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17622

Distr.
LIMITED

PPD.127
17 July 1989

UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

ORIGINAL: ENGLISH

THE AGRO-BASED INDUSTRIES IN LIBERIA:
KEY CHARACTERISTICS AND REHABILITATION ISSUES*

Special reports on industrial rehabilitation

No. 7

Prepared by
Regional and Country Studies Branch
Industrial Policy and Perspectives Division

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V.89-57839

PREFACE

As part of the programme of the Industrial Development Decade for Africa, UNIDO's Regional and Country Studies Branch is issuing a series of studies determining both the major problems of African manufacturing and the potential for regenerating the sector. The aim is to outline policies and measures that may result in overall improvements and to identify individual plants for assistance. The backbone of the series is formed by a number of country-level diagnostic surveys on the rehabilitation requirements of African manufacturing industries. These have been compiled by teams of experts during four-week field missions. As the surveys contain confidential plant-level information, their circulation is restricted. In order to present the salient parts of the full country surveys to a wider readership, a series of 'highlights' is being issued.

This particular report presents the highlights of the Liberia mission's survey of industrial rehabilitation needs of Liberian agro-based industries. It provides the reader with a general description of the economic and policy environment for industrial rehabilitation, as well as a description of Liberia's agro-related industries and branches. Chapters 6 and 7, providing general observations and recommendations regarding government policy and companies, should be useful in formulating an agenda for rehabilitation efforts. The full survey should be consulted for detailed suggestions for specific plant-level rehabilitation requirements.

The UNIDO field mission visited Liberia from 7 January to 4 February 1989. The members of the team were: Mr. George Assaf (team leader), Regional and Country Studies Branch, UNIDO, and UNIDO consultants: Mr. Björn Almquist, Mr. Jan Björk, Mr. Lindsay Haines, Mr. Christopher Konneh, Ms. Micaela Maftei, Ms. Helen O'Neill (acting team leader, 14 January to 6 February) and Mr. Graham Smith.

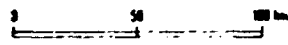
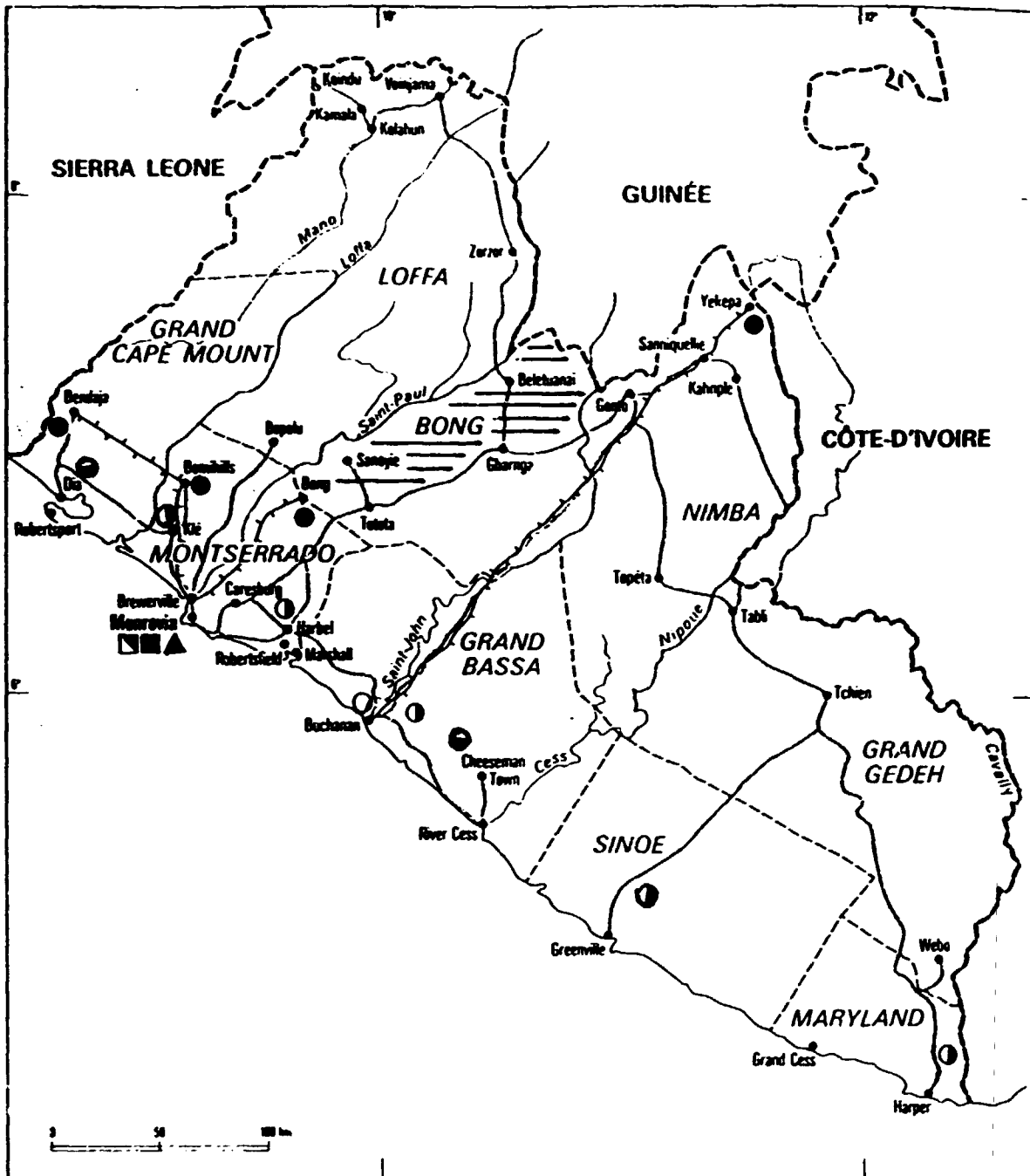
TABLE OF CONTENTS

<u>Chapter</u>	<u>Page</u>
PREFACE	i
MAP	iv
GENERAL COUNTRY INFORMATION	v
LIST OF ABBREVIATIONS	vi
1 REGENERATING LIBERIAN MANUFACTURING: THE ECONOMIC AND POLICY CONTEXT	1
1.1 The current economic situation - factors and trends	1
1.2 Recent policy changes and their impact	7
1.3 The international and regional contexts	12
2 THE ENVIRONMENT FOR REHABILITATION: RESOURCES, POLICIES AND INSTITUTIONS	15
2.1 The natural resource base and its renewal	15
2.2 Physical and social infrastructure	17
2.3 Industrial policy	18
2.4 Strengthening the role of the private sector	21
2.5 Strengthening the role of the institutions involved in industrial development and regeneration	23
2.6 Improving the macro-economic policy environment	25
2.7 Potential for economic co-operation and development	30
3 THE MANUFACTURING SECTOR AND ITS REHABILITATION	31
3.1 General overview	31
3.2 Major problems and constraints	34
3.3 Linkages	36
3.4 Ownership patterns	39
3.5 Trade in manufactured products	39
3.6 Policies and institutions for the manufacturing sector	41
4 AGRG-RELATED INDUSTRIES AND THEIR REHABILITATION	44
4.1 Justification	44
4.2 Branches	44
5 BRANCH PROFILES	49
5.1 Wood processing	49
5.2 Palm oil processing	54
5.3 Poultry processing	57
5.4 Animal feed manufacturing	62
6 OBSERVATIONS AND RECOMMENDATIONS REGARDING COMPANIES	64
6.1 Finance	64
6.2 Management, organization and marketing	66
6.3 Physical plant and buildings	67
6.4 Inputs	68

TABLE OF CONTENTS (continued)

<u>Chapter</u>		<u>Page</u>
7	GENERAL POLICY OBSERVATIONS AND RECOMMENDATIONS	69
7.1	General policy recommendations	69
7.2	The manufacturing sector	70
8	SUMMARY OF PROJECT CONCEPTS	72
8.1	General	72
8.2	For all enterprises visited	72
	SELECTED REFERENCES	73
	ANNEX 1: Tables	74
	ANNEX 2: UNIDO's approved and/or operational technical co-operation projects	77
	ANNEX 3: UNIDO's pipeline projects	77

Map of Liberia



-----	Administrative boundary	Location of selected economic activities	
—+—+—+—	Railways	■	Food processing
————	Major roads	■	Chemical industry
LOFFA County		▲	Refinery
		●	Oil palm plantation
		⊙	Rubber plantation
		●	Iron ore mine
		○	Ore treatment plant
		≡≡≡	Other oil palm growing areas

Liberia - Administrative division, transport network, selected economic activities

Source: Encyclopaedia Universalis/Grand dictionnaire encyclopédique Larousse.

General Country Information

Area: 111,400 km²
Population: 2.35 million (est. 1987); growth rate (1980/85): 3.4 per cent

Main towns: population in thousands
Monrovia 450 (1986 estimate)
Gbarnga 30 (1984 estimate)
Tchien 15 (1984 estimate)
Buchanan 24 (1982 estimate)
Harper 12 (1982 estimate)
Greenville 10 (1982 estimate)

1985 GDP at current prices (L\$ million): 811.2 (1987 estimate: 907)
1985 GDP at (1980) constant prices (L\$ million): 797.2 (1987 estimate: 821)
1985 Real GDP growth rate (%): -0.9
1985 GDP per capita (L\$): 370
1985 GDP per capita at (1980) constant prices (L\$): 364

Origins of GDP 1985 (% of total)/components of GDP 1986 (% of total)

Agriculture	19.4	Private consumption	64.3
Mining and quarrying	19.2	Public consumption	13.1
Manufacturing	8.2	Gross fixed capital formation	11.1
Construction	3.8	Change in stocks	0.8
Government services	16.1	Exports	44.4
Other services	33.3	Imports of goods and services	-35.8

1987 Exports (f.o.b. million L\$ estimate): 291.1
1987 Imports (c.i.f. million L\$ estimate): 233.8

Currency L\$:US\$

(October 1988 parallel market rate: US\$1 = L\$2.3)
1986 total external debt disbursed: US\$1,002 million
1985 total debt as percentage of GDP: 112 (1986 estimate: 121)

1985 Life expectancy: (men) 49 years, (women) 52 years
1985 Infant mortality rate: 12.7 per cent
School enrolment: (males) 95 per cent, (females) 57 per cent
Languages: English, Golla, Kpelle, Mande, Kru and other

List of Abbreviations

ACDB	Agricultural and Co-operative Development Bank
ADB	African Development Bank
ECA	Economic Commission for Africa
ECOWAS	Economic Community of West African States
EFMC	Economic and Financial Management Committee
ERP	Economic Recovery Programme
FAO	Food and Agriculture Organization
FFB	Fresh Fruit Branches
FDA	Forestry Development Authority
GDP	Gross domestic product
GOL	Government of Liberia
IMF	International Monetary Fund
LBDI	Liberian Bank for Development and Investment
LPRC	Liberian Petroleum Refinery Corporation
LWCIA	Liberian Wood and Carpentry Industry Association
MOA	Ministry of Agriculture
MOF	Ministry of Finance
MRU	Mano River Union
MVA	Manufacturing value added
NBL	National Bank of Liberia
NHSB	National Housing and Savings Bank
NIC	National Investment Commission
OAU	Organization of African Unity
OPEX	Operational Expert Team
SEFO	Small Enterprises Financing Organization
SME	Small and Medium-scale Enterprises
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Organization
USAID	United States Agency for International Development

CHAPTER 1

REGENERATING LIBERIAN MANUFACTURING: THE ECONOMIC AND POLICY CONTEXT

1.1 The current economic situation - factors and trends

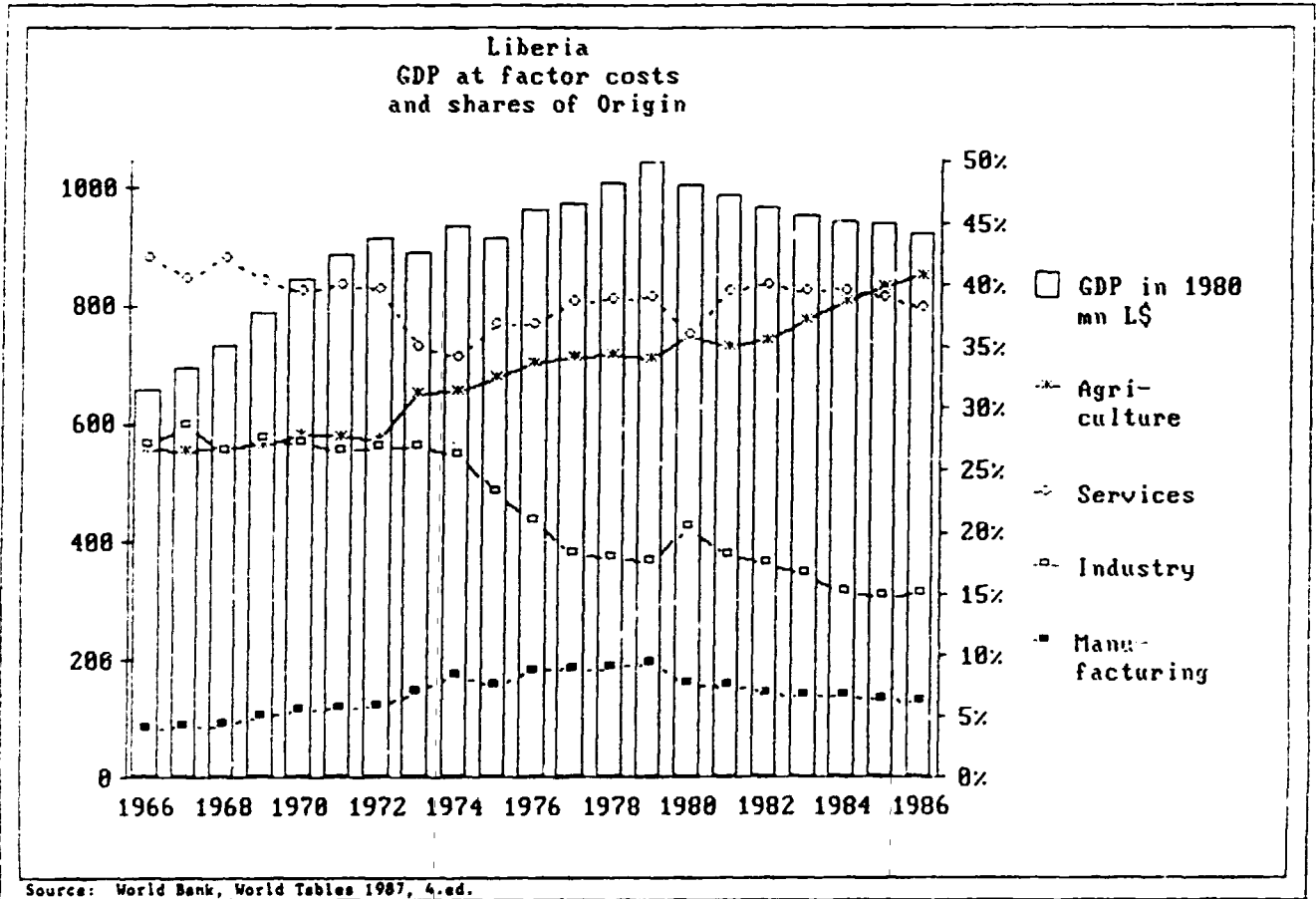
The Liberian economy can be described as a dual economy. Most of the population is engaged in subsistence agriculture. In the formal or monetized sector, activity is concentrated on the production of iron ore and rubber, which are exported with very little processing. The Government of Liberia (GOL) has estimated rural incomes in the mid-1980s at US\$160 per capita; average per capita income in the formal sector was estimated at US\$1,620. The manufacturing sector is very small, with a 1986 GDP share of 7.1 per cent and a gross output of US\$60 million in 1985. It is mainly engaged in the production of light consumer goods for the domestic market. Diagram 1.1 provides a general overview of the economy, showing GDP figures and sector shares for the 1966-1986 period^{1/}. An overall contraction of the economy is visible since 1979. The expanding share of agriculture is an indication of the development problems of the non-traditional sector, which will be analysed in detail below.

Liberia's "open-door" policy permitting the inflow and outflow of foreign capital and profits has attracted a number of large foreign investors, mainly active in the production of primary products for export. Public ownership in enterprises is limited. Exports are dominated by iron ore, rubber and logs (see annex table 1), which together have accounted for 85-95 per cent of export earnings throughout the 1980s. Iron ore is the single major export, although its importance is declining as a result of the depletion of currently exploited ore deposits. The non-traded formal sector consists of manufacturing, construction and government services, supported by a monetary and financial system which has utilized United States currency as legal tender together with the Liberian dollar. The introduction of Liberian coins in 1981 has led to increasingly diverging official and parallel market exchange rates between US and Liberian currency.

The Liberian economy has experienced severe difficulties in the 1980s. The country's financial and economic problems were exacerbated by measures such as the huge expenditures for hosting the Organization of African Unity (OAU) Conference in 1979. However, there are underlying and interlinked structural factors which account for Liberia's continuing difficulties: the contraction of general sectoral production, the worsening terms of trade, the unbalanced nature of government fiscal operations, and the accumulation of domestic and external payment arrears.

^{1/} It should be pointed out that data on the Liberian economy are not always reliable. It was not until 1987, for example, that serious attempts were made to introduce systematic public accounting. This should be kept in mind when interpreting the diagrams and tables in the study.

Diagram 1.1



1.1.1 Production

As table 1.1 shows, GDP decreased in real terms (1971=100) from US\$366.2 million in 1980 to US\$316.2 million in 1986. Export-oriented activities experienced a stronger decline than the domestic-oriented market. The strongest decline occurred in iron ore mining: its value decreased from US\$106 million in 1980 to US\$75.9 million in 1986, which accounts for 50 per cent of the overall decrease in GDP.

By 1986 the downward trend had virtually come to a halt, with GDP declining by less than 1 per cent since the previous year. The main cause of the relative improvement was the increase in the value of rubber and timber production. Preliminary information available in the size and composition of GDP for 1987 and 1988 indicates that the continued good performance of rubber and timber exports has resulted in a further stabilization of GDP.

Table 1.1.1: Gross domestic product statistics, 1980 to 1986
(selected years)
(in millions of US dollars at 1971 prices)

	1980	1982	1984	1986
Export-oriented sectors	174.0	155.0	141.1	147.9
Agriculture	63.0	56.0	61.4	68.9
Rubber	21.0	22.6	30.1	31.8
Forestry	23.0	10.6	10.6	16.3
Other	19.0	22.8	20.7	20.7
Mining and quarrying	111.0	99.0	79.7	79.0
Iron ore	106.0	91.8	75.7	75.9
Other	5.0	7.2	4.0	3.1
Domestic-oriented sectors	192.2	187.6	180.2	168.3
Manufacturing	26.0	21.2	20.5	20.4
Construction	15.0	17.8	13.3	13.7
Government services	39.6	47.8	47.0	44.0
Other services	111.6	100.8	99.4	90.2
-----	-----	-----	-----	-----
Gross Domestic Product at factor cost	366.2	342.6	321.3	316.2
Indirect taxes (net)	45.2	46.5	40.6	37.6
-----	-----	-----	-----	-----
Gross domestic product at market prices	411.4	389.1	361.9	353.8

Source: Ministry of Planning and Economic Affairs (MPEA) and IMF.

1.1.2 Trade

Liberia's trade balance has remained positive over the years, regardless of whether overall trade expanded or contracted. However, prices of imports have increased faster than those of exports (see table 3.5 for 1983-1987 figures); as diagram 1.2 shows, there was a downward trend in Liberia's terms

of trade until the beginning of the 1980s. The terms of trade index fell from over 150 in the early 1970s to approximately 90 in 1981, the downward trend levelling off after the major fall related to the 1973 oil shock. There was some improvement in the terms of trade in the early 1980s, but it was not until 1986 that the index again stood at 100, largely due to higher rubber prices.

Since Liberia is such a highly import-dependent economy (especially with regard to manufactured goods and industrial inputs), the decline in its terms of trade has been a major cause of the economy's problems. The need for an uninterrupted supply of essential imports has placed an increasing burden on the export sector.

1.1.3 Public finances

The relative improvement in overall economic performance, as reflected by the stabilization of GDP, is not reflected in a comparable improvement in government finances. Table 1.2 shows that there has been an increase in the GOL budget deficit over the period 1982-1988. The overall deficit, on a commitment basis, rose from L\$91.3 million in 1982 to L\$156.7 million in fiscal year 1987, the last year for which full information is available. The available information shows that, although total revenue has returned to the levels of the early 1980s (reportedly attributed to improvements in the taxation and revenue collection systems), the amount received in grants from foreign donors has dropped by over 50 per cent, from L\$41.4 million to L\$19.5 million. The 1989 budget foresees a continuing growth of revenue to L\$280.8, without presuming any significant rise in the amount received in grants from foreign donors.

Table 1.2: Selected data on central government operations
(in millions of Liberian dollars)

	FY 1982	FY 1987	FY 1988 (est)	FY 1989 (GOL budget)
Total revenue and grants	279.3	210.4	240.9	280.8
Total expenditures	370.6	367.1	418.4	385.9
Overall deficit	91.3	156.7	177.5	105.1

Source: Ministry of Finance.

The rise in expenditure is mainly due to rising interest payments and to non-budgetary expenditure included in the budget figures. According to the Ministry of Finance, the former rose from US\$37.8 million in 1982 to US\$140.8 million in 1988.

In 1988 extrabudgetary expenditures consisted mainly of loan repayments and interest payments to various Liberian banks amounting to L\$66.2 million. A different Ministry of Finance/IMF source identified additional extra budgetary spending amounting to L\$145.4 million. Extrabudgetary operations are a prominent element in the GOL's financial management; in 1988 the most important means of financing these operations were: debits of tax severance at banks (the banks collect tax on behalf of GOL), medium-term loans at the National Bank of Liberia, and fees paid by the logging and petroleum-refining industries.

