REPORT AND RECOMMENDATION
OF THE PRESIDENT
OF THE
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
TO THE
EXECUTIVE DIRECTORS
ON A
PROPOSED LOAN
IN AN AMOUNT EQUIVALENT TO US$110 MILLION TO
GECAMINES/EXPLOITATION
GUARANTEED BY THE
REPUBLIC OF ZAIRE
FOR A
GECAMINES REHABILITATION PROJECT

March 27, 1986
ZAIRE

GECAMINES REHABILITATION PROJECT

FISCAL YEAR

January 1 - December 31

CURRENCY EQUIVALENTS

Currency Unit = Zaire (Z)
Z 1 = US$0.02 (February 1986)
US$1.00 = Z 55 (February 1986)

WEIGHTS AND MEASURES

<table>
<thead>
<tr>
<th>Metric System</th>
<th>British/US System</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 meter</td>
<td>3.281 feet (ft)</td>
</tr>
<tr>
<td>1 kilometer (kg)</td>
<td>0.622 miles (mi)</td>
</tr>
<tr>
<td>1 metric tonne (t)</td>
<td>2.205 pounds</td>
</tr>
<tr>
<td></td>
<td>1.1 short ton (st)</td>
</tr>
</tbody>
</table>

PRINCIPAL ABBREVIATIONS AND ACRONYMS

CCCE - Caisse Centrale de Coopération Economique
EEC - European Economic Community
EIB - European Investment Bank
GECAMINES - La Générale des Carrières et des Mines
GECAMINES/Commerciale - Metals Marketing
GECAMINES/Development - Other Activities
GECAMINES/Exploitation - Metals Production (The Company)
GECAMINES/Holding - Holding Company
LAFB - Libyan Arab Foreign Bank
MIBA - Société Minière de Bakwanga
SMG - Société Générale des Minerais
SMK - Société Minière de Kisenge
SMTF - Société Minière de Tenké-Fungurumé
SNCZ - Société Nationale des Chemins de Fer Zairois
SODIMIZA - Société de Développement Industriel et Minier du Zaire
SOMINKI - Société Minière et Industrielle du Kivu
SONATRAD - Société Nationale de Trading
SOZACOM - Société Zairoise de Commercialisation des Minerais
SYSMIN - EEC's Minerals System Facility of ACP Mineral Producers
UMHK - Union Minière du Haut Katanga
Borrower: Gecamines/Exploitation

Guarantor: Republic of Zaire

Amount: US$110.0 million equivalent

Terms: IBRD interest rate, repayable over 15 years, including a 3-year grace period; in addition the Borrower will pay to the Guarantor an annual guarantee fee equivalent to 10 percent of the IBRD rate.

Project Description: The Project would finance part of the foreign exchange costs of Gecamines' five-year rehabilitation program (1986-1990), which aims at maintaining production capacity at its present level while raising productivity and reducing production costs. The Project would finance: (a) high priority investments for replacement and rehabilitation of equipment; (b) training to upgrade the skills of managerial and technical staff, and permit a gradual replacement of foreign personnel by trained nationals; and (c) pre-investment and technical studies, and technical assistance to improve on-going operations, review the company's social activities, reduce costs, and permit the definition of a long-term development plan, beyond the rehabilitation program.

Project Benefits: The Project would help strengthen Zaire's principal source of foreign exchange and play a significant role in the country's medium-term economic recovery. Incremental net foreign exchange benefits of the Project would average US$66 million yearly in current terms over the next five years. The Project would improve Gecamines' long-term competitive position by reducing costs, strengthening the company's managerial and technical skills, developing a corporate planning function, and helping to prepare a long-term development strategy (including a potential role for private investors). The Project would also help ensure the continued enforcement of satisfactory agreements with the agents in charge of Gecamines' sales and purchases. Finally, the Project would help in continuing to ensure full transparency and predictability in the financial relations between Gecamines and Government through continued enforcement of the current satisfactory tax regime and the definition of an appropriate dividend policy.
Project Risks: Major risks associated with the Project are the uncertainty concerning future copper prices, the possibility of resumption of undue Government interference in the company's financial affairs (marketing, taxes, demands for dividends not taking into account operations and investment financing), the maintenance of stable organizational arrangements, and management performance. The risks on future copper prices (over which Zaire would have no influence) are partly compensated by Gecamines' greater control over the cobalt market, assuming a rational approach to cobalt sales. Other risks, particularly those linked to the possibility of inefficient procurement, have been addressed in the design of the Project and assurances have been received concerning future relations between Gecamines and Government.

Estimated Project Costs:

<table>
<thead>
<tr>
<th>Local</th>
<th>Foreign</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>US$ million</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rehabilitation and Replacement Equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mining</td>
<td>89.4</td>
<td>130.4</td>
</tr>
<tr>
<td>Concentrators</td>
<td>12.0</td>
<td>28.4</td>
</tr>
<tr>
<td>Metallurgical Plants</td>
<td>44.8</td>
<td>71.3</td>
</tr>
<tr>
<td>Others</td>
<td>53.2</td>
<td>102.0</td>
</tr>
<tr>
<td>Sub-total</td>
<td>199.4</td>
<td>332.1</td>
</tr>
<tr>
<td>Training</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Preinvestment and Technical Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-investment Studies</td>
<td>11.7</td>
<td>17.4</td>
</tr>
<tr>
<td>Other Studies &amp; Technical Assistance</td>
<td>0.4</td>
<td>1.6</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>12.1</td>
<td>19.0</td>
</tr>
<tr>
<td>Total Base Costs</td>
<td>214.0</td>
<td>352.6</td>
</tr>
<tr>
<td>Physical Contingencies</td>
<td>16.9</td>
<td>26.2</td>
</tr>
<tr>
<td>Price Contingencies</td>
<td>35.7</td>
<td>56.3</td>
</tr>
<tr>
<td>Total Project Costs</td>
<td>266.6</td>
<td>436.1</td>
</tr>
<tr>
<td>(of which taxes)</td>
<td>129.1</td>
<td>-</td>
</tr>
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**Financing Plan:**

<table>
<thead>
<tr>
<th></th>
<th>Local</th>
<th>Foreign</th>
<th>Total</th>
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<tbody>
<tr>
<td><strong>Equity</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Gecamines</td>
<td>266.6</td>
<td>150.5</td>
<td>417.1</td>
</tr>
<tr>
<td><strong>Debt</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank</td>
<td>-</td>
<td>110.0</td>
<td>110.0</td>
</tr>
<tr>
<td>EEC/SYSMIN</td>
<td>-</td>
<td>27.0</td>
<td>27.0</td>
</tr>
<tr>
<td>AfDB</td>
<td>-</td>
<td>65.0</td>
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<tr>
<td>EIB</td>
<td>-</td>
<td>48.0</td>
<td>48.0</td>
</tr>
<tr>
<td>CCCE</td>
<td>-</td>
<td>28.6</td>
<td>28.6</td>
</tr>
<tr>
<td>(Others, Incl. Italy)</td>
<td>-</td>
<td>7.0</td>
<td>7.0</td>
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<tr>
<td><strong>Debt Sub-total</strong></td>
<td>-</td>
<td>285.6</td>
<td>285.6</td>
</tr>
<tr>
<td><strong>Total Financing</strong></td>
<td>266.6</td>
<td>436.1</td>
<td>702.7</td>
</tr>
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</table>

**Estimated Disbursements (IBRD)**

<table>
<thead>
<tr>
<th>Fiscal Years</th>
<th>FY87</th>
<th>FY88</th>
<th>FY89</th>
<th>FY90</th>
<th>FY91</th>
</tr>
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<tbody>
<tr>
<td>Annual</td>
<td>17.6</td>
<td>35.6</td>
<td>35.0</td>
<td>16.6</td>
<td>5.2</td>
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<tr>
<td>Cumulative</td>
<td>17.6</td>
<td>53.2</td>
<td>88.2</td>
<td>104.8</td>
<td>110.0</td>
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</tbody>
</table>

**Economic Rate of Return:** 24 percent (over 100 percent of project costs)

**Appraisal Report:** Report No.5842-ZR

**Maps:** IBRD 19111, 19112
1. I submit the following report and recommendation on a proposed loan to Gecamines/Exploitation, guaranteed by the Republic of Zaire, in the amount of US$110 million to help finance a Rehabilitation Project. The Project would be co-financed by the EEC-SYSMIN, the EIB, the African Development Bank, and the French CCCE.

PART I - THE ECONOMY

2. The latest country economic memorandum entitled "Zaire: Economic Change and External Assistance" dated March 29, 1985 (Report No. 5417-ZR) was distributed to the Executive Directors in April 1985. A Bank mission to assess recent economic developments and to review the Public Investment Program visited Zaire in March/April 1986 and its report is under preparation. The following section is updated to reflect the findings of the mission.

Background

3. Zaire is the third largest country in Africa in terms of its area and the fifth largest in terms of its population, but its GNP per capita estimated at US$140 in 1984, ranks among the lowest in the continent. With a population of about 30 million, Zaire has a low population density estimated at 12 persons per square kilometer. About a third of its population lives in urban areas. Although agriculture (commercialized and subsistence) accounts for only 30 percent of GDP, it provides employment and income for more than three-quarters of the population. Mining and mineral processing accounts for a third of GDP and about two-thirds of the country's export earnings. Mining has traditionally been a major source of public sector revenues.

4. When Zaire gained independence in 1960, it was ill-prepared for the change, both technically and institutionally. The first six years following independence were marked by a violent political strife and a severe disruption of the economy. After the restoration of political order in 1967, however, the country enjoyed a period of relative stability and economic growth which lasted until 1974. During this period, GDP grew at a rate of about seven percent a year in real terms.
The Crisis Period

5. The first signs of crisis began to emerge in 1975 as copper prices started to weaken. Between 1975 and 1983, the performance of the Zairian economy was characterized by a series of crises and short-lived recoveries, severe underutilization and deterioration of productive capacity and infrastructure, the emergence of significant economic and financial imbalances, high inflation, and a decline in per capita income. Several factors, some of them predating 1975, contributed to these difficulties. Among these are: the zairianization and nationalization measures of 1973/74, which though rescinded since, destroyed the distribution network and undermined private sector confidence; the heavy external borrowing of the early 1970s, much of it at unfavorable terms and for projects with questionable economic justification; and the deficiencies in economic management. The weakness and volatility of world copper prices during most of this period contributed to the severity of the crisis. By 1979, GDP contracted by about 10 percent below the pre-crisis (1972-74) level; inflation soared to more than 100 percent with chronic shortage of essential consumer goods, fuel and intermediate goods. With the balance of payments under strain, external payments arrears continued to accumulate. Although two stabilization programs supported by the IMF were adopted, and three Paris Club reschedulings were concluded during the 1975-79 period, these could not be implemented.

6. Systematic efforts to cope with the crisis did not start until 1979. These included a new stabilization program supported by the IMF, new debt rescheduling agreements with the Paris Club (December 1979) and with the London Club (April 1980); the preparation of a public investment program (PIP) for the 1979-81 period with the support of the Bank, the installation of external advisors at the Central Bank and the Ministry of Finance, the revamping of some institutions (the Customs Office, the ministry of Agriculture, the Investment Commission) and the creation of others (a Central Pay Directorate in the Ministry of Finance). Along with a strong recovery of copper production, these measures resulted in a considerable improvement of the economic situation in 1980.

