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REPORT AND RECOMMENDATION
OF THE
PRESIDENT OF THE
INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT
TO THE
EXECUTIVE DIRECTORS
ON A
PROPOSED LOAN
TO
THE NATIONAL IRON ORE COMPANY
WITH THE GUARANTEE OF
THE REPUBLIC OF LIBERIA
AND A
PROPOSED LOAN
TO
THE REPUBLIC OF LIBERIA
FOR AN
IRON ORE REHABILITATION PROJECT

December 9, 1981

CURRENCY EQUIVALENTS

The official monetary unit is the Liberian dollar with a par value equal to the U.S. dollar. The U.S. dollar is a legal tender in Liberia.

FISCAL YEAR

July 1 to June 30

ABBREVIATIONS AND ACRONYMS

ADB	African Development Bank
BMC	Bong Mining Company
ExIm	U.S. Export-Import Bank
FMO	Netherlands Finance Company for Developing Countries
LBDI	Liberian Bank for Development and Investment
LIBOR	London Interbank Borrowing Rate
LEL	Liberian Enterprises, Ltd.
LJV	Lamco Joint Venture
LMC	Liberia Mining Company
ltpy	Long tons per year
MMAL	Mine Management Associates, Ltd.
NIOC	National Iron Ore Company
OAU	Organization of African Unity

LIBERIA

NATIONAL IRON ORE COMPANY REHABILITATION PROJECT

LOANS AND PROJECT SUMMARY

Borrowers: Republic of Liberia and National Iron Ore Company (NIOC).

Guarantor: Republic of Liberia (for loan to NIOC).

Amount: US$20.0 million (US$8.3 million equivalent for Republic of Liberia and US$11.7 million equivalent for NIOC).

Terms: Both loans: 13 years, including 5 years' grace, with interest at 11.6 percent per annum; NIOC will also pay a guarantee fee of 1 percent per annum to the Government.

Project Description: The project's objectives are to rehabilitate NIOC's iron ore mining operations and reestablish its financial viability. Beneficiated ore output would be increased from 2.3 to 3.25 million long tons per year, and infrastructure facilities would be improved and equipment would be installed to reduce operating costs. The project would improve the railroad to the port at Monrovia, repair the St. Paul River railway bridge, and provide additional mining and miscellaneous support equipment; management and technical assistance to execute the project and improve the Company's operations would also be provided. The project would benefit about 2,000 workers directly and some 16-18,000 people indirectly. Over the life of the project, the Government should receive tax revenues of about US$74 million and earn dividends of about US$30 million. The main risks are financial, as returns and cash flow are sensitive to a fall in revenues or an increase in operating costs. However, these risks have been addressed by the inclusion of ample contingencies in both the capital and operating costs as well as by the establishment of an off-shore trust account into which all revenues of the Company from the sale of iron ore would be deposited. Payments out of the trust account would be made to service the new loans and to meet the operational cash needs of NIOC before any service payments were made on existing debt. Overall, the risks are considered acceptable, given the long-term importance of iron ore exports to the Liberian economy and potential earnings to the Government.

Estimated Cost: 1/

	Local	Foreign	Total	% of Base Cost
	US$ million			
A. NIOC				
Mining	0.26	9.03	9.29	38.1
Plant	0.37	3.59	3.96	16.3
Railroad	1.07	4.25	5.32	21.9
Miscellaneous Equipment	-	0.66	0.66	2.7
Project Management/Engineering	0.45	4.67	5.12	21.0
Base Cost	2.15	22.20	24.35	100.0
Physical Contingencies	0.13	1.36	1.49	
Price Contingencies	0.03	1.55	1.58	
Installed Cost	2.31	25.11	27.42	
Project Preparation	-	0.75	0.75	
Interest during Construction	-	6.47	6.47	
Working Capital	9.03	15.22	24.25	
Subtotal NIOC	11.34	47.55	58.89	
B. Bridge				
Bridge Repair	0.90	3.30	4.20	97.9
Engineering	-	0.09	0.09	2.1
Base Cost	0.90	3.39	4.29	100.0
Physical Contingencies	0.26	0.70	0.96	
Price Contingencies	0.26	0.82	1.08	
Installed Cost	1.42	4.91	6.33	
Project Preparation	-	0.25	0.25	
Interest during Construction	-	1.42	1.42	
Subtotal Bridge	1.42	6.58	8.00	
C. Economic Studies	-	0.25	0.25	
Total Project Cost	12.76	54.38	67.14	

1/ Net of taxes, from which the project is exempt.

Financing Plan:

	US$ Million		
	Local	Foreign	Total
Debt Financing			
World Bank	1.4	18.6	20.0
African Development Bank	-	11.4	11.4
Netherlands Finance Company for Developing Countries	-	3.5	3.5
The Opec Fund	-	8.3	8.3
Commercial Banks	6.0	8.5	14.5
Subtotal	7.4	50.3	57.7
Equity Financing			
Government Equity	3.0	4.1	7.1
NIOC Participation	2.3	-	2.3
Subtotal	5.3	4.1	9.4
Total	12.7	54.4	67.1

Estimated Disbursements:
(Bank Loans)

	US$ Million			
Bank Fiscal Years	FY82	FY83	FY84	FY85
Annual	5.0	10.8	3.7	0.5
Cumulative	5.0	15.8	19.5	20.0

Rate of Return: 26.5 percent.

Staff Appraisal Report: Report No. 3479 LBR, December 1, 1981.

Map: IBRD 15723

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

REPORT AND RECOMMENDATION OF THE PRESIDENT OF THE IBRD TO THE EXECUTIVE DIRECTORS ON PROPOSED LOANS TO LIBERIA AND THE NATIONAL IRON ORE COMPANY FOR A NATIONAL IRON ORE COMPANY REHABILITATION PROJECT

1. I submit the following report and recommendation on: (a) a proposed loan to the National Iron Ore Company (NIOC) with the guarantee of the Government of Liberia for the equivalent of US$11.7 million to help finance a project to rehabilitate the NIOC mine. The loan would have a term of 13 years, including 5 years of grace, with interest at 11.6 percent per annum. The Government of Liberia would charge NIOC a guarantee fee of 1.0 percent per annum on the outstanding amount of the Bank loan, bringing the cost of the loan to NIOC to 12.6 percent per annum; and (b) a proposed loan to the Government of Liberia for the equivalent of US$8.3 million to help finance bridge repairs and studies associated with the NIOC rehabilitation project. This loan would also have a term of 13 years, including 5 years of grace, with interest at 11.6 percent per annum.

2. The proposed project would be cofinanced by (i) the African Development Bank (ADB) for the equivalent of US$11.4 million, with a term of 13 years, including 5 years of grace, at an interest rate of 7.5 percent to the Government with an onlending rate of 8.5 percent to NIOC; (ii) the Netherlands Finance Company for Developing Countries (FMO) for the equivalent of US$3.5 million, with repayment over 13 years, including 4 years of grace, at an interest rate of 9 percent; (iii) the OPEC Fund for US$8.3 million to the Government, with repayment terms of 15 years, including 5 years of grace, at a service charge of 0.75 percent per annum, to be relent to NIOC at the same terms as the Bank loan to NIOC; and (iv) US$14.5 million from a syndicate of commercial banks led by the Bank of America, with repayment over seven years and interest charges of about 2.0 percentage points above LIBOR and an additional 3.0 percent insurance charge.

PART I - THE ECONOMY

Structural Characteristics

3. The growth of Liberia's economy remains heavily dependent on the performance of the enclave sector consisting mainly of: (a) iron ore mines, (b) rubber plantations, and (c) forestry concessions. These enclaves are the main source of export earnings. Iron ore mining is by far the largest single activity in the enclave sector, accounting for about one-third of gross domestic product at factor cost. There are only limited linkages between the enclaves and the rest of the economy; as a result, the benefits of economic growth have been unevenly distributed.

4. The income disparities between traditional agriculture and the (monetized) modern sector are a manifestation of structural imbalance in the economy. Traditional agriculture has minimal inter-action with the rest of the economy; however, it supports the majority of the population - as much as

60 percent - who live at, or near, subsistence level. With a population of about 1.7 million, average per capita GNP in 1979 is estimated at US$500. While the enclave sector yields a per capita GNP of about US$1,620 compared to US$780 for the rest of the monetized economy, the great majority of the population who live in the traditional non-monetized sector have a per capita income of about US$185 per annum.

Development Plan and General Economic Policy

5. After completing its first four-year Development Plan, Liberia has embarked upon preparation of a Second Plan. The first Plan was intended as the first of a series of multi-year investment programs aimed at meeting the basic, long-term objectives of Liberia's socio-economic development. These are: (a) diversification of production; (b) dispersion of sustainable socio-economic activities throughout the country; (c) greater involvement of Liberians in development activities; and (d) equitable distribution of the benefits of economic growth. Performance under the first Plan fell short of expectations. Investment in the productive sectors was below the original target, while one-fourth of total expenditure during the Plan period was for facilities and buildings for the Organization of African Unity (OAU) conference, which had not been included in the original Plan.

6. The new Government which assumed power in April 1980, reaffirmed the broad objectives of the First Plan. Work had been initiated under the former Government on the preparation of the Second Plan (FY82-86) which is scheduled for completion shortly. The general economic policy statement issued by the Government of the People's Redemption Council on June 5, 1980 sets out the broad objectives of the new regime. The main thrust of the economic policy is to expand the country's productive capacity, especially in agriculture, and to ensure that benefits from economic growth and development are enjoyed by an increasing number of Liberians. To achieve this end, the Government intends to encourage local and foreign private investment and give priority to labor intensive investments. Significant measures taken by the new Government since its assumption of office include decisions: (a) to retain the Liberian dollar at par with the US dollar, which remains legal tender in Liberia; (b) to honor all existing contractual agreements with foreign private investors and to change such agreements only through negotiations with all parties concerned; (c) to permit free flow of capital, goods and services; and (d) to regulate labor relations by full protection of the rights of both workers and management.

Recent Economic Developments

7. While strong world demand for Liberia's major export, iron ore, brought large gains in export prices in 1974, the subsequent recession in industrialized countries significantly reduced demand for the country's most important export commodities--iron ore, rubber and timber--in the 1975-78 period. With growth performance continuing to be largely a function of enclave activities, growth of real GDP--which averaged about 6.3 percent a year in the 1967-70 period and 4.2 percent a year in the 1970-74 period--has slowed down significantly and is estimated to have been about 0.7 percent per

year between 1974 and 1978. Economic performance in 1979 and the first quarter of 1980 had taken a turn for the better, but following the change in Government in April 1980 there was a setback in growth, and, according to the preliminary estimates, real GDP is reported to have declined by 4.4 percent in 1980.

8. During 1974-78, mostly reflecting accelerated international inflation, imports rose by 14 percent annually, exceeding the 5 percent annual export growth rate. However, the temporary resurgence in world prices of iron ore, and increases in the price of timber and rubber helped Liberia to expand its exports by 10 percent in 1979 and 14 percent in 1980. Oil imports increased from US$15 million in 1973 to US$103 million in 1979, or one-fifth of the country's total imports. But higher prices for Liberia's major exports helped achieve a trade surplus of US$30 million in 1979; the growth in imports has been relatively lower in the last 18 months due to the general slack in economic activities following the change in Government. The current account deficit, reflecting substantial remittances of capital and other factor income from enclave operations, increased to about US$132 million in 1979, or 13 percent of GDP, as compared to US$30 million in 1974, or 5 percent of GDP. Rising current account deficits were financed mostly by private capital transactions, but in the last two years, official capital inflows have risen substantially.

9. Liberia has had a long history of sound fiscal management and public sector resources did not come under undue pressure until the mid-1970s. Since 1974, the Government has been facing growing budgetary deficits. The deficit in 1975 was only about US$4.0 million, but by FY1979 had reached US$161 million, or 79 percent of government revenues. The strain on public sector finances intensified during 1979-80 and assumed serious proportions in the aftermath of the change in Government. The decline in public revenues, coupled with a decision to increase the salaries of low-paid military personnel from $100 to $250 per month and the payment of pending bills from the OAU Conference, increased the overall budgetary deficit from an estimated $56 million to $95 million (9 percent of GDP) by the end of the fiscal year. The shortfall in revenues was caused largely by lower import duty collection in the last quarter. The doubling of salaries of the lowest grade civilian employees from July 1, 1980 aggravated the budgetary deficit for FY1981 and the Government was faced with a serious liquidity crisis when it approached the IMF in May 1980 for further assistance.

Relations with the IMF

10. In July 1980 the new Government introduced a two-year stabilization program to support a standby arrangement with the IMF providing for support in an amount of SDR 65 million (about US$85 million). Major elements in the stabilization program included tighter fiscal policies and stricter control of the financial operations of the public corporations, increased mobilization of domestic revenues, rationalisation of energy pricing policies, and a freeze on wages and salaries of Government employees. Limits were placed on new borrowings with a maturity of one to twelve years and on credit to the Government and public sector from the banking system.