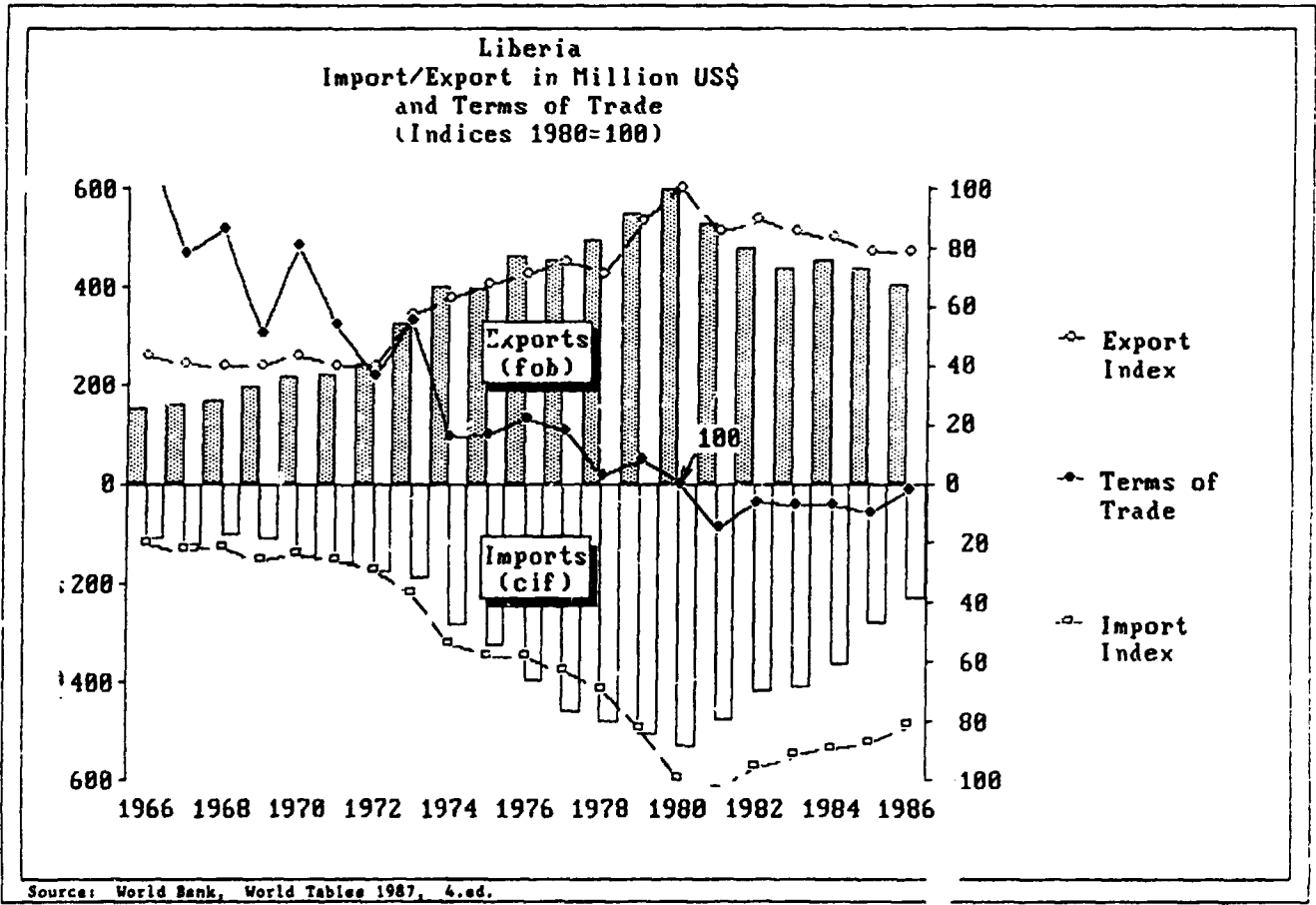
There has been a marked decline in development expenditure through the years, from L\$96.4 in 1982 to L\$23.7 million in 1988. Wages and salaries in the government sector have also decreased significantly, partly the result of a long wage freeze, which has tended to make it difficult for the GOL to attract qualified personnel. The 1989 budget shows that overall government expenditure is expected to decrease, although spending on development and the wage bill will not. The Government projects a slight increase in interest payments, but no extrabudgetary spending.

The budget deficit was financed largely through the issuance of L\$5 coins and through advances by the National Bank of Liberia (NBL). The evident lack of confidence in this Liberian currency, together with the recurring balance of payments deficits, led to a strongly reduced availability of US dollars. A parallel market for US currency emerged, creating a two-tier financial system in which the US dollar is traded at a substantial premium, although the official rate of exchange is still 1:1. By December 1988, the US dollar was trading at 2.15 Liberian dollars in the parallel market. Only a small share of transactions - those controlled by the authorities - now takes place at the official rate.

1.1.4 External debt and the balance of payments

As shown in table 1.3, the external debt grew slowly until the mid-1970s, but then trebled in the latter half of the decade, reaching US\$1,000 million by 1980. The reduced rate of growth in the 1980s is in part attributable to decreasing confidence in the economy and in the Government on the part of external lenders. Nevertheless, total debt rose to US\$1,626.2 million by 1987, approximately 150 per cent of GDP. The debt service ratio increased from 13.4 per cent in 1982/83 to 40.9 per cent in 1985/86 and 57.2 per cent in 1987, in spite of several reschedulings. Even a much lower rate would be likely to cause severe problems in the Liberian economy, which needs to retain as much as possible of its foreign exchange earnings to finance essential imports. Not surprisingly, therefore, large arrears have accumulated since the mid-1980s. The estimated external arrears amounted to US\$617.7 million in 1987 and are projected to reach US\$890.3 million in 1988 (see annex table 2). In fiscal year 1987, arrears to the IMF alone were estimated at US\$266.3 million, while arrears to other multilateral organizations, including the World Bank, amounted to US\$72.9 million. Since 1986, all lending by the IMF to Liberia has been suspended and the World Bank closed its office in Monrovia.

Diagram 1.2



The increasing debt-service burden is the main factor responsible for the overall balance of payments deficit, which rose from US\$73.6 million to US\$168.2 million over the period 1983/84-1987. Thus, while the trade surplus rose from US\$20.8 million to US\$56.3 million, the current account deficit grew from US\$26.5 million to US\$47.7 million, mainly as a result of increasing interest payments. The deficit on the capital account (which includes debt amortization) increased from US\$47.1 million to US\$120.5 million over the same 1983-87 period. Debt servicing thus offset all the gains generated by the surplus of exports over imports.

It should be noted that, with regard to the trade balance, the growth of imports is much faster than that of exports. This seems partly the result of renewed confidence in the economy, as the decrease of GDP bottoms out and demand for imports recovers. It is by no means clear, however, that the growth in imports has led to an equivalent improvement in the availability of goods needed for renewed economic growth such as inputs, equipment, or spare parts.

Table 1.3: External public debt
(in millions of US dollars)

	<u>1982/83</u>	<u>1983/84</u>	<u>1984/85</u>	<u>1985/86</u>	<u>1986</u>	<u>1987</u>
Disbursed and outstanding	870.0	957.0	1,070.0	1,280.0	1,389.7	1,626.2
Debt service	62.0	95.0	130.0	187.0	218.3	244.5
Interest	(47.0)	(47.0)	(61.0)	(79.0)	(86.3)	(103.1)
Principal amortization	(15.0)	(48.0)	(69.0)	(108.0)	(132.0)	(141.4)
Debt service (as % of exports of goods and nonfactor services)	13.4	20.0	27.3	40.9	50.1	57.2

Source: Data provided by the Ministries of Finance, and Planning and Economic Affairs.

1.2 Recent policy changes and their impact

In recognition of the deteriorating economic situation, the GOL has instituted a number of policy initiatives since the mid-1980s. These include the establishment of the Economic and Financial Management Committee (EFMC) in 1985, the preparation of the Economic Recovery Programme (ERP) in 1986, and the signing of a counterpart management agreement with the US Government. Under this agreement, seventeen operational experts (the so-called OPEX team) were sent to Liberia in 1988 to help improve the financial management of the public sector.

1.2.1 The Economic and Financial Management Committee (EFMC)

The EFMC, which is chaired by the Minister of Finance, includes as its members the Minister for Planning and Economic Affairs, the Governor of the National Bank of Liberia, the Director-General of the Budget, the Minister for Presidential Affairs, and the Ministers of Agriculture, Justice, and Lands, Mines and Energy. Its stated objective is to "...ensure the enforcement of the (revenue and finance) laws and the implementation of ...fiscal policies".

Although the EFMC was charged with responsibility for economic and financial policy co-ordination, and with overseeing the Bureau of Concessions and State Enterprises, it can point to only modest achievements. The Committee recommended an Executive Order which would provide strong enforcement instruments for budgetary control, although the version of the Executive Order that actually became effective did not deal directly with this issue. Its activities have for the most part been limited to what has been described as "crisis management".

1.2.2 The Economic Recovery Programme (ERP)

The ERP was drawn up in 1986 and is based largely on the 1981-1985 Plan. Its main objectives are as follows:

- To improve the economic status of the population and expand employment in the economy;
- To improve the Government's ability to meet its financial obligations, particularly with regard to development objectives;
- To improve the productivity of Liberian farmers in the main food and cash crops;
- To improve the management of the public sector as a whole and reduce the role of the State in economic activity, among others, by privatizing public enterprises;
- To diversify and expand the industrial base;
- To develop indigenous entrepreneurial capabilities, particularly in the small- and medium-scale industries.

In pursuit of the above objectives, the Government gave assurances to the private sector that:

- (a) Existing policies governing remittances of profits and investments will continue in line with the liberal policies of the Government;
- (b) The legal system and applicable labour laws will protect the legitimate interest of investors, as well as encourage the expeditious solution of labour disputes;
- (c) Agreements and contracts between the Government and private enterprises will be strictly adhered to and implemented in a manner promoting the effective operation of private sector enterprises; and
- (d) The Investment Incentive Code (see section 2.3.1) will be adhered to and administrative delays in the approval of projects reduced.

The measures for promoting enterprises in the private sector include the provision of economic information to investors, protection against excessive foreign competition, and preference to local industries in the Government purchasing programme. Other important components are: entrepreneurship

development, improved investment promotion facilities and investment incentives, and increased emphasis on promoting small- and medium-scale enterprises. Table 1.4 shows the projected distribution of ERP funds among programmes. It is clear that foreign sources of finance are expected to cover the larger part of expenditure under all sectoral heads.

Table 1.4: Economic Recovery Programme contingency plan -

amounts to be allotted
(in millions of US dollars)

Sectors Projects	1986/1987		1987/1988		1988/1989	
	GOL	FOR	GOL	FOR	GOL	FOR
Agriculture	9.6	25.8	3.1	25.1	3.1	25.1
Industry	-	1.0	0.2	0.5	0.2	0.5
Energy	-	-	1.0	12.0	1.0	12.0
Transport and communications	4.3	19.0	2.8	19.3	9.8	15.4
Water and sewer	-	5.0	0.4	3.6	0.4	3.6
Regional and urban development	0.5	2.9	0.5	2.8	0.5	2.8
Education and training	1.4	3.1	1.4	9.0	1.4	9.0
Health and social welfare	0.7	9.3	0.4	9.3	0.3	-
Manpower	0.3	2.5	0.6	3.7	0.6	3.7
State enterprise	-	0.5	-	0.5	-	-
Housing ^{a/}	-	-	-	-	-	-
Total	16.8	69.0	10.4	90.2	17.3	72.1
Contribution to international organizations	1.1	-	1.1	-	-	-
Grand total	17.9	69.0	11.5	90.2	17.3	72.1

Source: Economic Recovery Programme.

a/ Funded by National Housing Authority

GOL = Government of Liberia contribution

FOR = Foreign sources of finance

Through the ERP, output, productivity and debt servicing are to improve as a result of the recommended correction of the public finances. The general improvement in economic performance and public sector management, in turn, is to stimulate the inflow of external financial resources. In other words, the ERP recognizes that correction of the public finances is a pre-condition to economic recovery and the resumption of growth and development in the economy.

With regard to agriculture, the most important sector, the ERP seeks "to increase the volume and value of all exports and to reduce the quantity of food imports in order to earn and save more foreign exchange". The value of agricultural exports can be increased through increased production and improved marketing practices, as well as through additional processing of agricultural products.

The ERP's agricultural policies are based on Liberia's 1986 Green Revolution programme, the primary objective of which is the attainment of food self-sufficiency. Its stated goals are to "recreate an awareness of the

importance of agriculture to national well-being and to increase agricultural productivity. The overall goal is that Liberia as a nation will feed herself and produce export crops that would contribute to the growth of the national economy."

In implementing the Green Revolution, the following approaches are envisaged: 1) establishment within each county of a unit which will provide supervisor credit packages to farmers; 2) involvement of agriculturally trained graduates with a college degree, or its equivalent, as farmers in their county of origin; 3) infrastructural development; and 4) development of "nucleus estates" to group crops that are appropriate for the region.

Under the heading of Industrial Regeneration, the ERP includes the following proposals:

- The privatization of state enterprises to enhance their efficiency and productivity, and to reduce their dependency on government finance;
- The commencement of a study to improve rubber-processing capacity, including that of the Rubber Corporation of Liberia (RCL);
- Support for the expansion of the manufacturing of oil palm products and other food products in order to save foreign exchange;
- Support to the forestry subsector to increase processing of wood products for both the domestic and export markets, which would both save and generate foreign exchange.

The ERP programmes cannot be successful unless there is a strong commitment on the part of the Government to improve its institutional infrastructure and financial situation. Even if these can be achieved, the programmes are likely to exceed the country's presently available means. Due to the lack of confidence in the GOL and the economy, foreign sources of finance - which are essential for all ERP programmes - have dried up. A 1988 Economic Commission for Africa (ECA) mission report suggests that, given the financial difficulties and the shortage of qualified manpower, pilot projects should take the place of attempts at a general overhaul of the economy. Reviewing the restructuring effort, the ECA mission report makes the following comments:

"Given Liberia's structural imbalance, implicit in many things, including lack of integration between the monetary and subsistence sectors, we are convinced that, in addition to efforts aimed at the iron ore, rubber and forest sectors - which in the past were the main sources of growth and foreign exchange earnings to the country and are likely to remain so even for some time to come - there is an urgent need for diversification efforts aimed at developing additional exports in the agricultural and agro-industrial sectors and to substitute for many of the existing food imports. This is indeed the number one priority. Agro-processing and agro-allied industrial development is at its infancy, and very little has been done so far to hook up agriculture to industry; but this must be done in order to create enlarged demand for the products of agriculture. The re-ordering of food tastes and habits must also be accomplished in order for greater food self-sufficiency to prevail, such that the country will begin to consume what it produces locally. The number

two priority is rural development. Liberia is basically rural, hence the transformation of the rural sector forms an inevitable basis of national development since only a prosperous rural sector can provide a self-reliant base for the economic development of Liberia."¹

As Table 1.4 shows, a total of L\$2.4 million is to be made available from both GOL and foreign sources for these purposes in 1986/87 through 1988/89.

Little information is available regarding the achievements of the ERP, which is not even mentioned in the most recent publications. The ECA concludes that its success has been "very limited" so far and that "non-implementation" has been a serious problem.

1.2.3 The Operational Experts (OPEX) Team

The OPEX team was brought in by the EFMC to assist in budgeting, expenditure control, financial flows and accountability, including the development of a management information system. Its achievements include reducing payment arrears (including civil service wage payments), improving the system of public accounting, ending central bank financing of government activities, improving revenue collection, and establishing an information system for expenditure control. However, OPEX did not accomplish its primary goal of inducing the Government to control its level of total expenditures. Provisions in the OPEX agreement calling for a halt to extrabudgetary revenues and expenditures have not been implemented. Other terms of the agreement, such as those dealing with budgeting, auditing and restructuring of major public enterprises, also were not carried out during the period of OPEX involvement.

1.2.4 Current direction of policy

The Government of Liberia recently announced a strongly worded policy for dealing with extrabudgetary revenues and expenditures, in recognition of its increasingly serious consequences for the Liberian economy, as has been emphasized by its bilateral and multilateral aid partners. President Doe's Annual Message to the Legislature, on 27 January 1989, and later statements emphasized that revenues and expenditures are to be contained within the budget, and that such "financial discipline" was to be enforced.

The President's annual message also reaffirmed the Government's commitment to privatize certain state enterprises, and to establish a Business Development Fund to provide loans to small businessmen.

Another recent policy measure announced by the President of Liberia in January 1989, which directed all exporters to use the commercial banks to open Letters of Credit, should have the effect of identifying the quantity and value of total exports and total proceeds from them. This should result in an increase in the amount of foreign exchange available for essential imports. However, the real impact of this scheme depends on the introduction of a control system that prevents under-invoicing in an effective way.

1/ UN Economic Commission for Africa, Liberia, Report of an ECA Fact Finding Advisory Team, 16-30 January 1988, ECA/RA/1988/1.

1.3 The international and regional contexts

1.3.1 Bilateral development assistance

The ERP's dependence on foreign financial resources shows the importance of international development co-operation. Annex Table 3 shows that the United States is by far the largest aid donor, followed by the Federal Republic of Germany and Japan. This dependence on bilateral, and to a lesser extent on multilateral, aid has exposed the GOL to increased pressure with respect to its economic policies. Mounting arrears on previous borrowing caused a number of donors to suspend disbursements in 1985-1986. USAID disbursements (with the exception of food aid) were suspended during 1986. Available information suggests that official development assistance was down to US\$30 million in 1987. Aid agreements were signed with Romania and Canada and with the European Community (EC) under Lomé III. Other agreements were made in 1988 with Japan, France and the USSR.

1.3.2 Relations with multilateral institutions

The most important multilateral financial organizations to which Liberia belongs are the IMF, the World Bank and the African Development Bank (ADB). Liberia benefits from biannual Article IV consultations, but presently does not receive financial assistance from the IMF, which in 1986 declared Liberia ineligible for further IMF resources due to the accumulation of payment arrears. Liberia's relations with the World Bank group are also strained; due to the accumulation of arrears, the Bank has suspended disbursements to development projects which it had previously financed. Liberia is also in arrears in payments to the ADB.

Although Liberia is not a member of UNIDO, a number of industrial development projects have been initiated in the country. The annex contains lists of both UNIDO's operational and pipeline projects. In 1988, a UNIDO sponsored seminar was held in Monrovia to discuss industrial development problems within the context of the Industrial Development Decade for Africa. Recommendations from the seminar included improvements in policy making and execution, a review of the tariff structure, and a speeding up of the adoption of the revised Investment Incentive Code.

Within the Fourth UNDP Country Programming Cycle (1987-1991) multilateral technical assistance to the industrial sector is to be provided through the Ministry of Planning and Economic Affairs (MPEA), state enterprises and the private sector, as well as in the fields of upgrading technical and managerial skills and a pilot employment project.

1.3.3 Regional economic co-operation

The growth of regional markets could play an important role in the future development of Liberia's economy, since the domestic market is too small for a strong expansion of the manufacturing sector. Liberia is a member of a number of regional organizations, including the Economic Community of West African States, the Mano River Union, West African Clearing-House, and West African Rice Development Association.

(i) Economic Community of West African States (ECOWAS)

ECOWAS was established in 1975 by 16 countries in West Africa. The main objectives of ECOWAS are the achievement, first, of a customs union and, later, of a full common market among the member states. The intention is to increase intraregional trade and reduce the members' relative volumes of trade with the industrialized countries. The ECOWAS treaty provides for harmonization of policies among the member states in a number of sectors including agriculture, industry, transport and communications.

A Fund for Co-operation, Compensation and Development has been set up both to promote development in the poorest member states and also to compensate those whose economies are adversely affected by the activities of ECOWAS. The Fund has financed a number of projects through contributions made by the member states on the basis of per capita income.

Like other regional integration schemes, especially in developing countries, ECOWAS operations are hampered by the fact that neighbouring countries tend to produce competing goods in the primary sector which reduces intra-regional trading possibilities. Other constraints include simultaneous membership by member countries in a number of regional schemes and the large number of currencies which complicates transactions in the region.

The relationship between Liberia and ECOWAS is generally good. Although it continues to be indebted to the ECOWAS Fund, eight of the 136 investment projects in the ECOWAS Economic Recovery Programme are located in Liberia.

(ii) The Mano River Union (MRU)

Formed initially by Liberia and Sierra Leone in 1973, the Mano River Union was joined by a third member, Guinea, in 1980. Its aims include the elimination of barriers to trade between members, co-operation in transport, agriculture and industry, and the formation of a customs union. The MRU has not been very active in recent years, partly because of its limited financial resources. However, the member states co-operated in the establishment of a glass factory in Liberia, which is to serve the MRU market, and the other countries are to refrain from establishing competing firms. Relations with MRU members are cordial and Liberia is current with its financial contributions to the Union. A maritime trading institute, set up by the MRU in Morovia, has been taken over by the Liberian Government and is to be assisted through a programme formulated by UNIDO for this purpose.

(iii) West African Clearing-House (WACH)

The Central Banks of twelve countries established WACH in 1975. Its main objective is to settle payments for goods and services in national currencies on a multilateral basis by using the West African Unit of Account. Due to delays in settling the net balances, activity within WACH has recently decreased. There was no information on Liberia's role in the WACH.

(iv) West Africa Rice Development Association (WARDA)

Established in 1970 with headquarters in Liberia, WARDA includes all ECOWAS members except Guinea-Bissau, Ghana and Cape Verde. The principal objective is to make West Africa self-sufficient in rice production. Arrears

by some members in recent years have negatively affected WARDA operations. WARDA has probably not been intensively involved in Liberian agriculture. The organization is not mentioned in recent documentation dealing with the rice-cultivation programme under the ERP. Yet, according to the ECA, Liberia could become "the breadbasket of West Africa" if rice growing were given proper attention. It would also help to strengthen the raw material supply of domestic cereal mills.

Over the years, attempts at fostering regional co-operation have not been very successful. One of the main hindrances has been the multiplicity of currencies, most of which are not convertible. This has discouraged trade among the member states, who became trading partners with Europe and the United States. Trade in the region as a proportion of total trade is very small (less than 4 per cent). Another factor has been the lack of effective strategies for implementing industrial policies. Almost all member states are producing similar types of goods, which consequently cannot be easily marketed in the other member states. Apart from the foregoing, organizations have suffered from an inadequate level of support through contributions from member states because of the economic and financial difficulties faced by most of the countries.