7. Largely on the strength of this improved performance, in mid-1981, Zaire adopted a three-year program of economic and financial adjustment supported by an "Extended Fund Facility". Zaire also concluded another rescheduling agreement with the Paris Club in July 1981. Further weakening of copper and cobalt markets, however, caused exports to fall by US$540 million (about 25 percent in nominal terms). The immediate shortage of foreign exchange resulted in a sudden decline in imports which in real terms were half of the pre-crisis level. With weakening financial discipline, the budget deficit quadrupled in nominal terms, reaching 7 percent of GDP. Zaire could not comply with either the
criteria under the EFF or the Paris Club agreement. The EFF was formally
cancelled. The failure of the EFF meant the collapse of the premises on
which the hopes of recovery had been built. These comprised:
(i) improved economic and financial performance with the help of IMF
supported programs; (ii) major external debt rescheduling; (iii) system-
atic institutional reform; (iv) implementation of the public investment
program; and (v) well focused external aid in support of a realistic PIP.

8. In 1982, copper prices continued to decline. GDP contracted
further, and the overall balance of payments deficit reached a record
On the domestic front, the budget deficit continued to remain high as a
percent of GDP. Both external and domestic confidence were at a low ebb:
a grossly overvalued exchange rate, pervasive price controls, and high
inflation were the manifestations of widespread distortions in the
economy. Faced with a severe economic and financial crisis, the
Government began efforts to reestablish conditions for recovery at the
end of 1982. These efforts included implementation in the first half of
1983 of a "shadow program", as a precondition for a formal stand-by
arrangement with the IMF.

The Stabilization Period

9. The turning point for the Zairian economy came in 1983 when the
Government finalized, within the context of a formal IMF program, a
series of far-reaching measures, begun under the "shadow program". These
measures included: (i) immediate devaluation of the zaire by 78 percent
vis-a-vis the SDR; (ii) introduction of a transitional dual exchange rate
regime, with unification of the two rates in February 1984 and "floating"
thereafter; (iii) a substantial liberalization and simplification of the
exchange and trade system, including a revision of customs duties; (iv)
decontrol of most prices, including agricultural producers' prices and
most interest rates; (v) tight expenditure controls, including reduction
of public sector employment; and (vi) a series of actions to reduce the
burden of parastatals on the budget, including the sale of some assets.

10. The adoption of the policies outlined above was followed by a
substantive rescheduling agreement with the Paris Club creditors and a
meeting of the Consultative Group in December 1983. At the Consultative
Group meeting, the participants took two important steps relevant to the
execution of the 1983-85 PIP. They agreed on the appropriateness of
convening co-lender meetings on transport (highways) and Gecamines, and
they endorsed Zaire's decision to reactivate the External Resources
Coordinating Committee (which had not met for about two years). The
co-lenders meeting on highways was held successfully in March 1985 and
two meetings on Gecamines in September 1985 and March 1986.
11. The Government's stabilization-cum-liberalization program was also a manifestation of the growing recognition of the importance of private initiative and of the need to reduce Government intervention in the economy. The measures taken since 1983 were successful in putting the Zairian economy onto a stabilization path: the budget deficit, (taking into account rescheduling of interest payments on external debt), which was 6 percent of GDP in 1982, turned into a budget surplus (about 1 percent of GDP) in 1985; the balance of payments current account deficit (after reschedulings) declined from 4.8 percent of GDP in 1982 to 1.8 percent in 1985; and the rate of inflation which soared to 76 percent in 1983 was estimated at around 30 percent in 1985. Some of these measures had an immediate impact. Many price distortions were eliminated so that private sector activities could be redirected from rent-seeking activities towards directly productive sectors. The supply response in the foodcrop sector was impressive, but the results were mixed in the manufacturing sector. While short-run supply-side constraints, with the exception of the availability of credit, were by and large eased, capacity utilization rates in the industrial sector remained low. In addition, demand for manufactured products was curtailed by the sharp reduction in purchasing power in urban areas. Following a real GDP decline of 2.6 percent in 1982, growth picked up in 1983 and reached 2.8 percent in 1984. According to the preliminary estimates, GDP growth was around two percent in 1985. This slowdown was due largely to lower import growth as the foreign exchange shortage worsened.

12. With the floating exchange rate and the liberalization of exchange restrictions, both the volume of transactions and the premium on the parallel foreign exchange market were substantially reduced. In the non-copper export sector, significant export volumes were restored to official channels. Nevertheless, developments in the external sector during 1983-85 were characterized by weak export prices and net capital outflows. The primary source of strain on the balance of payments, has been on the capital account. First, disbursements on grants and medium- and long-term loans have declined precipitously since 1980. Second, private capital flows, including new direct foreign investment, have remained at negligible levels even after the 1983 reforms. Third, the debt service burden has continued to increase notwithstanding debt reschedulings. The rapid decline in disbursements on medium- and long-term (M&LT) loans to Zaire can be traced back to fluctuations in the commitments before 1983 and their continuous decline thereafter. Since 1983, the major source of commitments and disbursements has been multilateral donors which have increased their lending to Zaire both individually and as a group. Transfers from bilateral sources as a group have been negative since 1983.

13. Zaire successfully concluded another rescheduling agreement with the Paris Club creditors in May 1985, and to date, has met all of its external debt obligations under the Paris and London Club
agreements. In spite of these reschedulings, the impact of debt service and of the rapid depreciation of the zaire on fiscal management has been drastic. The combined effects of exchange rate depreciation and revenue measures taken since 1983 have been significant: the ratio of fiscal revenues to GDP rose from 10 percent in 1982 to 17 percent in 1985. The tax base, however, remains heavily dependent on export-based activities such as copper and oil sectors. Despite significant revenue increases, the budget has been under immense pressure because of the increasing debt service burden since 1982. Soaring debt service payments in local currency terms, have necessitated massive cuts in salaries, expenditures on goods and services, and investment expenditures in real terms. The share of debt service payments (after reschedulings and including arrears and domestic debt service) rose from 17 percent of total expenditures in 1982 to 73 percent (of which 55 percent was for external debt service payments) in 1985, thus considerably reducing the Government's latitude in allocating budgetary resources.

14. The brunt of financial adjustment fell on the investment budget which financed 10-15 percent of the public investment program. As a share of total budgetary expenditures, investment spending declined from 12 percent in 1982 to less than 3 percent in 1985. This corresponded to 0.4 percent of GDP. Overall financial execution of the 1983-85 PIP was 65 percent, with a much lower physical execution rate. Implementation of the program varied significantly among the sectors. Agencies which used self-generated funds were able to implement a larger proportion of their programs than those which depended on investment budget for domestic funds.

Prospects

15. Today, the Zairian economy is at a cross-roads. Despite Zaire's impressive stabilization effort in the last three years which helped redress critical external and internal disequilibria and laid the preconditions for the resumption of sustained growth, the success of a medium-term recovery scenario will depend on the country's ability to address four major constraints: (i) uncertain external financial prospects which remain dominated by a heavy debt burden and attrition to bilateral aid flows; (ii) a tight domestic financial situation which underlines the considerable impact of debt service on reducing Government's latitude to allocate resources for development expenditures; (iii) a weak institutional environment which requires the strengthening of public sector management to enable it to conceive, implement and monitor appropriate policies and action programs; and (iv) an inadequate physical infrastructure in need of continued rehabilitation. Zaire has recently adopted a Five Year Development Plan (1986-90) which identifies these constraints, and offers ways to begin addressing them.
16. Of Zaire's total external debt outstanding, estimated at US$5.4 billion at end-1985, almost two-thirds have been rescheduled at near-market terms. Zaire's ratio of external debt service payments to exports of goods and non-factor services (after rescheduling) was 27 percent in 1985. While the previous debt reschedulings provided short-term relief, they have increased the country's medium-term debt burden. Debt service payments falling due during the 1986-90 period is about US$4 billion, excluding Zaire's obligations to the IMF. In order to ease the external and domestic financial constraints, future debt reschedulings will have to be done with more concessional terms and for larger amounts than have been granted in previous reschedulings.

17. The next three years represent a critical period in the transition from stabilization to sustained growth. While the vagaries in world markets for copper play a significant role in Zaire's external financing prospects, the success of the transition will depend on the country's ability to address the key constraints mentioned above. This, however, would require a concerted joint effort by Zaire and the donor community. On the part of Zaire, it would require pursuing financial discipline and focusing on policies to stimulate growth within the context of a structural adjustment program. The Government has demonstrated its ability to implement a painful but comprehensive stabilization-cum-adjustment program during the last three years and there are clear indications that it is committed to undertake further policy measures for structural adjustment. The success of the transition will, however, also rest on the response of the international donor community to the Government's structural adjustment efforts. In addition to the financial assistance to support these efforts in the form of quick-disbursing non-project grants and loans, the level of new commitments for projects will have to be increased to cover at least a minimum public investment program. New projects, properly identified in the context of a resource-constrained public investment program, are needed to continue the rehabilitation of the country's physical infrastructure, to permit the development of human resources, and to assist in the recovery of productive sectors.

PART II — BANK GROUP OPERATIONS IN ZAIRE

18. From 1969 to date, the Association has approved one Special African Facility Credit (US$30 million equivalent) and 40 credits totalling about US$650 million for agriculture, transport, development finance company operations, water supply, power, petroleum technical assistance and education projects. The Bank Group has also extended grants totalling US$400,000 as contributions toward the cost of two planning assistance projects in Zaire. In 1975, the Bank made a loan of US$100 million for the Gecamines Mining Expansion Project, which was cofinanced by the European Investment Bank and by the Libyan Arab Foreign
Bank, and which provided for special repayment arrangements. A Technical Assistance Credit was approved in 1983 to assist Gecamines with its efforts to restructure its organization, improve its manpower and prepare a long-term rehabilitation and expansion program. The IFC, which has a US$1.3 million equity participation in the Société Financière de Développement Economique (SOFIDE), approved a US$4.1 million loan in 1978 for an offshore oil production project, and a US$230,000 loan in 1982 for studies related to the development of an aluminium complex at Banana. In 1985, IFC has approved a US$6.25 million loan to, and a US$528,000 equity participation in a textile company (SOTEXKI); a US$15.0 million loan to the "Grands Hôtels du Zaire"; and a US$100,000 equity participation in a cotton farming operation. Annex II contains a summary statement of Bank loans, IDA credits and IFC investments as of September 30, 1985.

19. A main objective of Bank Group operations in Zaire has been institution building. The development finance company (SOFIDE) was established in 1970 with assistance from IFC and IDA. The major transport agencies, ONATRA, Société Nationale des Chemins de Fer Zairois (SNCZ), Régie des Voies Fluviales (RVF), Régie des Voies Maritimes (RVM) and Office des Routes (OR), have received technical and financial assistance from the Association, which also helped establish the National Livestock Development Authority (ONDE). In the case of Gecamines, the Bank loan originated a dialogue, still ongoing and now supported by a technical assistance credit, intended to define ways and means to strengthen the management, financial position and planning of the company, which helped in the preparation of the proposed operation.

20. Project implementation has been satisfactory in spite of difficulties resulting from the country's inadequate manpower and management capability and, in recent years, because of the economic crisis. In the last two or three years, release of the required budgetary funds has been difficult periodically because of budgetary constraints. Lack of foreign exchange to finance spare parts and fuel, and the deterioration of the transport network and marketing system have resulted in severe supply problems for most projects. Recruiting and retaining adequate staff has also been difficult. In January 1980, the Bank undertook with Zairian officials an overall review of Bank Group projects which, for the first time, provided an integrated view of implementation problems; this resulted in an acceleration and improvement in the utilization of Bank Group assistance, particularly in the agricultural sector. A second overall review, focussing on macro-economic and sectoral issues and on their impact on project implementation, took place in May 1983 and assisted the Government in formulating the important economic measures of September 1983 (para. 9).