11. An IMF review of progress made by the Government in implementing the stabilization program took place in May 1981. The Government had introduced the necessary measures to revise tax rates and levy import surcharges. However, the budgetary deficit in FY81 is likely to be about $100 million (45 percent of Government revenues), or $25 million higher than the original budget estimates. While revenue collection is higher by 10 percent as compared to the previous year, it fell short of the expected yields as a result of a decline in customs duties. There was also some increase in recurrent expenditures beyond budget estimates. This budgetary imbalance, lack of strict control on the operations of public corporations, and the consumer subsidy on rice are some of the major issues which were addressed in the context of the second year of the stabilisation program. In this connection the Government has recently announced some important economic decisions. The consumer subsidy on rice has been eliminated; a new progressive national reconstruction tax has been levied on wages, salaries and self-employed income, and excise taxes on beer and gasoline have been increased. The Government also proposes to improve the financial viability of the public corporations. The IMF Board approved the program in August 1981 and made available SDR 55 million for the second year of the Standby Arrangement.

12. Monthly payments for oil imports continue to create a serious liquidity problem in public sector finances as receipts generated abroad are not sufficient to meet oil payments and service the public sector's external debt. A recent infusion of US$25 million provided by the U.S. Government in form of a grant from the Economic Support Fund will help to ease the situation.

Creditworthiness

13. Liberia's external public debt outstanding and disbursed was estimated at about US$495 million as of June 1980. The Bank Group share of the public debt outstanding and disbursed is presently about 15 percent and is expected to increase to about 24 percent by 1984. As a proportion of public debt servicing liability, the Bank Group's share is expected to increase from 14 percent to 18 percent over this period. Debt service payments as a proportion of exports of goods and non-factor services were estimated at about 10 percent in 1979 as compared to 5.7 and 7.7 percent for 1974 and 1972 respectively. Public debt service payments as a percentage of Government revenues (a more meaningful indicator for Liberia which uses the US dollar as a medium of exchange) declined from about 24 percent in 1972 and 21 percent in 1974 to 16.5 percent in 1978, but again went up to 23 percent in 1980. This upsurge in the debt service ratio has occurred primarily as a result of short-maturity loans contracted by Liberia in the last few years to finance OAU-related expenditures and meeting the growing budgetary deficits. In the short run, this increase in debt servicing obligations has created severe pressures on Liberia's public finances. The Government therefore sought and obtained the assistance of the Paris Club in rescheduling its external public sector debt of US$32 million maturing during the period July 1980 to December 1981; the rescheduled debt is to be repaid over 9 years, including four years of grace.

14. Assuming a continuation of the recent rate of growth in public revenues and exports (10 percent and 5 percent per annum, respectively) Liberia's debt service ratio is estimated to increase to about 33 percent of public revenues and 12 percent of exports by 1985; should there be an improvement in the country's economic prospects over the next few years, the debt service ratio would be somewhat lower (around 29 percent) by 1985. Although the movement in world prices of Liberia's main export commodities in 1981 is not particularly favorable, the growth in export earnings is projected to be higher in subsequent years as a result of the likely strengthening in demand for iron ore and an increase in iron ore prices. Forecasts for natural rubber prices also indicate a consistently upward movement, and Liberia may expect higher yields from the recently replanted acreage and new planting of rubber. Other on-going agriculture projects (particularly for coffee, cocoa, palm oil), and successful exploration and development of other mining resources, including gold and barite, will help diversify the economy and should result in an acceleration in the rate of growth of exports during the next three to four years. Public revenues will benefit from these increased export earnings. However, these prospects are clearly contingent upon a number of policy measures which the Government has to initiate and sustain over the next years, e.g., a reduction in the size of the Government budget deficit, restraint on new commercial borrowings and public sector credit expansion, increased mobilization of public savings, maintenance of the traditional openness of the economy, appropriate pricing and tariff policies, revival of investor confidence, inflow of new private investment and improvement in the coordination of overall economic management. Although Liberia has acute short-term liquidity problems, restoration of growth and stability is feasible, provided the Government is able and willing to pursue the right course.

15. In recent years Bank group lending to Liberia has been a blend of IDA credits and Bank loans; in view of the country's relatively low per capita income and high public debt service liability, continued IDA assistance is justified.

PART II - BANK GROUP OPERATIONS IN LIBERIA

16. The Bank has approved 18 loans (including one Third Window loan) for projects in Liberia totalling US$135.7 million; there have been 9 IDA credits totalling US$47.1 million, and one technical assistance grant of US$200,000 for development planning. IFC has made two equity investments totalling US$556,000 in the share capital of the Liberian Bank for Development and Investment (LBDI). The Bank Group assistance has financed roads, agriculture, rural development, power, education, water supply, LBDI, small enterprises, and petroleum pre-exploration. Annex II contains a summary statement of Bank loans, IDA credits, and IFC investments as of August 31, 1981 and notes on the execution of ongoing projects. Following the change of Government in April 1980, implementation of a number of projects was disrupted. For the most part projects are now being implemented well,

although problems have been caused by the Government's inability to meet its full share of financing for some projects as a result of the severe budget constraints.

17. The objectives of Bank Group operations are: (a) to help Liberians take greater initiative in developing their own resources for the benefit of their own people; (b) to support policies and programs leading to a broader distribution of the benefits of economic growth; (c) to help the Government broaden the economic base and overcome infrastructural constraints to growth; and (d) to assist the Government in mobilizing development resources from other external agencies. In furthering these objectives particular attention is being paid to (a) the need to expand the supply of trained manpower and (b) measures to strengthen and improve the operations and finances of the public corporations in Liberia.

18. In support of the objectives of raising the standard of living of lower income groups and broadening the productive base, the Bank Group lending program emphasizes agriculture and rural development. The Bank Group is currently cofinancing with USAID two agricultural projects in Bong and Lofa Counties. These projects are designed to (a) assist subsistence farmers to expand their production base and to increase their productivity and income through the provision of support services and infrastructure, and (b) to help diversify the country's export and revenue base. A rubber project, co-financed with the Commonwealth Development Corporation (CDC), will expand exports and increase productivity and incomes of small and medium size farmers by strengthening credit and extension services and promoting greater Liberian participation in the development of this subsector. The forestry project which the Bank is co-financing with the African Development Bank (ADB) and the German Agency for Technical Cooperation, will strengthen the Government's forest service, initiate an industrial plantation program, and help Liberia better manage and exploit its forestry resources. The oil palm project, co-financed by the ADB and the CDC, will help expand and diversify the country's export and revenue base, provide employment, increase the income level of rural families, and strengthen the institutional capability in the country for oil palm development. A second phase of the Lofa County agricultural development project was recently appraised by the Bank. Consideration is also being given to a rural development project in the southeastern region of Liberia.

19. In addition to its support for agriculture, the Bank Group is also assisting the Government in its diversification efforts through existing lines of credit to LBDI for the manufacturing sector. The small and medium scale enterprises project, approved in November 1980, will stimulate economic activity and employment by providing a line of credit and technical assistance. The objective of the petroleum exploration promotion project, approved in October 1980, is to establish Liberia's hydrocarbon potential by attracting oil companies to take oil exploration permits in Liberia. While the proposed project to rehabilitate the National Iron Ore Company would not serve the Government and Bank Group's objectives directly, the project addresses a number of development issues of importance to Liberia. It would mobilize resources for a productive activity which would improve the Government's ability to achieve these objectives through other means. By improving

the efficiency of an existing investment, the project would secure the jobs of 2,000 workers with no alternative means of employment and would permit the Government to take advantage of the recovery in the iron ore market which is expected in coming years. Over the life of the rehabilitated mine, the government should receive over $100 million in taxes and dividends from the Company whaich could be used for development purposes.

20. Given Liberia's pressing needs for physical infrastructure, the Bank Group continues to play a leading role in financing development and maintenance of water supply, roads, and power. A water supply project for which a credit was granted in 1978 is designed to help rehabilitate and expand the Monrovia water supply system, extend water distribution to lower income groups in metropolitan areas, and strengthen the management, staffing, and finances of the Liberia Water and Sewer Corporation. The feeder roads project for which a Bank loan was approved in 1979 is designed to open up the agricultural hinterland of Liberia in support of the ongoing and proposed agricultural and rural development programs. The nearly completed fourth highway project has, like earlier Bank-financed projects, expanded the country's limited basic road network. A fifth highway project under consideration would improve the country's road maintenance capability. In the power sector, a nearly completed fourth power project has expanded the Liberia Electricity Corporation's (LEC) thermal generating facilities to meet current demand, strengthened LEC's management, and extended connections to poor urban households in Monrovia. Bank Group assistance will also be considered to meet Liberia's longer term electricity needs through hydropower development.

21. Since the lack of trained manpower is a major constraint to development in Liberia, the Bank Group has financed three education projects and is currently financing preparation of a fourth project through an advance from the PPF. The proposed project would continue the emphasis on manpower training and upgrade primary and secondary education in the rural areas.

PART III - THE MINING SECTOR

Contribution to the Economy

22. Mining dominates the modern sector in Liberia, accounting for more than 54 percent of the country's export earnings and 24 percent of GDP in 1979. Iron ore accounts for about 95 percent of total mineral production, with artisanal gold and diamond mining accounting for the balance. Throughout the 1960s and early 1970s, iron mining provided substantial government revenues, making possible initial efforts to develop infrastructure and other sectors outside the concession areas.

23. Total iron ore production and its contribution to GDP showed average annual increases until 1974, during which year production amounted to 25 million tons and iron ore revenues accounted for over 37 percent of GDP and 13 percent of Government revenues. Since 1976, however, prolonged recession in the world steel industry has depressed both the volume and price of iron ore exports. Liberia's total tonnage exported fell by 28 percent from 1974 to

1979, although iron ore continues to account for over half of export earnings. In terms of contribution to Government revenue, the share of the iron ore mines has been small during the last few years because earnings have been low or negative and most of the concession agreements provide for profit sharing with the Government and no fixed royalties. Thus, in 1979 iron ore production accounted for only five percent of Government revenues.

24. Over 35 percent of employment in the modern sector is in mining; a greater proportion of the workers employed in mining are skilled and semi-skilled than in other industrial sectors of the country. In 1979, expatriates accounted for under 8 percent of the labor force in the Liberian iron ore sector; at the National Iron Ore Company (NIOC), this proportion was even lower at slightly above 3 percent.

25. The mining sector provides socio-economic benefits to the families which depend directly or indirectly on the mining activities for support. The mining companies provide housing, schooling, and medical services in remote areas of the country.

Iron Mining Activity

26. Three companies currently produce iron ore in Liberia. The most important mining company is the Lamco Joint Venture (LJV) which is owned jointly by Bethlehem Steel of the United States (25 percent) and Lamco (75 percent)--a consortium in which the Government holds 50 percent, private, local, and foreign interests 12.6 percent, and a Swedish consortium headed by Granges AB holds the remaining 37.4 percent. LJV's production capacity is 12 million long tons per year (ltpy), but production has fallen in recent years because of market problems and the need to suspend the costly production of pellets because of fuel price increases. Deposits in the current LJV mining area are expected to be depleted by 1985-1987. Feasibility studies for expansion into the Western Area have been completed, but no decision has been made whether or not to undertake the investment for which about US$300 million would be required. The decision will be influenced by plans to develop the Mifergui-Nimba iron ore deposits across the border in Guinea. Current plans call for evacuation of the Guinean ore on the LJV railroad infrastructure. More recently, a proposal has been made to combine the LJV Western Area and Guinean projects, but few details have been presented. Thus, the future of Liberia's principal iron ore mine is uncertain.

27. The Bong Mining Company (BMC), Liberia's second largest iron ore mining company, produced 7.5 million ltpy in 1980. BMC is owned 50 percent by the Government, but is controlled by several European steel companies, consisting of a consortium headed by Exploration and Bergbau of Germany (34 percent) and Finsider S.A. of Italy (16 percent). BMC's reserves are sufficient to permit production at present levels until the mid-to-late 1990s. However, pellets account for a large share of its production, and production costs have increased, resulting in large financial losses. BMC has been forced to cut back production in order to reduce losses.

28. The National Iron Ore Company (NIOC) is described in detail in Part IV of this report. Upon effectiveness of the proposed rehabilitation loans, it would be owned 80 percent by the Government and 20 percent by

foreign and local private shareholders. Until recently NIOC produced about 2.4 million ltpy. Production in 1980 was only 1.8 million tons because of technical and financial problems, which, if not addressed promptly, will lead to the closing of the mine. Sufficient proven reserves exist, however, to produce the planned 3.25 million ltpy until 1995 if the mine is rehabilitated under the proposed project.

29. A fourth mining company, the Liberia Mining Company (LMC), operated the Bomi Hills deposits until 1977 when its reserves were depleted. Until LMC withdrew, it owned the railroad from Bomi to Monrovia which is now owned by the Government and forms part of the railroad infrastructure used by NIOC to transport its ore to the Monrovia port.