CHAPTER 2

THE ENVIRONMENT FOR REHABILITATION: RESOURCES, POLICIES AND INSTITUTIONS

The successful rehabilitation and regeneration of Liberia's manufacturing sector depends, to a large extent, on the creation of a radically improved environment for manufacturing enterprises. The Economic Recovery Programme (ERP) shows an awareness of the need for such improvement.

The number of policy issues that need to be addressed is quite wide ranging, and include the following:

- The natural resource base, including its renewal and maintenance;
- Physical and social infrastructure;
- Industrial policy, including its legal and institutional base;
- Enhancing the role of the private sector, which is expected to be the main source of renewed growth in manufacturing;
- Strengthening the role of the institutions involved in industrial development and regeneration;
- Improving the macro-economic policy environment within which industrial regeneration can occur. The key issues under this heading are: control of public finances; the currency and foreign exchange rate regimes; pricing policy; and credit and interest rate policies.

2.1 The natural resource base and its renewal

As chapter 3 will show, the Liberian manufacturing sector's linkages to the domestic raw material base are not very strong. But the country has a very large, underutilized natural resource potential, and it is essential for the regeneration of the manufacturing sector to use this potential more efficiently.

Reference has already been made in Chapter 1 to the decreasing productivity of existing iron ore mines. There are large unexploited deposits in the country, but the present world market prices for iron ore are too low to make this exploitation viable. Two out of four mines have been closed down, and the companies working the other mines have made drastic cuts in production and employment. It is likely that the largest remaining mine at Mount Nimba will also have to be closed down, as deposits are almost exhausted. Ore is washed and pelletized prior to treatment, but it is not processed otherwise, and both the world market and the domestic economic situation make it highly unlikely that other processing facilities will be established.

Rubber is cultivated both by large foreign companies and Liberian smallholders, with the former controlling about half of the total area under rubber. Processing takes place only to the extent needed for transport overseas. Rubber is the most important foreign exchange earning cash crop (see Annex Table 1), and production and prices have increased considerably since the early 1980s. The GOL and bilateral and multilateral organizations have been involved in raising the productivity of smallholder rubber plantations. It would be appropriate to follow up on these efforts and to investigate the possibility of establishing secondary processing activities within the rubber subsector of Liberia.

In the new Investment Code, the GOL has declared its intention to pursue such secondary processing in a serious manner. It has identified five types of products that could be produced with Liberia's vast rubber resources. These are:

- all types of tyres and tubes
- inflatable rubber products
- automotive and other moulded rubber parts
- medical and surgical rubber products
- rubber-made sporting goods.

It would also be appropriate to investigate the extent to which foreign enterprises could be encouraged to co-operate with such downstream industries. This would lead to a considerable increase of domestic value added in the rubber sector.

Wood is Liberia's number three export. Almost half of the country is covered with forests. The largest forest reserves are found in the northwest and southeast of the country, areas where, apart from logging, few other monetized economic activities take place. Logging is far more important than wood processing, and the economy of these remote areas would benefit considerably if local wood were processed to a greater degree.

There are indications that the Liberian Government is cognizant of the need to reduce the quantity of unprocessed round logs that are exported from the country and to increase the processing of such resources. Regulation 14 of the Forestry Development Authority (FDA), dated March 1987, stipulated that 20 per cent of exported timber should be processed. Because of perceived difficulties with an immediate acceptance of such a target by timber exporters, this target was amended by Regulation 15, dated September 1987, stating that the 20 per cent level would be reached only by 1993.

Support for increased processing is evident at the highest level. In his State of the Nation speech on 27 January 1989, President Samuel K. Doe underlined the importance of processing for employment creation and the improvement of the public finances: "[If] exporters process a minimum of 15 per cent of their logs locally, employment opportunities will increase and the Government will gain more in revenue." Nevertheless, progress under this heading has been very slow to date. The 1986-1987 report of the FDA shows that only 1.9 per cent of timber exports was exported in processed form. Progress toward the objectives of increasing value added, promoting

employment, and increasing government revenues from its timber subsector can be made if the Government adheres strictly to its processing regulation and resists the temptation to allow exporters to escape their obligations.

Liberia is rich in cultivable land. The most important food crops are rice, cassava, bananas and oil palm fruit. Most of the crop is consumed locally. However, the monetized sector of the economy (urban consumers, processing units) is to a large extent dependent on imported foodstuffs. In order to increase domestic supply (which would save foreign exchange), a number of problems would have to be solved, including low productivity of traditional farming, low product quality, low official buying prices for rice, and transport and marketing bottlenecks. Productivity and product quality issues have been addressed by several projects, such as the smallholder Rice Feed Development Project and the county-level Agricultural Development Projects under the ERP, but such projects can only bring about widespread agricultural development if more financial resources and qualified manpower are made available, and if there is a serious commitment to agricultural development as a long-term priority.

The OAU, in its declaration on the 1980s Industrial Development Decade for Africa, stressed the importance of agro-based manufacturing and the need for the continent to tackle seriously the processing of its own natural resources. Liberia has subscribed fully to the OAU approach. To this end it is imperative that Liberia maintain its renewable natural resources so that they will continue to provide the inputs to an agro-based manufacturing sector. This involves sustaining the productivity of the country's forests and fisheries and continued serious attention to the development of the rural economy.

2.2 Physical and social infrastructure

The regeneration of Liberia's manufacturing sector also calls for improvement in its physical infrastructure. In particular, the transport and communications networks will require improvement if the benefits of industrialization are to be spread more evenly throughout the country. The improvement of the educational infrastructure, especially in relation to management training, is also a matter requiring immediate attention.

2.2.1 Transport, communications and energy

Liberia's transport infrastructure (see map on page iv) is largely geared to serving the rubber plantations and iron ore mines. Over 90 per cent of the roads are unpaved, and the road infrastructure is particularly poorly developed in the south-western half of the country. The sole purpose of the railways is to link iron ore mines to ports. The ports, too, are mainly equipped for ore exports. Given the fact that most of the country's industrial enterprises are located in or near Monrovia, where infrastructure and facilities are far better developed than elsewhere, the shortcomings of the transport infrastructure are, in most cases, not immediate obstacles to rehabilitation.

Medium- and long-term planning, however, should give sufficient attention to the upgrading and expansion of the transport network. This would ensure a more regular supply of inputs to factories, and would enable industry to obtain a far larger share of the country's natural resources. It would

also enable the location of appropriate industries in rural areas and secondary urban centres, and thus help to increase employment and incomes outside the Monrovia area.

Improvements in the postal and telecommunications services and in electricity supply should receive high priority attention. Upgrading these services is a short-term imperative. Presently postal services and telecommunications function very poorly and electricity supply is irregular. Hydroelectric generating capacity (which accounts for one fourth of total capacity) often cannot be used during the dry season. The reasons for the poor performance of the existing hydroelectric plants during the dry season are not clear, but they should be identified, and appropriate action taken. Considerable potential exists for hydro-electric energy, and efforts should be made to seriously assess the possibilities of increasing capacity, building on earlier co-operation proposals with Côte d'Ivoire and the Mano River Union.

2.2.2 Management training

Although the educational and training standards are higher than in most other countries in the region (primary school enrolment stood at 76 per cent in 1985, but was down to 53 per cent in 1988), there is a serious shortage of skilled technical and managerial personnel at the middle and higher levels. The GOL also suffers from a shortage of personnel for economic policy making and implementation, as shown by the continuing dependence of enterprises and government institutions on expatriates. The whole issue of management training for both the public and the private sectors needs to be tackled in a systematic way. The extension and rehabilitation of existing courses and institutions will provide part of the solution. However, it is clear that if management within manufacturing enterprises and planning within the public sector are to be significantly improved, then education and training courses at the University of Liberia, the Liberian Institute of Public Administration, and other institutions will have to be geared to Liberia's conditions and needs. There is little evidence to suggest that training in these institutions at present is geared to the needs and conditions of the domestic economy.

Thus, while efforts at providing general basic education should continue, special efforts should be made to provide training and educational facilities that can teach the skills needed by Liberian business and economic policy-making. A step in this direction is the expansion of the WVS Tubman College of Technology, for which technical assistance is provided by the EC.

2.3 Industrial policy

There is no official statement or policy document as such which describes Liberia's overall approach to industrialization. As Section 3.6 shows, the measures that have been formulated are quite superficial. The most pertinent document is the Investment Incentive Code, which enumerates the kinds of economic activities the Government wishes to encourage and the types of incentives it will offer to investors in industry. The Code is, therefore, the most important guideline available to potential investors in Liberia, whether they be domestic or foreign entrepreneurs. It thus merits detailed examination.

2.3.1 The Investment Incentive Code (IIC)

The first Investment Incentive Code of Liberia was adopted in 1966 and amended in 1973. During this period the country's Open Door Policy was at its peak, and thus the emphasis was primarily on the attraction of foreign capital. In 1985 the Code was revised once more, this time against a background of economic crisis, declining investment, and a growing realization on the part of Government that having "closed the door" after the 1980 coup, the resulting dramatic decline in inflows of foreign capital had seriously damaged the growth prospects of the economy. The 1985 revision of the Code - which has yet to be approved and adopted - seeks to reflect the new economic realities and provides, therefore, a more realistic approach to the industrialization process.

The Code sets out to encourage the establishment of industrial enterprises which:

- (a) utilize, to the highest possible extent, Liberian manpower at all levels and contribute to advancing their skills through training schemes (on-the-job and otherwise);
- (b) utilize raw materials and products of Liberian origin to the maximum possible extent;
- (c) utilize as much as possible ancillary activities available in the productive and service sectors of Liberia;
- (d) contribute to making Liberia independent of imports of basic necessities, as far as it is economically feasible;
- (e) contribute to the expansion and diversification of Liberia's exports; and
- (f) contribute to increased employment opportunities all over the country.

The basic objectives of the Investment Incentive Code of Liberia remain unchanged even after the 1985 revision. Both the revised and the earlier versions of the Code contain provisions which are designed to enhance opportunities for stimulating the industrialization process. The Open Door Policy remains the principal mechanism through which the process of industrialization is to be achieved.

The main difference between the 1985 revised Code and the previous one is in terms of approach rather than objectives; the difference lies in the policy instruments used to achieve the overall objective rather than in the objective itself.

Under the previous Code, investment incentive contracts were awarded to any industry which used raw materials of Liberian origin and provided job opportunities for Liberians. There was no prioritization of industries on the basis of their contribution to the industrialization process.

The revised Code of 1985 seeks to further the industrialization process through a more systematic approach. Priority sectors - agriculture and manufacturing - have been emphasized. Within the manufacturing sector, enterprises which use raw materials of Liberian origin and have potential linkages to other sectors of the economy are to be awarded additional incentives.

Moreover, as a part of the overall strategy for promoting industrialization, the integration of the rural sector with industry is a major focus. Industries which have chosen to locate outside Monrovia and within specified rural areas will enjoy maximum incentives.

The incentives offered under the Code should prove very attractive to potential investors. They come under the headings of customs duty benefits and income tax benefits, as well as preferential leasing arrangements and accelerated depreciation allowances.

For enterprises that are granted investment incentive contracts under the Code, the customs duties benefits include exemption from import duty of up to 90 per cent of the dutiable value of approved imports of machinery and equipment - "approved", in this instance, being interpreted as machinery and equipment with more than three years life - and exemption of import duty of up to the same amount on approved imports of raw material, semi-finished products and other inputs used in production.

The income tax benefits include exemptions on profits reinvested into fixed assets and on 50 per cent of the taxes that would otherwise be paid on the remaining profits. There are to be full rebates on import duties, excise taxes, and taxes on manufactured export earnings.

One or more additional benefits from the following list of benefits may also be granted to investors who have been awarded investment incentive contracts:

- (a) lease of land at preferential rates in a Government-owned industrial park, together with assistance in provision of infrastructural facilities;
- (b) support in securing loans or equity capital, especially for small enterprises;
- (c) reasonable tariff protection;
- (d) provision for carrying losses forward;
- (e) accelerated depreciation allowances; and
- (f) purchases by government agencies, subject to quantity and quality conditions.

The Code acknowledges the pivotal place that foreign investment has always played in the development of the economy. It underlines the Government's intention to welcome further inflows and states that enterprises in Liberia can be fully owned by foreign capital, can be partnerships involving foreign and Liberian private capital, or can be joint ventures involving foreign investors and the limited number of remaining Government owned enterprises. The Code reiterates the GOL's commitment to pursue the Open Door Policy in "all its forms and ramifications" since it ensures "an unreservedly profitable climate for both local and foreign investments."

In the immediate aftermath of the 1980 coup, a number of local private enterprises and other locally-owned assets were confiscated by the Government. The new Investment Incentive Code goes out of its way to allay fears that such a practice would be repeated in the near future. It states categorically that all investments, whether local or foreign-owned, are fully protected by law and that private enterprises cannot be nationalized under any circumstances.

The National Investment Commission (NIC) was and continues to be the principal institution in Liberia responsible for the promotion of investment. NIC is also responsible for the awarding of investment incentive contracts as well as monitoring the performance of the beneficiaries under the Contract. If adopted and implemented as designed, the revised Investment Incentive Code of 1985 should prove to be an important stimulus to investment and rehabilitation and will provide a very good basis for the promotion and regeneration of industry and, indeed, the entire economy.

By emphasizing the promotion and regeneration of those manufacturing industries which have linkages back to agriculture and other activities in the primary-producing sector, as well as linkages to other industrial activities, the revised Investment Incentive Code should help to promote development and regeneration across a whole range of economic sectors.

At the time of writing, the 1985 Investment Incentive Code was still awaiting ratification and adoption. The crucial condition will be the manner in which the Code is implemented. It is imperative that all Government ministries and agencies involved in its implementation co-operate with each other. The implementation of the incentives available under the Liberia Industrial Free Zone Authority - established in 1975 to attract export-oriented investments - was dogged by the effects of conflicting objectives and inter-agency rivalries. In order to ensure that the new Investment Incentive Code acts as an instrument for the regeneration of Liberian manufacturing industry, co-operation must be the watchword among the concerned government ministries and agencies.

2.4 Strengthening the role of the private sector

Before 1980, the stimulus to economic growth in Liberia was provided mostly by the private sector. However, with the military government that came to power in 1980, political uncertainties developed and investors' confidence fell. Despite assurances by the Government to investors that there would be no major shift in policy toward the private sector, there was a huge outflow of capital and a decline in overall investment. Additionally, enterprises of

some prominent Liberians were confiscated. As a result of this, and contrary to declared Government policy, the public sector came to play a more prominent role. In the absence of sufficient capable staff, especially managers, and because of excessive Government interference and financial mismanagement, most public enterprises were soon experiencing losses.

More recently, however, the Government, in an attempt to restore confidence in the economy, has opted for a more positive attitude towards the private sector. All confiscated property has been returned to its owners. In 1986, a law was enacted giving the President the authority to devise plans for the privatization of certain state enterprises which were considered inefficient and unproductive. A Presidential Commission for privatization was then appointed to identify enterprises suitable for privatization. Moreover, the level of interference in the management of public enterprises has been significantly reduced.

Among others, the Liberian Petroleum and Refinery Company (LPRC), the Liberian Palm Product Corporation (LPPC), the Decoris Palm Corporation (DPC) and Air Liberia were identified for privatization. However, to date, privatization plans have not been implemented because some of the corporations which were chosen are considered vital entities for government revenue generation. (As such, unfortunately, they are also closely linked with the very serious issue of extrabudgetary revenue collection and expenditure - see section 1.1.3.) Others were not privatized because investors have not, so far, expressed an interest in acquiring them.

2.4.1 Support to small and medium-scale enterprises (SMEs)

Support to SMEs which are wholly-owned by Liberians is another attempt by the Government to promote private sector development. Some 900 SMEs were identified in 1986, 360 of them outside Monrovia. The low capital thresholds for starting such enterprises, along with their widespread income and employment generating effects, make them useful vehicles for regeneration efforts. SMEs in the manufacturing sector are examined more extensively in chapter 3.

Emphasis on the development of small- and medium-scale enterprises is intended partly to address the problem of the lack of Liberian entrepreneurship, which is singled out as one of the constraints on private sector development. At present, many of the private sector enterprises are run by expatriates. The shortage of capable entrepreneurs, managers and technicians reflects, to a large extent, the shortcomings of the education system (see section 2.2.2), but the absence of an "entrepreneurial tradition" is also an important factor. Only a comprehensive manpower development plan could, in the long run, guarantee a successful "liberianization" of the economy. In the short to medium term, continued reliance on expatriates seems unavoidable.

One response to the need to address the problem of Liberian entrepreneurship was the creation of a Small Enterprise and Financing Organization (SEFO) through the sponsorship of the United States Agency for International Development (USAID). SEFO was designed to develop project proposals and to provide managerial and technical assistance to SMEs. It can

also fund project proposals which are approved. Because of the inadequacy of the capital base of SEFO, other institutions such as the Agricultural Cooperative and Development Bank (ACDB), the Liberian Bank for Development and Investment (LBDI) and, to a minor extent, the National Housing and Savings Bank (NHSB) were encouraged to participate in financing approved projects.

Despite the support given by various institutions, SME development is still in its infancy. Most of the projects have had a poor success rate to date. A key problem is the macro-economic environment which continues to adversely affect most businesses. The resulting low repayment rate of loans has caused most of the banks to withdraw from the schemes. Credit issues, including the role of the above-mentioned organizations, are more extensively dealt with in section 2.6.4.

2.5 Strengthening the role of the institutions involved in industrial development and regeneration

Many government ministries and agencies are involved in the promotion and regeneration of manufacturing industry in Liberia. For some, this role is central; for others it is more indirect. These ministries and agencies and their principal functions relating to industrial development are as follows:

Ministry of Commerce and Industry (MCI) formulates and co-ordinates commercial and industrial policy; it issues manufacturing licences as well as import and export licences. A representative serves on the NIC Board.

Ministry of Agriculture (MOA) designs and co-ordinates effective agricultural and development programmes. It liaises with MCI in the issuance of import and export licences for food products.

Ministry of Finance (MOF) is responsible for taxation of enterprises and companies and for the formulation and co-ordination of private and/or joint venture investment programmes in the export sector. A representative chairs the Economic and Financial Management Committee and serves on the NIC Board.

Ministry of Planning and Economic Affairs (MPEA) is the principal economic planning agency and was responsible for drafting the ERP.

National Investment Commission (NIC) is responsible for investment promotion; it formulates and co-ordinates private investment programmes in the manufacturing sector. NIC drafted the Investment Incentive Code.

National Bank of Liberia (NBL) is the main institution involved in the formulation and execution of foreign exchange policies. It is the lead institution for on-lending IDA soft loans to the private sector through the participating financial institutions. NBL also formulates credit policies for the private sector. As the US dollar is legal tender alongside the Liberian dollar, the NBL cannot be considered to be fully capable of fulfilling its main official task, which is to regulate the money supply and promote monetary stability.

Liberian Bank for Development and Investment (LBDI) is the main instrument for financing investment in the Liberian agro-industrial sector, providing loans to public and private enterprises. Its functions have been widened recently to include commercial banking. Seventy per cent of LBDI's capital is foreign-owned.

Agricultural and Cooperative Development Bank (ACDB) was established with the sole function of financing agricultural developments. More recently, it has become involved in commercial banking operations.

Small Enterprise Financing Organization (SEFO) was established to give technical and financial assistance to small and medium-sized enterprises by financing their investment activities. A large part of its funds comes from IDA's soft-loan facility through the NBL. SEFO also receives technical assistance from UNIDO.

Bureau of State Enterprises (BSE) formulates and oversees policy involving the state enterprise sector and advises the EFMC (see section 1.2). It also gives technical and managerial assistance to state enterprises.

Liberia Industrial Free Zone Authority (LIFZA) was set up in 1975 to attract investment in export-oriented manufacturing enterprises.

From the point of view of industrial development, the above-mentioned government institutions suffer from a number of shortcomings:

- Insufficient co-ordination, and sometimes outright competition, between ministries and agencies that are partners in a project or in the execution of a policy;
- Policies and measures are not implemented in a consistent way. Private enterprises, for example, were not always granted the privileges they were entitled to under the old Investment Incentive Code;
- Serious shortage of, and uncertain career prospects for, capable personnel, especially at the higher levels of the public service;
- Extrabudgetary expenditure and revenue collection by a variety of entities (such as banks), making it very difficult for the Ministry of Finance to control the GOL's financial operations.

The public enterprises are a special problem. Although most economic activities are carried out by private entrepreneurs, mixed ownership and full public ownership also play a role. The most important examples of public ownership in manufacturing are the Liberia Petroleum Refining Corporation (LPRC) and the Liberia Produce Marketing Corporation (LPMC). The LPRC is a profit-making venture, but much of its profit has been used to cover extra budgetary expenditure by the Government. The LPMC has been criticized for its low producer prices and its deficiencies in administration, produce collection and marketing. In fact, a considerable part of the harvests of crops such as rice, cocoa and coffee whose prices are controlled is smuggled to neighbouring countries, where more favourable market conditions prevail. This narrows the potential resource base for food processing and - in the case of rice - leads to unnecessary increases in rice imports.

Common problems of public enterprises include interference in management and financial affairs and shortages of management personnel. IMF sources, moreover, speak of the extremely precarious financial position of the majority

of public enterprises. No recent data are available, but transfers from the GOL to the public corporations (including development banks) are known to have amounted to L\$125 million in the 1981/82-1985/86 period.

Attempts are being made under the ERP to restructure and streamline ministries, government agencies, and public enterprises, and a number of the latter are to be privatized on the basis of recommendations from the Government's privatization committee. Much depends on the political will to carry out the announced reforms, and in the short to medium term the shortage of qualified staff will remain a serious obstacle. The UN system, including UNIDO, has provided various forms of assistance to public entities in the past, and the continuation of this kind of assistance will be crucial for the success of the restructuring attempts in the manufacturing sector.