21. Sixteen credits and one loan have been totally disbursed. Completion reports have been issued for all projects. Performance Audit Reports have been issued for the First SOFIDE, the First, Second and Third Highway Projects, the River Transport Project, the Rail/River Project and the First Education Project. The conclusion of the audit and completion reports was that the Bank Group's impact on institution building had been mixed. All project entities had encountered operat-
ing difficulties beyond their control as the economy deteriorated, financial resources grew scarcer and the problems besetting the investment environment were exacerbated by the Government's zairianization/radicalization measures. Nonetheless, effective administrations had evolved in REGIDESO, SOFIDE and the Office des Routes, the highway agency. Performance of ONATRA, the port and river transport agency, had not improved as a result of the first River Transport Project but did improve under the Rail/River Project. More attention to institution building activities would have been beneficial in the education sector; administrative weaknesses in the Department of Education were cited as partly responsible for poor performance under the First Project and the inability to implement investment components under the Second Education Project which resulted in cancellation of US$18.8 million in February 1983. Details on the Bank Group's involvement with Gecamines are provided in the remainder of this report. Bank Group support to all of the above mentioned entities is continuing through follow-on projects designed to address the issues raised by the completion and audit reports.

22. The rate of disbursement to Zaire (about 20 percent for fiscal years 1983-1985) is average for the Eastern Africa Region. While disbursement performance in general is satisfactory, difficulties have arisen in several projects. In the case of early credits for transport, education and livestock (Credits 255-ZR, 272-ZR and 398-ZR), the lack of a strong project entity caused implementation delays. Economic conditions were also a factor in slowing project programs in instances where government counterpart funds were not available (Third Highway, Credit 660-ZR; Second Education, Credit 624-ZR) and where the investment environment experienced slow recovery from the aftermath of abrupt nationalization (Fourth SOFIDE, Credit 710-ZR). Future project implementation should be less affected by the above influences given the strengthening of institutions under subsequent projects and efforts by the Government to improve budgetary support of IDA-financed projects. As of June 30, 1985, the Bank Group's share of Zaire's total debt disbursed and outstanding was about 7 percent.

23. In the past three years, the Bank Group's main efforts have been directed towards assisting in the rehabilitation and development of the agriculture, industry/mining and transport sectors, in part through the design and implementation of appropriate new policies. Initial efforts in support of the energy sector include the Shaba Power System Rehabilitation Project (Cr. 1224-ZR) and the Ruzizi II Regional Hydroelectric Power Project (Cr. 1421-ZR). Our lending will continue to assist the development of the agriculture sector, including policy reforms under the agricultural component of a proposed Structural Adjustment Credit; to promote the development of the industrial and mining sectors; and to support the transport sector. In addition, further support will be considered for the energy sector to develop power, and to minimize the cost of supplying petroleum products to the country. An Education Technical Assistance and Training Project to improve the management of the education sector and relevance of education programs was recently approved. Preparation is under way for an eighth
line of credit to SOFIDE; a navigation improvement project; and a technical assistance project to improve investment planning, budgetary procedures, and parastatal management. In addition to projects, two quick-disbursing policy operations are also under preparation: an industrial sector adjustment credit which would assist the Government in rationalizing and simplifying tariff structure and export procedures, the tax regime of industrial enterprises, and finance imports of spare parts and essential equipment; and a structural adjustment credit to address cross sectoral issues and pave the way for medium-term recovery.

**PART III - GECAMINES IN THE ZAIRIAN ECONOMY: PROBLEMS AND PROSPECTS**

A. The Mining Sector

24. **Resource Base.** Zaire is richly endowed with mineral resources, but a complete assessment of its mineral wealth is difficult because of the relatively low level of exploration carried out so far. The country's known reserves of base and precious metals are large, but spread unevenly among different regions. In the Shaba province of southeastern Zaire, the copper-cobalt deposits represent 7 percent of the world's inland copper and 31 percent of the inland cobalt resources. Ore reserves in the Gecamines concession are estimated at over 40 years of production at present levels. Other known mineral deposits include: tin metal, manganese, gold and diamonds, and significant undeveloped resources of iron ore, bauxite, phosphate, and uranium. Industrial materials, such as limestone are quarried for local use and petroleum is produced offshore in small quantities.

25. **Institutional Structure.** Activities in the mineral sector are organized around a few companies, dominated by the state-owned Gecamines, accounting for 93 percent of the copper and 100 percent of the cobalt produced in the country. The company also produces about 65,000 tons of zinc. The other copper producer is the state-owned Société de Développement Industriel et Minier du Zaire (SODIMIZA), which accounts for the remaining copper output.1/ SODIMIZA has an annual production capacity of 40,000 tons, but no smelting facilities in Zaire. Its copper concentrates have been shipped to Zambia for refining since 1984. The rest of the industry comprises the diamond producer Société Minière de Bakwanga (MIBA) - 80 percent owned by the Government - the state-owned

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1/ Until 1983 SODIMIZA was 85 percent owned by Japanese interests and under Japanese management. The Japanese shares were sold to Government in 1983. The firm, currently under a management contract with a Canadian firm, appears well run, with no major problems.
Office des Mines d'Or de Kilo-Moto, the country's most important gold producer; and the Société Zaïreïtain and Société Minière et Industrielle du Kivu (SOMINKI) producing tin, tungsten and gold as well as some other minerals.

**Sectoral Prospects**

26. Between 1981 and 1984, mining activities accounted for about 20 percent of Zaire's GDP, and contributed an average US$1.2 billion per year, or 65 percent of merchandise export earnings. Moreover, the sector plays an important role in generating government budget revenues with an average share of over 25 percent in the past decade, of which Gecamines accounted for 20 percent. The sector also contributes substantially to industrial employment, energy and transportation demand, and provides numerous social services and training.

27. Since the mid-1970's, shortages of foreign exchange, skilled labor and fuel, increasing transport bottlenecks, and unstable economic conditions have led to a decline in productivity and to a growing decapitalization of all mining companies. The performance of the sector has been affected not only by external events (price fluctuations, transport route closings, Shaba invasions), but also by government policies in the areas of taxation, financial and personnel management, and the role of foreign capital. These factors have initiated a progressive decline throughout the sector which has resulted or will eventually result in production decreases. Recent government measures to reestablish business confidence and to promote investments provide hope for an increased inflow of commercial and concessional foreign aid, to support various rehabilitation efforts of the non-Gecamines sector.

28. While the Government's priority remains to meet Gecamines' investment needs, rehabilitation of the other mining companies should become a key element of the Government's policy of diversification in the mining sector. To initiate a sector-wide recovery program, various issues will need to be addressed, including the viability of the different subsectors, their financing needs, personnel and management policies, ownership options and the possible role of foreign investors, the need for improved infrastructure and communications, and marketing arrangements. In this context, a crucial issue facing Government today is how to control and reverse the decline of the non-copper sector, so as to maximize the mining sector's contribution to economic recovery and growth. To assist Government in assessing these needs, the Bank has organized a sector mission in early 1986 to review the constraints as well as the options for the sector's development.

29. The technical supervisory agency of the mining sector is the Ministry of Mines and Energy. Because of the significance of mining in the economy and of the predominance of Gecamines in the sector, this ministry is, however, only one of many government institutions involved in the sector. Among these, the President's Office exercised during a
certain period a direct supervisory responsibility over Gecamines; the Ministry of Finance subsequently assumed that role to oversee the design and implementation of fiscal regulations applicable to the sector; the Central Bank controls most external financial transactions of the largely export-oriented mining sector; the Ministry of Portfolio holds all government property, including shares in mining companies; and the Ministry of Foreign Trade oversees mineral exports as well as the important imports for operations and investments. The Ministry of Planning plays an important role in the design of sectoral investment plans and mobilization of external financing.

B. The Gecamines Group

Background

30. Copper mining in Zaire started in 1911 under the aegis of the Union Minière du Haut-Katanga (UMHK), a Belgian company. UMHK's assets were nationalized in 1967, and the company eventually became La Générale des Carrières et des Mines (Gecamines) in 1971. Under the compensation arrangement which followed nationalization, the Société Générale des Minerais—SGM, an affiliate of UMHK continued to provide technical assistance and to market Gecamines' production. In April 1974, the existing arrangements between the Government, Gecamines, and SGM were modified to permit, inter alia, an increase in copper refining in Zaire, and the marketing of Gecamines' production by a new Zairian marketing company, the Société Zairoise de Commercialisation des Minerais (SOZACOM).

31. Gecamines operated under the direct supervision of the President's Office until 1981, at which time this responsibility was transferred to the Ministry of Finance. SOZACOM, however, operated under supervision of the Ministry of Foreign Trade and its relations with Gecamines were strained because of Gecamines' inability to control the marketing of its production, SOZACOM's high marketing fees, and financial irregularities. In mid-1982, a new Marketing Agreement between Gecamines and SOZACOM gave Gecamines full ownership of its mineral production up to the final sale, full control over its sales receipts, and increased influence in defining the strategy for marketing its production. Despite these rearrangements, disagreements continued. In July 1984, Government abolished SOZACOM and reestablished Gecamines' complete marketing authority.

32. In November 1984, Government reorganized the Gecamines/SOZACOM group as follows: a new entity, Gecamines/Holding, was constituted to oversee all Gecamines' activities, replacing the Ministries of Finance and of Foreign Trade as direct supervisor of the group. Gecamines/Holding in turn is supervised by a committee consisting of the Minister of Mines and Energy, the Minister of Finance and Budget, the Minister of Portfolio, and the Governor of the Central Bank. Gecamines/Holding has three independent subsidiaries:
Gecamines/Exploitation, in charge of all metal production activities (the former Gecamines); Gecamines/Commerciale, in charge of all the marketing activities for copper, cobalt, zinc, and other minerals (staffed mainly with former SOZACOM employees); and Gecamines/Développement, in charge of all non-mining activities of the former Gecamines (mostly agricultural activities in Shaba, formerly organized under a Gecamines subsidiary). Zairian executives were appointed at the top of each of the four companies, underlining, as in other sectors, the political will to replace expatriates by Zairian nationals. The new organization became effective in January 1985.

33. So far, the new structure has improved the integration of the production and marketing functions. A full time coordinating body (the Holding), reporting to a single interministerial committee, concentrates on outside representation of the Gecamines group, facilitates contacts with the authorities, and coordinates inter-group relationships, without getting involved in day-to-day management and without presenting a sizeable financial or bureaucratic burden. The Holding operates under a Board, chaired by the President of the Holding, which includes the chief executives of the three subsidiaries and four Government representatives. The new organization has created an effective institutional link between Zaire's copper industry and the relevant political and economic decision-making centers.

34. In the past, Gecamines has suffered from repeated reorganizations. Given the suitability of the new holding structure, it appears essential that it be left in place, unless significant changes in the economic environment justify adjustments or modifications. The Government and the Holding would consult with the Bank prior to any decision affecting the organization of the Gecamines group.