Future Development Potential

30. Prospects for the iron ore sector are uncertain; all three operating companies are experiencing financial, technical, and/or marketing problems which may jeopardize their future operation. In addition to the three operating mining concessions, three other iron ore deposit areas (the Bie mountains, the Wologisi range, and the Putu range) are covered by concession/lease agreements. Exploration work has been done in all these areas, and the reserves are estimated at 200-600 million tons of low-grade, fine-grained ores suitable mainly for pellet feed production. These areas lack infrastructure, and would require substantial investments to be developed. In view of the poor quality of the reserves in these concessions and the high investment costs required to develop them, the likelihood that these deposits will be developed in the foreseeable future is slim.

31. The Bank has had no previous involvement in the mining sector in Liberia. Indeed, through both its lending program and its economic dialogue, the Bank has encouraged the Government to diversify the economy so as to reduce dependence on a single commodity and spread development beyond the enclaves to the largely subsistence rural population. The proposed project represents, therefore, a special case in which the life of an existing mine would be extended in order to "buy time" to prepare for an orderly phaseout and generate government revenues with which to stimulate alternative economic activity for the population currently dependent on the mine.

PART IV - THE PROJECT

32. The proposed project was initiated in 1978 at Government's request for assistance to rehabilitate the National Iron Ore Company (NIOC) in order to forestall imminent suspension of mining production at the Mano River mine. The Bank subsequently helped NIOC and the Government prepare the project by providing in 1979 a US$500,000 Project Preparation Facility (PPF) advance to the Government to finance consulting studies and engineering work to define the project scope, design, and viability. The project was appraised in December 1980, and a second PPF advance of US$500,000 was approved in February, 1981 to finance detailed engineering and legal assistance. Loan negotiations

were held in Washington on September 4, 1981. The Liberian delegation was headed by Mr. Rudolph Johnson, Deputy Minister of Finance. Significant events and special conditions are summarized in Annex III. The project is described in detail in Staff Appraisal Report No. 3479-LBR, dated December 1, 1981.

Objectives

33. The immediate objective is to increase run-of-mine and beneficiated ore output, reduce operating costs, and improve infrastructure facilities (bridge and railroad) so NIOC can operate efficiently for at least another 13 years, the estimated life of its proven ore reserves. The longer term objective is to make it possible for the Government to use the revenues it obtains from the restructured company to promote economic development in Cape Mount County, where the mine is situated, and provide alternative sources of income for the population once the mine is depleted.

Background

34. NIOC was established in 1958 to develop the Mano River iron ore deposits near the Sierra Leone border. The Government of Liberia received 50 percent of the shares in exchange for permanent exemption from taxes or royalties. Lansdell Christie, a U.S. citizen who had explored the deposits and had already formed LMC 1/, retained 27 percent of NIOC's stock, LMC received 15 percent, and numerous other US and Liberian investors (financed primarily by Christie) purchased the remaining eight percent. NIOC owns all the assets at the mine, port facilities in Monrovia, and the railroad link from Mano to Bomi; the railroad from Bomi to Monrovia was turned over to the Government when the LMC mine closed.

35. The Mano mine was originally developed as an adjunct to the LMC mine at Bomi Hills, with whose ore NIOC's could be mixed to meet grade specifications. The NIOC installation was badly designed from the start and never met its expected annual production target of four million tons. During 1972-74, in anticipation of the closing of Bomi, additional capital investment was made at Mano to expand NIOC's production to 4.5 million tons. NIOC encountered severe operational problems after the commencement of phase two because of ill-advised technical decisions by the management firm and poor supervision of the engineering firm in charge of plant modification. More recently, inadequate maintenance and replacement of equipment have led to interruptions in production and financial losses. By the end of 1980, NIOC was producing only 1.7 million ltpy and had incurred losses of about US$6 million.

36. Although the Government was the largest shareholder, it played no significant role in supervision of the Company until 1979. NIOC was managed by contract with Mine Management Associates, Ltd. (MMAL) which was owned by the Christie Estate. In 1979, the Board of Directors, on which the Government had appointed four out of seven members, terminated the contract with MMAL, which was by then perceived by the Government as costly and ineffective.

1/ LMC was owned 41 percent by Christie and 59 percent by Republic Steel (US). In 1980, Republic Steel transferred all of its shares in LMC to the Christie Estate which currently holds Christie's interests.

37. The Christie estate and an associated interest also held some US$8 million of NIOC debt, part of which was disputed by NIOC. The remainder of the term debt is held by the U.S. Export-Import (ExIm) Bank. NIOC currently owes ExIm US$3.5 million, part of which was assumed last year when Bankers Trust and Citibank called in the guarantees on NIOC loans which ExIm had guaranteed. Finally, NIOC owes the Government of Liberia US$5.6 million. Prior to negotiation of the proposed Bank loans, agreement was reached in principle to restructure the existing debt, and appoint a new consulting firm to manage the project and mine operations.

Project Description

38. Iron ore production from the concentrating plant would be increased from the present level of 2.3 million ltpy to 3.25 million with a recovery of 53 percent, implying an increase in run-of-mine ore output from about 4.5 million ltpy to 6.1 million ltpy. Major project components include additional mining equipment, a surge facility for crushed ore, modification of the concentrator flowsheet, improvements in the railroad to the port at Monrovia, repair of the St. Paul River railway bridge, and miscellaneous support equipment. A critical project component would be management and technical/engineering assistance to execute the project and improve the operations of the company. The project also includes studies and pilot projects to determine the economic potential of the Mano River mining area.

Project Implementation

39. The project is expected to take about 20 months, after which another year may be needed until the final production target is met. Under the new corporate structure agreed upon by all the shareholders, the Government would own at least 80 percent of NIOC and would control the Company; up to 12 percent would be owned by the Christie Estate and up to 8 percent by the other existing owners. To ensure adequate management authority to carry out the project, the role of the minority shareholders would be limited, and full responsibility for management decisions would be vested in the Government. The Government's control would be assured by the establishment of a voting trust arrangement into which all the shares in the Company would be placed. Effectiveness of the voting trust agreement would be a condition of effectiveness of the Bank loans (draft NIOC Loan Agreement, Section 7.01(b)). The Government would have a controlling majority in the voting trust and would appoint the Board of Directors for the Company.

40. The Board would appoint a three member executive committee composed of the Minister of Finance, the Minister of Planning and Economic Affairs and the Minister of Land and Mines. This Executive Committee would meet at least once a month and is expected to supervise the operations of the mine closely. The day-to-day operations of the mine would be managed by a General Manager located at the mine site, who would report directly to the Executive Committee. As a condition of effectiveness of the Bank loans, the NIOC Board would approve terms of reference, satisfactory to the Bank, setting out the responsibilities of the Executive Committee (draft NIOC Loan Agreement, Section 7.01(e)).

41. Over the past year, NIOC has suffered from the loss of qualified management personnel. As a result of a perceived deterioration in NIOC's future prospects and the unsettled climate following the coup, a number of senior expatriate and Liberian personnel, including the General Manager and the Assistant General Manager, resigned. In order to strengthen the management capability, Met Chem Consultants Limited of Canada, (a wholly-owned subsidiary of the United States Steel Corporation of the U.S.A.) have been selected by NIOC to provide necessary management and technical services. Signature of agreements on the management of NIOC in a form satisfactory to the Bank would be a condition of effectiveness of the proposed loans (draft NIOC loan agreement, Section 7.01(b)). Met Chem would provide initially about ten experienced expatriate technicians, including a General Manager. The agreement would provide for total management of NIOC's operations up to June 30, 1984. Aside from the General Manager and Financial Controller, who are expected to remain for the full period, most team members would be replaced after about a year as qualified Liberian or individually recruited expatriate replacement personnel are hired and trained. Assurances have been received that NIOC would review with the Bank the appropriateness of retaining the consultants beyond the above date and based on this review would make management arrangements satisfactory to the Bank (draft NIOC Loan Agreement, Section 4.02(b)).

42. The cost of Met Chem's services is consistent with costs of similar assignments worldwide. The total number of man-months requested is estimated to be about 380. The estimated average cost per man-month is US$12,000, and the total cost over the 30-month period is estimated at about US$5.4 million (including engineering work needed for the project). The Met Chem contract includes strong production incentives in the form of royalties, and penalties.

43. Ore Resources. NIOC's proven ore reserves as of June 1980 were 86 million tons with an average Fe content of 51.4 percent. This is sufficient to enable the mine to operate at the increased level of production for at least 13 years. In addition, probable/possible reserves of 24 million tons with a similar iron ore content are estimated. These latter estimates are based on scarce geological information but, because of past experience and the uniformity of the geology of the area, the estimate is considered conservative. These additional reserves are likely to extend the mine's life by another 5 years.

44. While sufficient ore classification information exists for 60 percent of the proven reserves, detailed classification of the remaining 40 percent would be undertaken as part of the project in order to facilitate mine planning. NIOC has agreed to prepare a detailed drilling program by March 31, 1982 and to carry out the program by December 31, 1982 (draft NIOC Loan Agreement, Section 4.06).

45. Mine Planning. In connection with the studies done by Met Chem, a preliminary long-term mine plan has been prepared. Assurances have been obtained that, by specified dates during project implementation, NIOC would prepare--with the assistance of a mine planning apecialist provided by Met Chem--more detailed two-year, medium, and long-term mine plans. NIOC would review and update these plans annually and afford the Bank a reasonable opportunity to comment on them (draft NIOC Loan Agreement, Section 4.05).

46. Railroad. Until the Bomi Hills mine closed in 1977, LMC maintained the 40-mile railroad track between Bomi and Monrovia, while maintenance of the 50-mile track between Mano River and Bomi has always been the responsibility of NIOC. As a result of neglect by LMC, the former track is in poor condition and immediate measures are required to reduce the risk of derailment. The proposed project includes relaying 6.25 miles of mainline track and a general track rehabilitation program. Additional ore cars would be provided, and equipment and parts would be purchased to rehabilitate and maintain both the track and cars.

47. Bridge Improvements. The above-water structure of the railroad bridge crossing the St.Paul River is in good condition, but damage caused by scouring and corrosion of the piers under the water line must be repaired in the near future to prevent collapse of the bridge. The bridge would be repaired by contractors as proposed in a study by Raymond Technical Facilities, Inc. (US). The Government would employ management experts acceptable to the Bank to supervise the bridge rehabilitation (draft Loan Agreement with the Government, Section 3.02 (a)). Emergency repairs as recommended by Raymond were completed by NIOC in November 1979 to reduce the risk of imminent bridge collapse. The more permanent work to be carried out under the project should extend the life of the bridge at least another 20 years.

48. Economic Development Studies. To promote development of alternative employment opportunities in the region when mining is phased out, the proposed project includes funds for an economic development study of the area, feasibility studies, and pilot projects. To execute the study, the Government would employ consultants not later than December 31, 1982 whose qualifications and experience would be acceptable to the Bank and under terms and conditions acceptable to the Bank (draft Loan Agreement with the Government, Section 3.02(b)). Such studies would be expected to provide the basis for future Bank Group support to the agricultural sector in the area.

Iron Ore Market

49. The iron ore produced by NIOC is a specialty product for which the demand is not much affected by fluctuations in the world iron ore market demand/supply situation. Nevertheless, the price for NIOC ore does reflect world market prices; following a decrease in real terms in 1981, iron ore prices are expected to recover to the pre-1981 level in 1982 and thereafter increase an average of one percent per year in real terms.

50. The sales agent for NIOC (Caemi International B.V., of the Netherlands) has been able, over the years, to place all NIOC's available production, and has obtained letters of intent from five out of six of NIOC's major long-term customers explicitly stating their willingness to receive a total of 13.6 million tons of iron ore undelivered under current contracts and their intention to negotiate new long-term contracts with similar annual quantities. Assurances have been obtained from NIOC that Caemi or another marketing agent acceptable to the Bank would be retained (draft NIOC Loan Agreement, Section 4.03).

Project Costs

51. Total costs for the NIOC project are estimated at US$67.1 million, of which US$54.4 million or 81 percent are foreign costs. NIOC would continue to be exempt from import duties for project items and all costs are net of taxes. A breakdown of project costs is given in the project summary at the beginning of this report.

52. The costs of mining and miscellaneous equipment for the mine and the plant are based on quotations obtained from suppliers. A 5 percent physical contingency has been applied to mining and maintenance equipment, and power plant switchgear, while a 10 percent physical contingency has been applied to plant equipment. For the plant modification and construction of the surge system, cost estimates are based on the preliminary engineering done by Met Chem and physical contingencies of 25 percent and 30 percent respectively have been applied. For the railroad repair, the bulk of the cost would be foreign equipment, for which quotations have been obtained from suppliers and to which a 10 percent physical contingency has been applied. The local cost, which covers repair work to be performed by NIOC, supplemented by additional local labor, is based on Met Chem estimates. The estimated foreign cost of the management contract is based on 30 months at the contractual ceiling price agreed upon between NIOC and Met Chem (para. 42) plus an additional provision for reimbursables as estimated by Met Chem. A physical contingency of 10 percent has been applied to the management costs.