2.6 Improving the macro-economic policy environment

A supportive policy environment at the macro-economic level is an essential pre-condition for the recovery of the Liberian economy and the regeneration of its manufacturing sector. Apart from the sector-specific area of industrial policy - already discussed under 2.3 above - the other key areas under this heading relate to:

- control of public finances;
- currency and foreign exchange rate regimes;
- pricing policy; and
- credit and interest rate policies.

It is appropriate to examine each of them in turn, describing the present policy stance under each subheading, and making suggestions regarding appropriate modifications which, if implemented, would improve the general policy environment within which economic recovery and the regeneration of the manufacturing sector would be more easily promoted.

2.6.1 Control of public finances

The present critical state of Liberia's public finances has already been reviewed under 1.1.3. The key issue is extrabudgetary public finances - that is, public revenues and public expenditures which have occurred but have not been included in the budget.

The mission is convinced that the GOL is very well aware of the need to reorder the public finances. This is particularly evident with regard to the reduction of expenditure. In his annual State of the Nation speech on 27 January 1989, President Samuel K. Doe stressed this point: "There is need to ensure that expenditures are contained within the limits of the budget. We must make sure that we spend only that which we have." There is an equal, or even greater, necessity to ensure that all expenditures made out of public monies and all revenues collected are included in the budget and that the practice of extra budgetary financing is ended.

2.6.2 The currency and foreign exchange rate regimes

If the productive sectors of the Liberian economy are to be regenerated, then a mechanism for the proper distribution and allocation of scarce foreign exchange must be established. In this context, exchange rate management has a key role to play and must be undertaken within the broad framework of a currency reform programme because of Liberia's dual currency system. An institutional framework to support and manage the appropriate exchange rate regime must also be created.

United States currency has been used as legal tender since 1943, although it has circulated alongside small Liberian coins which were issued in denominations of up to L\$1.00. With the predominant use of the US dollar as legal tender, and a buoyant economy, the monetary system of the country thrived without any need for exchange rate management. Large balance of payments surpluses were created, out of which the Government's external US dollar reserves were built. With the emergence of economic and financial difficulties after 1980, caused by severe budgetary and balance of payments problems, the monetary system began to disintegrate. Capital flight intensified during the early 1980s, as confidence in the Liberian economy decreased, resulting in a huge outflow of US bank notes from the country. Private, unregulated transfers to other countries, for example, totalled some US\$220 million in the first half of the 1980s. The Government's external reserves dwindled from US\$20 million in 1983 to US\$0.51 million in late 1987. The economy suffered a severe liquidity crisis.

To bring temporary relief to the liquidity crisis, Liberian five-dollar coins were issued in 1982 in small quantities. However, due to the severe pressure on the economy, mainly caused by the huge recurrent budget deficits, the Government resorted in later years to the minting of large quantities of five dollar coins. As a result, these five-dollar coins have largely replaced US banknotes since the mid-1980s.

At present, a hybrid monetary system exists that is neither a pure US dollar standard nor a pure national currency system. Officially, the exchange rate between the US dollar and the Liberian dollar is maintained at a 1:1 basis. However, a parallel market exists, in which US banknotes are traded at a substantial and increasing premium. By early 1988, the parallel market rate was 1:1.5; by the end of the year the rate was 1:2.3. The parallel market rate is openly used for private sector transactions. There are no signs at present that the US dollar will be abolished as legal tender, but there is increasing pressure on the Government to adopt a flexible, more realistic official exchange rate. Both the Special Presidential Commission on Foreign Exchange and the IMF have suggested this. The IMF has formulated a detailed proposal which is based on freely negotiable exchange rates in currency dealings among banks and between banks and their customers. Under the IMF's proposed scheme, NBL would then conduct a weekly "fixing session" with the commercial banks which would be used to establish the official exchange rate of the Liberian dollar for the next week, on the basis of the "spot rates" agreed upon in currency transactions during the past week, including such transactions between the NBL and the commercial banks. The US dollar rate would be the standard from which other exchange rates are derived.

At the heart of Liberia's economic and financial difficulties is the uncontrolled overspending of the Government (see section 1.1.3). If a currency reform programme is to be undertaken and implemented successfully, the Government must bring its fiscal operations under control. The government expenditures must be reduced considerably; the recent measures which have increased the level of revenue collected and deposited in the treasury must be continued and, if possible, even strengthened. The external balance must be improved by creating an environment that is conducive to the diversification of the export base and an increase in viable import-substitution production.

To increase the availability of foreign exchange in the public sector, an export earnings surrender scheme was introduced in 1986. Exporters are required to surrender 25 per cent of their hard currency earnings to the NBL, on a 1:1 exchange basis (in the case of US dollar). The scheme has only been partially successful; less than half the amount due to the NBL in 1987 (calculated on the basis of that year's total export value) was actually received by the Bank. The remainder was, in all probability, traded at the parallel market rate. The available information indicates that the scheme was no more successful in 1988.

In the mission's opinion, there is no workable foreign exchange rating system at present. The IMF advocates a gradual abolition of the present scheme, with the availability of foreign exchange to be eventually regulated by the market to the NBL as described above. The parastatals, however, would be required to surrender to the NBL all foreign exchange earnings, above small working capital reserves. The Presidential Commission has also made the latter recommendation, but it would like to continue the surrender scheme. This would allow the Government more control over inflows of foreign exchange than the IMF proposal. Both the IMF and the Commission urge the establishment of regulations to ensure that scarce foreign exchange will be used for imports of goods that are essential for the regeneration of the economy. Whatever measures are adopted, solutions must be found to the currency and foreign exchange policy issues as quickly as possible.

A "foreign exchange budget" needs to be prepared for the public sector and adhered to without exception. Foreign exchange spending must be kept strictly within the budget framework, with outgoings based on clearly formulated priorities. Within the manufacturing sector, priority allocation should be made to industries which possess the capacity to save or earn foreign exchange, whose needs for imported raw materials are relatively low, and which have linkages to other sectors of the economy.

2.6.3 Pricing policy

For political reasons, the GOL presently controls the prices of selected essential commodities. Their prices, together with the prices of cocoa and coffee, have been fixed at the same levels in Liberian dollars for several years. In US dollar terms, of course, this means that their prices have fallen. Rice and petroleum products are the major categories of these commodities. In the context of agro-processing, the issue of rice prices is the most important.

Outside observers such as the ECA, the IMF and the World Bank, all agree that the producer price for rice is too low to stimulate production. Production has been stagnant since the early 1980s, and in order to feed the growing population, rice imports (for which scarce foreign exchange must be used) have increased steadily. Rice is now the second most important imported good after petrol. The farm-gate price is US\$0.03-0.04 per pound of paddy at the parallel market rate, which compares with US\$0.13 per pound in Côte d'Ivoire. Prices in Sierra Leone are also higher. Smuggling is common, therefore further reducing the volume of domestically produced rice marketed in Liberia. This is a disadvantage not only to the direct consumer, but also to the food-processing industry, especially cereal milling and feedstocks. Similar problems exist for export crops such as coffee. A revision of agricultural pricing policies is now essential to stimulate production both for direct consumption and for processing, although ways must be found to protect the poorest urban consumers from price increases for basic foodstuffs. Simultaneously, efforts to increase domestic food production by other means, such as improved extension services as outlined in the ERP, should be stepped up.

2.6.4 Credit and interest rate policies

Both the NBL and commercial banks play an important role in providing credit to the Liberian economy. As a consequence of the country's orientation to a free enterprise system, there are no controls governing the allocation of credit. Generally, commercial bank credit has a short-term maturity, most of it being used to finance imports. By mid-1988, total lending by commercial banks to the private sector amounted to L\$87.5 million. At the same time, the public sector owed L\$64.9 million to commercial banks. By far the most important supplier of credit to the Government and to parastatals, however, is the NBL. The public sector owed L\$486 million to the NBL in mid-1988. (NBL lending to the private sector is minimal.) A considerable part of the money borrowed by the Government from the NBL is used to cover budget deficits; in 1988 the amount is estimated to have been L\$73 million, more than three times the amount approved by the budget and the OPEX team. While stricter budgetary control by the MOF is essential to reduce the recurrent deficits, it may be necessary for the NBL to find ways to restrain the flow of funds to the GOL, for example by charging higher interest rates. Stronger guarantees for an independent status of the NBL may also be needed. Such measures would help to increase confidence in the GOL's financial policy, which is one pre-condition for renewed economic growth.

Since 1980, Liberian banks have been reluctant to provide loans to the productive sectors of the economy. In that year, lending to the private sector fell from L\$121 million to L\$89 million, after an almost continuous rise during the 1970s. Commercial lending has remained below the 1980 figure since then. As the Liberian pound was devalued, and the US dollar prices of many imports rose, the purchasing power of these loans has decreased even more. Loan allocations to the manufacturing sector are only a fraction of total lending; the yearly average for the 1982-1984 period was 0.3 per cent of the total. Under the present circumstances, it seems unlikely that the commercial banks will respond to incentives for increased lending to productive activities from their excess reserves. Restored confidence in the Government's financial and development policies would be needed, but the banks' lack of confidence in private business (the default rate among borrowers is considered very high) is another problem to be tackled.

Specialized banks were created during the latter part of the 1970s to provide credit for special activities. These banks include the Liberian Bank for Development and Investment (LBDI), the ACDB, and the NHSB. The latter two institutions have become involved in largely commercial functions, and have also been lending money to manufacturing enterprises, a role which is not in line with the purpose of their establishment. Both banks were in financial difficulties by the mid-1980s, although the ACDB's performance has improved since it has received OPEX assistance. To encourage the flow of credit to Liberian business, a Credit Guarantee Scheme (CGS) was set up at the National Bank of Liberia in 1984, under the sponsorship of the World Bank. International Development Association (IDA) resources were channelled to the NBL for the purpose of providing the loan guarantees. Two thirds of all loans granted to Liberian-owned enterprises by the participating financial institutions (LBDI, ACDB) were to be covered under the Scheme.

Much of the activity of the above-mentioned institutions focuses on small- and medium-sized enterprises (SMEs), defined as having fixed assets up to a maximum of L\$100,000. In terms of the number of units and total employment, SMEs are the dominant form of enterprise in Liberia, outside the foreign enclaves in the raw materials sector. SEFO, specifically established to assist the smallest enterprises, is involved in the CGS and is supported by UNDP, UNIDO and bilateral organizations. In spite of external support, SEFO has experienced financial problems since at least 1984. Details are very scarce, but the general impression is that the various credit schemes, including those of SEFO, have not performed well. Up to mid-1987, US\$2.2 million had been made available under the IDA scheme, one third of it to small manufacturing establishments.

Disbursement under the IDA scheme has been slowed down because the Liberian counterparts insist on at least 75 per cent equity participation by the prospective Liberian beneficiary (IDA only requires 10 per cent). Other problems include insufficient ability on the part of entrepreneurs to draft proper submissions for loans, and insufficient capacity on the part of the Liberian institutions to evaluate these submissions. Moreover, interest rates tend to be high (up to 20 per cent), and as a consequence many small businessmen tend to default. The assistance of bilateral and multilateral organizations has thus not been able to ensure a successful functioning of the schemes. While further assistance will remain essential, a reassessment of the functioning of these schemes, followed by drastic restructuring, is also necessary.

Credit policy instruments, such as interest rates, credit ceilings and credit allocations are used only to a small extent to influence the direction of credit. Policy regarding interest rate determination in Liberia has been based largely on rates prevailing in New York. This method of interest rate determination has had the effect of producing negative real rates of interest, especially in recent years. This practice has now been modified and interest rates are to be based on the domestic supply and demand for funds. The most widely used credit policy instrument is changing the reserve requirements of banks. However, this instrument has not been used to influence the direction of credit but rather to provide financial resources for financing the Government's budget deficits. The private sector has tended to be crowded out as a result of the Government's demand for funds, arising from its budget

deficits. It can be assumed, however, that much credit is made available through informal channels, especially to SMEs, as it is in other developing countries.

2.7 Potential for economic co-operation and development

A report which necessarily deals in depth with the current problems in the Liberian economy should not obscure recognition of Liberia's inherent strengths: a rich natural resource base, a relatively well-developed infrastructure in the coastal areas, a relatively well-educated population, a market-oriented economy with an entrepreneurial trading tradition, and a familiarity with international business and trade practices.

There are clearly discernible signs of improvement in a macro-economic picture which in recent years has caused understandable concern among international investors, creditors and development assistance partners. In particular, the Government's strongly worded call for "financial discipline" to eliminate extrabudgetary revenues and expenditures promises to address the main obstacle to eliminating budgetary imbalances and foreign exchange shortages. There will not, however, be a full restoration of confidence until stated intentions are implemented, and reflected in resulting improvements in growth rates, trade and financial flows and government fiscal operations.

The investment climate continues to improve, as the Government of Liberia is actively promoting opportunities for private investors, and seeking to develop a network of supportive institutions. The Government has pledged renewed adherence to its traditional "open-door" approach to foreign investment, and has taken steps to revise its Investment Incentive Code to respond to new economic realities. It has repeatedly emphasized its encouragement of indigenous Liberian business, and it should be possible to find ways to transfer the entrepreneurial and managerial skills available to a wider group of entrepreneurs. At the same time steps should be taken to ensure that these skills, mainly acquired in trade, are modified and expanded to serve the development of manufacturing industry.

CHAPTER 3

THE MANUFACTURING SECTOR AND ITS REFORMULATION

3.1 General overview^{1/}

During the 1960s and 1970s, the manufacturing sector grew rapidly, stimulated by the Government's import substitution strategy. Manufacturing output tripled in value terms during the 1960-1973 period. The average annual growth rate for the 1970s was 7 per cent. This growth rate was higher than that of any other sector of the Liberian economy. Per capita manufacturing value added (MVA) increased from US\$34 in 1970 to US\$43 in 1979. However, by 1984 it had declined to US\$29. According to UNIDO data, the sector's share in GDP decreased from 10 per cent in 1979 to 7.5 per cent in 1984. According to data from the Ministry of Planning and Economic Affairs, the 1981 share was 6.7 per cent but increased to 7.1 per cent in 1986. Even if the latter figures are more accurate, the sector would still have contracted in absolute terms.

The main cause of the decline was the general collapse of the economy in the aftermath of the coup in 1980.

Apart from the factors that caused the overall decline - low raw material earnings and internal unrest - the incompetent management of some key parastatals in the manufacturing sector should also be included in any listing of causes of the present depressed state of the sector. Several large enterprises were closed down in the early 1980s, and have not resumed operation since.

In the opinion of the mission, the recent liberalization of imports, which exposed Liberian manufacturers to a greater degree of competition (even though imports remain modest because of foreign exchange restrictions), may have caused further decline within the sector. As a result, the per capita MVA may have decreased even further than the low US\$29 in 1984.

Table 3.1 shows employment and gross output in large and medium-sized enterprises in 1984 and 1985, the most recent years for which these data were available. The branches for which no data are available do not appear to be significant contributors to total manufacturing output. Although Liberia is a major rubber producer, very little processing takes place in the country. Virtually all rubber is exported as dry rubber after primary processing. The country's sole mineral oil refinery contributed a large share of gross output during the 1970s, but the plant has been closed since 1983.

^{1/} Data on the manufacturing sector are scarce and not always reliable. Value added data at the sector and branch levels, for example, are not available. This should be kept in mind when reading this chapter and chapters 4 and 6.

Table 3.1: Employment, gross output and wages, 1984 and 1985
(output and wages in thousands of US dollars)

	<u>Employment</u>		<u>Gross Output</u>	
	1984	1985	1984	1985
3000 TOTAL MANUFACTURING	2,066	2,202	63,976	60,451
3110 Food products	248	307	3,936	6,933
3130 Beverages	681	708	29,262	27,322
3140 Tobacco	68	68	3,937	...
3210 Textiles	...	...	...	...
3220 Wearing apparel, except footwear	...	...	...	...
3230 Leather products	...	...	...	...
3240 Footwear, except rubber or plastic	...	28	...	165
3310 Wood products, except furniture	158	...	954	...
3320 Furniture, except metal	246	296	4,400	2,911
3410 Paper and products	14	14	433	413
3420 Printing and publishing	77	76	945	830
3510 Industrial chemicals	28	14	701	289
3520 Other chemicals	202	262	5,931	4,584
3530 Petroleum refineries	...	...	...	...
3540 Misc. petroleum and coal products	...	...	...	...
3610 Pottery, china, earthenware	...	...	...	...
3620 Glass and glass products	25	27	653	368
3690 Other non-metallic mineral products	207	193	11,131	13,283
3710 Iron and steel	...	...	...	...
3720 Non-ferrous metals	...	...	...	...
3810 Fabricated metal products	53	139	659	2,540
3820 Machinery, except electrical	17	19	211	215
3830 Machinery, electrical	30	39	655	455
3840 Transport equipment	...	...	...	...
3850 Professional & scientific equipment	...	...	...	...
3900 Other manufactured products	...	...	...	...

Source: UNIDO data base.

The beverage branch is by far the most important, accounting for almost one third of total manufacturing employment and some 45 per cent of gross output in 1985. The branch is dominated by a few enterprises that are large-scale and capital-intensive by Liberian standards: a brewery and liquor and soft drinks producers. Two firms account for one half of total employment in the branch.

Until recently, the next important branch was non-metallic mineral products, accounting for approximately 9 per cent of manufacturing employment and 22 per cent of gross output in 1985. The branch is dominated by a single plant, the Liberian Cement Corporation (Cemenco). However, this enterprise

had to suspend operations in 1988. Inability to procure sufficient foreign exchange for its major import, clinker, and low earnings as a consequence of unrealistic retail prices set by the Government were the major reasons for the shut-down of the plant.

Other important manufacturing branches in 1985 were food products, other chemicals (mainly consumer goods such as paint and soap), wooden furniture and metal products (mainly construction materials). In contrast to the branches that dominate the sector, these branches largely consist of medium and small-scale enterprises (SMEs) using relatively labour-intensive technologies. This type of enterprise is more typical of Liberian manufacturing than the large-scale type. Although estimates of the contribution of SMEs to total manufacturing employment or production are not available, their contribution in manufacturing employment is clearly significant. Government expenditure in the SME sector over the 1987-1991 period is expected to generate 5,430 jobs.

Table 3.2: Industrial output by branch of manufacturing (selected years)
(in thousands of Liberian dollars)

	1973	1977	1984	1985
3000 TOTAL MANUFACTURING	...	...	...	...
3110 Food products	5,170	9,300	3,936	6,933
3130 Beverages	5,869	11,980	29,262	27,322
3140 Tobacco	1,090	68	5,937	
3210 Textiles	...	...	...	...
3220 Wearing apparel, except footwear	...	...	...	...
3230 Leather products	...	...	...	...
3240 Footwear, except rubber or plastic	513	715	...	185
3310 Wood products, except furniture	694	3,658	654	...
3320 Furniture, except metal	564	876	4,400	2,911
3410 Paper and products	...	...	433	413
3420 Printing and publishing	...	...	946	830
3510 Industrial chemicals	...	...	701	285
3520 Other chemicals	3,814	13,330	5,931	4,585
3530 Petroleum refineries	20,293	...	...	...
3540 Misc. petroleum and coal products	...	...	...	...
3550 Rubber products	...	...	...	...
3560 Plastic products	168	773	653	365
3610 Pottery, china, earthenware	...	...	...	...
3620 Glass and products	...	...	168	143
3690 Other non-metallic mineral products	2,425	6,087	11,131	13,283
3710 Iron and steel	...	...	...	...
3720 Non-ferrous metals	...	...	...	...
3810 Fabricated metal products	251	502	659	2,540
3820 Machinery, except electrical	...	...	311	215
3830 Machinery, electric	...	...	655	455
3840 Transport equipment	...	...	...	...
3850 Professional & scientific equipment	...	...	...	...
3900 Other manufactured products	...	...	...	...

Source: UNIDO data base.

As table 3.2 shows, the overall picture of fast growth until the late 1970s, followed by decline in the 1980s, is reflected at the branch level. Until 1984, beverages, tobacco, wooden furniture, non-metallic minerals and metal products were still growing. By 1985, decline was also a fact in the beverages and furniture industries. As mentioned above, the cement plant is now closed.

Available information on the tobacco industry shows a record of strongly fluctuating output. According to a 1986 UNIDO survey (see selected references), the only Liberian tobacco products factory on which data were available appeared to be performing relatively well in the mid-1980s, with output rising continuously. Part of the output fluctuation can be explained by the irregular availability of good quality domestic tobacco, as few attempts have been made to grow the crop on a large scale using modern methods.

The only other relatively successful industry in the group of industries under review appears to be the fabricated metal products industry, and even in this branch a number of individual firms are in serious trouble. This is shown in table 3.3, which lists the capacity utilization rates of medium and large-scale factories in the Monrovia area. The table lists 44 of these enterprises which - given the size of the sector - may be considered a large sample. It includes enterprises from virtually all branches and offers a good picture of the present overall situation in the sector. The average rate of capacity utilization was 30 per cent and a number of factories were not operational at all.

3.2 Major problems and constraints

While the overall collapse of the economy, accompanied by shrinking domestic markets and a lack of confidence among entrepreneurs, is the major cause for the decline of manufacturing industry, it is possible to identify a number of more specific reasons for poor performance and low capacity utilization. These include:

- (i) Shortages of raw material due to the lack of access to foreign exchange (see also viii). In spite of increasing government efforts to stimulate the use of domestic raw materials such as rubber, round logs, palm oil and sugar cane, these do not yet form a solid basis for developing the manufacturing industry.
- (ii) Poor maintenance of equipment and installation, absence of preventive maintenance, and lack of spare parts. Maintenance problems are sometimes aggravated by abuse of the equipment.
- (iii) Frequent, unexpected power cuts during the three to four months of the dry season.
- (iv) Inadequate budgetary control, production planning and control, product costing, market forecasting and break-even point analyses. In many cases there is no understanding of how to manage a manufacturing enterprise.