Gecamines/Exploitation2/

35. The company's organizational structure is characterized by functional centralization and geographical separation of three production groups at Lubumbashi, Likasi, and Kolwezi. Following the recommendations of a study undertaken under the Bank-financed extension project (Loan 1090-ZR of 1975, amended in 1979), Gecamines has undertaken a major reorganization effort to decentralize responsibilities on a cost center basis, and to establish a comprehensive control system for top management as well as for each cost center. Since 1983, the IDA-financed technical assistance project (Credit 1336-ZR) has been assisting this reorganization effort, particularly in the Finance Department, with a view to strengthening Gecamines' management in the production, financial, marketing, and legal fields.

2/ Unless noted otherwise, Gecamines will be used in short for Gecamines/Exploitation in the remainder of this Report.
36. The company currently needs to address three key management issues: to maintain stability at the top; to permit a gradual and orderly replacement of retiring expatriates by qualified Zairians; and to develop long-range corporate planning capabilities. Long range corporate planning would help the company keep track of developments in the world metals markets, to identify marketing opportunities, to coordinate effectively the various functions of the enterprise (notably commercial, production, and finance), to guide Gecamines' management on medium- and long-term investments and production options within a longer term context, and to reduce the company's dependence on external expertise in these matters. Gecamines has already filled its top management positions. To plan its long-term strategy, Gecamines would establish by September 30, 1986 an adequately staffed corporate planning unit, reporting to the Director General, and operating under terms of reference satisfactory to the Bank.

37. Gecamines' Personnel. Gecamines employs about 36,000 people and is the economic keystone of the Shaba province. The size of the workforce is now under control, but compensation policies need to be reviewed. While salaries have not kept up with inflation, the company offers generous fringe benefits (free housing, schooling and medical care, and subsidized food prices). As a result, absenteeism has been growing and low salaries are a deterrent to hiring competent technical personnel. To remedy this situation, Gecamines would prepare by December 31, 1986 a plan to implement its stated policy of gradually increasing wages over the next several years (including incentive scheme) and of reducing fringe benefits (in particular subsidized food), in order to counteract the negative effects of low wages and generally reduce absenteeism.

38. Gecamines plans to increase the number of Zairian supervisory staff from 2,300 in 1984 to 3,600 in 1992. During the same period, the number of expatriate staff is expected to decline to about half its present level of 700. To achieve these goals effectively, existing staff constraints have to be taken into account and appropriate training needs defined so that the planned transition can take place without impairing the Company's efficiency. For this purpose, Gecamines would prepare not later than December 31, 1986 a comprehensive manpower development program for its supervisory staff taking account of the stated policy of accelerated Zairianization. The program would include a detailed plan for the progressive retrenchment of expatriates and would establish clear recruitment and promotion policies for local staff, including an appropriate merit system. Gecamines would also prepare a comprehensive training program oriented toward improving the skills of its personnel in management and technical positions, at the central level and in the various plants. Special attention would be given to inventory control, procurement policies, and purchasing.
39. **Gecamines' Productive Facilities.** Gecamines' production complex is an intricate matrix of operations spread over 300 km and grouped in three separate geographic areas around Kolwezi, Likasi, and Lubumbashi. Currently, the company has a mining capacity of about 450,000 tpy. Gecamines' refining capacity is, however, limited to 250,000 tpy, and a good part of copper production is refined overseas. Processing the oxide, sulfide, and mixed copper-cobalt ores requires complex treatment. The existing facilities require heavy inter-Group transport of concentrates, and give Gecamines little flexibility but to keep the present balance of concentrates, which corresponds to the characteristics of its processing facilities. Given that oxide ores in the mines now under exploitation are likely to be depleted over the next decade, Gecamines will have to put new oxide ore deposits into production by 1995 to avoid a major redesign of its metallurgical plants. The most obvious oxide ore sources would be the Tenke and Fungurume deposits. The overall composition of Gecamines' ores will also determine the justification of the construction of a flash smelter at Kolwezi. Such a smelter would reduce the costs of concentrate transports, provide much needed flexibility for the company to adapt to higher quantities of sulfide ores, and make Gecamines self-sufficient in sulfuric acid, thus eliminating future sulfur imports for acid production and reducing foreign exchange outlays.

**Gecamines' Performance**

40. **Physical Production.** Over the past four years, Gecamines has produced close to capacity. This was made possible through the use of the company's buffer stock of mined ore, since a series of factors has adversely affected Gecamines mining activities: shortages of spare parts, supplies, inadequate maintenance, insufficient replacement investments, poor mine planning, and management shortcomings due to insufficient training. Problems have been particularly severe at Kolwezi (especially after the 1978 invasion drove expatriates away) where excavation is lagging behind targets and where the truck fleet spends only 60 percent of its time on site. Given the importance of maintaining production levels, Gecamines would present by December 31, 1986, a plan to reorganize its mine planning (short, medium, and long-term) at all mining divisions, and particularly at the Kolwezi open pits.

41. **Production Costs.** Until 1982, costs were poorly controlled and Gecamines' production costs were adversely affected, when expressed in US dollar terms, by the continuous overvaluation of the zaire currency. The company remained, however, in the lower half in terms of worldwide production costs. In 1983, fixed production costs represented 55 percent of total costs (up from about 33 percent in 1973). In 1982, Gecamines' management introduced cost cutting measures, particularly at head office, which, together with the 1983 devaluation, have already contributed to reducing costs considerably. The successful continuation of this cost cutting program requires an improved knowledge of costs levels and trends broken down by geographical production center to apply cost control measures to high priority areas. Progress toward the gradual introduction of cost accounting has been made under the IDA-financed
technical assistance to Gecamines' Finance Department. Given the importance of cost cutting measures and of the reorganization of the accounting system currently under way, Gecamines would submit for the Bank's review by December 31, 1986 a program for cost accounting, cost control and cost reduction by production center.

42. **Gecamines' Tax Regime.** Gecamines' tax regime has, in the past, been subject to frequent ad-hoc changes, often made in an erratic and arbitrary way, to meet the Government's financial needs. The unpredictability of its fiscal burden hampered the company's financial management. To improve the situation, the Government agreed at the Amendment of Loan 1090-ZR in November 1979 to carry out a tax reform study. As a result of the study's recommendations, Gecamines' tax regime was changed in September 1983. The new tax regime involves two export levies, one of which takes into account copper price fluctuations. The new system has worked well by stabilizing Gecamines' tax payments while ensuring regular tax income for the Government. To preserve these positive results, Government would consult with the Bank before making any changes to Gecamines' tax regime.

43. **Financial Results.** Between 1978 and 1981, Gecamines' financial situation showed good levels of net income and internal cash generation. In 1981, when copper prices started to decline and the cobalt market collapsed (in quantity and price), Gecamines' revenues decreased by about one third despite a stable copper production. At the same time, costs were allowed to increase and the overvalued Zaire currency continued to exert its distorting effects, resulting in a sharp drop in the Company's profitability. After the 1982 assets revaluation and its impact on depreciation, Gecamines showed substantial net losses in 1982 (about US$316 million) and 1983 (about US$111 million). The combined effect of cost cutting measures, recovery of the cobalt market, and stabilization of the tax regime in 1983, improved the Company's financial results substantially. In 1984, Gecamines showed a net income of about US$42 million and an internal cash generation of US$210 million. A summary of Gecamines' financial performance can be found in Annex IV.

44. **Liquidity Position and Foreign Exchange Availability.** Even while showing high profits until 1981, Gecamines has encountered grave liquidity problems due in large part to SOZACOM's weak cash management and to the poor coordination between SOZACOM and Gecamines. Following the 1982 Marketing Agreement, Gecamines' liquidity situation improved substantially but its cash-flow remained insufficient to permit adequate reinvestments, thus compounding operational difficulties. While it is still too early to assess the performance of Gecamines/Commerciale and its impact on marketing delays and short-term financing needs, coordination with Gecamines is expected to improve under the Holding. In addition, the IDA-financed technical assistance project has helped initiate a major effort at improving Gecamines' cash management. Since 1982, the company has received 45 percent of its net sales in foreign exchange, as agreed with Government in 1977, partly because the implementation of the Gecamines/SOZACOM marketing agreement gave
Gecamines fuller control over its accounts. Under the proposed Project, Government would continue to allow Gecamines to retain 45 percent of its foreign exchange earnings.

45. **Financial Relations with Government.** Gecamines has in the past been subject to repeated Government interventions resulting in uncompensated sales, barter operations without prompt and adequate reimbursement, and payments or services rendered without proper compensation. Debts due by Government to Gecamines from uncompensated sales had accumulated to an amount of US$124 million until 1984, and now amount to about US$57 million. In 1983, the Government agreed on repayment of these debts along a definite schedule, but the agreed schedule has not been strictly respected in part because of budgetary constraints under the on-going stabilization program agreed with the IMF and the World Bank. Quarterly commercial audits to keep track of potential financial irregularities in the commercial operations have, however, shown that no further uncompensated sales took place after June 1984. Government has agreed that it would define together with Gecamines and furnish to the Bank by December 31, 1986 an appropriate dividend policy, and promptly thereafter implement recommendations resulting from the study. Government has also agreed that its financial relations with Gecamines would be governed exclusively by the existing tax regulations and by the dividend policy, and that no sales without proper and prompt compensation would take place.

**Gecamines/Commerciale**

46. **Relations with Gecamines/Exploitation.** Gecamines/Commerciale's relations with the production company are identical to those stipulated in the 1982 Marketing Agreement between Gecamines and SOZACOM (para. 31). Gecamines/Exploitation has established satisfactory control mechanisms to monitor the strict respect of the Agreement, and since the abolition of SOZACOM in July 1984, external commercial audits report quarterly on the functioning of the controls as well as on any potential irregularities. Since the Marketing Agreement is essential for ensuring Gecamines' financial autonomy and effective financial management, as well as for designing a rational marketing policy, the 1982 Marketing Agreement between Gecamines and SOZACOM would continue to govern the relationship between Gecamines/Exploitation and Gecamines/Commerciale, and would not be amended without prior Bank approval. In addition, Gecamines/Exploitation would maintain its controls and half-yearly external commercial audits would continue to apprise Gecamines/Exploitation, and the Bank, of any potential irregularities in the implementation of the Marketing Agreement. Finally, Gecamines/Commerciale would market Gecamines' products in accordance with regular commercial practice, ensuring that, at no time will Gecamines/Exploitation receive less than full ex-works commercial price (subject to normal trade discounts) for its products.

47. **Commercial Strategy.** The current concentration of sales in Europe (about 85 percent) represents a potential marketing weakness because of lack of diversification and of a foot-hold in other expanding markets. In addition, Gecamines' product line is currently dominated by wirebars, a traditional product increasingly replaced by high grade
cathodes. While the market for wirebars is not expandable, Gecamines could for a period of time maintain a safe and dominant position on this market, if it pursues an active customer-oriented marketing policy and provides adequate and reliable services along with the sale of its products. To this effect, Gecamines/Commerciale would present by June 30, 1987, a plan defining its strategy for marketing wirebars in the medium term, and for the progressive replacement of wirebars. Outside of the two areas outlined above, the marketing of copper does not present major difficulties. Unlike copper, cobalt marketing requires critical judgments both in terms of setting selling prices and of finding market outlets. With Gecamines' finances extremely sensitive to cobalt prices, it is important that the cobalt pricing policy take account of the risks of setting unreasonably high prices and of the need to maintain the clients' confidence, which took several years to reestablish after the 1970's. Gecamines/Commerciale would, by June 30, 1987, submit to the Bank its cobalt marketing policy.