53. The cost estimate for the repair of the St. Paul River bridge is based on preliminary engineering and a quotation by Raymond Technical plus a 20 percent physical contingency. The interest during construction estimates cover interest from 1982 to mid-1984. A provisional amount has been included for economic studies and pilot projects. The base costs are in constant September 1981 dollars for all items except the bridge rehabilitation which is in constant end-1980 dollars. Price contingencies applied to the base prices assume foreign and local price increases for equipment, construction, and engineering of 12.5 percent in 1980, 9.0 percent in 1981, 8.5 percent in 1982, and 7.5 percent in 1983.

Financing Plan

54. The foreign financing required for the project--amounting to US$54.4 million, or 81 percent of total requirements--would be financed through long-term foreign loans amounting to US$41.8 million, commercial bank financing amounting to US$8.5 million, and a Government equity contribution to NIOC of US$4.1 million. The local costs of US$12.7 million would be financed with a Government equity contribution of US$3.0 million, a NIOC contribution of US$2.3 million, and US$1.4 million from the proposed Bank loan to the Government and US$6.0 million of commercial bank financing.

55. The new Government equity would finance US$3 million of working capital as well as US$4.1 million of interest during construction on all loans except for the proposed World Bank loans. The US$3 million equity contribution for working capital is a condition of effectiveness of the Bank loans (draft NIOC Loan Agreement, Section 7.01(c)). The Government

contribution to cover interest during construction would be made when required to meet such charges up to June 30, 1984 (draft Guarantee Agreement, Section 2.02 (a)). The Government would also guarantee all the new loans to NIOC, and it would provide funds to cover any NIOC operational or project shortfall (draft Guarantee Agreement, Section 2.02(b)).

56. NIOC's equity contribution would be in the form of force account work (erection of the surge system, repair of the railroad) and rail, ballast, and equipment for the plant which were acquired by the Company over the last two years in anticipation of the rehabilitation project.

57. The proposed World Bank contribution would be separated into two loans: a loan of US$8.3 million to the Government to finance the rehabilitation of the bridge (which is government-owned) and studies; and a loan of US$11.7 million to NIOC to finance part of the mine rehabilitation cost. Each loan would have a total maturity of 13 years (i.e., the proven life of the mine) including 5 years of grace. NIOC would pay a guarantee fee to the Government of one percent (draft NIOC Loan Agreement, Section 5.10). The PPF advances, which were made to the Government and total about US$1.0 million would be apportioned to the NIOC and Government loans as appropriate. Thus, about US$250,000 for studies on the bridge and for legal assistance to the Government would be refinanced under the loan to the Government, and US$750,000 would be refinanced under the loan to the Company. Prior to loan signature, NIOC is expected to have purchased about US$1 million of spare parts included in the proposed project and to have spent at least US$200,000 on Met Chem's services. It is proposed that expenditures not to exceed US$2 million and made after January 1, 1981 be retroactively financed under the proposed loan to NIOC (draft NIOC Loan Agreement, Schedule 1, para. 4(b)).

58. The ADB loan would be made to the Government at 7.5 percent per annum to be re-lent to NIOC with the same charge, plus a 1 percent per annum guarantee fee; repayment would be over 13 years including 5 years of grace. The loan from FMO would be made directly to the Company at 9 percent per annum interest, for 13 years including 4 years of grace. The OPEC Fund loan would be made to the Government for 15 years including 5 years of grace, with no interest charge, and a 0.75 percent service charge; this loan would be onlent to NIOC on the same terms as the Bank's loan to NIOC.

59. In addition to the long-term financing requirements outlined above, NIOC's critical financial situation and the projected cash needs for 1981 and 1982 made it necessary to secure US$14.5 million of commercial bank financing for working capital. These funds, to be provided by a syndicate of commercial banks led by the Bank of America, would be repaid by the end of 1988 and would carry interest charges of about 2.0 percent above LIBOR. In addition, there would be an insurance fee to the American International Group of 3.0 percent per annum. At the date of this report, firm commitment has not yet been obtained from the commercial banks to provide this financing. However, in view of the strong interest which has been expressed by a number of banks, it is expected that by the time this proposal is considered by the Executive Directors, such a commitment will have been made.

60. NIOC's existing long-term and short-term debt--amounting to about US$16.4 million at the end of 1980--has been rescheduled. The Government has agreed to convert US$5.6 million of pre-1981 debt into equity. The U.S. ExIm Bank has agreed in principle to reschedule its existing loans, which amount to US$3.5 million, into a long-term loan subordinated to the new loans. The other previous lenders, most of whom are related to the Christie interest, have agreed to convert and reduce their outstanding claims, amounting to US$8 million, into a US$3 million long-term loan subordinated to the new loans. The terms of both rescheduled long-term loans provide for 13 years' repayment, including 6.5 years of grace, bearing interest at 12 percent, to be fully subordinated to the new lenders for the rehabilitation project as well as to the operational requirements of the company. Effectiveness of these conversion, rescheduling, and subordination agreements would be a condition of effectiveness of the Bank loans (draft NIOC Loan Agreement, Section 7.01(b)).

Trust Account

61. To provide the lenders to the Project with additional security and to ensure that NIOC operates on a sound financial basis, the proceeds from the sale of iron ore would be allocated, as a first priority, to debt service payments and, as second priority, to finance day-to-day operations of NIOC's mine-related facilities as well as necessary renewal investments. To this effect, all NIOC sales revenues would be paid into a trust account with a number of sub-accounts. The Wilmington Trust Company (U.S.) would be Trustee. All "senior" (i.e. new) project loans, including those to both NIOC and the Government, would be serviced from the trust account. The commercial bank loans would also be serviced from the account. The subordinated (i.e., existing) loans would be serviced only after debt service requirements of the new lenders and the operational requirements of the Company have been met. Effectiveness of the security trust agreement--in which all new lenders to the project including the commercial banks, the Government, NIOC, and Wilmington Trust would participate--is a condition of effectiveness of the Bank loans (draft NIOC Loan Agreement, Section 7.01(b)).

Allocation of Bank Loan and Disbursement

62. The proposed Bank loan to the Government would finance: (i) the rehabilitation of the St. Paul River bridge (US$6.3 million); (ii) the economic studies (US$0.3 million); (iii) interest during construction on the proposed loan (US$1.4 million); and (iv) refinancing of the engineering studies for the bridge and legal assistance to the Government financed under the PPF advance (US$0.25 million). The proposed Bank loan to the Company would finance: (i) the management and technical assistance contract with Met Chem (US$5.4 million); (ii) spare parts (US$3.2 million); (iii) interest during construction on the proposed loan (US$2.3 million); and (iv) refinancing of the engineering and feasibility studies for NIOC financed under the PPF advance (US$0.75 million). The proposed Bank loans would be disbursed against 100 percent of the foreign exchange costs of the management contract and economic studies and against 100 percent of the costs of imported spare parts or 70 percent if purchased locally. For the bridge, it is proposed that the Bank disburse against 100 percent of the civil works contract including a

local component estimated at US$1.4 million. The financing of this local cost, as well as interest during construction, is justified in view of the acute cash shortage affecting both the Government and NIOC.

Procurement

63. All goods and services financed under the Bank loans would be procured in accordance with Bank guidelines. The bridge rehabilitation (US$6.3 million) would be executed by contract which would be awarded after international competitive bidding. The management contract (US$5.4 million) negotiated with Met Chem (Canada) is acceptable to the Bank. Spare parts (US$3.2 million) would be procured by limited international tendering or, in the case of items which need to be compatible with existing equipment, and up to a value of US$2 million, from the original suppliers (draft NIOC Loan Agreement, Section2.03). The economic studies (US$250,000) would be commissioned in accordance with Bank guidelines.

Financial Analysis and Covenants

64. Starting in 1983, NIOC is expected to generate an annual profit (before taxes) which would increase from US$0.6 million in 1983 (or 1 percent of sales revenues) to about US$27 million by 1994 (or 24 percent of sales revenues). However, in 1982, operating losses are expected to amount to about US$5.5 million as a result of the low production levels achieved. These losses, together with the repayment of some of NIOC's outstanding short-term obligations, would be financed with the additional Government equity and commercial bank loans included in the financing plan.

65. NIOC currently pays only minor taxes and does not pay corporate income tax. Amendment of the concession agreement to subject NIOC to all taxes of general application, including corporate income tax, would be a condition of effectiveness of the Bank loans (draft NIOC Loan Agreement, Section 7.01 (a)). During the period 1981-87, all those taxes which NIOC does not now pay would be deferred until certain financial ratios are met (see below) in order to ensure that sufficient cash is available to NIOC to repay the debt to commercial banks. Thereafter, annual taxes of 50 percent of profit and accrued taxes--taking into account a loss carry-forward of five years--would be payable by NIOC.

66. To ensure maintenance of a sound financial position and to safeguard the position of the new lenders, the following covenants have been agreed to:

(a) NIOC would not pay any dividend if after such dividend the ratio of current assets to current liabilities would be less than 1.3:1 or the debt:equity ratio would exceed 60:40, and in any case until at least 75 percent of the aggregate principal of the "senior" loans has been repaid (draft NIOC Loan Agreement, Section 5.06 (a));

(b) NIOC would defer payment of new taxes, including corporate income tax, unless after such payment the ratio of current assets to current liabilities would be at least 1.3:1 and at least 50 percent of the aggregate principal of the "senior" loans had been repaid (draft NIOC Loan Agreement, Section 5.06 (b));

(c) NIOC would not repay any principal or interest on the subordinated debt unless after such payment the ratio of current assets to current liabilities would be at least 1.3:1 (draft NIOC Loan Agreement, Section 5.06 (c));

(d) NIOC would not repay any of the principal on the subordinated debt until 12 months after the first principal payment on the Bank loan had been paid (draft NIOC Loan Agreement, Section 5.06 (d));

(e) NIOC would maintain a ratio of current assets to current liabilities of at least 1.3:1 at all times (draft NIOC Loan Agreement, Section 5.04);

(f) NIOC would not incur any additional debt--beyond the debt incurred for the financing of the project and the debt incurred in 1981-82 with commercial banks for cash short-fall financing--before December 31, 1987 without prior Bank approval and thereafter if, as a result of such debt, the debt:equity ratio would be above 60:40, or the projected debt service coverage ratio (excluding subordinated debt) would be below 1.5 (draft NIOC Loan Agreement, Section 5.05); and

(g) before completion of the project, NIOC would not make any investments other than those directly related to the rehabilitation project, and thereafter, aggregate annual capital investments would not exceed US$5 million, unless otherwise agreed by the Bank (draft NIOC Loan Agreement, Section 5.11).

Audit

67. As a result of the management and financial difficulties NIOC has faced, the audit of its accounts for 1980 is still in progress. Submission of this audit report to the Bank would be a condition of effectiveness of the proposed Bank loans (draft NIOC Loan Agreement, Section 7.01(d)). Thereafter, NIOC would submit annual audited accounts to the Bank in a form satisfactory to the Bank no later than four months after the end of its fiscal year (draft NIOC Loan Agreement, Section 5.02).

Economic and Financial Benefits and Risks

68. Iron ore mining has made a substantial contribution to Liberia's economic development in the past, accounting for an important proportion of the Government's revenues in the 1960s and 1970s and about half of the country's exports in 1979. The industry has been adversely affected by the decline in world demand for steel products which began to be felt in 1976, and more recently by the economic recession that has afflicted industrialized

countries and depressed iron ore prices even further. NIOC is, however, basically viable and could contribute to exports, employment, and Government revenues once economic conditions in industrialized countries are normalized and iron ore prices improve. Rehabilitation of the NIOC mine, ensuring that it has sound management, and that equipment and transport facilities are provided to reduce operating costs, would improve the Company's ability to survive through a period of depressed demand and would enable it to quickly reap benefits as economic conditions improve. The alternative to rehabilitation is to close the mine, which would result in a permanent loss of part of Liberia's foreign iron ore market and would reduce Government revenues in the long run.

69. The project's pre-tax financial rate of return on incremental investment (including commercial bank loans incurred in 1981), calculated in real terms, is estimated to be 14.3 percent. The economic and social benefits of the project far exceed its direct financial returns, and result in an incremental economic rate of return of 26.5 percent. The benefits are financial revenues which would accrue to the Government, income taxes and dividends, as well as the social services provided, e.g., schools, hospitals, and infrastructure maintenance. The costs include all capital and operating costs as adjusted for shadow pricing of local labor, and exclusive of indirect taxes. NIOC would pay taxes amounting to 50 percent of gross income estimated to begin in 1988. Over the life of the project, these revenues should be about US$74 million. The Government should also receive dividends of about US$30 million, resulting in a return on equity for the Government of 25 percent. The availability of these funds would make it possible for the Government to promote economic development in the mining area and prepare for an orderly phaseout of mining operations.