Table 3.3: Capacity utilization rates in Liberian
manufacturing enterprises, 1985

Establishment	Capacity utilization rate
J.B.T. Carpentry Shop, Tubman Blvd., Monrovia	20 per cent
Nimba Wooden Industrial Co., Congo Town	20 per cent
EADDOO Poultry, Somalia Drive	Nil
LEVAN Steel, Somalia Drive	40 per cent
Parker Industries Ltd. (Paints)	33 per cent
Liberia Glue and Latex Foam Industries Inc.	Closed
LP Industries (PVC pipes)	25 per cent
Mesurado Oxygen and Acetylene Plant	Closed
Mesurado Soap Plant	Closed
Mesurado Detergent Plant	Closed
Mesurado Aluminium Fabrication Plant	No activity
Mesurado Garment Industries/Domestic Appliances	Closed
MODALCO - Food Processing	Closed
M.I.C.	20 per cent
Mesurado Fishing Compound and LIFAICO	10 per cent
LIPCO	45 per cent
METALUM	80 per cent
MEZBAU	70 per cent
Liberian Steel Products Corporation	70 per cent
National Food Manufacturing Corporation	80 per cent
Metaloplastica (Liberia) Ltd.	50 per cent
Industrial and Chemical Corporation	25 per cent
LIMACO (Match Manufacturers)	80 per cent
Liberia Battery Manufacturers Corporation	40 per cent
Monrovia Breweries 1 shift (capacity 3 times higher)	70 per cent
ERA Industries Complex Inc.	50 per cent
MANO Mfg. Co. (MANCO) (Bleach, candles, insecticides)	60 per cent
LIPLAFCO - Liberia Plastic Footwear Corporation	45 per cent
Liberia General Industries (cosmetics and soap)	40 per cent
MOTIFCO - Tile Factory	70 per cent
LUNA Nail Factory	No activity
Monrovia Tobacco Corporation	60 per cent
UNIPAC Corrugated Carton Manufacturers	40 per cent
VAANG-AHN Enterprises Ltd. (toilet paper and napkins)	50 per cent
CEMENCO Liberia Cement Corporation	40 per cent
Monrovia Slaughter House	40 per cent
Italian-Liberian Fishing Enterprise	60 per cent
C.F. Wilhelm Jantzen (Furniture) Ltd.	50 per cent
Union Glass Corporation	-
Rainbow Industries	40 per cent
Firestone Rubber Plantation, Latex Plant	...
Firestone Brick Manufacturing Plant	...
A.Z. Corporation Cube Sugar Plant	-
Average	30 per cent

Source: UNIDO, Management Diagnosis and Industrial Rehabilitation in Liberia, 1986.

- (v) Limited domestic market options and failure to seize many of those available. Limited export opportunities due to product design and quality, and inability of many firms to guarantee delivery dates. Competition from imported goods has recently become a problem.
- (vi) An inadequately developed and functioning banking system, resulting in inefficiencies and lack of liquidity. Overdraft facilities, which most businesses need in order to utilize their capital resources to the fullest, are not available even when warranted. Other services to industry (consultancy, repair shops) are weak as well.
- (vii) Inconsistencies in tariff and tax regulations and implementation of the regulations. For example, tax exemptions under the Investment Code are not always granted in the Ministry of Finance.
- (viii) Shortages of foreign exchange, especially in non-exporting firms, to buy imported inputs, spare parts and so on, and increasingly difficult access to the foreign exchange that is available.

SME is less dependent on imports of raw materials and spare parts than the large-scale industry sector. However, its management and financing problems are often worse, because entrepreneurs lack know-how and are not considered credit-worthy.

3.3 Linkages

The previous section has already indicated that Liberian manufacturing has weak linkages with the domestic resource base. Stronger linkages would not only save foreign exchange; a higher degree of processing of domestic raw materials would also raise the domestic value added of export products, which again would result in higher per unit export earnings.

Forward linkages are especially weak; in fact, the mission could find only two examples. Wood is processed in secondary processing industries such as the furniture and match industries, but this amounts to only about 5 per cent of the export value of round logs. The Government has taken measures to increase this percentage. Palm oil is mainly exported as crude. A small part of the production is used for the manufacture of soap.

Although Liberia's marine resources are considerable, there is no industrial processing of fish at present.

Iron ore, rubber, coffee and cocoa are only subject to primary processing necessary for overseas transport. Apart from these export crops, agriculture is poorly developed, and production is mainly for local consumption. Consequently, few food crops are industrially processed. Raw rice is processed locally by small mills, but, as section 2.6.3 indicated, the pricing policy for rice inhibits rice growing on a commercial scale.

The metal products industry, mentioned earlier as one of the few growth industries, appears to rely completely on imports. The industry is predominantly a producer of building materials; its products do not appear to be used as inputs by down-stream industries.

Table 3.4: Location of small manufacturing enterprises in Liberia
(less than 10 employees)

Type of Industry	Location	Number of Enterprises
Alcohol	Gardnersville	1
Bakeries	Monrovia	9
Bakeries	Kakata	1
Batteries/Accumulators	Gardnersville	1
Batteries/Accumulators	Monrovia	1
Beverages	Monrovia	4
Beverages	Gardnersville	1
Brooms/Brushes	Monrovia	1
Cigarettes	Monrovia	1
Cigarettes	Congo Town	1
Construction Materials	Gardnersville	8
Construction Materials	Lakpazee	1
Construction Materials	Bong Town	1
Construction Materials	Gardnersville	2
Electrical/Mechanical Equipment	Monrovia	2
Fish Processing/Fishing	Monrovia	5
Fish Processing/Fishing	Sinkor	1
Food Processing	Monrovia	1
Furniture/Carpentry	Monrovia	147
Glass	Monrovia	1
Handicrafts	Monrovia	3
Ice Cream/Pastry	Monrovia	4
Ice Cream/Pastry	Urstrura	1
Ice Cream/Pastry	Gardnersville	1
Insecticides	Monrovia	1
Jewelry/Goldsmith	Monrovia	7
Leather Processing	Monrovia	3
Matches	Gardnersville	1
Meat Processing	Gardnersville	1
Metal Processing	Monrovia	9
Metal Processing	Gardnersville	1
Metal Processing	Vai Town	1
Milling, Cereal Processing	Monrovia	4
Milling, Cereal Processing	Buchanan	1
Milling, Cereal Processing	Duo Town	1
Milling, Cereal Processing	Zwedru	1
Milling, Cereal Processing	Tuzon	1
Milling, Cereal Processing	West Point	1
Oxygen/Acetylene	Monrovia	1
Packaging	Bushrod Island	1
Paints	Monrovia	2
Paper Products	Monrovia	2
Paper Products	Freeport	1
Paper Products	Bensonville	1

.....continued

Table 3.4: Location of small manufacturing enterprises in Liberia
(in numbers) continued

Type of Industry	Location	Number of Enterprises
Plastic Processing	Monrovia	5
Plastic Processing	Gbarnga	1
Plastic Processing	Gardnersville	2
Potato Chips	Monrovia	1
Printing	Monrovia	12
Soap/Detergents/Cosmetics	Monrovia	7
Soap/Detergents/Cosmetics	Bardnersville	1
Soap/Detergents/Cosmetics	Gardnersville	3
Soap/Detergents/Cosmetics	Congo Town	1
Steel Industry	Monrovia	4
Textiles/Garments	Monrovia	13

Source: Ministry of Commerce and Industry database.

Large enterprises such as the beverages and beer plants are located in the Monrovia area. This includes most of the industries included in table 3.3. The location is logical, due to the fact that Monrovia is the main port and market of the country, the seat of Government, and - to the extent available - the provider of support services. The Monrovia area is also best equipped with physical infrastructure. Palm-oil processing plants and sawmills are located in the plantation and forest areas throughout the country, at points of access to main roads or ports.

An attempt to expand the manufacturing sector by the establishment of an Industrial Free Zone in Monrovia has not been successful and most companies which established themselves in the free port have now closed down (see also section 3.6). Currently, attempts are being made to expand the steel-processing capability in the Monrovia area by establishing a ship-breaking industry in the country. However, the downstream steel-processing industry, which could use the scrap steel within Liberia for manufacturing and building purposes, is too weak and the project is unlikely to be successful. Exports of scrap are not likely to be a viable option either.

Table 3.4 shows the location of registered private small-scale companies, with the exception of furniture/carpentry companies. The number of the latter was estimated at 170 in 1981, with the great majority located in the Monrovia area. There might even be more tailors. Many of the registered companies are not operating, according to the Ministry of Commerce and Industry, or are operating at very low capacities. Small-scale industries are somewhat more widespread than large and medium-scale industries, but even they show a high degree of concentration in the Monrovia area.

While for direct rehabilitation purposes the high degree of concentration in and around Monrovia may be convenient, a greater diffusion of industrial activities would be an essential element in an industrial regeneration drive. Processing of raw materials at the source could in many cases be undertaken by relatively unsophisticated small- and medium-scale industries which are not too dependent on the relatively well developed infrastructure of the capital. This would also help to increase rural employment and income.

3.4 Ownership patterns

The economy as a whole is dominated by the private sector, and this is also true to a large extent in the manufacturing sector.

Most manufacturing enterprises are owned by foreigners. No figures are available, but it is estimated that less than 5 per cent of the large-scale companies are fully owned by Liberians. A reservation scheme for small-scale enterprise, which would restrict investment in small-scale industry (SSI) to indigenous Liberians, is being discussed. Otherwise, no restrictions on foreign private investment appear likely in the short-to-medium term.

The Government owns some manufacturing enterprises, including rubber- and sugar-processing units and a glass factory. All of these have been intermittently dependent on government transfers during the 1980s. With the exception of the LPRC, the Mesurado Group was the most important conglomerate of government-owned manufacturing enterprises, producing a wide range of goods (see table 3.3). Partly as a result of mismanagement, most of the plants had to close down during the 1980s. Finally, the Government is a partner in several joint ventures with foreign enterprises, including some in the beverage industry.

As part of the ERP, the Government is studying the privatization of most of the companies in which it has controlling interest (see section 2.1). At national seminars on the development of the private sector held in Monrovia in 1988, however, it was pointed out that mere privatization would not solve the problems of the enterprises. A serious commitment to restructuring and revitalization on the part of the private entrepreneurs would be essential to guarantee their future viability.

3.5 Trade in manufactured products

Manufactured exports accounted for a mere 2.5 per cent of total export earnings in 1983 (see table 3.5). By 1987, their share had decreased to only 1.8 per cent of the value of total exports. The largest export groups were palm oil, palm-kernel oil (until 1985) and sawn, non-coniferous timber. The decrease in international palm-oil prices, together with the lack of export promotion and price competitiveness in world markets, were the major factors in the continuous decline of Liberia's manufactured exports.

Although the Government has stated that it wishes to stimulate exports in order to increase the flow of foreign currency into the country, no specific policies have been designed to increase manufactured exports; as before, industries remain basically domestic demand-oriented. Sawn wood and palm-oil are likely to remain the main manufactured exports in the medium term.

The decline of foreign exchange reserves and earnings has resulted in a significant reduction of imports. This is also true for manufactured imports, which represented between 76 per cent to 84 per cent of total imports over the 1983-1987 period, if petroleum products are included.

With regard to imports specifically designated for the manufacturing sector, the declining share of capital goods (machinery, industrial and transport equipment) in total imports of manufactures should be noted. This reflects the stagnation of the manufacturing sector since 1980/1981, and also

the scarcity of foreign exchange. As indicated before, the high degree of import dependence of the manufacturing sector and the scarcity of foreign exchange have resulted in decreasing levels of plant capacity utilization.

Recorded imports and exports of manufactured products were paralleled by non-recorded trade with neighbouring countries. This trade has been very active but is difficult to quantify.

Provided that adequate attention and support is given to problems of operational efficiency and viability of domestic demand-oriented enterprises, increased import substitution in agro-related industries can be achieved and can complement an export expansion strategy. Foreign exchange earnings would thus be complemented by foreign exchange savings. Import substitution could be increased in the food products subsector, while secondary wood processing is a likely candidate for export expansion.

Table 3.5: Composition (value and share) of exports and imports, 1983-1987

	1983	1984	1985	1986	1987
Total exports, F.O.B. (million L\$)	427.6	452.1	435.6	408.4	382.2
Manufactured goods of which:	2.5	2.1	2.0	1.9	1.8
- palm oil	0.5	0.7			
- palm kernel oil	n.a.	0.8			
- sawn, new coniferous wood	0.3	0.2		0.3	0.7
Crude ores and products of which:	97.5	97.9	98.0	98.1	98.2
- iron ore	62.5	61.7	64.1	60.8	57.0
- crude rubber	17.1	20.2	17.7	19.8	23.4
- wood logs	5.2	5.0	5.3	8.3	9.3
- coffee	4.3	3.0	6.3	4.0	2.6
- diamonds	4.0	2.4	1.1	1.6	2.9
- cocoa	2.7	3.4	2.6	2.2	1.6
Total imports, C.i.f. (million L\$)	411.6	363.2	284.4	259.0	307.6
Manufactured goods of which:	81.3	81.6	75.8	83.2	83.7
- capital goods (machinery/ transport/equipment)	13.5	14.7	11.1	11.5	10.0
- intermediate goods (energy products, construction materials)	52.4	51.0	48.4	52.2	57.6
- consumption goods, except food	15.4	15.9	16.3	19.5	16.1

Source: Ministry of Planning and Economic Affairs, Annual Report 1988.

Liberia's trade relations are predominantly with the developed market economies. Few details are available on the destination and sources of manufactured tradeables. However, a good impression of the trade flows can be gained from general trade data.

In 1987, the European Economic Community countries purchased 74 per cent of total recorded Liberian exports, followed by the United States (19 per cent). Neighbouring ECOWAS countries bought only 1.2 per cent of Liberian exports and re-exports in 1987, but absorbed all non-recorded exports. The US, Federal Republic of Germany and ECOWAS countries are the largest suppliers of manufactures and primary goods, but US shares in the import market have decreased over the years to 19 per cent in 1987. The Federal Republic of Germany supplied about 12 per cent of total Liberian imports between 1983 and 1986, and 17 per cent in 1987. Import trade with ECOWAS countries intensified, from 3.5 per cent of the total recorded imports in 1983 to 15.8 per cent in 1985 and 16.3 per cent in 1987. Nigeria is a major supplier of petroleum products, and Côte d'Ivoire is the major buyer among neighbouring countries.

Due to the relatively low level of processing, Liberian export growth has not generally been constrained by protectionist barriers in importing countries. The impact of regional trade agreements such as the ECOWAS and Mano River Union has been significant as far as imports are concerned. The dependency on overseas export markets has remained extremely high.

Until 1987, there was a ban on imports of a number of manufactured goods to protect domestic producers. These controls have been largely abolished. The most important domestic product still enjoying protection is beer.

3.6 Policies and institutions for the manufacturing sector

The Ministry of Commerce and Industry is charged with the formulation of policies and measures for the development of the manufacturing sector. However, few of the development policies that have been implemented in Liberia are manufacturing-specific, and there is a lack of co-ordination and continuity in policy-making and execution. Other ministries and institutions having an influence on industrial development include:

- The Ministry of Planning and Economic Affairs (preparation and implementation of plans, policies and programmes for industrial development);
- The Ministry of Finance (sources of financing, investment control);
- The Ministry of Rural Development (creation of employment and industrial investment opportunities in the rural areas);
- The National Bank of Liberia (NBL), Small Enterprises Financing Organization (SEFO), Liberia Bank for Development and Investment (LBDI), Agricultural and Co-operative Development Bank (ACDB), National Housing and Savings Bank (NHSB) (industrial financing);
- The Monrovia Vocational Training Centre (MVTC) and other training institutions (training of entrepreneurs and workers for industrial development).

The most important general development policies and measures that have been formulated and implemented have been reviewed in the previous chapters. Specific efforts for the development of manufacturing include:

(i) The objectives for the manufacturing sector formulated in the ERP:

- To arrest the decline of the private sector and to broaden the range of goods produced;
- To develop an appropriate mix of import substitution and export-oriented industrial production;
- To promote greater Liberian participation in, and a wider spread of, ownership of the enterprises, as well as to ensure development of experienced entrepreneurs;
- To develop linkages of the small-scale sector with large-scale enterprises; and
- To generate employment opportunities throughout the country with particular emphasis on the rural areas.

The sector's projects and programmes under ERP are: financing small and medium enterprise (SME) projects; development of growth centres; establishment of a technological centre for metal casting; study of potential rural industries based on local resources; study of the supply of machinery for hire-purchase to SMEs. Annex table 4 gives a breakdown of planned expenditure, indicating that most of the support will be directed towards SME and rural industry. Otherwise, the section on manufacturing in the ERP contained very few details. No evaluation of the implementation of the programmes was available at the time of writing.

(ii) The Liberia Industrial Free Zone Authority (LIFZA)

The LIFZA was created in 1975 to attract export-oriented investment. Viewed as an extra-territorial entity designed to minimize administrative formalities, LIFZA granted zone enterprises the following incentives:

- 100 per cent exemption from corporate income tax for the first five years; subsequent taxation was not to exceed 25 per cent;
- 100 per cent exemption from all import and export duties;
- No limitation on outflows of capital and profits;
- Admission of entirely foreign-owned enterprises and expatriate staff;
- Assistance in company registration, customs clearance and other legal formalities;
- Assistance in obtaining loans and finance;
- Easy access to ECOWAS, Mano River, EC and US markets.

These incentives should have been conducive to investment, but certain divisions of the Ministry of Finance did not want to honour these incentives because income generated by the firms was needed to meet the Ministry's revenue targets. Leasing rates also proved very high, and therefore few firms were attracted to the LIFZA for a long period of time. To make up for the small number of exporting firms, several firms producing for the domestic market were also admitted. Even this did not help to make the LIFZA project successful. Most of the firms presently located in the Zone have ceased operation or operate at very low capacity levels.

CHAPTER 4

AGRO-RELATED INDUSTRIES AND THEIR REHABILITATION

4.1 Justification

Successful industrial development in Liberia could be greatly enhanced by a heavier reliance on the domestic supply of raw materials, now predominantly exported in unprocessed or semi-processed form. The ERP recognizes this, and emphasizes the role of processed agricultural and forest raw materials in future development. The term agro-related used here includes industries using raw materials from agriculture, forestry and fisheries: cereals, cassava, coffee, cocoa, rubber, palm-oil, tropical woods and fish.

The ERP'S motivation for emphasizing these industries is not based on the abundant or potentially abundant availability of these raw materials alone. Agro-related industries, especially food industries, have a low demand threshold; therefore, they can be successful even in the rather small Liberian market. Because most food products are basic needs, demand tends to be relatively stable as well. Looking at export markets, foreign exchange earnings can be increased by a higher degree of processing of fish, agricultural and forest resources. Finally, many of these industries use relatively simple, cheap technologies and are labour-intensive. Financial needs are therefore limited and the employment effects considerable.

Virtually every agro-related industry suffers from problems constraining it from making an optimal contribution to economic development. Hence, for regeneration of the industrialization process in Liberia, the subsector must be reviewed and rehabilitation and restructuring measures formulated. In this context, it is vital that a national strategy for the subsector be elaborated, stating priorities, targets and a time-frame for implementation. The experience of successful rehabilitation and restructuring in the agro-related industries would also be useful for other industries.

4.2 Branches

The subsector has the following branches:

- animal feed processing
- fish processing
- flour milling
- food processing
- rubber processing
- palm oil processing
- wood processing

Crops such as coffee and cocoa are not processed industrially at present.

4.2.1 Overall characteristics

(i) Animal feed processing

This branch is at present very small; there is only one manufacturer producing commercial formula feeds. Small plants were established in the 1970s to cater for the needs of large poultry farms and, to some extent, pig farms.

This branch in particular is important for increasing the production of poultry since domestic output of red meat is relatively small.

(ii) Fish processing

Liberia has a long coastline with rich fish resources. In the 1970s, there was a well developed integrated fish industry geared to supplying the domestic market and to producing large quantities for export. The scale of these activities is now small. Fish resources are now partly explored by fishing vessels from other countries and the economic benefits accruing to Liberia appear to be small. There is no functioning industrial fish-processing plant in Liberia at present which, given the mission's criteria for plant selection, disqualifies the industry from rehabilitation studies. However, the branch has great potential, which should be of great concern to the Government of Liberia.

(iii) Flour milling

Flour milling is of great importance for the supply of essential staple commodities, wheat flour in particular, to urban areas. For climatological reasons, however, no wheat is grown in the country. All wheat used for flour milling is imported and there is only one flour milling enterprise, National Milling, which has its flour mill near Buchanan.

(iv) Food processing

This is a branch which comprises a variety of processing industries, from slaughterhouses to fruit canning, and frozen vegetables to tomato sauce. The branch is also heterogeneous from the point of view of the size of its enterprises, although in Liberia the food-processing branch has a narrow base. The branch is discussed in more detail in section 6.3.

(v) Rubber processing

Natural rubber is by far the most important export crop. Production reached 102,000 tonnes in 1987, 43,000 tonnes of which were produced by the foreign enterprise Firestone; 37,000 tonnes by other foreign concessions; and 22,000 tonnes by Liberian farmers, including absentee landlords living in the cities.

The natural coagulated wet rubber is subject to a primary process which turns it into dry rubber. It is then pressed into bales for export. This process is carried out in nine processing plants, or centres, of varying capacities. The plants are located mainly in the "Rubber Belt" extending from Monrovia in the south going northeast past Gbarnga, and also along the coast at Harper, Greenville, and inland from Buchanan.

Apart from the above-mentioned primary processing plants, there is no rubber industry in Liberia. The country is only a supplier of raw materials for overseas manufacturing companies. Moreover, the Liberian-owned plantations are aging and the future of the entire Liberian rubber branch may be in jeopardy unless more emphasis is soon placed on replanting of rubber trees. The present high international rubber price should be a stimulus for new efforts to increase the contribution of domestic rubber producers to the economy.

(vi) Palm-oil processing

A large part of the national palm-oil processing capacity is at present under government control. Although most plants have plantations of their own, many of them also receive oil-palm fruit for processing from outgrowers.

Although the bulk of crude palm oil is exported, some is used for domestic soap manufacturing. There is no refinery in Liberia. The palm oil branch is discussed in detail in section 6.2.