Purchasing Arrangements

48. Materials and consumables represent about 35 percent of Gecamines' production costs, and, together with equipment for investment, amount to about US$250 million in foreign exchange annually. The success of Gecamines cost reduction strategy depends on the company's ability to improve its procurement process. The Government, aware of procurement problems in all its public enterprises, chose to address them through the creation in March 1985 of a central procurement agency, the Societe Nationale de Trading (SONATRAD), to serve all large public enterprises, including Gecamines. SONATRAD's mandate is to permit substantial improvements in procurement through improved negotiation techniques, grouped orders from several public enterprises, standardization of equipment, elimination of certain purchasing intermediaries, diversification of supply sources, and promotion of competitive local producers.

49. Extensive discussions have taken place since March 1985 between the Government, Gecamines, SONATRAD and the Bank to develop SONATRAD into an institution that can effectively play its role, and to have the respective roles and responsibilities of Gecamines and SONATRAD clearly spelled out. A Purchasing Agreement between Gecamines and SONATRAD, agreed as a result of these discussions, was signed on March 4, 1986.3/

3/ The draft agreement stipulates that SONATRAD will act as Gecamines' purchasing agent for: (i) goods common to various public enterprises (so as to promote bulk discounts and equipment normalization), and (ii) contracts specific to Gecamines estimated to cost more than US$1 million. The US$1 million threshold would give SONATRAD a limited number (about 30) of large contracts in 1986 and it will be reviewed every six months. Gecamines will purchase directly for its other needs. SONATRAD will play an audit function for purchases by Gecamines on its own account.
It is a satisfactory document which adequately addresses the weaknesses of the present system and would not be amended without prior Bank approval. In addition, Gecamines would maintain control over its purchasing, and quarterly external audits of SONATRAD would apprise Gecamines, and the Bank, of progress in the implementation of the Purchasing Agreement.

Transportation Routes

50. The two main export routes for Gecamines' production are the Voie Nationale (a multimodal chain of rail and river transport with multiple trans-shipment points) and the Southern Route through the railways of Zaire, Zambia, Zimbabwe, Botswana, and South Africa. Total transit time in 1984 averaged 70 days on the Voie Nationale at an average cost of US$162/ton, and 57 days on the Southern route at the average cost of US$150/ton. Zaire's policy is to export through the Voie Nationale on a priority basis because it does not pose any security problems and does not require foreign exchange outlays. This policy, supported by major donors, requires the continued rehabilitation and improvement of the parastatals in charge of transport along the Voie Nationale (SNCZ—the railway company; ONATRA—in charge of river transport, and the Régie des Voies Fluviales, which maintains the river network). The Bank Group and other donors are assisting these agencies, but progress is slow and significant improvements are expected only toward the end of the decade.

Gecamines' Long-Term Strategy

51. Gecamines' present strategy is oriented towards maintaining its present production levels while improving its cost competitiveness through further integration of mining and processing within each of the three geographical production groups. It aims at a more efficient use of the Company's total physical assets, improvements in productivity and quality, and reduction of inter-group transport costs. In an increasingly competitive market, Gecamines has little choice but to improve its cost competitiveness all along the production and distribution chain, so as to remain within the lower third bracket of the world copper production cost, including transportation and financial charges.

52. Implementation of Gecamines' long-term strategy, especially the mining of new deposits, raises a number of issues about the future role of Government in the development of Zaire's copper industry. In the short term, and in view of the poor past performance of foreign investment in copper in Zaire, Gecamines constitutes an irreplaceable source of investment for the copper sector. In the long term, however, questions remain as to whether Gecamines should develop new deposits alone, or seek private foreign partners, and in that case, as to the structure of such a partnership. Government and Gecamines would discuss with the Bank their expansion plans and the structure of the partnership envisaged for diversification or new investments.

The Need for Rehabilitation

53. The necessity of designing a substantial rehabilitation program arose from the company's increasing vulnerability to operating difficulties. In the past 10 years, the Company maintained fairly high production and sales levels despite numerous obstacles, to a large extent because stockpiles had
accumulated, providing the company with the ability to withstand much buffeting without major consequences. This flexibility has now disappeared. While Gecamines had, in 1974, 19 months of production in banked ore, reserves have dropped to 9 months in 1984 and the ore grade has decreased from 4.8 to 3.9 percent. Similarly, the concentrate cushion provided by the startup of a new concentrator in 1980 has now been used up.

54. The essential constraints in Gecamines' operations are the low availability of mining equipment in the Western open-pit mines and low metal recovery rates in its concentrators. Therefore, a large part of the Gecamines' rehabilitation effort addresses those two main constraints. During the elaboration of its rehabilitation program, Gecamines prepared in 1984 a five-year investment program, which covers its requirements during the period 1984-88, and which directs investments to (i) replacement of worn and obsolete equipment to improve performance and reduce cost, mainly in the mines and (ii) projects increasing metals recovery in the concentrators and in the metallurgical plants. The program has now been extended to the 1984-1990 period because of the low level of execution in the 1984-1985 period. The key elements of Gecamines' rehabilitation program are summarized in Annex V.

Rationale for Bank Group Involvement

55. The Bank Group has been involved in Zaire's mining sector through two operations with Gecamines: the 1975 IBRD Extension Loan (Ln. 1090-ZR), amended in 1979, and the 1983 Technical Assistance Credit (Cr. 1336-ZR). These operations have enabled the Bank Group and its cofinanciers to play a significant role in the organization and the development of the company during a troubled period in its history. In particular, the Bank Group and its cofinanciers have strived to help the Government achieve and maintain full transparency in the company's financial affairs, and to assist Gecamines in continually improving the efficiency of its operations, and in increasing its awareness of financial and commercial issues as well as its exposure to critical trends in the copper industry. The Marketing and Purchasing Agreements, the design of Gecamines' tax regime, the improvement of financial management, the decentralization of managerial responsibilities on a cost center basis, the establishment of a corporate planning department, and the design of a comprehensive training program addressing the needs of supervisory and managerial personnel at all levels attest to the good quality of our dialogue with Gecamines and Government on these difficult issues.

56. The success of the Rehabilitation Program will depend on three sets of conditions:

(a) Gecamines itself should improve the technical efficiency of its operations, reduce its operating costs, upgrade its human resources in a systematic way, design a long-term strategy, and adopt rational and efficient marketing policies;

(b) Government should provide Gecamines with a stable and predictable institutional and policy environment in which to conduct its affairs (tax and dividend policies, designation of top executives, organizational stability); and
(c) Gecamines' relations with its purchasing and sales agents should remain organizationally clear and financially transparent and should enable the production company to maintain appropriate control over its agents.

Based on experience, Bank Group involvement would increase the probability that these conditions of success be met. It would also have important economic justifications.

57. Zaire is currently implementing a comprehensive program of economic policy reforms (aiming mostly at stabilization and liberalization), in collaboration with the IMF. While these stabilization efforts should and will continue, the elements of a medium term recovery scenario need to be put in place in the near future, and economic recovery over the next two years will greatly depend on the availability of increased external resources. In this context, Gecamines' creditworthiness and sound rehabilitation program provide the Bank Group with a unique opportunity to transfer IBRD resources in support of the economy through Gecamines. These resources would constitute a net addition to the concessional financing provided through IDA and to the supplemental resources made available through the Special Africa Facility. External financing of the program's foreign exchange costs would increase Gecamines' ability to contribute to the economy, thus easing binding internal and external financial constraints during the crucial transition period between stabilization and recovery.

58. Getting external support for financing Gecamines' rehabilitation program is an important element of the Government's strategy for improving Zaire's balance of payments through continuing export and foreign exchange earnings. Gecamines' continued ability to generate and contribute foreign exchange is also essential to support the Government's strategy of diversification of the country's economic structure, so as to attract private local and foreign investors, and permit economic growth. Gecamines is expected to generate a total of US$5.8 billion gross foreign exchange (in current terms) over the next five years representing over 55 percent of the country's foreign exchange earnings. The net foreign exchange inflow would amount to US$3.2 billion over the next five years. These economic benefits, together with the importance of helping ensure that the conditions of success of the rehabilitation program are adequately met, provide the main rationale for the Bank Group's support of Gecamines' Rehabilitation Program.

PART IV. THE PROJECT

59. The proposed Project was identified and prepared, starting in 1984, during implementation of the Gecamines Technical Assistance Project (Credit 1336-ZR). It was appraised in May 1985. Two co-financing meetings were held: the first took place in Paris in September 1985, the second in Washington in March 1986. Negotiations were held in Washington from March 12 to 14, 1986. Mr. Kasongo Mutuale, Ambassador of Zaire to
Washington, led the Zairian delegation. A report entitled "Staff Appraisal Report, Zaire, Gecamines Rehabilitation Project", No.5842-ZR is being distributed separately. A supplementary data sheet is provided in Annex III.

60. Project Objectives. Gecamines' rehabilitation program is an important element in the company's long-term strategy. The Project would partly finance the foreign exchange costs of the program, whose objectives would be to raise the company's productivity at the mines and in the surface plants and, while maintaining production capacity at its present level of about 470,000 tpy during the 1986–90 period, assure the continued flow of the principal source of foreign exchange earnings to Zaire. The Project also aims to increase Gecamines' profitability and ability to transfer resources to the Treasury, to consolidate its position in the world copper market, and to integrate its operations with other economic activities in Shaba. Specifically, the Project would aim at:

(a) maintaining metals production at the company's nominal capacity to achieve optimal use of existing installations;

(b) increasing metal recoveries at concentrators and metallurgical plants to reduce quantities of ore to be produced at the mines;

(c) reducing operating costs at the level of concentrators and metallurgical plants, and containing mining costs;

(d) diversifying the company's product mix through production of high grade cathodes;

(e) improving the company's management and efficiency of operation; and

(f) preparing of Gecamines' long-term strategy through pre-investment, research and studies.

Project Description

61. The Project would cover the priority investments required during the period 1986–90 for replacement of old equipment and rehabilitation of selected plant facilities. The Project would also help strengthen the company's training department to upgrade management and supervisory personnel, and would finance technical assistance and studies needed to improve weak performance in selected areas (supply organization, truck dispatch, short-term mine planning) or to prepare investments after 1990. The Project consists of three major components: (i) investments in existing mining and plant facilities for equipment replacement and rehabilitation, aiming at improved maintenance, productivity increases and reduction of operating costs; (ii) a training program to upgrade skills of technical supervisory and managerial personnel; and (iii) preinvestment, technical studies, and technical assistance including preparation of investments after the Project period.
62. Mining and Plant Rehabilitation. The mining component would consist of equipment replacement, mine development, and installation of an in-pit crushing and conveying system for the KOV mine, designed to assure a mining capacity of 470,000 tpy of copper. The concentrator and metallurgical plant component would consist of numerous projects, including replacement of worn, obsolete equipment, and rehabilitation at sections of certain plant facilities in order to eliminate bottlenecks, improve metal recoveries and reduce operating costs. These components consist essentially of overdue investments which Gecamines has not carried out in recent years, or of investments which would be part of a normal program of replacement to preserve good operating conditions of the production facilities.