70. Without the rehabilitation project, the NIOC would be forced to close down, resulting in a loss of jobs for about 2,000 workers. Including dependents and persons engaged in fringe commercial activity, some 16-18,000 people would lose their primary means of support. A number of social services provided by the mine would either be lost or have to be taken over by the local government if the mine were to close. These include a 90-bed hospital, providing medical services to approximately 80,000 out-patients and 4,500 in-patients annually; two schools serving about 775 students; housing; and the transportation/communication infrastructure which is currently maintained by NIOC and which constitutes the only link between western Liberia and Monrovia.

71. The financial risks are the most significant. The financial rate of return is sensitive to a fall in revenues: a drop in iron ore prices of 10 percent, an increase in operating costs of 10 percent or a decrease in production of 10 percent, would reduce the Company's ability to service its debt. The main burden of this risk would, however, be borne by the previous lenders whose loans would be subordinated to the new loans and would be payable only after all operational requirements (including current operating and renewal costs) have been met. The financial risk would be further limited by the establishment of an off-shore trust account into which all the Company's revenues from the sale of iron ore would be paid. Finally, the Government would guarantee or contract all the new loans, and it has agreed to cover any cash shortfall which might jeopardize NIOC's operations.

72. Additional risks are that transport infrastructure may not be rehabilitated in time, thus affecting the volume of production, and that the Company may be affected by labor or social unrest. Measures have been taken to start improvements to rail and bridge installations as soon as possible, thus reducing the risk of production delays due to infrastructure failure, and the chances of the project being affected by work stoppages are considered small, given the Government's strong support and that workers and inhabitants in the mining area already know that closure of operations has been considered. The market risks are also considered small in view of the special characteristics of NIOC's ore and the commitments already received from its customers. Overall, given that the project would preserve an existing investment and provide potential earnings to the Government, the risks are considered acceptable.

PART V - LEGAL INSTRUMENTS AND AUTHORITY

73. The draft Loan Agreement between the Republic of Liberia and the Bank, and between the Bank and the National Iron Ore Company, the Guarantee Agreement between the Republic of Liberia and the Bank, and the Reports of the Committee provided for in Article III, Section 4(iii) of the Articles of Agreement, are being distributed separately to the Executive Directors.

74. Special conditions of the project are listed in Section III of Annex III to this Report.

75. Additional conditions of effectiveness of the Bank loans would be:

(a) amendment of the certificate of incorporation and concession agreement in a manner satisfactory to the Bank;

(b) effectiveness of the agreements to reschedule and subordinate NIOC's existing debt; the security trust agreement; the management agreement; and the voting trust agreement;

(c) fulfillment of all conditions precedent to the effectiveness of all other new loans;

(d) cash payment by the Government of US$3 million as new equity contribution to NIOC;

(e) submission to the Bank of audited NIOC accounts for 1980, in a form satisfactory to the Bank; and

(f) appointment of an executive committee of the Board with terms of reference satisfactory to the Bank.

76. I am satisfied that the proposed loans would comply with the Articles of Agreement of the Bank.

PART VI - RECOMMENDATION

77. I recommend that the Executive Directors approve the proposed loans.

A. W. Clausen
President

Attachments

Washington, D.C.
December __, 1981

TABLE 3A
LIBERIA - SOCIAL INDICATORS DATA SHEET

LAND AREA (THOUSAND SQ. KM.) TOTAL 111.4 AGRICULTURAL 6.1	LIBERIA 1960 /b	 1970 /b	 MOST RECENT ESTIMATE /b	REFERENCE GROUPS (WEIGHTED AVERAGES - MOST RECENT ESTIMATE) /a MIDDLE INCOME AFRICA SOUTH OF SAHARA	 MIDDLE INCOME LATIN AMERICA & CARIBBEAN
GNP PER CAPITA (US$)	160.0	260.0	500.0	794.2	1616.2
ENERGY CONSUMPTION PER CAPITA					
(KILOGRAMS OF COAL EQUIVALENT)	87.5	558.8	448.2	707.5	1324.1
POPULATION AND VITAL STATISTICS					
POPULATION, MID-YEAR (THOUSANDS)	978.0	1335.0	1797.0	.	.
URBAN POPULATION (PERCENT OF TOTAL)	20.5	26.2	32.3	27.7	64.2
POPULATION PROJECTIONS					
POPULATION IN YEAR 2000 (MILLIONS)			3.7	.	.
STATIONARY POPULATION (MILLIONS)			11.0	.	.
YEAR STATIONARY POPULATION IS REACHED			2095	.	.
POPULATION DENSITY					
PER SQ. KM.	8.8	12.0	16.1	55.0	34.3
PER SQ. KM. AGRICULTURAL LAND	163.0	217.0	284.6	130.7	94.5
POPULATION AGE STRUCTURE (PERCENT)					
0-14 YRS.	45.4	46.7	47.6	46.0	40.7
15-64 YRS.	52.0	50.8	50.0	51.2	55.3
65 YRS. AND ABOVE	2.6	2.5	2.4	2.8	4.0
POPULATION GROWTH RATE (PERCENT)					
TOTAL	2.8	3.1	3.3	2.8	2.4
URBAN	5.4	5.7	5.6	5.1	3.7
CRUDE BIRTH RATE (PER THOUSAND)	50.2	49.3	48.1	46.9	31.4
CRUDE DEATH RATE (PER THOUSAND)	20.3	16.3	13.6	15.8	8.4
GROSS REPRODUCTION RATE	3.4	3.4	3.4	3.2	2.3
FAMILY PLANNING					
ACCEPTORS, ANNUAL (THOUSANDS)	..	..	..	.	.
USERS (PERCENT OF MARRIED WOMEN)	..	..	..	..	..
FOOD AND NUTRITION					
INDEX OF FOOD PRODUCTION					
PER CAPITA (1969-71=100)	96.0	101.0	100.0	89.9	108.3
PER CAPITA SUPPLY OF					
CALORIES (PERCENT OF REQUIREMENTS)	95.0	97.0	104.0	92.3	107.6
PROTEINS (GRAMS PER DAY)	38.0	41.0	42.0	52.8	65.8
OF WHICH ANIMAL AND PULSE	9.0	11.0	10.0	16.1	34.0
CHILD (AGES 1-4) MORTALITY RATE	29.3	21.9	16.4	20.2	7.6
HEALTH					
LIFE EXPECTANCY AT BIRTH (YEARS)	44.4	49.4	53.5	50.8	64.1
INFANT MORTALITY RATE (PER THOUSAND)	..	..	..	..	70.9
ACCESS TO SAFE WATER (PERCENT OF POPULATION)					
TOTAL	..	..	20.0	27.4	65.7
URBAN	..	..	64.0	74.3	79.7
RURAL	..	..	6.0	12.6	43.9
ACCESS TO EXCRETA DISPOSAL (PERCENT OF POPULATION)					
TOTAL	..	..	11.0	..	59.9
URBAN	..	..	35.0	..	75.7
RURAL	..	..	6.0	..	30.4
POPULATION PER PHYSICIAN	12600.0/c	11754.5	9259.0	13844.1	1728.2
POPULATION PER NURSING PERSON	5810.1/c	4651.1	2904.0	2898.6	1288.2
POPULATION PER HOSPITAL BED					
TOTAL	711.8	592.0	623.0	1028.4	471.2
URBAN	181.3	194.4	..	423.0	558.0
RURAL	..	..	..	3543.2	..
ADMISSIONS PER HOSPITAL BED	..	27.7	..	..	..
HOUSING					
AVERAGE SIZE OF HOUSEHOLD					
TOTAL	..	..	..	..	..
URBAN	3.9	..	..	..	..
RURAL	..	..	..	..	..
AVERAGE NUMBER OF PERSONS PER ROOM					
TOTAL	..	..	..	..	..
URBAN	1.7/d	..	..	..	..
RURAL	..	..	..	..	..
ACCESS TO ELECTRICITY (PERCENT OF DWELLINGS)					
TOTAL	..	..	..	..	..
URBAN	..	..	..	..	..
RURAL	..	..	..	..	..

TABLE 3A
LIBERIA - SOCIAL INDICATORS DATA SHEET

	LIBERIA			REFERENCE GROUPS (WEIGHTED AVERAGES - MOST RECENT ESTIMATE) /a	
	1960 /b	1970 /b	MOST RECENT ESTIMATE /b	MIDDLE INCOME AFRICA SOUTH OF SAHARA	MIDDLE INCOME LATIN AMERICA & CARIBBEAN
EDUCATION					
ADJUSTED ENROLLMENT RATIOS					
PRIMARY: TOTAL	31.0	53.0	64.0	73.7	101.7
MALE	45.0	71.0	80.0	96.8	103.0
FEMALE	18.0	35.0	48.0	79.0	101.5
SECONDARY: TOTAL	2.0	9.0	20.0	16.2	35.3
MALE	3.0	15.0	29.0	25.3	34.9
FEMALE	1.0	4.0	11.0	14.8	35.6
VOCATIONAL ENROL. (% OF SECONDARY)	..	5.3	3.0	5.3	30.1
PUPIL-TEACHER RATIO					
PRIMARY	32.0	36.0	42.0	36.2	29.6
SECONDARY	12.0	17.0	..	23.6	15.7
ADULT LITERACY RATE (PERCENT)	8.9/e	15.0	30.0	..	80.0
CONSUMPTION					
PASSENGER CARS PER THOUSAND POPULATION	1.0	11.1	8.1	32.3	42.6
RADIO RECEIVERS PER THOUSAND POPULATION	102.2	116.1	162.8	69.0	215.0
TV RECEIVERS PER THOUSAND POPULATION	1.5	4.9	5.9	8.0	69.0
NEWSPAPER ("DAILY GENERAL INTEREST") CIRCULATION PER THOUSAND POPULATION	0.8	5.2	4.9	20.2	62.8
CINEMA ANNUAL ATTENDANCE PER CAPITA	0.6	0.6	1.1	0.7	3.2
LABOR FORCE					
TOTAL LABOR FORCE (THOUSANDS)	379.8	480.4	605.8	.	.
FEMALE (PERCENT)	34.1	32.8	32.1	36.7	22.6
AGRICULTURE (PERCENT)	80.0	75.6	70.5	56.6	35.0
INDUSTRY (PERCENT)	10.0	11.6	13.7	17.5	23.2
PARTICIPATION RATE (PERCENT)					
TOTAL	38.8	36.0	33.7	37.2	31.8
MALE	51.9	49.0	46.3	47.1	49.0
FEMALE	26.1	23.3	21.4	27.5	14.6
ECONOMIC DEPENDENCY RATIO	1.2	1.4	1.5	1.3	1.4
INCOME DISTRIBUTION					
PERCENT OF PRIVATE INCOME RECEIVED BY					
HIGHEST 5 PERCENT OF HOUSEHOLDS	..	61.7/f	..	..	..
HIGHEST 20 PERCENT OF HOUSEHOLDS	..	72.6/f	..	..	..
LOWEST 20 PERCENT OF HOUSEHOLDS	..	5.3/f	..	..	..
LOWEST 40 PERCENT OF HOUSEHOLDS	..	10.9/f	..	..	..
POVERTY TARGET GROUPS					
ESTIMATED ABSOLUTE POVERTY INCOME LEVEL (US$ PER CAPITA)					
URBAN	..	..	..	381.2	..
RURAL	..	..	75.0	156.2	187.6
ESTIMATED RELATIVE POVERTY INCOME LEVEL (US$ PER CAPITA)					
URBAN	..	..	137.0	334.3	513.9
RURAL	..	..	125.0	137.6	362.2
ESTIMATED POPULATION BELOW ABSOLUTE POVERTY INCOME LEVEL (PERCENT)					
URBAN	..	..	23.0	..	..
RURAL	..	..	..	..	..

.. Not available
. Not applicable.

NOTES

/a The group averages for each indicator are population-weighted arithmetic means. Coverage of countries among the indicators depends on availability of data and is not uniform.

/b Unless otherwise noted, data for 1960 refer to any year between 1959 and 1961; for 1970, between 1969 and 1971; and for Most Recent Estimate, between 1976 and 1979.

/c 1964; /d City of Monrovia only; /e 1962; /f Population, higher income calculated as residual; includes expatriates.

May, 1981

DEFINITIONS OF SOCIAL INDICATORS

Notes: Although the data are drawn from sources generally judged the most authoritative and reliable, it should also be noted that they may not be internationally comparable because of the lack of standardized definitions and concepts used by different countries in collecting the data. The data are, nonetheless, useful to describe orders of magnitude, indicate trends, and characterize certain major differences between countries.

The reference groups are (1) the same country group of the subject country and (2) a country group with somewhat higher average income than the country group of the subject country (except for "Capital Surplus Oil Exporters" group where "Middle Income North Africa and Middle East" is chosen because of stronger socio-cultural affinities). In the reference group data the averages are population weighted arithmetic means for each indicator and shown only when majority of the countries in a group has data for that indicator. Since the coverage of countries among the indicators depends on the availability of data and is not uniform, caution must be exercised in relating averages of one indicator to another. These averages are only useful in comparing the value of one indicator at a time among the country and reference groups.