(vii) Wood processing

In 1987, a total of 711,673 cubic metres (solid measure) of round logs were harvested in Liberia's natural forests. Exports accounted for 429,000 cubic metres; this represented an increase of 37 per cent over the 1986 figure. Exports of sawn wood in 1986/87, however, were only 8,410 cubic metres, or about 2 per cent of round log exports. This illustrates the present situation of the branch fairly well - felling in the natural forests, accompanied by very little processing. There are 24 sawmills and 3 veneer/plywood plants in Liberia. There is no pulp processing. Secondary wood processing is confined to small-to-medium-sized furniture and carpentry enterprises primarily manufacturing for the domestic market. Section 6.1 describes the wood-processing branch in more detail.

4.2.2 Major problems and constraints

In the opinion of the mission, agro-related industries are currently performing below optimal capacity. They are going through a period of stagnation and performance is generally poor. This is the result of a number of factors which affect the operation of the plants and discourage investment.

The constraints to the operations of the majority, if not all, of the enterprises are:

- deficiencies in managerial capabilities at various levels;
- lack of finance, including foreign exchange, for the procurement of essential spare parts and inputs;
- frequent mechanical breakdowns of equipment due to inadequate preventive maintenance and lack of spare parts;
- insufficient, or total absence of, incentives to encourage employees to perform well;

- frequently inadequate and often erratic supply of raw material inputs;
- inadequate transport capacity, caused by excessive wear on vehicles due to bad road conditions, inadequate preventive maintenance and lack of spare parts.

In addition to the financial problems facing the enterprises, especially those in the public sector, there is at present a reluctance to invest in agro-related enterprises. This is a serious constraint on the future development of the various branches. It is largely due to the lack of confidence in the present economic environment in Liberia which has been noted in the first chapters of this report.

4.2.3 Linkages

It was noted in section 3.3 that in the manufacturing sector both backward and forward linkages are weak. In the case of the agro-related industries, linkages are developed to some extent only in the palm-oil and wood-processing industries. These are more often backward than forward linkages. (See chapter 6 for a more detailed discussion.)

The main reason for the near absence of linkages is the Government's failure to implement a coherent strategy of resource-based industrialization in the past. The old Investment Incentive Code, which came into force in 1977 and was revised in 1982, had the stated objective of encouraging the establishment of industrial units utilizing Liberian manpower, raw materials, and products of Liberian origin. But no institutional machinery was established within the Government to enforce the implementation or to monitor the impact of the Code. The ERP and the new Investment Code provide a new opportunity to strengthen intersectoral and inter-industry linkages.

The figures in chapter 5 illustrate the linkages at the branch level and the flow of products to both the domestic consumer sector and the export sector.

4.2.4 Spatial distribution

The distribution of enterprises within the subsector is directly related to the location of the natural resource being exploited. Fishing enterprises are centred in Monrovia. Rubber-processing plants are located in the Monrovia to Gbarnga "Rubber Belt" and also in the isolated rubber-producing areas in Grand Cape Mount county and Sinoe. Sawmills are located in all of the logging areas, but the secondary wood-based industries are centred in Monrovia, where most of the buyers of their products are found. Palm-oil processing plants are located in the main plantation areas of Grand Cape Mount County, Lofa County and Sinoe County. The main milling company using imported grain is located in Buchanan close to the port facilities. Manufacturers providing consumer goods such as ice cream, pastry, potato chips, beverages and bakery products are all based in Monrovia.

4.2.5 Ownership patterns

Agro-related industries show a mixed picture with regard to ownership. The palm-oil industry is practically fully government-owned via the National Palm Corporation (NPC). The sole enterprise in the animal feed branch is privately owned by the National Milling Corporation which, in turn, is controlled by the US-based Seabourne Company. The fish-processing branch is almost entirely controlled by private interests, with foreign companies predominating: out of 28 fishing vessels registered with the Ministry of Agriculture only two are Liberian-owned. Private ownership also predominates in other food processing industries. The rubber-processing branch is dominated by US firms, with the exception of Sinoe Rubber Corporation and the Rubber Corporation of Liberia which are both publicly owned. Finally, the wood-processing branch is predominantly privately owned as well, with both foreign and domestic enterprises represented. Most of the large enterprises are foreign-owned.

4.2.6 Policies and institutions as they relate to the agro-industrial subsector

The general investment incentives discussed in section 2.3 and the ERP policy objectives for private and public sector manufacturing outlined in section 3.6 also apply to agro-industries. No separate policies or institutions exist in support of this subsector. Some of the general policies that have been implemented, however, have had a special impact on agro-related industries. In chapter 3, reference has been made to changes in the trade, tariff and pricing policies that have an impact on manufacturing. For the agro-processing industries, the retention of the ban on imports of poultry products is important. Duties are to be lowered on a number of important agricultural products and semi-processed goods (cereals, vegetable oils), which should help to improve the flow of inputs to food-processing industries, as domestic agriculture is not yet able to provide such inputs in sufficient quantities. Duties on soft drinks, beer and several other products of the food and beverages subsector that are also made locally are to be raised according to the Cabinet Committee on the Review of the Tariffs. (Other sources mention a ban on imported beer.)

Food products are a major category of the commodities whose prices are controlled. In the agro-industrial context, the issue of rice prices is the most important. (See chapter 2, section 2.6.3, on pricing policy for a detailed discussion.)

CHAPTER 5

BRANCH PROFILES

The analysis of Liberian agro-related industries and the preliminary assessment of several companies resulted in the choice of three companies for rehabilitation in the following three branches: wood processing, palm-oil processing and poultry/feed processing. This chapter provides background information on these branches.

5.1 Wood processing

5.1.1 Overall characteristics

Wood processing is the second most important branch in the manufacturing sector, after textiles/wearing apparel, in terms of the number of enterprises and size of the labour force. In 1986/1987, about 220 woodworking enterprises were estimated to exist. Together, they employed about 2,150 persons, equivalent to 19 per cent of the total manufacturing labour force. There are many small-scale wood processors in the informal sector, although no estimate of their number is available. In this connexion, it is worth noting that there are 51 registered logging companies, employing some 3,800 people.

Table 5.1: Wood processing: estimated number of registered enterprises and employment, 1986/1987

	Number of companies	Total labour
PRIMARY PROCESSING		
- Sawmilling	24 ^{a/}	1,300
SECONDARY PROCESSING		
- Plywood, veneer)	3	150
- carpentry, wood workshops)		
- Furniture)	over 170	700
TOTAL	about 200	about 2,150

Source: Compilation of Ministry of Planning and Economic Affairs.
^{a/} Only 17 operational.

Primary wood processing consists of sawmilling. Most of the sawmills concentrate on logs for export, as well as small quantities of high quality sawn wood of well-known hardwood species.

Only one company has over 1,000 employees; six others employ over 100. The other ten operational sawmills are small, labour-intensive operations. The equipment employed is generally out-dated, and the operations are inefficient. Slabs and off-cuts are utilized as fuel wood, and large quantities of wood residues and waste are left to rot. Productivity is low and the installed machinery is generally under-utilized, mainly because roads and logging trucks are often in a state of disrepair. Sawmills, therefore, cannot be properly supplied.

Secondary wood-processing industries utilize the primary products for further manufacturing and assembly into standardized products (scaffoldings, partial frames, beams, form work and so on), non-standard products (building components such as doors, windows, mouldings), furniture, packaging (crates, boxes, pallets), and others (hatches, boats).

With the exception of three large foreign-owned companies, the secondary wood-processing sector consists of small enterprises, mainly producing non-standardized products and catering only to the needs of the local market. The industry is highly labour-intensive, offering non-serial production of generally low-quality finishing and design.

Woodworking machinery used in secondary processing is generally obsolete and poorly maintained.

The domestic value-added content of wood-based products supplied to the domestic market remains low, and secondary processed goods are generally unable to withstand the competition from higher quality, lower priced imported products.

A new regulation No. 15 on exports of logs and processed wood came into effect in March 1988. It imposed an obligation on logging companies to process 10 per cent of extracted logs locally. An additional sawmilling capacity of 25 to 50 per cent could become operational in the near future if this regulation is implemented. Moreover, the domestic value added content of wood products will be increased.

Liberian-owned manufacturers and distributors in the branch were encouraged by the Government to form a professional association, the Liberian Wood and Carpentry Industry Association (LWCIA). The LWCIA receives government and foreign support, and its main goal is the development of secondary wood processing. Some of the envisaged activities of the Association are the development of a centralized clearing-house system for contracts, control of sawn timber retailing on the domestic market, and centralization of imports of equipment and supplies. At the time of writing, the extent to which these activities actually take place was not known.

Measures to stimulate the development of secondary wood-processing include an increase in the utilization of standard products, the establishment of quality standards, and measures to increase domestic demand. If successful, these measures are expected to increase the number of market outlets and the level of utilization of sawmilling enterprises over the medium term. They will also have the effect of reducing dependence on imports and conserving foreign exchange.

5.1.2 Major problems and constraints

As a whole, the wood-processing industry is faced with the following major constraints:

- Inadequate supplies of wood inputs at competitive prices due to inefficient extraction and transport of logs;

- Non-standardization and low quality of secondary processed wood products. Breaking even is difficult because of high production costs and low prices that domestic wood products command in the market;
- Very low productivity in the sawmills;
- Lack of promotion on the local market of lesser-known, but relatively cheap wood species;
- Lack of experienced and adequately trained management, as well as skilled personnel;
- General lack of recognition of the need for short- and long-term planning in managing enterprises, and lack of understanding of the fundamentals of price/cost calculations and record-keeping procedures;
- General lack of adequate working capital;
- Poor maintenance and lack of equipment and spare parts (the latter is often a result of foreign exchange shortages);
- General lack of knowledge of the market and general lack of marketing support;
- Absence of institutional credit facilities, especially for Liberian businessmen and Liberian-owned companies. When loans are granted there is normally a long period between submission of the application and disbursement.

5.1.3 Linkages

Forward linkages are not very well developed at present, with a limited amount of further processing performed. Doors, panels, crates and pallets are examples of downstream manufacturing.

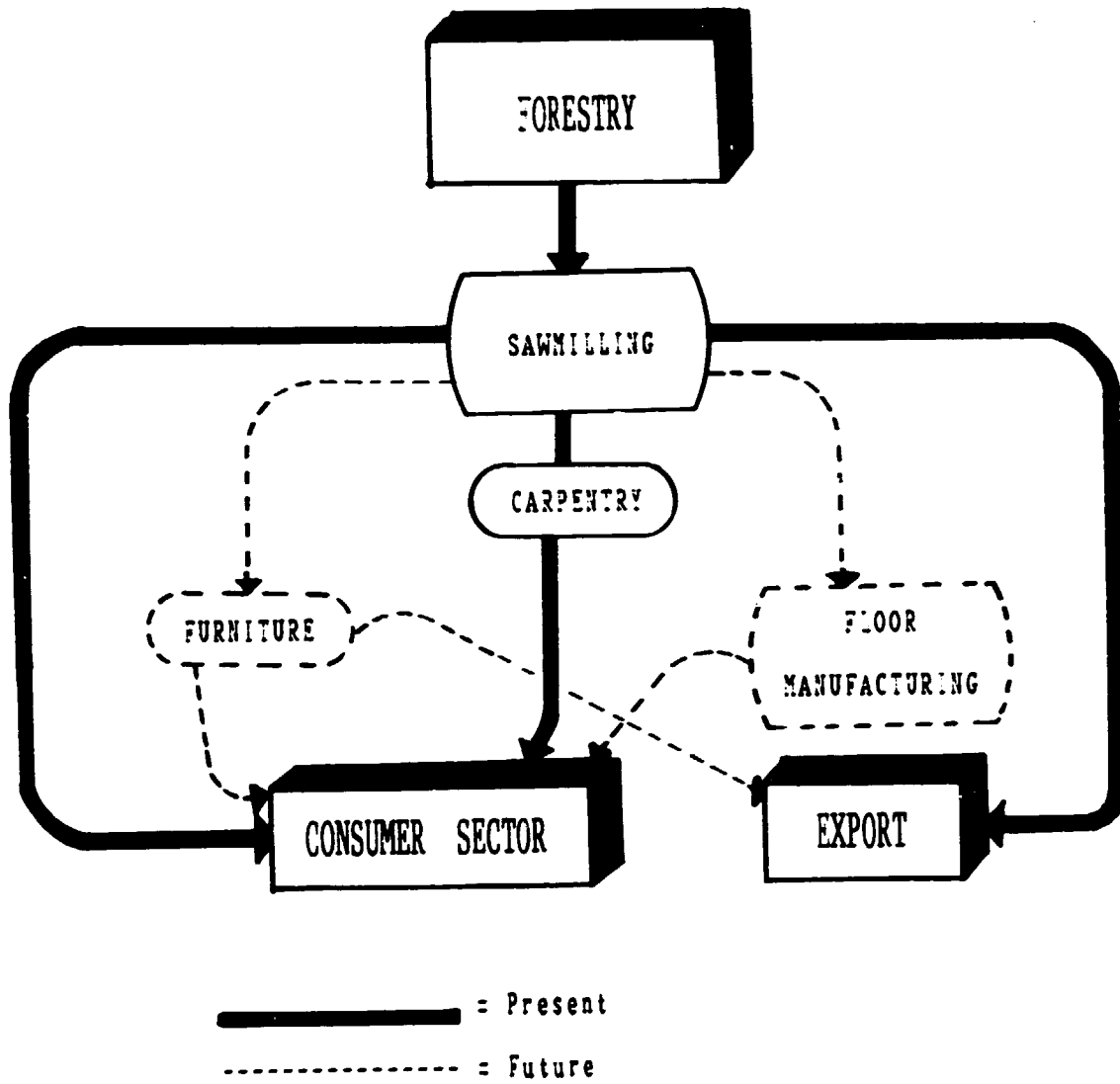
As seen in figure 5.1, sawn timber is also sold to carpenters working for the domestic market. This figure also shows examples of potential forward linkages, including export-oriented knock-down furniture industries, and the manufacturing of floor boards and parquet floors for direct installation. Other forward linkages could possibly be identified, depending on developments in the domestic and export markets.

In summary, the potential for forward linkages is considerable. Market surveys would have to be made to identify products which can be produced in Liberia at competitive prices and of uniformly high export quality.

5.1.4 Spatial distribution

The forest resources of Liberia occupy about 49 per cent of the total land area of the country, the majority of the forests being in the south-eastern and north-western areas of the country.

Figure 5.1: Linkages - present and potential wood-processing branch



Geographical Distribution of Forest Areas

	<u>Million hectares</u>	<u>Million acres</u>
South-eastern sector	2.727	6.736
North-western sector	1.205	2.977
Northern sector	0.059	0.147
Others	<u>0.799</u>	<u>1.976</u>
	4.790	11.836

Source: Forestry Development Authority, Annual Report 1986/87.

The majority of logging and wood-processing operations are dispersed throughout the south-eastern and north-western forested regions. They are located at the points of access to main roads or ports, as the industry is largely dependent on export markets. Within the branch, the number and economic importance of logging companies is larger than that of the primary processing companies, with the majority of activities focused on the export of raw logs. Recent government regulations oblige logging companies to process locally a minimum of 10 per cent of their total output. If implemented, this regulation would lead to a better distribution of wood processing facilities within the country.

During 1986/87 there were 17 operational sawmills producing sawn timber, veneer and plywood. They are located in the following regions:

<u>Forest region</u>	<u>County of forestry HQ</u>	<u>Number of sawmills</u>	<u>Number of plywood/ veneer plants</u>
1	Nimba	7	-
2	Grand Gedeh	8	2
3	Lofa	7	-
4	Sinoe	<u>2</u>	<u>1</u>
	Totals	24	3

Source: Forestry Development Authority, Annual Report 1986/87.

Seven of these sawmills were not operational in 1987. Apart from the Bomiwood mill, they produced mainly for the local market.

The branch also contains secondary woodworking units, all owned by Liberians; 167 were registered with the LWCIA in the Greater Monrovia area in 1987. Such enterprises are also found in all other major towns, although their precise numbers are not known.

5.1.5 Ownership pattern

The enterprises in the branch are almost all owned by private companies; most of the larger enterprises are foreign-owned.

Within this branch there is only one wholly Government-owned company, which is controlled by the Forestry Development Authority (FDA) and the National Investment Commission (NIC), the former owning 60 per cent and the latter 40 per cent.

5.1.6 Policies and institutions as they relate to the wood-processing branch

Government policy concerning the management and utilization of forest resources is stated in the 1976 Forest Development Authority Act.

Measures concerning the conservation of forest resources, as well as the forest management practices of the Forestry Development Authority, are based on the following policy objectives:

- Make the most productive use of public forests, taking both direct and indirect values of wood reserves into consideration;
- Co-ordinate forestry and other forms of agricultural land uses, and develop the forestry sector and industries in harmony with overall national development;
- Preserve and protect forest resources by avoiding waste and destructive extraction of valuable species, as well as by the application of conservation programmes involving the rural population;
- Undertake afforestation and reforestation programmes and establish scientifically managed permanent forest estates in the National Forest Areas;
- Promote the commercialization and use of lesser-known wood species.

The Forestry Development Authority, under the auspices of the Ministry of Agriculture, is the institution in charge of forestry development.

5.2 Palm oil processing

5.2.1 Overall characteristics

Palm cultivation and palm-oil processing is a mirror image of Liberian agriculture in general: it is an activity which is sharply divided between modern plantations and mills on the one hand, and a traditional subsistence sector which is essentially non-monetized on the other.

No area estimates of wild oil-palm groves are available, but according to a World Bank survey (see Selected References page 73) nearly 45 per cent of the agricultural households make palm-oil traditionally from wild grove fruits.

Most of the domestic demand for palm-oil, roughly estimated at 23,000 to 25,000 tonnes per year, is covered by local production. Liberia has no refinery for crude palm oil. Between 1983 and 1987, imports of refined oil needed to meet local consumption needs averaged \$3.85 million per year.

In the late 1960s and 1970s, the Government started encouraging the modern cultivation of oil palms, and even got directly involved. The objective was to satisfy local demand and also to produce for export markets. This objective has only partially been reached, and most of the demand is satisfied by private enterprise.

According to the estimates of the Ministry of Planning and Economic Affairs, the current area planted with oil palms amounts to some 19,600 hectares, and the existing milling capacities amount to 42 tonnes/h of fresh fruit bunches (FFB), distributed as follows:

<u>Ownership or concession</u>	<u>Area planted (ha)</u>		<u>Milling capacity</u>
	<u>Estate</u>	<u>Smallholders</u>	<u>(t/h FFB)</u>
Public sector or public sector majority	8,950 (in all locations)	5,600	31.0 (in 6 locations)
Private sector	5,050 (in 5 locations)	-	11.0 (in 3 locations)
Total	<u>14,000</u>	<u>5,600</u>	<u>42</u>

Source: Ministry of Planning and Economic Affairs, Annual Report 1986.

The Government operates oil mills on smallholder farms (73.7 per cent of the existing planted area) and on concessions, and owns, or is the major shareholder in, 73.8 per cent of the total milling capacity in the country.

The condition of the state-managed palm sector is alarming. Most plantations are old - that is, close to the end of their productive life of 15-16 years - and improperly maintained (no use of fertilizers, little or no replanting, irregular and inadequate upkeep). Four of the small mills (with capacities of 1.5, 2 or 6 tonnes/h FFB) are old and their processing capacities were insufficient from the start, so that only part of the output of the surrounding plantations could be processed. They are either operating at very low levels or had closed down by 1985.

The two larger government-owned mills, with capacities of 10 t/h FFB, are operating intermittently, far below their rated capacity, and at a loss. A 75/t/day palm kernel crushing mill that exported up to 6,000 t/y of palm kernel oil until 1978 was closed down in 1980. The yields on smallholders' farms are low in comparison with wild oil palm groves, primarily due to poor initial site selection and poor management, although the planting material (of the Fenera variety) gives generally satisfactory results.

Prices in this branch are administratively controlled.

5.2.2 Major problems and constraints

The major constraint facing this branch is the lack of defined, coherent development policies and objectives.

The majority of the plantations are badly mismanaged, and tree reserves have been partially destroyed through inadequate upkeep and harvesting techniques.

The insufficient capacity of several processing mills resulted in uncollected crops that were left to rot on the trees.

Due to the lack of competent management and shortages of working capital, all plants operate intermittently, at very low output levels. This results in relatively high production costs and accumulating operational losses.

Shortages of foreign exchange and a lack of planning in purchasing imported spare parts regularly cause breakdowns or closure of plants.

The productivity and profitability in the majority of enterprises are reduced further by the low level of labour skills and, more importantly, the lack of motivation and interest among workers due to low salaries or even non-payment of wages.

5.2.3 Linkages

In addition to the backward linkage to agriculture, there are at present only two forward linkages - one to soap manufacturing and the other to animal feed processing. Some crude palm oil is sold directly to domestic consumers while the remainder is exported. Figure 5.2 shows both existing and potential linkages. To increase linkages, MVA and employment, the rehabilitation of the existing palm kernel processing plant would be of some interest. This would also permit the palm-oil extraction plants to find a market for the palm kernels. At present these do not generate any revenue, as they are either used as fuel or simply thrown away.

A palm-oil refinery has been under consideration by the Government on the basis of a 1978 UNIDO feasibility study. In the opinion of the mission, demand on the domestic market and the Mano River Union would probably justify this project. The availability of refined oil, moreover, would enable the exploitation of more forward linkages.