63. Training Component. The training component would finance: (i) the creation of a Training Planning Unit and a Technical Supervisor Training Unit at the Head Office; (ii) the evaluation and reorientation of the activities training for trainers abroad; strengthening of practical training; organization of specific courses on technical and commercial subjects in Zaire and abroad; and study of the creation of a Technical Training Center; (iii) a review of on-the-job training and plant training programs to introduce modern training methods and to standardize courses throughout the company; and (iv) on-the-job training for supervisors in the open-pit mines.

64. Pre-investment and Technical Studies and Technical Assistance. The pre-investment work and technical studies would supplement and complete the changes initiated after the organizational study and the mining assistance carried out under the IDA-financed technical assistance project to prepare for longer term developments and to analyze specific activities with cost reduction potential. The proposed studies would include a review of the inventory system; a review of purchasing practices to improve the bidding and bid evaluation processes; optimization of open-pit mining operations; exploration work within Gecamines' concession and feasibility and engineering studies for future orientation of the Kipushi mine and development of the Tenke and eventually Fungurume deposits; and a comprehensive review of the company's social activities, their costs and their links to operations. Long-term technical assistance would be provided for inventory control (one-inventory management specialist) and purchasing (one procurement specialist and one purchasing specialist).

Project Implementation and Schedule

65. The various components of the Project would be implemented by the appropriate departments in Gecamines. For the replacement and rehabilitation component, the management of the different operating departments would provide technical specifications, assist in bid evaluation and manage all on-site work, while procurement will be handled by the purchasing division of Gecamines in coordination with SONATRAD. The training component would be implemented by the Training Department. Technical assistance would be provided to the Supplies and Services Department and the Kolwezi production group and would generally be
coordinated by the Planning and Research Department. While in a Project of this nature, it is unavoidable that implementation responsibilities be disseminated throughout the company, Gecamines has the ability to carry out all tasks without undue burden on its organizational structure. The Project is, however, relatively ambitious and exceeds past implementation levels achieved by Gecamines, and the company will have to rely more heavily than in the past on outside contractors for construction and installation. In order to assure implementation of the Project according to schedule, Gecamines should review the impact of outside contracting on implementation of the Project on the basis of its own implementation capacity with particular emphasis on manpower requirements.

66. The Project activities described above represent about 5 years of Gecamines' rehabilitation effort. An implementation schedule for the project components has been agreed. The replacement and rehabilitation component would be carried out between 1986 and the end of 1990. The training component would be initiated in 1986, and preinvestment and technical studies would be concluded by December 1988.

67. Environmental Aspects. Health and safety conditions are satisfactory in underground and open pit mines, but more lax in surface plants. The impact of open-pit mining is, of course, considerable but limited in land area. Significant quantities of gaseous, liquid, and solid wastes are by-products of large-scale recovery of metals from ores. Tailing ponds are used as effective solid retention basins. A project, currently under way, should reduce air pollution in Lubumbashi. Water pollution from metallurgical operations discharges is well above acceptable levels, but planned improvements in the Luilu refinery will greatly reduce acid and metal losses. Presently, Gecamines undertakes all environmental monitoring of the company's operations through regular checks of water and air quality. Gecamines would submit to the Bank regular reports on pollution control and effluent discharge monitoring, and discuss with the Bank any corrective measures required, in particular for land reclamation and water pollution control.

Project Costs and Financing

68. Cost Estimates. The total financing required for the Project, excluding incremental working capital and interest during construction, has been estimated at US$703 million, of which US$436 million (62 percent) in foreign exchange. Of the total base cost of US$567.6 million about US$532 million (94 percent) will be needed for investments in plants and mines, US$31 million (5 percent) for Pre-investment and technical studies, and US$5 million (1 percent) for training. Capital cost estimates were prepared in 1984 by Gecamines' Planning and Research Department on the basis of previous experience with procurement of similar equipment, updated suppliers' quotations, and engineering studies. Base costs and the Project's implementation schedule were reviewed and updated to end-1985. Estimating methods have been found adequate and capital cost estimates, reviewed extensively during appraisal, are considered reliable. Physical contingencies of 5 percent have been assumed for mobile equipment and equipment with little installation requirements, while 10 percent were estimated for investments with high installation contents. Price contingencies are based on escalation of 7 percent each in 1986 and 1987, 7.5
percent in 1988, 7.7 percent in 1989, and 7.6 percent in 1990. They have been applied to both foreign and local costs in view of the Government's floating exchange rate policy. Consultant services for technical studies have been estimated on the basis of prevailing market rates.

69. **Financing Plan.** The Project would be financed by Gecamines' internal cash generation (59 percent of estimated costs) and by external sources (41 percent). The proposed Bank financing would cover about 16 percent of the Project's total cost, and 25 percent of the total foreign exchange requirements. The European Community (through their Minerals Systems facility SYSMIN), the African Development Bank (ADB), the European Investment Bank (EIB), and the French Caisse Centrale de Cooperation Economique (CCCE) would cofinance the Rehabilitation Program. The effectiveness of all loans would be a condition of effectiveness of the Bank loan. Should the Project experience a cost increase, Gecamines would finance any such increase by borrowing within a maximum overall 50:50 debt to equity ratio which is considered feasible.

70. The proposed Bank loan of US$110 million would be extended to Gecamines for a period of 15 years, including 3 years of grace, at the IBRD interest rate plus an annual guarantee fee to the Government equal to 10 percent of the IBRD rate.

71. The analysis of Gecamines' future financial position for 1986-1995 confirmed that it is expected to remain a profitable operation throughout this period, even under difficult operational and market conditions, capable of meeting its service obligations on borrowings on conventional terms. In addition to the usual Government guarantee, special arrangements would be made for the Bank loan and other loans made directly to Gecamines on commercial terms. These would be similar to the set-aside arrangements established under the Gecamines expansion project that have worked well since 1975. They provide for debt service to be paid out of a special fund managed by an independent commercial bank, the Union des Banques Arabes et Francaise (UBAF), of London. The fund is replenished by Gecamines by monthly allocations directly from export sales proceeds, and contains at all times at least half of the following semi-annual debt service payment due. Satisfactory arrangements for the second trust fund to continue or replace the existing UBAF Trust Fund would be a condition of effectiveness of the proposed Bank loan.

**Procurement and Disbursements**

72. Procurement for all IBRD-financed items will follow the Bank's Procurement Guidelines. Procurement of items financed by the other co-lenders will follow the respective procurement procedures of these institutions. A procurement schedule is provided in Annex VI.

73. **Equipment and Spare Parts.** Equipment including about two years of spare parts, and transport to Zaire would be procured primarily through International Competitive Bidding (ICB) in accordance with Bank Procurement Guidelines. However, equipment and spare parts amounting to about US$10 million, or about 9 percent of the proposed Bank loan amount, is expected to be procured through Limited International Bidding (LIB) from at least 4 suppliers from at least 3 different countries, to replace or serve existing mine and plant equipment. This would also include packages costing less than US$300,000 each,
up to US$3 million. Some of the mine equipment can be supplied by local agents, and the Zairian manufacturers would receive a 15 percent preference, or the amount of customs duty whichever is lower. In addition, approximately US$10 million, or about 9 percent of proposed Bank loan amount, would be used for direct purchase of proprietary equipment to replace or add to proprietary equipment already operating in the mines and plants. Equipment items would be grouped into packages designed to achieve maximum efficiency and economy under a complex financing arrangement.

74. **Training and Technical Assistance.** Contracting for training staff would be handled by the Training Department of Gecamines and would follow procedures acceptable to the Bank. All technical assistance would be contracted under Bank Guidelines.

75. **Contract Review.** On the basis of Gecamines' list of procurement packages, the Bank would do a prior review of bidding documents for packages estimated to value more than US$300,000 (representing about 80 percent of equipment financing). Packages below US$300,000 would be subject to post review by the Bank. To ensure proper adherence to Bank procurement procedures, the first two procurement packages would be reviewed a priori irrespective of their value and of whether they are procured through direct purchase or LIB.

76. The Bank loan would finance all foreign expenditures on the following goods and services: (i) in-pit crushing and conveying facilities; (ii) metallurgical plant; (iii) equipment and spare parts for mining, mobile and rail equipment, data processing and communications, and training equipment; (iv) training; (v) preinvestment and technical studies; (vi) studies on wire-bar and cobalt marketing; and (vii) services of consultants and experts. All expenditures would be fully documented except expenditures in respect of contracts, purchase orders, or training programs valued at less than US$50,000, which would be on the basis of Statements of Expenditures. To ensure that funds for the proposed Project would be made available when needed, a Special Account operated by Gecamines, would be established with an initial deposit of US$5 million. The account would be replenished on the basis of documentary evidence, to be provided to the Bank by Gecamines, of payments made from the account for goods and services required for the Project. It is expected that the account would be used mainly for payments against the training and technical studies categories, and for equipment packages costing less than US$1 million.

77. The disbursement profile for the Project is based on estimates of order placements, payment schedules, and expected delivery times. It differs from the standard country and industry profiles as the Project is a rehabilitation project. The loan is expected to be fully disbursed by June 1992.

**Financial Covenants**

78. In order to ensure the necessary financing for the Project and its completion in a sound manner, Government and Gecamines have agreed to the following:
(a) Government would: (i) ensure that Gecamines has adequate access to sufficient foreign exchange to complete the Project and to operate the company; (ii) let its financial relations with Gecamines be governed exclusively by the existing tax regime and by a dividend policy acceptable to the Bank; (iii) abide by the financial covenants to ensure Gecamines' viability and ability to implement the Project; and

(b) Gecamines would: (i) prepare every year and submit to the Bank by November 1, (a) 5-year financial projections, including its foreign exchange and local currency requirements, and (b) foreign exchange and local currency budgets on an annual basis; (ii) in any given year during the Project's period, not make capital investments in addition to the already approved Investment Program, exceeding in aggregate US$15 million, without prior Bank approval; and (iii) maintain a current ratio of at least 1.3 and a ratio of debt (excluding short-term maturities thereof) to equity of not more than 40:60.

79. **Auditing and Reporting Requirements.** All Gecamines companies would be requested to submit to the Bank annual reports audited by independent auditors acceptable to the Bank within 4 months of the end of the accounting year. Gecamines has in the past been audited by independent auditors acceptable to the Bank and no special arrangements for selection of auditors have to be made. In addition to the annual audit reports, Gecamines would submit quarterly financial statements within 45 days after the end of each quarter, and monthly project progress reports and procurement status reports within three weeks of the end of each quarter. Finally, within 6 months after the closing date for the Project, Gecamines would prepare and furnish to the Bank a completion report on the Project dealing with its implementation, and the costs and benefits derived and expected to be derived therefrom. Gecamines record of the last 10 years on reporting to the Bank and alerting the Bank on potential problems has been excellent and no problem is expected in complying with the Bank's requirements.

80. **Financial Rate of Return and Sensitivity.** The financial rate of return for the Project has been calculated on an incremental basis in real terms. In assessing the Project's results, it was assumed that without the Project, output even from viable and competitive operations would decrease by 1.5 percent annually. Based on these assumptions, the incremental financial rate of return is 20 percent before taxes and 16 percent after taxes. The return is mostly sensitive to the assumptions made on the percentage decline in production expected, should the Project not be implemented. If this percentage varies from 1.5 percent to 1 percent, the return decreases from 16 percent to 12 percent, demonstrating both the financial risks of the Project and the limited validity of an incremental analysis when applied to a Project of this nature. The return is less sensitive to operating costs, investment costs or copper price variations (based on latest Bank forecasts which assume fluctuations around an average of $.65/lb in 1986 reaching $.74/lb in 1995, both in 1985 dollars). Switching values have been calculated on the basis of a return of 12 percent after tax. The most critical variable is the production level: since this variable remains to a large extent under Gecamines' control, and on the
basis of Gecamines encouraging record of the last 3 years (which should further improve since cost reduction is clearly the main object of the Project), the probability of reaching the switching values is small. The Project's return is also sensitive to metals prices over which Gecamines has little (copper) to reasonably good control (cobalt). Because of this favorable copper-cobalt mix, and assuming a rational approach to cobalt sales, the overall downside risk on sales receipts is also small in the 15-20 percent range, a very favorable and in fact rather unique situation for a copper producer.