LAND AREA (thousand sq.km.)
Total - Total surface area comprising land area and inland waters.
Agricultural - Estimate of agricultural area used temporarily or permanently for crops, pastures, market and kitchen gardens or to lie fallow; 1978 data.

GNP PER CAPITA (US$) - GNP per capita estimates at current market prices, calculated by same conversion method as World Bank Atlas (1977-79 basis); 1960, 1970, and 1979 data.

ENERGY CONSUMPTION PER CAPITA - Annual consumption of commercial energy (coal and lignite, petroleum, natural gas and hydro-, nuclear and geothermal electricity) in kilograms of coal equivalent per capita; 1960, 1970, and 1979 data.

POPULATION AND VITAL STATISTICS
Total Population, Mid-Year (thousands) - As of July 1; 1960, 1970, and 1979 data.
Urban Population (percent of total) - Ratio of urban to total population; different definitions of urban areas may affect comparability of data among countries; 1960, 1970, and 1979 data.
Population Projections
Population in year 2000 - Current population projections are based on 1980 total population by age and sex and their mortality and fertility rates. Projection parameters for mortality rates comprise of three levels assuming life expectancy at birth increasing with country's per capita income level, and female life expectancy stabilizing at 77.5 years. The parameters for fertility rate also have three levels assuming decline in fertility according to income level and past family planning performance. Each country is then assigned one of these nine combinations of mortality and fertility trends for projection purposes.
Stationary population - In a stationary population there is no growth since the birth rate is equal to the death rate, and also the age structure remains constant. This is achieved only after fertility rates decline to the replacement level of unit net reproduction rate, when each generation of women replaces itself exactly. The stationary population size was estimated on the basis of the projected characteristics of the population in the year 2000, and the rate of decline of fertility rate to replacement level.
Year stationary population is reached - The year when stationary population size has been reached.
Population Density
Per sq. km. - Mid-year population per square kilometer (100 hectares) of total area; 1960, 1970 and 1979 data.
Per sq. km. agricultural land - Computed as above for agricultural land only; 1960, 1970 and 1978 data.
Population Age Structure (percent) - Children (0-14 years), working-age (15-64 years), and retired (65 years and over) as percentages of mid-year population; 1960, 1970, and 1979 data.
Population Growth Rate (percent) - total - Annual growth rates of total mid-year populations for 1950-60, 1960-70, and 1970-79.
Population Growth Rate (percent) - urban - Annual growth rates of urban populations for 1950-60, 1960-70, and 1970-79.
Crude Birth Rate (per thousand) - Annual live births per thousand of mid-year population; 1960, 1970, and 1979 data.
Crude Death Rate (per thousand) - Annual deaths per thousands of mid-year population; 1960, 1970, and 1979 data.
Gross Reproduction Rate - Average number of daughters a woman will bear in her normal reproductive period if she experiences present age-specific fertility rates; usually five-year averages ending in 1960, 1970, and 1979.
Family Planning - Acceptors, Annual (thousands) - Annual number of acceptors of birth-control devices under auspices of national family planning program.
Family Planning - Users (percent of married women) - Percentage of married women of child-bearing age (15-44 years) who use birth-control devices to all married women in same age group.

FOOD AND NUTRITION
Index of Food Production per Capita (1969-71=100) - Index of per capita annual production of all food commodities. Production excludes seed and feed and is on calendar year basis. Commodities cover primary goods (e.g. sugarcane instead of sugar) which are edible and contain nutrients (e.g. coffee and tea are excluded). Aggregate production of each country is based on national average producer price weights; 1961-65, 1970, and 1979 data.
Per capita supply of calories (percent of requirements) - Computed from energy equivalent of net food supplies available in country per capita per day. Available supplies comprise domestic production, imports less exports, and changes in stock. Net supplies exclude animal feed, seeds, quantities used in food processing, and losses in distribution. Requirements were estimated by FAO based on physiological needs for normal activity and health considering environmental temperature, body weights, age and sex distribution of population, and allowing 10 percent for waste at household level; 1961-65, 1970, and 1977 data.
Per capita supply of protein (grams per day) - Protein content of per capita net supply of food per day. Net supply of food is defined as above. Requirements for all countries established by USDA provide for minimum allowance of 60 grams of total protein per day and 20 grams of animal and pulse protein, of which 10 grams should be animal protein. These standards are lower than those of 75 grams of total protein and 23 grams of animal protein as an average for the world, proposed by FAO in the Third World Food Survey; 1961-65, 1970 and 1977 data.
Per capita protein supply from animal and pulse - Protein supply of food derived from animals and pulses in grams per day; 1961-65, 1970 and 1977 data.
Child (ages 1-4) Mortality Rate (per thousand) - Annual deaths per thousand in age group 1-4 years, to children in this age group; for most developing countries data derived from life tables; 1960, 1970 and 1979 data.

HEALTH
Life Expectancy at Birth (years) - Average number of years of life remaining at birth; 1960, 1970 and 1979 data.
Infant Mortality Rate (per thousand) - Annual deaths of infants under one year of age per thousand live births.
Access to Safe Water (percent of population) - total, urban, and rural - Number of people (total, urban, and rural) with reasonable access to safe water supply (includes treated surface waters or untreated but uncontaminated water such as that from protected boreholes, springs, and sanitary wells) as percentages of their respective populations. In an urban area a public fountain or standpost located not more than 200 meters from a house may be considered as being within reasonable access of that house. In rural areas reasonable access would imply that the housewife or members of the household do not have to spend a disproportionate part of the day in fetching the family's water needs.
Access to Excreta Disposal (percent of population - total, urban, and rural - Number of people (total, urban, and rural) served by excreta disposal as percentages of their respective populations. Excreta disposal may include the collection and disposal, with or without treatment, of human excreta and waste-water by water-borne systems or the use of pit privies and similar installations.
Population per Physician - Population divided by number of practicing physicians qualified from a medical school at university level.
Population per Nursing Person - Population divided by number of practicing male and female graduate nurses, practical nurses, and assistant nurses.
Population per Hospital Bed - total, urban, and rural - Population (total, urban, and rural) divided by thier respective number of hospital beds available in public and private general and specialized hospital and rehabilitation centers. Hospitals are establishments permanently staffed by at least one physician. Establishments providing principally custodial care are not included. Rural hospitals, however, include health and medical centers not permanently staffed by a physician (but by a medical assistant, nurse, midwife, etc.) which offer in-patient accommodation and provide a limited range of medical facilities. For statistical purposes urban hospitals include WHOs principal/general hospitals, and rural hospitals local or rural hospitals and medical and maternity centers. Specialized hospitals are included only under total.
Admissions per Hospital Bed - Total number of admissions to or discharges from hospitals divided by the number of beds.

HOUSING
Average Size of Household (persons per household) - total, urban, and rural - A household consists of a group of individuals who share living quaters and their main meals. A boarder or lodger may or may not be included in the household for statistical purposes.
Average number of persons per room - total, urban, and rural - Average number of persons per room in all urban, and rural occupied conventional dwellings, respectively. Dwellings exclude non-permanent structures and unoccupied parts.
Access to Electricity (percent of dwellings) - total, urban, and rural - Conventional dwellings with electricity in living quarters as percentage of total, urban, and rural dwellings respectively.

EDUCATION
Adjusted Enrollment Ratios
Primary school - total, male and female - Gross total, male and female enrollment of all ages at the primary level as percentages of respective primary school-age populations; normally includes children aged 6-11 years but adjusted for different lengths of primary education; for countries with universal education enrollment may exceed 100 percent since some pupils are below or above the official school age.
Secondary school - total, male and female - Computed as above; secondary education requires at least four years of approved primary instruction; provides general, vocational, or teacher training instructions for pupils usually of 12 to 17 years of age; correspondence courses are generally excluded.
Vocational enrollment (percent of secondary) - Vocational institutions include technical, industrial, or other programs which operate independently or as departments of secondary institutions.
Pupil-teacher ratio - primary, and secondary - Total students enrolled in primary and secondary levels divided by numbers of teachers in the corresponding levels.
Adult literacy rate (percent) - Literate adults (able to read and write) as a percentage of total adult population aged 15 years and over.

CONSUMPTION
Passenger Cars (per thousand population) - Passenger cars comprise motor cars seating less than eight persons; excludes ambulances, hearses and military vehicles.
Radio Receivers (per thousand population) - All types of receivers for radio broadcasts to general public per thousand of population; excludes unlicensed receivers in countries and in years when registration of radio sets was in effect; data for recent years may not be comparable since most countries abolished licensing.
TV Receivers (per thousand population) - TV receivers for broadcast to general public per thousand population; excludes unlicensed TV receivers in countries and in years when registration of TV sets was in effect.
Newspaper Circulation (per thousand population) - Shows the average circulation of "daily general interest newspaper", defined as a periodical publication devoted primarily to recording general news. It is considered to be "daily" if it appears at least four times a week.
Cinema Annual Attendance per Capita per Year - Based on the number of tickets sold during the year, including admissions to drive-in cinemas and mobile units.

LABOR FORCE
Total Labor Force (thousands) - Economically active persons, including armed forces and unemployed but excluding housewives, students, etc., covering population of all ages. Definitions in various countries are not comparable; 1960, 1970 and 1979 data.
Female (percent) - Female labor force as percentage of total labor force.
Agriculture (percent) - Labor force in farming, forestry, hunting and fishing as percentage of total labor force; 1960, 1970 and 1979 data.
Industry (percent) - Labor force in mining, construction, manufacturing and electricity, water and gas as percentage of total labor force; 1960, 1970 and 1979 data.
Participation Rate (percent) - total, male, and female - Participation or activity rates are computed as total, male, and female labor force as percentages of total, male and female population of all ages respectively; 1960, 1970, and 1979 data. These are based on ILO's participation rates reflecting age-sex structure of the population, and long time trend. A few estimates are from national sources.
Economic Dependency Ratio - Ratio of population under 15 and 65 and over to the total labor force.

INCOME DISTRIBUTION
Percentage of Private Income (both in cash and kind) - Received by richest 5 percent, richest 20 percent, poorest 20 percent, and poorest 40 percent of households.

POVERTY TARGET GROUPS
The following estimates are very approximate measures of poverty levels, and should be interpreted with considerable caution.
Estimated Absolute Poverty Income Level (US$ per capita) - urban and rural - Absolute poverty income level is that income level below which a minimal nutritionally adequate diet plus essential non-food requirements is not affordable.
Estimated Relative Poverty Income Level (US$ per capita) - urban and rural - Rural relative poverty income level is one-third of average per capita personal income of the country. Urban level is derived from the rural level with adjustment for higher cost of living in urban areas.
Estimated Population Below Absolute Poverty Income Level (percent) - urban and rural - Percent of population (urban and rural) who are "absolute poor".

Economic and Social Data Division
Economic Analysis and Projections Department
May 1981

ECONOMIC INDICATORS - LIBERIA

GROSS DOMESTIC PRODUCT IN 1979	US$ Mln.	%	ANNUAL RATE OF GROWTH (% 1971 CONSTANT PRICES)1/ 1974-78	1979
GDP at Market Prices	890.0	100.0	1.6	4.8
Gross Domestic Investment	218.6	24.6	11.5	20.5
Gross Domestic Saving	..	12.6	..	..
Current Account Balance	-113.2	12.7	.	..
Exports of Goods, NFS	551.6	61.9	-7.5	-1.3
Imports of Goods, NFS	536.6	60.2	4.8	-11.8

OUTPUT, LABOR FORCE AND PRODUCTIVITY IN 1979

	Value Added		Labor Force1/		V. A. Per Worker	
	US$ Mln.	%	'000	%	US$	%
Agriculture	328.0	35.0	324.8	47.5	1009.8	73.4
Industry2/	217.0	23.0	39.6	5.8	5480.0	398.8
Services	395.0	42.0	73.5	10.7	5374.0	391.1
Unallocated			246.1	36.0		
Total/Average	940.0	100.0	684.0	100.0	1374.2	100.0

GOVERNMENT FINANCE

	General Government			Central Government		
	(Mln.)	% of GDP		(US$ Mln.)	%of GDP	
	197	197	196 - 7	1980-81 4/	1980-81 5/	1976-80 6/
Current Receipts	..	..	..	220.0	20.8	20.4
Current Expenditures	..	..	..	220.5	20.8	15.4
Current Surplus	..	..	..	-0.5	..	3.5
Capital Expenditure	..	..	..	126.0	12.0	12.8
External Assistance (net)	..	..	..	45.0	4.3	6.1

MONEY, CREDIT AND PRICES

	1974	1975	1976	1977	1978	1979
	(Million US$ Outstanding End Period)					
Money and Quasi Money		.	.	.	.	.
Bank Credit to Public Sector	4.0	2.2	0.9	4.7	9.4	61.7
Bank Credit to Private Sector	72.7	76.8	83.1	109.2	132.1	146.3
	(Percentages or Index Numbers)					
Money and Quasi Money as % of GDP	.	.	.	.	.	.
General Price Index (1963 = 100)3/						
Annual Percentage Changes in:						
General Price Index	19.5	13.6	6.0	5.8	8.6	11.6
Bank Credit to Public Sector	..	-45.0	-59.1	422.2	100.0	656.0
Bank Credit to Private Sector	..	5.6	8.2	31.4	20.9	10.7

Note: All conversions to dollars in this table are at the average exchange rate prevailing during the period covered.