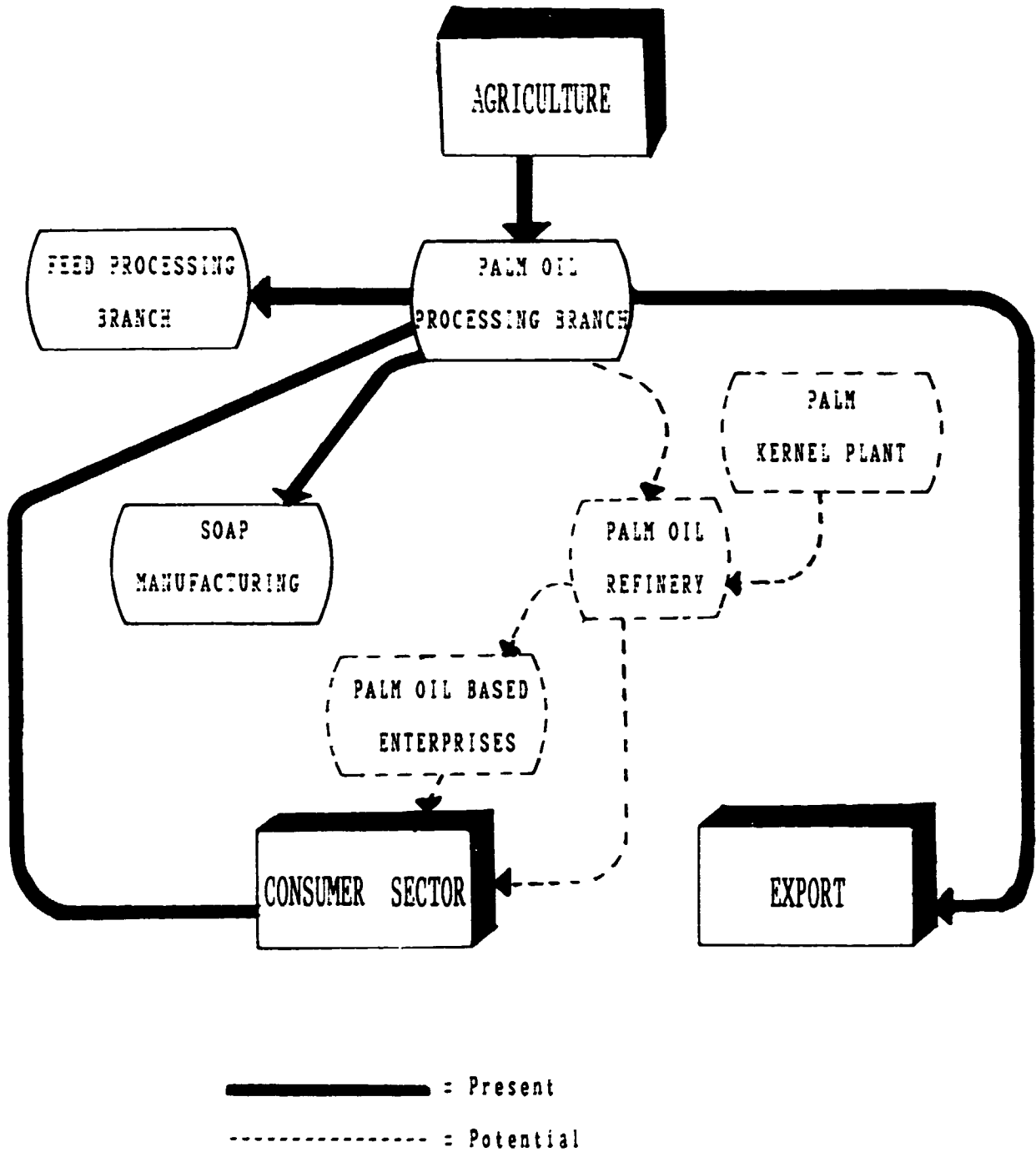
5.2.4 Spatial distribution

The palm-oil processing branch presently consists of a few modern crushing mills distributed around the country, plus many small village units where oil-seed is crushed by hand for local consumption. The kernel-crushing mill is located in the Monrovia Free Zone. As indicated above, all of the larger units installed in the country are now either closed down or are operating at very low capacities. The location of these is as follows:

<u>Company</u>	<u>Plantation size (acres)</u>	<u>Installed capacity (t/hour)</u>	<u>Country location</u>
WAAC	4,000	10	Grand Cape Mount
Butaw	5,800	10	Sinoe
Decoris	14,000	4	Marland
Foya	2,500	6	Foya
Dube	1,100	1	Grand Gedeh
Zlea Town	1,000 (village processing)	0	Grand Gedeh
Kpatawee	1,000 (village processing)	0	Bong
Totota	900	1.5	Bong
Madco	700	1	Fendell
Libinc	6,500	10	Grand Bassa

Source: Socfin Consultant Services, Belgium, Study on Palm-Oil Processing Sector, 1985.

Figure 5.2: Linkages - present and potential palm-oil processing



LIBINC, a private company located at Buchanan, supplies industrial oil to Rainbow Industries for soap manufacture and appears to be the most successful operation.

5.2.5 Ownership pattern

According to a LBDI study, the total production of palm-oil in Liberia is estimated to be about 20,000 tonnes annually, of which 15,000 is produced in the subsistence sector. The remaining 5,000 tonnes is produced by the industrial palm-oil sector, of which LIBINC, a private company, produces about 3,900 tonnes or 77 per cent. The rest of the industrial palm-oil sector is partly or wholly-owned by the GOL through National Palm Corporation (NPC).

Ownership in many of the private companies in the palm-oil processing branch has witnessed rapid changes. There have been minority interests from abroad, mainly from Belgium, but all foreign investors have pulled out after a short time.

5.3 Poultry processing

5.3.1 Overall characteristics

The meat-processing branch incorporates slaughtering and processing of poultry, cattle and pigs. The current very low level of development of this branch is partly a consequence of the specific structure of Liberian livestock and meat supplies.

Poultry meat is of particular interest to Liberia as a source of animal protein in addition to fish. Chicken production was developing quite well during the 1970s, but industrial rearing and slaughtering of broilers ceased during the first part of the 1980s. Resumption of these activities is of national interest; therefore, the following discussion focuses on poultry processing.

Traditional meat supplies

The majority of the Liberian population depends upon subsistence agriculture for its meat supply. It therefore relies essentially on non-monetized livestock and meat production. The development of intensive animal production and meat processing in urbanized areas has been slow, partly because of the development of fisheries and artisanal fish processing, which provided the principal source of animal protein in urban areas.

The size of the traditional livestock herd is very small. It was estimated at a total of 260,000 head in 1987/1988 (Ministry of Agriculture estimates), of which half are goats, 23 per cent sheep, 21 per cent pigs and 6 per cent cattle.

An estimated 800,000 poultry (95 per cent chickens and 5 per cent ducks) were found on traditional farms according to MOA estimates. Assuming off-take rates of 10 per cent for cattle, 75 per cent for pigs and goats/sheep, and 100 per cent for poultry, and using the prevailing average carcass weights, the current equivalent meat supply amounts to 4,150 tonnes only. For a population

estimated at 2.29 million in 1987/88, this implies an annual consumption of about 1.8 kg meat per capita from indigenous traditional livestock. Nearly all the meat off-take of the traditional farms is consumed directly in the villages.

Commercial poultry/piggeries and meat processing

In the peak years 1979 and 1980, commercial, intensive poultry and pig farming and slaughtering supplied an additional 2,200 tonnes of meat per year. However, most of the large integrated poultry/slaughtering units that existed in the early 1980s have closed down for reasons outlined in section 5.3.2. Commercial operations are now reduced to only two relatively large units and to some 30 small farms which sell the greater part of their poultry production live. In the remaining large poultry unit, which operates at a very low level, laying is more important than slaughtering.

Commercial poultry and slaughtering operations still supply a large part of the meat marketed in towns, either fresh or frozen. However, the entire demand for meat and meat products cannot be met by these local suppliers. Between 1982 and 1985 annual imports of meat, paid for with scarce foreign exchange, averaged 215 tonnes of meat and edible offal, 3,650 tonnes of preserved meat, and 6 tonnes of chickens. In 1986/87 imports rose to 10,000 tonnes of pork ribs, 5,400 tonnes of frozen poultry, 12,500 tonnes of frozen beef, and about 8,000 tonnes of processed meat products, according to data supplied by the University of Agriculture.

The GOL conducted a national poultry survey in 1987 in order to develop a strategy for the development of commercial meat processing, with particular emphasis on the production of chickens and eggs and the curtailment of imports. The results and recommendations of the survey are still under consideration.

It is the mission's view that poultry processing is the most promising industry in the meat-processing branch. Therefore, the following sections are limited to issues relevant to the poultry-processing industry.

5.3.2 Major problems and constraints

Several commercial integrated poultry slaughtering and processing operations closed down after 1982/83, as a direct result of mismanagement, insufficient working capital reserves, an irregular feed supply, and difficulty in obtaining access to commercial credit.

The enterprises which are still operating encounter major difficulties in importing their basic raw materials - feeds, day-old chickens, packaging materials, and spare-parts - due to the scarcity of foreign exchange.

Prior to 1981, the domestic meat processing business was protected by a ban on the import of chickens. The liberalisation of imports and competition from very low-priced chickens from Europe forced several poultry operations out of business and continues to be a major problem for the few remaining ones.

Efforts are being made by private producers to reduce their imports of inputs by initiating local contract-farming of feed, or by starting-up new hatcheries. These developments are delayed by the difficult access to credit at acceptable terms.

5.3.3 Linkages

Figure 5.3 shows the backward and forward linkages in the Liberian poultry-slaughtering industry. It is important to remember that there is only one industrial poultry slaughtering enterprise which is currently not operational. The backward linkages are likely to be primarily with the commercial poultry units, with few direct links to domestic agriculture. In the long term, the market for live birds is likely to be replaced by one for dressed birds. It is then expected that, with regard to slaughtering, the small to medium-sized poultry operations on integrated farms will become important sources of broilers and spent hens from egg production.

5.3.4 Spatial distribution

At present, the branch consists mainly of numerous subsistence farmers scattered throughout the country. There is virtually no surplus for the urban population.

In the Monrovia area, the Baker hatchery with a capacity of 24,000 day-old chicks per week, closed down in 1980. The company's broiler farm in Monrovia, with a capacity of 500,000 broilers per year, ceased operation in 1984.

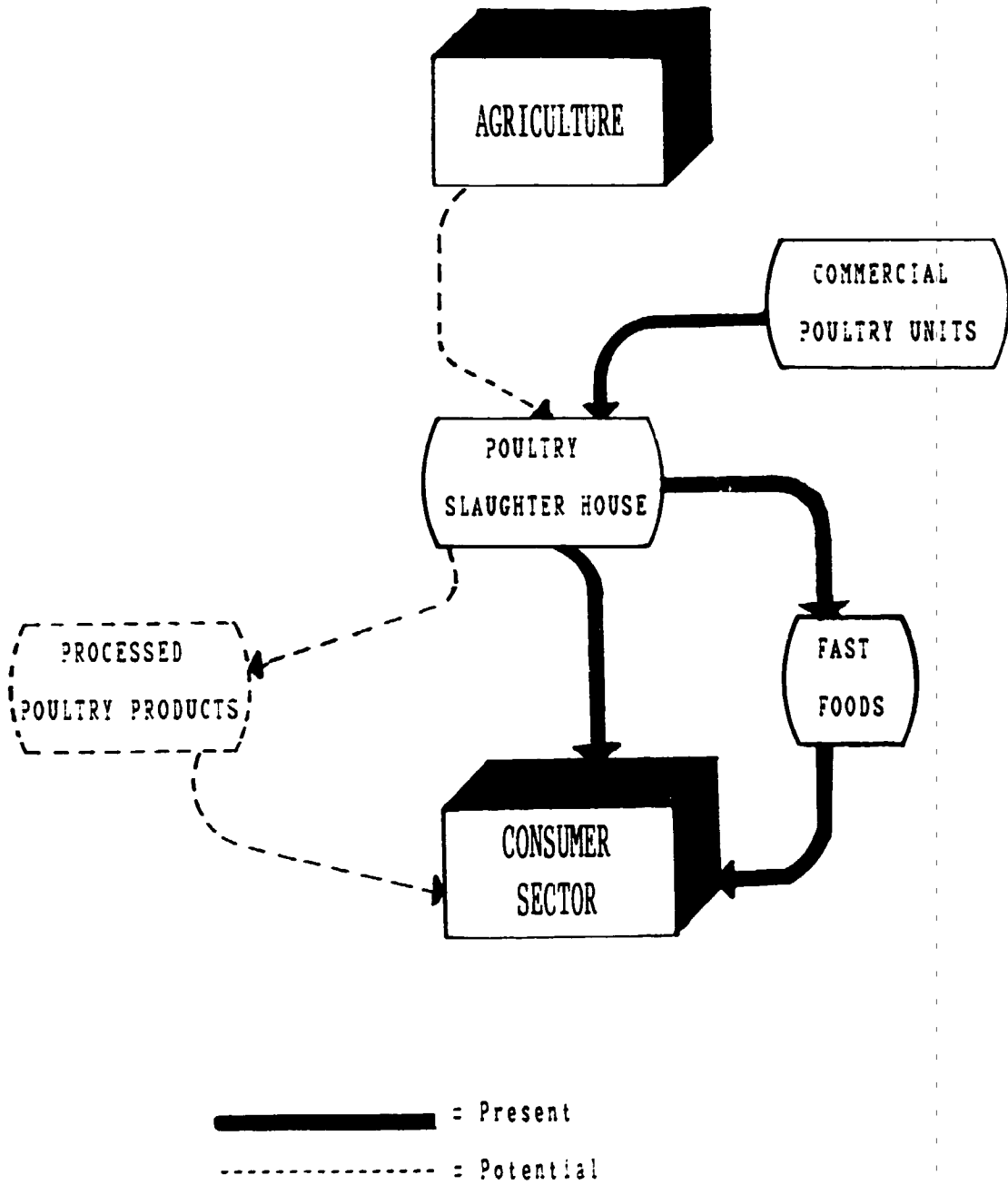
In the Gbarnga area, the Baker unit as well as the Sangai laying and broiler farm and broiler-processing plant, with a capacity of 1,000 birds per hour, closed down in 1980. At Sangai, there is a hatchery unit but this unit was never commissioned.

The only remaining commercial producer is the Bright layer farm at Kakata, which produces approximately 26,000 eggs per day. A broiler production unit is presently being planned for the same site. The distribution, by county, of traditional subsistence poultry raising is as follows:

<u>County or Territory</u>	<u>Number of households with chickens</u>	<u>Number of households with ducks</u>
Bomi	2,300	250
Bong	11,800	1,060
Grand Bassa	8,100	520
Grand Cape Mount	2,100	330
Grand Gedeh	9,400	960
Grand Kru	3,300	120
Lofa	12,200	1,080
Margibi	4,800	550
Maryland	5,200	210
Montserrado	3,900	340
Nimba	18,200	2,850
Rivercess	1,800	170
Sinoe	5,200	350
TOTAL	88,300	8,790

Source: Ministry of Agriculture, June 1988 Report.

Figure 5.3: Linkages - present and potential poultry processing



5.4 Animal feed manufacturing

5.4.1 Overall characteristics

The mission estimates that total Liberian consumption of animal feed averaged 7,000 tonnes per year between 1981 and 1984, of which about 80 per cent was supplied from imports (5,670 tonnes/y, valued at 2.05 million \$/y), and 20 per cent by the local production of two feed mills. These feedmills imported some 80 per cent of their inputs.

The two feedmills were closed in 1980 and 1984. The current stockfeed requirement is mainly met by imports, with some feed produced domestically by the National Milling Company, primarily a producer of wheat flour for human consumption. According to Ministry of Agriculture estimates, about 4,190 tonnes of feeds were imported in 1986/1987, of which 2,370 tonnes were poultry feeds and 920 tonnes pig feeds. The National Milling Company markets bran for animal feed and recently also began to distribute compound feeds.

Bright Feed Mill, a poultry operation in Kakata, is currently installing a 3t/hour feed mill expected to come into operation by the end of 1989. Although the mill plans to use imported corn initially, it will be supplied with corn provided by local contract growers in the longer run. The greater amount of feed produced will be consumed by the poultry-rearing operation of the company.

Stockfeed manufacturing is slowly starting up again in spite of the fact that it is highly dependent on imports of the major raw materials (corn, soyameal, concentrates, fish meal). In the future it should be possible to substitute a large part of the imported ingredients with domestic supplies of corn, pulses, processed slaughterhouse by-products, and fish meal, if the relevant activities are sufficiently stimulated.

5.4.2 Major problems and constraints

The main constraints on the animal feed industry are:

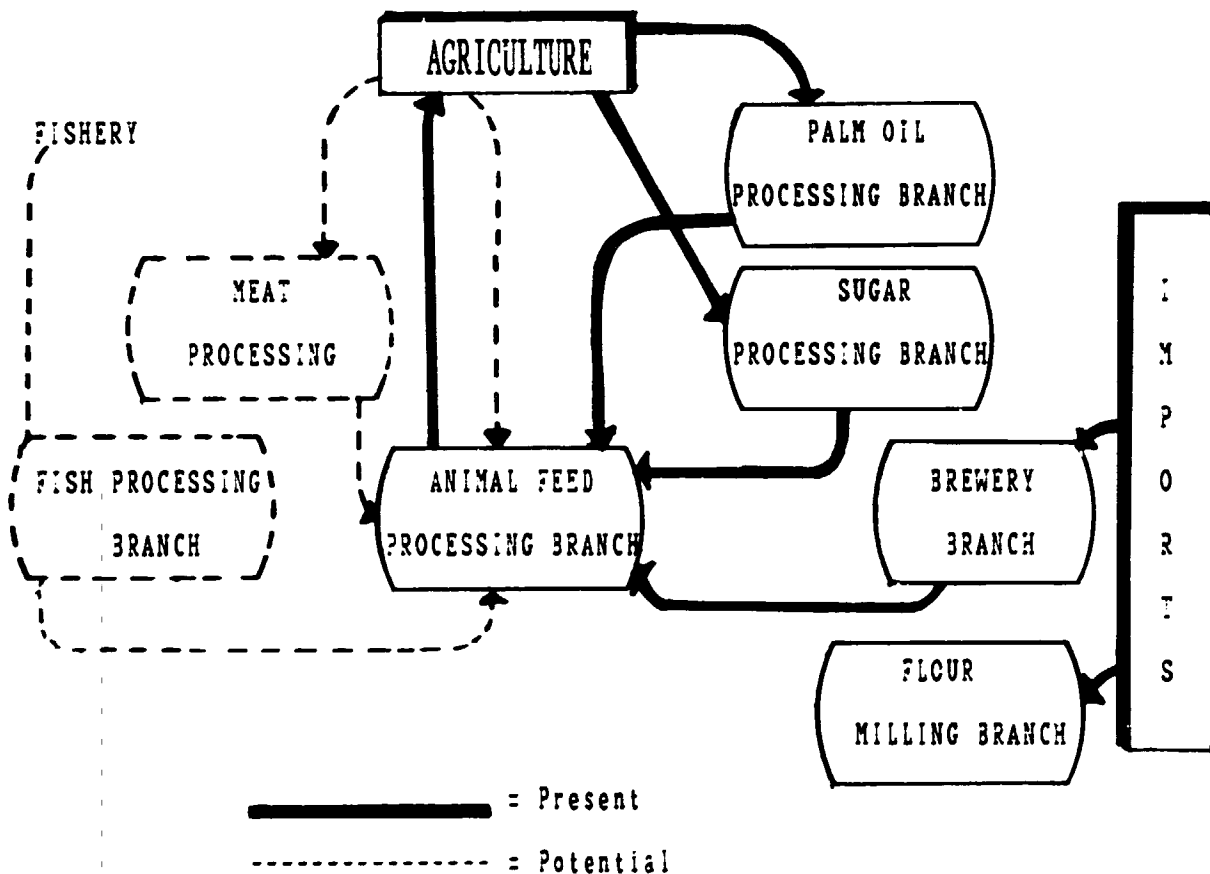
- shortage of domestic inputs, as farmers have few stimuli to grow and market the required products;
- shortage of imported inputs and spare parts/equipment as a consequence of foreign exchange shortages;
- the present weakness of commercial meat production operations which results in a low demand for animal food;
- shortage of capable managers, technicians and skilled workers.

5.4.3 Linkages

Figure 5.4 illustrates the linkages of the animal feed processing branch. A well-developed feed industry usually exhibits a network of backward linkages. The feed industry may use ingredients from agriculture and a large number of food-processing branches, which supply by-products directly or after further processing.

In the case of Liberia, where the animal feed-processing industry is still in its infancy, the backward linkages are less pronounced. However, it is essential to realize that the feed-processing enterprises are of great importance in increasing the resources of many food-processing industries by providing a ready market for their by-products or wastes. Although the forward linkages are few, the feed processing branch is in a key position to help increase the supply of animal protein to an increasing population.

Figure 5.4: Linkages - present and potential animal feed processing branch



CHAPTER 6

OBSERVATIONS AND RECOMMENDATIONS REGARDING COMPANIES

The mission examined three plants in detail in order to specify rehabilitation needs at the plant level. These were:

- a palm-oil processing plant;
- a sawmill, which also trains personnel for forestry and sawmill employment;
- a poultry enterprise which breeds, hatches, and rears broilers for supply to the slaughterhouse.

One is privately owned, one government-owned, and the third is mixed with a 67 per cent government interest. They were selected from a list of 24 candidate enterprises presented by the Liberian Government and the Liberian Chamber of Commerce.

In making the choice of plants, the mission consulted with the Ministry of Commerce and Industry; other government institutions including the Ministries of Agriculture, Planning and Finance; the National Investment Commission; Liberian Bank for Development and Investment; and representatives of the Liberian business sector and the country's main bilateral and multilateral co-operation partners.

Figure 6.1 illustrates the linkages between the enterprises selected.

The following general observations and recommendations are made with respect to finance; management, organization and marketing; physical plant and buildings; and inputs.