Benefits

81. Economic Rate of Return. The economic rate of return of the Project has been calculated in real terms, on an incremental basis. The economic cost and benefit streams are measured from the viewpoint of the economy as a whole, and have been adjusted to reflect distortions in the market prices of the project inputs and outputs. They have been based on the same assumptions used for the financial return, except for the exclusion of all identifiable taxes, as a standard conversion factor of 1 was applied, which assumes that the Government would continue to apply exchange rate and tariff policies eliminating distortions between international and domestic price levels. As expected for a project of this nature, the economic rate of return is high and amounts to 24 percent. As in the case of the financial return, the economic return is most sensitive to the without-Project production levels. Should the Project prevent a drop in production of only 1 percent yearly during 1986-90 (instead of 1.5 percent), the return would still be acceptable at 17 percent. As the financial return, the economic return is less sensitive to variations in revenues, operating costs, and investment costs.

82. Foreign Exchange Benefits. The net foreign exchange benefits of the Project are high since Gecamines generates 100 percent foreign exchange from export sales of copper, cobalt, and zinc, while only a portion of its costs, in addition to the service of foreign debt, is in foreign exchange. Incremental foreign exchange benefits have been calculated based on the streams for the incremental financial rate of return plus debt-service on foreign financing. The resulting incremental net foreign exchange benefits of the Project are considerable, averaging about US$66 million annually in current terms over the next five years.

83. Contribution to Government Revenues. Other macro-economic benefits are the revenues accruing to Government (income and other taxes). On the basis of the present taxation system, during the next five years, Gecamines is expected to pay about US$0.9 billion in direct and indirect taxes, (or US$180 million annually), of which US$0.4 billion in export and corporate taxes and US$0.5 billion in other taxes including import duties. Substantial additional benefits could accrue to the Government from dividend payments.

84. Institution Building. As a part of the institution building effort, training programs would contribute to strengthen the company. These unquantifiable benefits would add to the attractiveness of the Project. Finally, the Bank would work closely with Gecamines to help prepare a sound investment program for its long-term development.
Risks

85. The technical risks are small. The rehabilitation and replacement component is relatively straightforward in terms of technical design and operation; it forms part of Gecamines' recurrent investment needs and has taken adequately into account on-going operating arrangements.

86. While Gecamines is not expected to encounter difficulties in marketing its copper production, it cannot be excluded that copper prices decline more than has been assumed and that cobalt prices and sales remain depressed. Future copper price projections are subject to considerable uncertainty, and while most experts expect some improvement, there remains a non-negligeable probability (in the 20-25 percent range) that prices remain below the low copper price scenario assumed in the Project. The Project is not expected to influence the general level of copper prices, as Gecamines would maintain its present share of around 7 percent of the international copper market. The risk on cobalt sales is more controllable by Gecamines and a prudent marketing strategy should minimize this risk. Given Gecamines' competitive cost structure and generally high profitability, risks linked to future prices are not considered a major problem for Project implementation.

87. One of the main financial risks for Gecamines is the resumption of undue government interferences in marketing, introduction of additional tax burdens, and demands for transfer of maximum amounts of net profits as dividends without due regard to the company's cash needs for operations and investment financing. In order to minimize this risk, Government would maintain with Gecamines clear financial relations, governed by the existing tax regime and a suitable dividend policy. In order to provide an adequate base for assessment of its financial needs, the company would revise its financial projections annually and submit them to the Government and the Bank for review. The risk of insufficient access to foreign exchange is low because of the right of Gecamines to retain 45 percent of its sales revenues from metals in foreign currency to service its debt and cover its foreign exchange requirements for operations and investments. Lastly, the risk of inefficient purchasing activities would be minimized through close monitoring of SONATRAD's performance and the provision of technical assistance to Gecamines. With respect to copper prices, despite the uncertain outcome for the next ten years, Gecamines' financial situation is expected to remain sound because of decreasing unit production costs and reductions in the costs of refining and marketing.

88. Finally, the Project presents some managerial risk. The success of the rehabilitation program depends heavily on the management whose task is to implement the Project successfully and correct past practices that had led to a deteriorating situation. In order to assure effective management, the Bank would be consulted before any changes in the organization is made. Moreover, the training program should improve technical skills of local employees and thus lay the basis for improvement, and for the successful introduction of cost effective production methods. Finally, the Project's success depends heavily on the Government's and Gecamines' commitment to transform the agreed upon long-term objectives in a consistent action program. Gecamines would prepare during the Project implementation period, and submit by December 1989 a draft of its next Five-year investment program for the period 1991-95, including the principal features of its program after 1995.
PART V—RECOMMENDATION

89. I am satisfied that the proposed IBRD Loan would comply with the Articles of Agreement of the International Bank for Reconstruction and Development. I recommend that the Executive Directors approve the recommended IBRD Loan.

A. W. Clausen
President

Attachments

Washington, D. C.
March 27, 1986
<table>
<thead>
<tr>
<th>AREA (THOUSAND SQ. KM)</th>
<th>1966/7</th>
<th>1970/71</th>
<th>1972/73</th>
</tr>
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<tbody>
<tr>
<td>TOTAL</td>
<td>2345.4</td>
<td>2345.4</td>
<td>2345.4</td>
</tr>
<tr>
<td>AGRICULTURAL</td>
<td>146.4</td>
<td>151.2</td>
<td>156.3</td>
</tr>
</tbody>
</table>

**PER CAPITA (USD):**

- GDP: 2345.4
- CPI: 2345.4

**ENERGY CONSUMPTION PER CAPITA (KILOGRAMS OF OIL EQUIVALENT):**

- 65.0
- 80.0
- 82.0

**POPULATION AND VITAL STATISTICS:**

| POPULATION, M8-DECEMBER (THOUSANDS) | 17734.0 | 2143.0 | 2967.0  |
| TOTAL POPULATION (X OF TOTAL)       | 15.7    | 21.6    | 20.1    |

**POPULATION PROJECTIONS:**

- POPULATION IN YEAR 2000 (MILL): 145.0
- STATIONARY POPULATION (MILL): 1.9

**POPULATION DENSITY:**

- PER SQ. KM: 7.6
- PER SQ. KM HL. AGRI.: 121.3

**POPULATION AGE STRUCTURE (%):**

<table>
<thead>
<tr>
<th>AGE GROUP</th>
<th>0-14 YRS</th>
<th>15-64</th>
<th>65 AND ABOVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>2.2</td>
<td>2.8</td>
<td>2.9</td>
</tr>
<tr>
<td>URBAN</td>
<td>3.2</td>
<td>7.6</td>
<td>5.1</td>
</tr>
</tbody>
</table>

**POPUATION GROWTH RATE (%):**

- TOTAL: 2.9
- URBAN: 2.9

**CRUDE BIRTH RATE (PER THOUS):**

- 46.1
- 47.8

**CRUDE DEATH RATE (PER THOUS):**

- 24.3
- 20.8

**GROSS REPRODUCTION RATE:**

- 2.9
- 3.3

**FAMILY PLANNING ACCEPTORS, ANNUAL (THOUS):**

- USERS (X OF MARRIED WOMEN)

**FOOD AND NUTRITION:**

<table>
<thead>
<tr>
<th>INDEX OF FOOD PROD. PER CAPITA (1964-7=100)</th>
<th>101.0</th>
<th>101.0</th>
<th>85.0</th>
<th>82.3</th>
</tr>
</thead>
</table>

**PER CAPITA SUPPLY OF CALORIES (K OF REQUIREMENTS):**

- 94.0
- 101.0
- 102.0

**PROTEIN (GRAMS PER DAY):**

- 34.0
- 38.0
- 35.0

**OF WHICH ANIMAL AND PULSE:**

- 13.0
- 13.0
- 10.0

**CHILD (AGES 1-4) DEATH RATE:**

- 32.8
- 27.2
- 20.0

**HEALTH:**

<table>
<thead>
<tr>
<th>LIFE EXPECT. AT BIRTH (YEARS)</th>
<th>42.9</th>
<th>45.3</th>
<th>50.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFANT MORT. RATE (PER THOUS)</td>
<td>150.0</td>
<td>132.0</td>
<td>106.0</td>
</tr>
</tbody>
</table>

**ACCESS TO SAFE WATER (X POP):**

- TOTAL: 11.0
- URBAN: 53.0
- RURAL: 4.0

**ACCESS TO EXCRETA DISPOSAL (% OF POPULATION):**

- TOTAL: 5.0
- URBAN: 5.0
- RURAL: 5.0

**POPULATION PER PHYSICIAN:**

- 79620.0
- 20240.0
- 12940.0

**POP. PER NURSING PERSON:**

- 3510.0
- 2290.0
- 1810.0

**POP. PER HOSPITAL BED:**

- TOTAL: 230.0
- URBAN: 60.0
- RURAL: 770.0

**ADMISSIONS PER HOSPITAL BED:**

- TOTAL: 27.2

**HOUSING:**

<table>
<thead>
<tr>
<th>AVERAGE SIZE OF HOUSEHOLD</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
</tr>
<tr>
<td>URBAN</td>
</tr>
<tr>
<td>RURAL</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AVERAGE NO. OF PERSONS/ROOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
</tr>
<tr>
<td>URBAN</td>
</tr>
<tr>
<td>RURAL</td>
</tr>
</tbody>
</table>