1/ Total labor force; unemployed are allocated to sector of their normal occupation. "UNallocated" consists mainly of unemployed workers seeking their first job.
2/ Over 80 percent is accounted for by iron ore.
3/ Consumer Price Index (September, November 1964 = 100).
4/ 1980-81 budget estimates.
5/ GDP estimates for 1979 are preliminary and subject to change.
6/ Fiscal years 1976 to 1980

. Not applicable.
.. Not available.

June 1981

TRADE PAYMENTS AND CAPITAL FLOWS

3ALANCE OF PAYMENTS

	1977	1978	1979
	(Millions US$)		
Exports of Goods, NFS	458.0	500.1	551.6
Imports of Goods, NFS	-490.1	-535.6	566.7
Resource Gap (deficit = -)	-32.1	-44.5	-35.5
Interest Payments (net)	-6.7	-10.8	-22.0
Workers' Remittances	-27.5	-32.5	-35.0
Other Factor Payments (net)	-68.0	-92.8	-78.8
Net Transfers	30.8	32.2	37.7
Balance on Current Account	-104.5	-139.4	-113.2
Direct Foreign Investment 1/	8.1	-10.5	-58.4
Net MLT Borrowing	38.3	64.5	123.6
Disbursements	50.0	78.7	178.0
Amortization	-13.7	-14.2	-54.4
Sub-Total	-19.8	-54.0	65.2
Capital Grants	..	..	..
Other Capital (net)	-35.3	79.6	..
Other Items n.e.i.	51.1	..	..
Increase in Reserves (+)	4.0	25.1	-48.0
Gross Reserves (end year)	..	..	..
Net Reserves (end year)	..	..	..
Fu-' and Related Materials			
orts			
of which: Petroleum	103.2	68.8	84.6
Exports			
of which: Petroleum			

RATE OF EXCHANGE

Through - 1971	Since
US$1.00 = 1.00	US$1.00 = 1.00
1.00 = US$	1.00 = US$

MERCHANDISE EXPORTS (AVERAGE 1978-80)

	US$ Mln.	%
Iron Ore	291.3	53.8
Rubber	86.4	15.9
Diamonds	34.5	6.4
Logs or Lumber	62.0	11.4
Coffee	28.5	5.2
Palm Products	3.0	0.5
Cocoa	12.0	2.2
All Other Commodities	23.5	4.4
Total	541.2	100.0

EXTERNAL DEBT, JUNE 30, 1980

	US$ Mln.
Public Debt, Incl. Guaranteed	533.3
Non-Guaranteed Private Debt	-
Total Outstanding and Disbursed	533.3

DEBT SERVICE RATIO FOR 1980 2/

	%
Public Debt, Incl. Guaranteed	7.9
Non-Guaranteed Private Debt	-
Total Outstanding and Disbursed	7.9

IBRD/IDA LENDING, (JUNE 30, 1980) (MILLION US$):

	IBRD	IDA
Outstanding and Disbursed	53.6	18.0
Undisbursed	66.3	25.9
Outstanding Incl. Undisbursed	119.9	43.9

1/ Includes errors and omissions.
2/ Ratio of debt service to exports of goods and non-factor services

. Not applicable.
.. Not available.

June 1981

THE STATUS OF BANK GROUP OPERATIONS IN LIBERIA

A. STATEMENT OF BANK LOANS AND IDA CREDITS (as of August 31, 1981)

Loan or Credit Number	Year	Borrower	Purpose	Amount (US$ million) less cancellation: Bank	IDA /a	Undisbursed
Seven loans and three credits fully disbursed				28.47	10.96	
1055	1974	Liberian Bank for Dev. and Investment	Second Development Finance	4.0		0.09
577	1975	Rep. of Liberia	Agriculture		6.0	1.09
1156	1975	Rep. of Liberia	Third Road	27.5		3.12
1266T	1976	Rep. of Liberia	Second Education	4.0		0.63
1323	1976	Liberian Bank for Dev. and Investment	Third Development Finance	7.0		3.85
1417	1977	Rep. of Liberia	Education	6.3		2.74
700	1977	Rep. of Liberia	Agriculture		7.0	2.81
786	1978	Rep. of Liberia	Rubber Development		6.0	4.52
839	1978	Rep. of Liberia	Forestry Development		6.0	4.34
859	1978	Rep. of Liberia	Monrovia Water Supply		8.0	3.69
1544	1978	Rep. of Liberia	Rubber Development	7.0		7.00
1573	1978	Rep. of Liberia	Fourth Highway	13.8		0.51
1600	1978	Liberian Electric Corporation	Fourth Power	10.0		0.16
1644	1979	Rep. of Liberia	Feeder Roads	10.7		8.55
1765	1979	Rep. of Liberia	Decoris Oil Palm	12.0		11.46
1076	1980	Rep. of Liberia	Small & Med.-Scale Enterprises	-	3.2	3.20
1907	1980	Rep. of Liberia	Petroleum Explo.	5.0	-	0.95
		Total		135.77	47.16	58.71
		of which has been repaid		14.91	-	
		Total now outstanding		120.86	47.16	
		Amounts sold	0.41			
		of which repaid	0.41	0.0		
		Total held by Bank and IDA		120.86	47.16	
		Total undisbursed		39.06	19.65	58.71

/a Prior to exchange adjustments.

B. STATEMENT OF IFC INVESTMENTS (as of August 31, 1981)

Fiscal Year	Obligator	Type of Business	Loan	Equity	Total
1966	Liberian Bank for Development and Investment	Development Finance Company		0.250	0.250
1977	Liberian Bank for Development and Investment	Development Finance Company		0.306	0.306
				0.556	0.556
	Less Sold			0.001	0.001
	Now Held by IFC			0.555	0.555

C. PROJECTS IN EXECUTION 1/

(Status as of September 30, 1981)

Loan No. 1266T-LBR Second Education Project: US$4.0 Million Third Window Loan of June 7, 1976;. Effective Date: July 8, 1976; Closing Date: August 31, 1982

Physical implementation of the project is nearing completion after delays due to shortages of construction materials and unusually long rainy seasons. The extension of a teacher training institute was completed on schedule and within appraisal cost estimates. Eighty-five of the one hundred planned primary school units have been completed. The technical assistance program has been completed and most of the fellowships have been awarded. The only major activity which is outstanding is the educational publications component. The overall project is expected to be completed in mid 1982, about two years behind the original target date.

Loan No. 1417-LBR Third Education Project: US$6.3 Million Loan of May 26, 1977; Effective Date: July 13, 1977; Closing Date: December 31, 1981

Overall, project implementation is about two years behind schedule due to poor contractor performance, site changes, and delays in placing fellows. The Vocational Training Center/Agricultural and Industrial Training Board, the Forestry Training Institute and three of the four Science and Technology Centers should begin operation soon. The construction of the fourth Science and Technology Center will begin soon. The technical assistance program is being implemented as planned. The fellowship program for the Vocational Training Center is being implemented satisfactorily but the remainder of the fellowship program is about two years behind schedule. The project is expected to be completed about two years behind the original completion date but close to appraisal cost estimates.

Credit No. 577-LBR Agricultural Development (Lofa) Project: US$6 Million Credit of August 1, 1975; Effective Date: May 26. 1976; Closing Date: December 31, 1981

Project performance continues to be satisfactory in swamp and upland rice development with 101 percent and 90 percent of their respective targets to date achieved. About 75 percent of the cocoa targets and 58 percent of coffee targets were met. The main reason for these shortfalls were the temporary disturbances in field operations in May and June 1980 following

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1/ These notes are designed to inform the Executive Directors regarding the progress of projects in execution, and in particular to report any problems which are being encountered and the action being taken to remedy them. They should be read in this sense, and with the understanding that they do not purport to present a balanced evaluation of strengths and weaknesses in project execution.

the April change of government and shortage of planting materials. The performance of the completely Liberianised Senior Staff continues to be satisfactory although the Cooperative and Agricultural field staff needs strengthening. A Bank mission appraised a second phase of this project in June, and the appraisal report is being prepared.

Credit No. 700-LBR — Agricultural Development (Bong) Project: US$7 Million Credit of December 29, 1977; Effective Date: March 15, 1978; Closing Date: December 31, 1983

Project performance continues to be satisfactory. About 100 percent of upland rice targets, 13 percent of swamp rice targets, 100 percent of cocoa targets and 85 percent of coffee targets, have been achieved. The project continues to face difficulties in getting farmers to develop swamp rice. Project management is adjusting to recent staff changes.

Credit No. 786/ Loan No. 1544-LBR — Rubber Development Project: US$7 Million Loan and US$6 Million Credit, both of April 21, 1978; Effective Date: October 3, 1978; Closing Date: June 30, 1984

Satisfactory progress is being made in the management of this project. However, improving smallholders involvement in the full range of rubber activities is progressing only slowly. A new Training Officer is being appointed and training of staff, farmers and tappers should soon commence. The Bank is considering amendments to the project scope and design, to include processing facilities. Some 90 percent of project targets are likely to be attained for 1980/81.

Credit No. 839-LBR — Forestry Project: US$6 Million Credit of July 28, 1978; Effective Date: December 20, 1978; Closing Date: June 30, 1984

There has been a perceptible improvement in staff morale since the new Managing Director was appointed. Progress is being made in the building program and the development of the trial industrial plantation site. The reduced effectiveness of the Forest Development Authority and of Ministry of Finance in collecting forest taxes has resulted in considerable arrears from concessions. This has limited the Authority's role in the sector and the plantation program has also suffered. Planting is now expected to reach only 63 percent of appraisal targets. The fellowship and training program is proceeding satisfactorily.

Loan No. 1765-LBR
Special Action Credit No. 35-LBR

Decoris Oil Palm Project: US$12.0 Million Loan and US$2.0 Million EEC Credit, both of December 21. 1979: Effective Date: February 23, 1981; Closing Date: December 31, 1987

Project performance is satisfactory, and land development is almost on target with some 1225 ha of nucleus and smallholders land cleared. Procedures for compensating farmers for land obtained for the nucleus estate are being developed. Although funding is at times difficult, Project Management continues to make reasonably good progress.

Loan No. 1156-LBR — Third Highway Project: US$27.5 Million Loan of August 28, 1975; Effective Date: October 14, 1975; Closing Date: March 31, 1982

The construction of a major bridge and an urban main road (5.4 m) in Monrovia was completed in 1979, and the main trunk road (83 m) was substantially completed in May 1981 after delays due to bad weather, difficulties in the supply of materials and disturbances associated with the change of government in 1980. The feasibility studies of about 98 miles of main roads and an urban transport study of Monrovia have been completed. The Lofa County Feeder Road Unit, which became operational in January 1977, has been transferred to the Feeder Road Project (1664-LBR) after completion of the three-year construction program. Technical assistance in developing the Planning and Programming Division of the Ministry of Public Works has been reasonably effective.

Loan 1573-LBR — Fourth Highway Project: US$13.8 Million Loan of June 2, 1978; Effective Date: September 11, 1978; Closing Date: December 31, 1982

The project includes reconstruction and improvement of the Paynesville-Totota and Paynesville-Robertsfield road, road maintenance, technical assistance and preinvestment studies. Reconstruction of the Paynesville-Robertsfield road, financed by the Kuwait Fund, was completed in October 1980. Rehabilitation of the Paynesville-Totota road was resumed in September 1980 after disruptions caused by the change of government, and is now about 65 percent completed. Detailed engineering of the Ganta-Sanniquellie and Ganta-Tapeta roads, delayed temporarily, was substantially completed in December 1980. Due to a shortage of funds and changes in government personnel assigned to maintenance operations, technical assistance for maintenance has not been effective. During the last six months of their contract, the road maintenance advisory team assisted the Ministry of Public Works to prepare a study for a follow-up maintenance project. A project cost overrun of about US$9.5 million is now expected as a consequence of implementation delays and higher than expected construction costs due to faster deterioration than foreseen at appraisal of Paynesville-Totota road; Government is exploring other sources of funding to complete the works.

Loan No. 1664-LBR — Feeder Roads Project: US$10.7 Million Loan of April 4, 1979: Effective Date: April 30, 1979; Closing Date: December 31, 1984

The project provides for the construction or improvement and maintenance of about 700 miles of feeder roads and for the maintenance of a further 200 miles of feeder roads. The work will be undertaken by three brigades operated by the Ministry of Public Works. While some of the equipment has been delivered, the project has been adversely affected by the unsettled situation since the 1980 change of government and, more recently, by a shortage of counterpart resources.