6.1 Finance

General observations

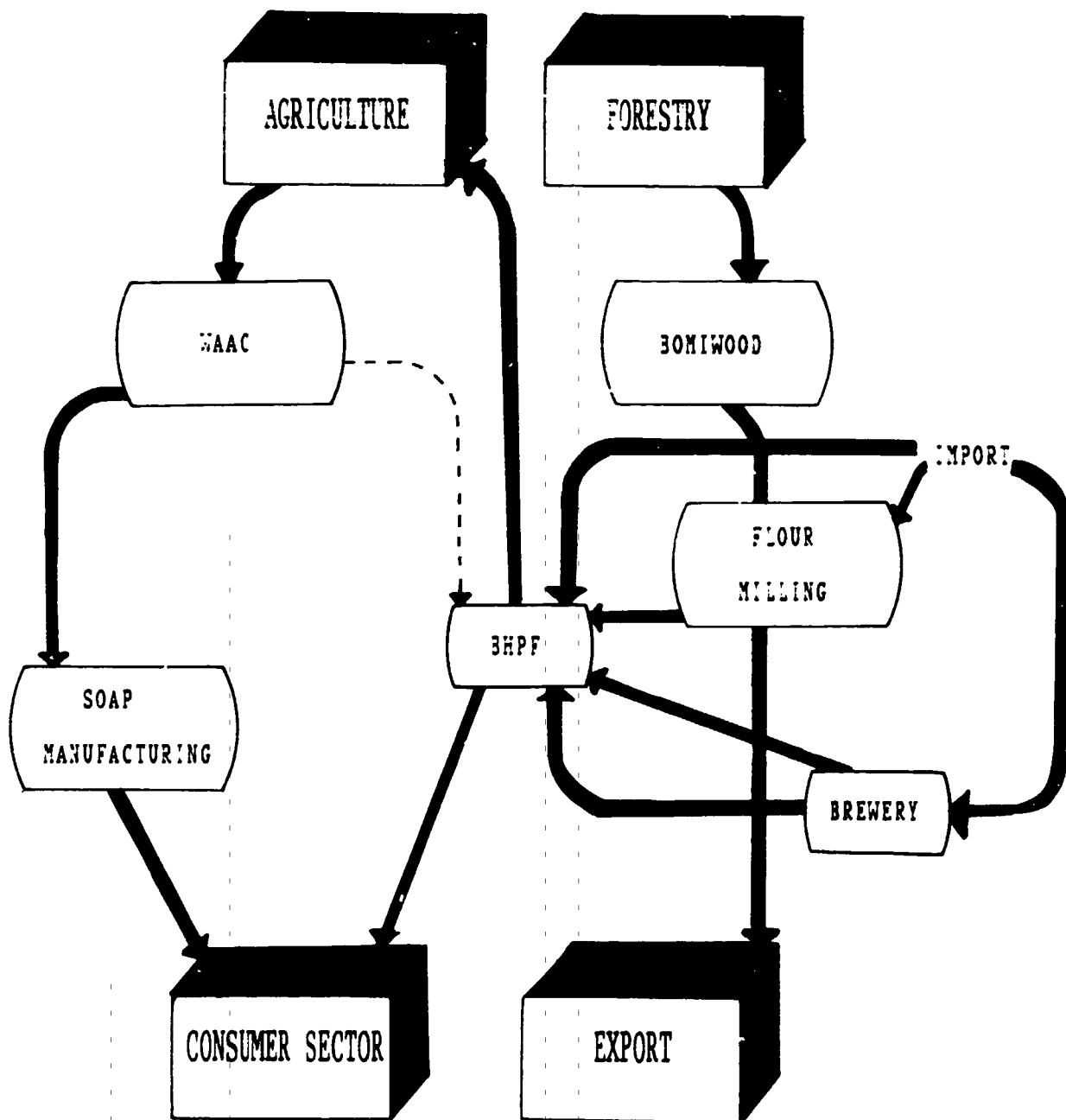
All the plants visited have incurred losses since their inception for the following reasons:

1. Undercapitalization of fixed and working capital;
2. Extremely high debt ratio, implying that creditors financed the bulk of the operation;
3. Acute liquidity problems, resulting from inadequate capitalization and maturity of current portion of long-term debt.

Recommendations

Plant rehabilitation will require the infusion of adequate capital, including working capital, at least in the amount undercapitalized. This will be the responsibility of the shareholders. In the event they are incapable of injecting the required funds because of their own financial situation, an option such as restructuring capital may have to be considered.

Figure 6.1: Linkages - selected enterprises



6.2 Management, organization and marketing

General observations

All the operational companies visited suffer from significant deficiencies at middle management level. Top management is also clearly deficient in many cases. The palm-oil processing plant, for instance, has had six general managers since 1980. This situation is a cause for deep concern since it appears to be the case for the industry as a whole. The "brain drain" that began after the 1980 coup and that has continued ever since has contributed significantly to the low level of management expertise. Moreover, business confidence has also been adversely affected.

Management, training and information systems are generally inadequate for routine tasks such as accounting, administration, inventory, purchase and sales.

All the companies visited are now operating in a sellers market, and consequently none has an effective sales organization.

In order to export, the companies themselves have to transport the products to the nearest harbour for shipping. In the context of rehabilitation and expansion, it will be necessary to improve both the sales organization and the distribution systems, notably in regard to distribution in the rural areas and to export markets.

Institutions involved in export promotion include the Ministry of Commerce and Industry and the Liberia Chamber of Commerce. This involvement is very marginal, however, since every company seems to look after its own export promotion, without governmental assistance. Liberia has no permanent trade organizations abroad for export promotion. However, in some cases the Liberian embassies abroad have proven helpful. The Mano River Union has also assisted in collecting payments in some cases.

Recommendations

Careful consideration should be given to the issue of management training and related facilities. Especially, middle management needs to be trained and the number of posts reduced in order to control costs and cut the top-heavy nature of the organizational structure. Where required, computer systems should be introduced, accompanied by relevant training programmes.

While management training at university and higher technical levels needs to be upgraded, the establishment of a specialized management training institute should also be considered.

All the companies visited need to improve their marketing and distribution systems and training in these areas when rehabilitation has taken place.

In the medium- and long-term perspective, it will be necessary to introduce trade representation abroad, geared to specific export markets. These could be placed in regional groupings such as ECOWAS and the MRU, or further afield in the European Community, for example, where Liberian exports have significant market opportunities under the trade provisions of the Lomé Convention.

6.3 Physical plant and buildings

General observations

In all the enterprises visited, the condition of the buildings was relatively good, with only minor maintenance work required for the walls and roofs. In one case, certain upgrading of the building is required for hygienic reasons.

The condition of the installed machinery varied considerably depending on the company. However, a planned maintenance programme was invariably lacking due to a common failure to obtain necessary spare parts. This is caused by a lack of both foreign exchange for the imported spare parts and local funds for the domestic spare parts. Some of the machinery was in a state of total breakdown as a result of the lack of spare parts and the consequent lack of regular maintenance. Most companies, therefore, have been operating machinery on the "breakdown maintenance" philosophy - that is, without any preventative maintenance schedule. Only when the machine broke down did it receive any serious attention. Even where management was aware of the short-comings of this policy and its effect on plant production and the company's financial performance, shortage of spare parts and working capital for normal routine maintenance meant that they had little choice but to operate machinery until it broke down.

Many, but not all, plants had well experienced maintenance staff; however, most require further training in the organization of planned maintenance schemes and would benefit from further supportive skill training. Shortages of tools, workshop equipment, and consumable maintenance items such as steel, oxygen and acetylene, in addition to the required spare parts for machinery and mobile plant, meant that it was frequently impossible for the maintenance personnel to work efficiently.

Recommendations

In the case of almost all the plants visited, their rehabilitation would necessitate the supply of technical assistance to improve the training of maintenance personnel, especially in the proper organization of preventative maintenance schemes. However, this alone would not be sufficient to revitalise a company. As part of the technical assistance programme, a limited number of hand-tools, machine-tool parts, and spare parts for machinery should be provided and assistance given with finding the required finance for the purchase of certain new workshop and plant machinery.

In most cases, this technical assistance for maintenance personnel should be combined with additional assistance for training managerial and production personnel so that all relevant employees are thoroughly familiar with the new maintenance procedures.

6.4 Inputs

General observations

Given that the processing plants are technically capable of full capacity utilization, the inadequacy of the raw material supply is a serious constraint. The reasons for this are summarized as follows:

- (a) Insufficient transport capacity as a result of inadequate preventive maintenance and lack of spare parts due to lack of finance, especially foreign exchange;
- (b) Financial shortages which lead to shortages of material input. These shortages, in turn, impede the full utilisation of available raw materials;
- (c) Low performance per unit of time caused by delays in payments to the workers and few incentives, if any, to promote good performance;
- (d) Degrading of plantations due to age and inferior maintenance, resulting in low yields, failure to replant and, above all, failure to establish new plantations on available areas as replacement for currently uneconomical plantations;
- (e) For the animal feed industry, non-availability of most domestic ingredients, including feed grain and pulses and dried cassava.

Recommendations

- (a) Adopt routine and properly monitored preventive maintenance programme of transport; make increased efforts to procure and maintain the necessary spare parts, seeking outside financing if necessary;
- (b) Improve economic management to facilitate financing of essential material inputs;
- (c) Arrange for wage payments to be paid regularly and on time; introduce appropriate incentive schemes to improve workers' performance;
- (d) Embark, as soon as possible, on a programme to establish new plantations and replant the old ones;
- (e) Initiate the growing of corn, pulses and other feed crops which are essential for an emerging Liberian animal feed industry;
- (f) In the medium term, process domestically available animal protein offal, i.e. from future fish processing industries and slaughter-houses, into protein animal-feed ingredients.

CHAPTER 7

GENERAL POLICY OBSERVATIONS AND RECOMMENDATIONS

7.1 General policy recommendations

Public finances

The Liberian economic crisis is being tackled seriously by the Government. In his Annual Message to the Nation on 27 January 1989, President Samuel K. Doe stated: "There is a need to ensure that expenditures are contained within the budget. We must make sure that we spend only that what we have."

The mission is of the opinion that the Liberian economy is at a turning point in this regard. Forceful measures are essential to ensure that the President's message is carried out.

Industrial policy

Rehabilitation and promotion of manufacturing, especially based on renewable natural resources, agriculture, forestry and fishery, requires a coherent policy framework which would include:

- Protection policy, for both resources and processed products;
- Taxation policy;
- Credit policy;
- Exchange rates policy;
- Interest rates policy.

The new Investment Incentive Code, currently being debated, includes the Government's proposal to seriously pursue the establishment of secondary processing industries. This is an essential and indispensable element for industrial development.

The attraction of Liberia as a host economy to private foreign investment will now be enhanced by the section of the Code entitled "Security of Investments". According to this section, local and foreign investments are guaranteed by the Government and are fully protected by law. Provisions are also made that private enterprises cannot be nationalized under any circumstances.

Employment

One of the more important mechanisms for spreading the benefits of development in a country is creating and maintaining employment, especially for women and those in rural areas.

In the Bomi Hills area, two of the companies reviewed play a crucial role in maintaining present employment and generating additional jobs. The existence of these two companies, providing income to the local employees, helps to compensate for the losses the area has experienced from closing the Bomi Hills Mines. The rehabilitation of the palm-oil processing plant has an important social dimension, as it cannot be replaced as a major employer in the southern part of Grand Mount County.

In Nimba county, the company LAMCO, one of the largest employers in Liberia and the most important export earner, is to close down in the near future. The resulting loss of employment opportunities in this region will have serious socio-economic implications. Therefore, every effort must be made to create replacement jobs.

The rehabilitation of the two companies in particular will play a key role in stemming job losses and creating new ones in both primary and secondary processing industries, using renewable natural resources.

Maintenance of renewable resources

Sustained employment, production and income from agriculture, forestry and fishery-based processing industries is not possible if the productivity of these resources is not secured.

Hence, to neglect the development of agriculture, the protection of natural forests through appropriate forest management, or the safeguard of future fishery resources is to violate the OAU's declaration of The Industrial Development Decade in Africa, to which Liberia subscribes.

The lesson of enterprises like Bomi Hills Mines, and now LAMCO, is that if a country exports unprocessed non-renewable resources and does not maintain its renewable natural resources, one day it will discover that these resources are depleted. Along these lines, the Government should emphasize the enforcement of regulations speeding up development of national forestry-based manufacturing.

Management training

In the plants visited, many very serious weaknesses exist both at top and middle management levels. It is suspected that this is a general feature of Liberian manufacturing and that the problem should be addressed at a national level.

Management education and training at the University of Liberia, LIDA, the Polytechnic, and other institutions should be geared to Liberia's specific needs. The recommendations for regeneration of Liberia's agro-based industry include a project design to investigate and formulate an appropriate programme for extended management education and training in Liberia.

7.2 The manufacturing sector

General observations

The manufacturing sector experienced a sharp decline in output after 1980. Its contribution to GDP in 1985 had fallen to 8.2 per cent in 1985, from 10 per cent five years earlier. This situation is reflected by the unusually low rates of utilization of installed capacities. According to the Ministry of Commerce and Industry, capacity utilization did not exceed 30 per cent for the manufacturing sector as a whole. As a result, production costs increased and domestic products became uncompetitive with equivalent imported goods.

The manufacturing sector is heavily dependent on imports of equipment, intermediate inputs and raw materials. Import duties, especially on machinery and spare parts, increase production costs even further in many instances. The increasing scarcity of foreign exchange acts as a serious constraint on the ability to purchase inputs as well as the ability of the majority of plants to operate.

The general lack of sufficient working capital and the difficult access to cheap commercial credits resulted in temporary or definitive shut-downs of several plants. Failure to pay the labour force or chronic delays in payment, especially in the public sector enterprises, resulted in a general lack of interest in the production process.

The lack of clearly defined policies and development objectives for each of the manufacturing branches led to rather hectic and disorganized production and the loss of market shares for Liberian products in export markets. Skilled labour at the company level is generally insufficient, especially in accountancy, bookkeeping and pricing.

Recommendations

- Policies should be defined and incentives provided in order to make better use of domestic natural resources and to enhance the availability of local raw materials as substitutes for imported goods;
- An effective system of foreign exchange allocation needs to become operational in order to allow manufacturing companies to import supplies of equipment and spare parts.
- The training of accountancy and bookkeeping personnel should be institutionalized and reinforced at the national level.
- Specialized training programmes could be developed for personnel related to specific manufacturing sectors.

CHAPTER 8

SUMMARY OF PROJECT CONCEPTS

8.1 General

- Provide technical assistance (UNIDO) to carry out a feasibility study for a palm-oil refinery and possible rehabilitation of the palm kernel mill in Monrovia.
- Provide technical assistance (UNIDO) to develop the wood-processing industries, both primary and secondary, in order to increase the volume of exported processed timber.
- Provide technical assistance (UNIDO) to identify bankable joint venture possibilities in downstream rubber manufacturing industries, as a basis for the long-term development of the rubber industry.
- Provide technical assistance (FAO) for the planting of new oil-palm plantations as well as assistance in their financing.

8.2 For all enterprises visited

- Improve the management training of all senior and middle management, especially in the use of appropriate management information systems.
- Improve the technical training of production and maintenance staff by means of technical assistance programmes (UNIDO), which would include a limited number of essential spare parts as part of the training programme.

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ANNEX I

Table A.1: Liberia: Major exports, 1981/82-1986-87
(in millions of US dollars)

	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87 preliminary estimates
Iron ore	331.1	325.1	295.3	257.8	272.3	245.6	217.8
Rubber	93.6	68.8	59.8	87.5	78.4	82.7	81.6
Logs and timber	45.9	45.4	38.1	33.5	33.6	41.0	63.9
Diamonds	23.5	28.9	19.5	12.6	8.8	6.2	4.1
Coffee	24.7	19.2	18.7	17.8	18.3	22.7	9.8
Other exports	11.5	4.9	5.0	4.0	9.3	9.0	12.1
Re-exports	13.5	4.8	7.3	5.3	3.0	3.0	2.4
Total exports, f.o.b.	554.7	508.9	452.5	433.4	436.5	419.0	395.8

Source: IMF.

Table A.2: Liberia: Balance of payments estimates, 1983/84-1988 a/
(in millions of US dollars)

	1983/84	1984/85	1985/86	1986	1987	1988
Current account	-26.5	42.1	64.7	47.5	-47.7	-37.5
Trade balance	20.8	117.5	145.4	115.8	56.3	48.5
Exports, f.o.b.	(433.4)	(436.5)	(419.0)	(381.2)	(374.9)	(390.6)
Imports, c.i.f.	(-412.6)	(-319.1)	(-273.6)	(-265.4)	(-318.6)	(-342.1)
Services (net)	-105.7	-115.0	-123.2	-111.3	-125.5	-134.6
of which: interest due on public debt	(-54.0)	(-67.2)	(-78.7)	(-86.3)	(-103.1)	(-113.9)
Transfers (net)	58.4	39.7	42.5	43.0	21.5	48.6
Private	(-36.6)	(-37.8)	(-32.0)	(-22.4)	(-18.4)	(-11.7)
Public	(95.0)	(77.5)	(74.5)	(65.4)	(39.9)	(60.3)
Capital account	-47.1	-139.2	-147.2	-177.7	-120.5	-138.1
Official long-term	19.0	2.3	-24.0	-25.6	-50.4	-72.5
Disbursements	(69.0)	(60.3)	(42.0)	(47.4)	(28.3)	(14.2)
Amortization due	(-40.0)	(-58.0)	(-66.0)	(-73.0)	(-78.7)	(-86.7)
Private (including errors and omissions)	-66.1	-141.5	-123.2	-152.1	-70.1	-65.6
Overall balance	-73.6	-97.1	-82.5	-130.2	-168.2	-175.6
Financing	73.6	97.1	82.5	130.2	168.2	175.6
National Bank of Liberia	41.7	-18.7	-39.7	-57.0	-62.7	-43.0
Assets (increase-)	(3.3)	(0.1)	(3.3)	(2.0)	(-)	(-)
Liabilities	(38.4)	(-18.8)	(-43.0)	(-59.0)	(-62.7)	(-43.0)
Use of Fund credit (net)	(37.0)	(-16.0)	(-42.7)	(-59.0)	(-62.7)	(-43.0)
Other	(1.4)	(-2.8)	(-0.3)	(-)	(-)	(-)
Arrears (accrual+)	14.8	96.8	122.2	187.2	230.9	218.6
Debt relief	17.1	19.0	-	-	-	-
<u>Memorandum items</u>						
External arrears (end of period)	48.6	140.4	291.4	422.2	671.7	890.3
IMF	(-)	(27.9)	(92.9)	(146.4)	(266.3)	(...)
Other multilateral organizations	(-)	(13.3)	(20.3)	(23.6)	(72.9)	(...)
Official bilateral creditors	(5.0)	(12.9)	(42.2)	(68.6)	(99.1)	(...)
Commercial banks	(43.6)	(86.3)	(136.0)	(183.6)	(233.4)	(...)
	<u>(In per cent of GDP)</u>					
Current account balance	-2.5	4.0	6.2	4.6	-4.4	-3.2
Overall balance	-6.8	-9.1	-7.8	-12.6	-15.4	-15.1

Sources: Data provided by the Liberian authorities; and IMF staff estimates.

a/ Data for 1983/84-1985/86 are based on the fiscal year (July-June); for 1986 onward, data are on a calendar year basis.

Table A.3: Gross official development assistance
(in millions of US dollars)

	1980	1981	1982	1983	1984	1985
Bilateral						
United States of America	72.3	95.5	88.0	94.1	113.1	67.7
Federal Republic of Germany	33.0	66.0	63.0	57.0	89.0	54.0
Japan	13.3	17.0	11.5	21.0	12.2	8.1
United Kingdom	0.8	3.5	1.7	4.3	2.1	1.4
Multilateral	28.7	19.8	22.6	30.4	25.8	26.5
International Development Association	4.9	5.9	7.5	10.8	14.7	12.2
African Development Fund	-	-	-	2.9	3.7	3.7
European Community	4.4	4.0	3.1	3.8	1.9	2.3
Total	101.0	115.2	110.5	124.5	138.8	94.2
of which grants	46.6	69.1	69.4	62.9	88.5	63.1

Source: IMF.

Table A.4: ERP manufacturing sector expenditure
(in millions of US dollars)

Programme in order of priority	Source	1986/87	1987/88	Total
1. Small and medium scale Enterprise financing	GOL	0.4	0.4	0.8
	FOR	1.3	2.0	3.3
	TOT	1.7	2.4	4.1
2. Development of two growth centres	GOL	1.3	2.0	3.3
	FOR	0.2	0.7	0.9
	TOT	0.3	1.0	4.1
3. Establishment of a technological centre for metal casting	GOL	0.1	0.2	0.3
	FOR	0.2	1.0	1.2
	TOT	0.3	1.2	1.5
4. Study on development rural industries based on local resources	GOL	0.2	0	0.2
	FOR	0.6	0	0.6
	TOT	0.8	0	0.8
5. Study on the supply of machinery for hire purchase to SMEs	GOL	0.1	0	0.1
	FOR	0.1	0	0.1
	TOT	0.2	0	0.2
Total for the five priority programmes and projects	GOL	0.9	0.9	1.8
	FOR	2.4	3.7	6.1
	TOT	3.3	4.6	7.9

Source: Economic Recovery programme.

GOL = Government of Liberia; FOR = Foreign; TOT = Total.

ANNEX 2

UNIDO's approved and/or operational technical co-operation projects

(approved = PAD issued)

Republic of Liberia

Project Number	Backstopping Responsibility	All.Acc.Code	Project Title
TF/LIR/87/001	IO/IIS/INFR Mr. Hisakawa	J12105	Associate expert (Ms. van Oyen) (multifund to DP/LIR/87/007)
TF/LIR/87/003*	IO/IIS/INFR Mr. Hisakawa	J12105	Associate expert (Mr. Nakano) (multifund to DP/LIR/87/007)
DP/LIR/87/007**	IO/IIS/INFR Mr. Hisakawa	J12105	Development of small and medium-scale enterprises (phase II) (continuation of DP/LIR/80/007)
UC/LIR/88/254	IO/T/ENG Mr. Fritz	J13300	Establishment of a metalworking common service facility in Liberia
SI/LIR/88/801	IO/IIS/INFR Mr. Goubet	J12102	Assistance to the Division of Standards in the Ministry of Commerce and Industry
XA/LIR/89/609	IO/T/CHEM Mr. Williams	J13424	Production of charcoal and briquetted fuel from woodwaste in existing sawmill/woodprocessing industry in Liberia

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

** Total allotment \$1 million or above

ANNEX 3

UNIDO's pipeline projects

Project number	Project title	Total budget - \$
DP/LIR/88/XXX	Assistance to Liberia woodworking and capentry industrial association (LWCIA)	271,000
DP/LIR/88/XXX	Liberian industrial free zone authority revitalization study	72,000
XX/LIR/88/XXX	Processing of agricultural crops (cassava)	235,000
XX/LIR/88/XXX	Strengthening capacity and capabilities of the Maritime Training Institute at Marshall	302,000