Loan No. 1055-LBR — Second Development Finance Company (LBDI) Project: US$4 Million Loan of December 3, 1974; Effective Date: January 3, 1975; Closing Date: December 31, 1980; and

Loan No. 1323-LBR — Third Development Finance Company (LBDI) Project: US$7 Million Loan of October 7, 1976; Effective Date: December 17, 1976; Closing Date: December 31, 1982

Loan 1055-LBR is fully committed and should be completed shortly. Commitment of Loan 1323-LBR has been slower than anticipated (50 percent of the loan has been committed) owing to depressed economic activity in Liberia and a downturn in business investment. Following the 1980 political changes and subsequent general economic difficulties, the quality of LBDI's portfolio and its financial position have deteriorated considerably. LBDI is now concentrating its efforts on project follow-up and loan recovery.

Loan No. 1076-LBR — Small and Medium-Scale Enterprise Project: US$4 million Credit of January 9, 1981; Effective Date: September 14, 1981; Closing Date: June 30, 1984

Credit effectiveness and initial project implementation have been delayed by weak management in the implementing agency (NIC). The consultant study on industrial incentives and revision of the investment code is underway. The first of three technical experts will join NIC soon. Minor disbursements have been made for technical assistance only.

Loan No. 1600-LBR — Fourth Power Project: US$10.0 Million Loan of July 7, 1978; Effective Date: December 11, 1978; Closing Date: June 30, 1982

The project consists of expansion of thermal generating facilities by 26 MW to meet demand up to 1985, power distribution to urban poor, rural transmission studies and technical assistance for management and training. Construction of the power plant has been completed, and the two diesel units are in operation. LEC's financial performance has been severely affected by low operating efficiency. A five-man management support team started work at LEC in July 1978 as a part of the Management Improvement Program instituted under this loan. Progress of this team has been satisfactory but loan funds for this component were exhausted in June 1981. LEC is funding a one year extension from meager resources; additional funding is needed to keep the team in place after June 1982.

Credit No. 859-LBR — Water Supply Project: US$8 Million Credit of January 8, 1979; Effective Date: April 2, 1979; Closing Date: December 31, 1982

Project costs have escalated from $16.1 million at appraisal to $23.2 million. The Government successfully approached the Finnish Aid Agency (FINIDA) for funds to finance the local component. Construction works are now progressing according to plan, except for the raw water intake and pipeline which are pending resolution of a LEC claim for compensation. The installation of standpipes in Monrovia's urban poor quarters has been completed. Unaccounted-for water remains at a high level, almost 50%. Serious revenue shortfalls continue to plague LWSC but billing and collection are slowly improving. Government funding of LWSC remains irregular and Government intends to introduce by 1982 new funding arrangements based on LWSC's actual cash needs. The Management Improvement and Technical Assistance Program has not yielded expected results due to changes in top management, shortages in counterpart funds and financial constraints. The German Government is funding a continuation of the program through GTZ.

Loan No. 1907-LBR — Petroleum Exploration Promotion Project; US$5.0 Million Loan of November 21, 1980; Effective Date: January 9, 1981; Closing Date: December 31, 1983.

The project seeks to promote Liberia's offshore petroleum potential by financing a seismic survey; processing, interpreting and integrating seismic data; consulting services for the promotion, auction and negotiation of new exploration permits and technical assistance to the Bureau of Hydrocarbons and for energy planning. Project implementation is proceeding satisfactorily. The seismic survey was initiated on March 4, 1981 and has now been completed. Availability of counterpart financing may constitute a problem in the future for the implementation of the project.

LIBERIA

National Iron Ore Company Rehabilitation Project

Supplementary Project Data Sheet

I. Timetable of Key Events

(a)	Identification Mission:	August 1978
(b)	Project Preparation Agency:	National Iron Ore Company (NIOC) assisted by consultants financed with a PPF advance.
(c)	Date of appraisal mission:	December 1980
(d)	Negotiations:	September 4, 1981
(e)	Planned effectiveness:	March 1982

II. Special Bank Implementation Action

None

III. Special Conditions

(a) Signature of management contract and terms of reference for the Executive Committee, both in a form satisfactory to the Bank, as conditions of effectiveness, (para. 40 and 41);

(b) NIOC would review with the Bank the appropriateness of retaining management consultants after June 30, 1984 and make management arrangements satisfactory to the Bank (para. 41);

(c) NIOC would prepare a detailed drilling program by March 31, 1982 and carry it out by December 31, 1982 (para. 44);

(d) NIOC would prepare detailed two-year, medium-term, and long-term mine plans by specified dates, carry out the plans, review and update them yearly (para. 45);

(e) The Government would employ management experts acceptable to the Bank to manage the bridge rehabilitation (para. 47);

(f) The Government would employ consultants acceptable to the Bank by December 31, 1982 to execute economic studies in the mining region (para. 48);

(g) NIOC would retain a marketing agent acceptable to the Bank (para. 50);

(h) The Government would make a US$3 million equity contribution to NIOC to finance working capital as a condition of effectiveness, (para. 55);

(i) The Government would make further equity contribution during project implementation to cover interest during construction on all loans except the World Bank loans (para. 55);

(j) The Government would cover any NIOC financial shortfall (para. 55);

(k) NIOC would pay a guarantee fee of one percent on the Bank loan to the Government (para. 57);

(l) Retroactive financing of up to US$2 million for management fees and spare parts incurred after January 1, 1981 would be provided under the NIOC loan (para. 57);

(m) Fulfillment of all conditions precedent to the effectiveness of all other new loans as a condition of effectiveness (para. 60);

(n) Effectiveness of the agreements to reschedule and subordinate NIOC's existing debt as a condition of effectiveness (para. 60),

(o) Effectiveness of the security trust agreement as a condition of effectiveness (para. 61);

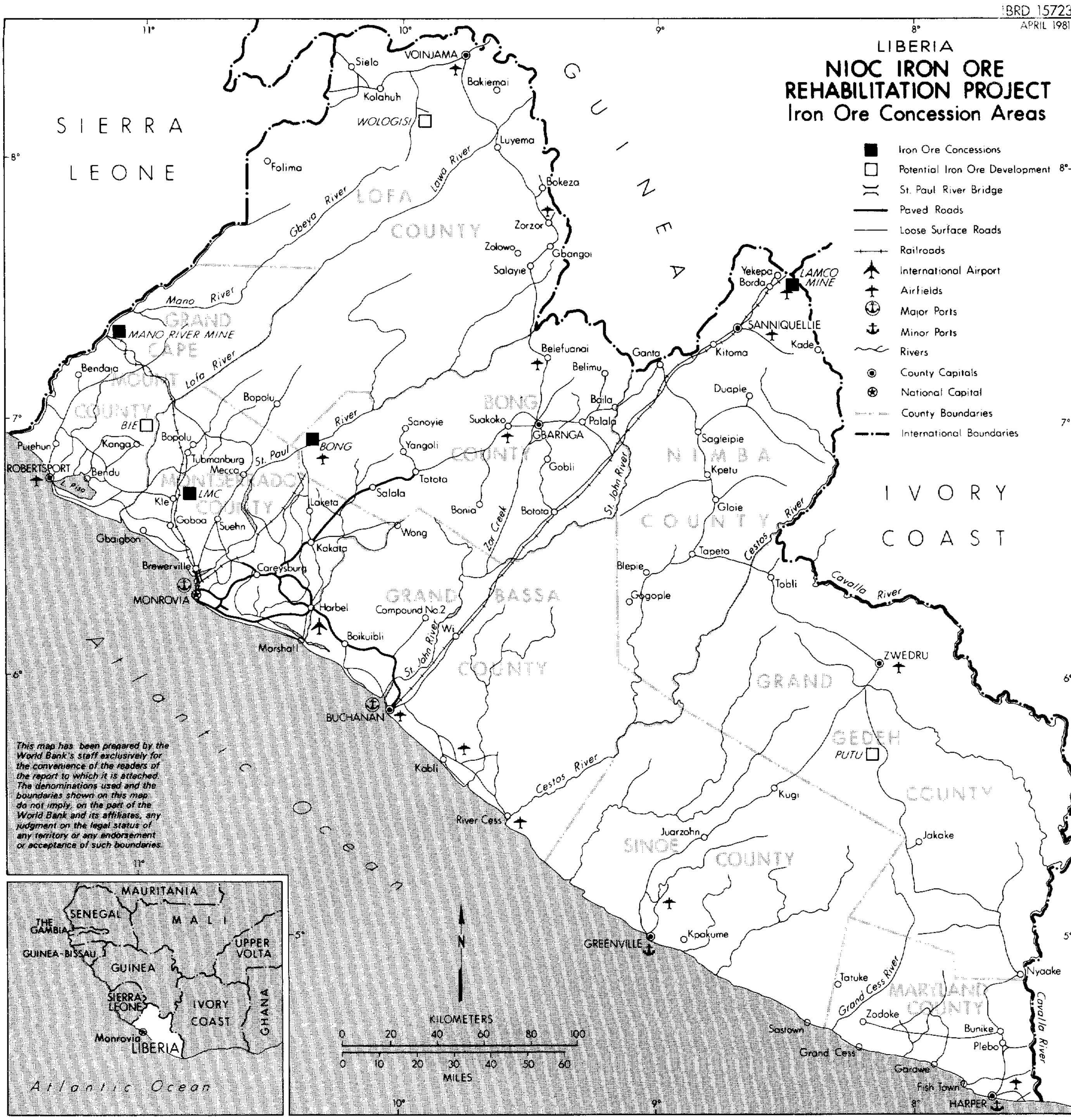
(p) Effectiveness of the voting trust agreement as a condition of effectiveness (para. 39);

(q) Amendment of the concession agreement and the certificate of incorporation of NIOC as a condition of effectiveness (para. 65);

(r) NIOC would observe certain financial covenants regarding payment of dividends, service of existing debt, payment of taxes, incurring of additional debt, and making investments; and NIOC would maintain a current ratio of 1.3 to 1 (para. 66);

(s) NIOC would submit to the Bank audited accounts for 1980 as a condition of effectiveness (para. 67); and

(t) NIOC would submit audited accounts to the Bank no later than four months after the end of its fiscal year (para. 67).


IBRD 15723
APRIL 1981
LIBERIA
NIOC IRON ORE REHABILITATION PROJECT
Iron Ore Concession Areas
Iron Ore Concessions
Potential Iron Ore Development
St. Paul River Bridge
Paved Roads
Loose Surface Roads
Railroads
International Airport
Airfields
Major Ports
Minor Ports
Rivers
County Capitals
National Capital
County Boundaries
International Boundaries
SIERRA LEONE
GUINEA
IVORY COAST
Atlantic Ocean
LOFA COUNTY
GRAND CAPE MOUNT COUNTY
MONTSERRADO COUNTY
BONG COUNTY
NIMBA COUNTY
GRAND BASSA COUNTY
GRAND GEDEH COUNTY
SINOE COUNTY
MARYLAND COUNTY
WOLOGISI
MANO RIVER MINE
BIE
LMC
BONG
LAMCO MINE
PUTU
VOINJAMA
Sielo
Kolahuh
Bakiemai
Folima
Luyema
Bokeza
Zorzor
Zolowo
Gbangoi
Salayie
Yekepa
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SANNIQUELLIE
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Kitoma
Ganta
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Botota
Duapie
Sagleipie
Kpetu
Gloie
Tapeta
Tobli
Blepie
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Bendaja
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Kongo
Pujehun
ROBERTSPORT
Bendu
L. Piso
Tubmanburg
Mecca
St. Paul River
Kle
Goboa
Suehn
Laketa
Kakata
Wong
Gbaigbon
Brewerville
Careysburg
MONROVIA
Harbel
Compound No.2
Wi
Boikuibli
Marshall
BUCHANAN
Kabli
River Cess
Juarzohn
Kugi
Jakake
ZWEDRU
Kpakume
GREENVILLE
Tatuke
Zodoke
Sastown
Grand Cess
Bunike
Plebo
Garawe
Fish Town
HARPER
Nyaake
Gbeya River
Lawa River
Mano River
Lofa River
Zai Creek
St. John River
Cestos River
Cavalla River
Grand Cess River
This map has been prepared by the World Bank's staff exclusively for the convenience of the readers of the report to which it is attached. The denominations used and the boundaries shown on this map do not imply, on the part of the World Bank and its affiliates, any judgment on the legal status of any territory or any endorsement or acceptance of such boundaries.
MAURITANIA
MALI
SENEGAL
THE GAMBIA
GUINEA-BISSAU
GUINEA
UPPER VOLTA
SIERRA LEONE
IVORY COAST
GHANA
Monrovia
LIBERIA
Atlantic Ocean
KILOMETERS
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0 10 20 30 40 50 60
MILES
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11°
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