**PERCENTAGE OF DWELLINGS WITH ELECT:**

- TOTAL: 27.2
- URBAN: 27.2
- RURAL: 27.2
## ANNEX I

### TABLE 2

<table>
<thead>
<tr>
<th>Sub-Title</th>
<th>Middle Income</th>
<th>South of Sahara</th>
<th>Low Income Africa</th>
<th>Most Recent Estimate</th>
<th>Reference Groups (Weighted Average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUCATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted Enrollment Ratios</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary: Total</td>
<td>60.0</td>
<td>88.0</td>
<td>90.0</td>
<td>67.8</td>
<td>95.7</td>
</tr>
<tr>
<td>Male</td>
<td>58.0</td>
<td>110.0</td>
<td>104.0</td>
<td>77.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Female</td>
<td>62.0</td>
<td>86.0</td>
<td>79.0</td>
<td>54.9</td>
<td>63.2</td>
</tr>
<tr>
<td>Secondary: Total</td>
<td>3.0</td>
<td>9.0</td>
<td>23.0</td>
<td>13.5</td>
<td>17.3</td>
</tr>
<tr>
<td>Male</td>
<td>4.0</td>
<td>13.0</td>
<td>35.0</td>
<td>17.9</td>
<td>25.0</td>
</tr>
<tr>
<td>Female</td>
<td>1.0</td>
<td>4.0</td>
<td>13.0</td>
<td>9.1</td>
<td>14.8</td>
</tr>
<tr>
<td>Vocational (% of secondary)</td>
<td>26.5</td>
<td>9.6</td>
<td>10.0</td>
<td>13.2</td>
<td>3.9</td>
</tr>
<tr>
<td>Pupil-Teacher Ratio</td>
<td>Primary</td>
<td>40.0</td>
<td>42.0</td>
<td>30.0</td>
<td>44.9</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>20.0</td>
<td>20.0</td>
<td>21.0</td>
<td>27.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>25.5</td>
</tr>
<tr>
<td>CONSUMPTION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passenger Cars/Thousand Pop</td>
<td>2.5</td>
<td>3.0</td>
<td></td>
<td>3.6</td>
<td>20.8</td>
</tr>
<tr>
<td>Radio Receivers/Thousand Pop</td>
<td>..</td>
<td>29.1</td>
<td>86.0</td>
<td>55.9</td>
<td>107.0</td>
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<tr>
<td>TV Receivers/Thousand Pop</td>
<td>..</td>
<td>0.3</td>
<td>0.4</td>
<td>2.0</td>
<td>14.0</td>
</tr>
<tr>
<td>Population (&quot;Daily General Intelect&quot;) Circulation</td>
<td>..</td>
<td>1.2</td>
<td>9.2</td>
<td>1.6</td>
<td>5.0</td>
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<tr>
<td>Pupil-Teacher Ratio</td>
<td>Cinema Annual Attendance/Capita</td>
<td>.01</td>
<td></td>
<td>0.1</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Llabor Force</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Labor Force (thous)</td>
<td>8216.0</td>
<td>9423.0</td>
<td>12615.0</td>
<td>.</td>
<td></td>
</tr>
<tr>
<td>Female (percent)</td>
<td>46.4</td>
<td>44.5</td>
<td>42.2</td>
<td>34.2</td>
<td>36.2</td>
</tr>
<tr>
<td>Agriculture (percent)</td>
<td>83.0</td>
<td>79.0</td>
<td>73.0</td>
<td>77.5</td>
<td>54.5</td>
</tr>
<tr>
<td>Industry (percent)</td>
<td>9.0</td>
<td>11.0</td>
<td>13.0</td>
<td>9.7</td>
<td>15.3</td>
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<tr>
<td>Participation Rate (Percent)</td>
<td>48.3</td>
<td>43.7</td>
<td>39.9</td>
<td>39.3</td>
<td>36.8</td>
</tr>
<tr>
<td>Total</td>
<td>57.9</td>
<td>48.8</td>
<td>47.3</td>
<td>50.9</td>
<td>47.1</td>
</tr>
<tr>
<td>Female</td>
<td>41.2</td>
<td>38.0</td>
<td>35.4</td>
<td>28.1</td>
<td>27.2</td>
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<tr>
<td>ECONOMIC DEPENDENCY RATIO</td>
<td>1.0</td>
<td>1.1</td>
<td>1.2</td>
<td>1.3</td>
<td>1.3</td>
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<tr>
<td>Income Distribution</td>
<td>Percent of Private Income</td>
<td>..</td>
<td></td>
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<tr>
<td>Received by Highest 5% of Households</td>
<td>..</td>
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<td>Highest 10% of Households</td>
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<td>Lowest 20% of Households</td>
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<td>Lowest 40% of Households</td>
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<td>Poverty Target Groups</td>
<td>Estimated Absolute Poverty Income Level (US$ per capita)</td>
<td>..</td>
<td>165.5</td>
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<td>590.7</td>
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<tr>
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<td>..</td>
<td>..</td>
<td>95.0</td>
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<tr>
<td>Rural</td>
<td>..</td>
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<tr>
<td>Estimated Relative Poverty Income Level (US$ per capita)</td>
<td>..</td>
<td>..</td>
<td>113.1</td>
<td>..</td>
<td>545.6</td>
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<td>..</td>
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<td>..</td>
<td>201.1</td>
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<td>..</td>
<td>..</td>
<td>67.6</td>
<td>201.1</td>
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<td>Estimated Pop. Below Absolute Poverty Income Level (%)</td>
<td>..</td>
<td>..</td>
<td>36.6</td>
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<tr>
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<tr>
<td>Rural</td>
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<td>..</td>
<td>..</td>
<td>61.8</td>
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</tbody>
</table>

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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.


JUNE, 1985
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 "High Income 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.

AREA (thousand sq.km.)
- Total—Total surface area comprising land area and inland waters; 1960, 1970 and 1983 data.
- Agricultural—Estimate of agricultural area used temporarily or permanently for crops, pastures, market and kitchen gardens or to lie fallow; 1960, 1970 and 1982 data.

GNP PER CAPITA (US$)—GNP per capita estimates at current market prices, calculated by same conversion method as World Bank Atlas (1981-83 basis); 1983 data.

ENERGY CONSUMPTION PER CAPITA—Annual apparent consumption of commercial primary energy (coal and lignite, petroleum, natural gas and hydro-, nuclear and geothermal electricity) in kilograms of oil equivalent per capita; 1960, 1970, and 1982 data.

POPULATION AND VITAL STATISTICS
- Total Population, Mid-Year (thousands)—As of July 1; 1960, 1970, and 1983 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 1983 data.
- Population Projections
  - Population in year 2000—The projection of population for 2000, made for each economy separately. Starting with information on total population by age and sex, fertility rates, mortality rates, and international migration in the base year 1980, these parameters were projected at five-year intervals on the basis of generalized assumptions until the population became stationary.
  - Stationary population—Is one in which age- and sex-specific mortality rates have not changed over a long period, while age-specific fertility rates have simultaneously remained at replacement level (net reproduction rate = 1). In such a population, the birth rate is constant and equal to the death rate, the age structure is also constant, and the growth rate is zero. 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.
  - Population Momentum—Is the tendency for population growth to continue beyond the time that replacement-level fertility has been achieved; that is, even after the net reproduction rate has reached unity. The momentum of a population in the year \( t \) is measured as a ratio of the ultimate stationary population to the population in the year \( t \), given the assumption that fertility remains at replacement level from year \( t \) onward, 1985 data.
- Population Density
  - Per sq.km.—Mid-year population per square kilometer (100 hectares) of total area; 1960, 1970, and 1983 data.
  - Per sq.km. agricultural land—Computed as above for agricultural land only, 1960, 1970, and 1982 data.
- Population Age Structure (percent)—Children (0-14 years), working age (15-64 years), and retired (65 years and over) as percentage of mid-year population; 1960, 1970, and 1983 data.
- Population Growth Rate (percent)—total—Annual growth rates of total mid-year population for 1950-60, 1960-70, and 1970-83.
- Population Growth Rate (percent)—urban—Annual growth rates of urban population for 1950-60, 1960-70, and 1970-83 data.
- Crude Birth Rate (per thousand)—Number of live births in the year per thousand of mid-year population; 1960, 1970, and 1983 data.
- Crude Death Rate (per thousand)—Number of deaths in the year per thousand of mid-year population; 1960, 1970, and 1983 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 1983.
- 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)—The percentage of married women of child-bearing age who are practicing or whose husbands are practicing any form of contraception. Women of child-bearing age are generally women aged 15-49, although for some countries contraceptive usage is measured for other age groups.

FOOD AND NUTRITION
- Index of Food Production Per Capita (1969-71 - 100)—Index of per capita annual production of all food commodities. Production excludes animal feed and seed for agriculture. Food commodities include primary commodities (e.g. sugarcane instead of sugar) which are edible and contain nutrients (e.g. coffee and tea are excluded), they comprise cereals, root crops, pulses, oil seeds, vegetables, fruits, nuts, sugarcane and sugar beets, livestock, and livestock products. Aggregate production of each country is based on national average producer price weights; 1961-65, 1970, and 1982 data.
- Per Capita Supply of Calories (percent of requirements)—Computed from calorie 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 for use in agriculture, 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, 1970 and 1982 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 allowances 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 Supply; 1961, 1970 and 1982 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) Death Rate (per thousand)—Number of deaths of children aged 1-4 years per thousand children in the same age group in a given year. For most developing countries data derived from life tables, 1960, 1970 and 1983 data.

HEALTH
- Life Expectancy at Birth (years)—Number of years a newborn infant would live if prevailing patterns of mortality for all people
Access to Safe Water (percent of population)—total, urban, and rural—Number of people (total, urban, and rural) served by 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 waterborne systems or the use of pit privies and similar installations.

Population per Physician—Population divided by number of practising physicians qualified from a medical school at university level.

Population per Nursing Person—Population divided by number of practising male and female graduate nurses, assistant nurses, practical nurses and nursing auxiliaries.

Population per Hospital Bed—total, urban, and rural—Population (total, urban, and rural) divided by their respective number of hospital beds available in public and private, general and specialized hospitals 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.

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 quarters 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.

Percentage of Dwellings with Electricity—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. While many countries consider primary school age to be 6-11 years, others do not. The differences in country practices in the ages and duration of school are reflected in the ratios given. For some countries with universal education, gross enrollment may exceed 100 percent since some pupils are below or above the country’s standard primary-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.

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 un-licensed 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 householders, students, etc., covering population of all ages. Definitions in various countries are not comparable; 1960, 1970 and 1983 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 1980 data.

Industry (percent)—Labor force in mining, construction, manufacturing and electricity, water and gas as percentage of total labor force; 1960, 1970 and 1980 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 1983 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 working age population (those aged 15-64).

INCOME DISTRIBUTION

Percentage of Total Disposable Income (both in cash and kind)—According to percentile groups of households ranked by total household income.

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 (USS 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 (USS per capita)—urban and 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.”

Comparative Analysis and Data Division
Economic Analysis and Projections Department
June 1985
## Zaire Economic Indicators

### National Accounts

<table>
<thead>
<tr>
<th>Category</th>
<th>1984 US $ Millions</th>
<th>1984 As percent of GDP</th>
<th>Annual Growth Rates (%) at 1980 prices</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP Market Prices</td>
<td>4982.2</td>
<td>100.0</td>
<td>0.8</td>
</tr>
<tr>
<td>GDP Factor Cost</td>
<td>4872.6</td>
<td>97.8</td>
<td>1.4</td>
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<tr>
<td>Agriculture</td>
<td>1556.4</td>
<td>32.0</td>
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<tr>
<td>Industry</td>
<td>1755.0</td>
<td>36.0</td>
<td>4.1</td>
</tr>
<tr>
<td>Other</td>
<td>1567.1</td>
<td>32.0</td>
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<tr>
<td>Net Export of GNFS</td>
<td>8.2</td>
<td>0.2</td>
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<tr>
<td>Import of GNFS</td>
<td>2831.8</td>
<td>56.9</td>
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<td>Export of GNFS</td>
<td>2840.0</td>
<td>41.0</td>
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<td>Gross Fixed Investment</td>
<td>811.6</td>
<td>16.2</td>
<td>6.6</td>
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<tr>
<td>Consumption</td>
<td>4182.4</td>
<td>77.6</td>
<td>3.6</td>
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<tr>
<td>Gross Domestic Savings</td>
<td>819.6</td>
<td>22.5</td>
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<tr>
<td>Gross National Savings</td>
<td>483.3</td>
<td>12.6</td>
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### Public Finance (Central Government)

<table>
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<tr>
<th>Category</th>
<th>1983 Zaire Millions</th>
<th>1984 Zaire Millions</th>
<th>1985 Zaire Millions</th>
<th>1983 % of GDP</th>
<th>1984 % of GDP</th>
<th>1985 % of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current revenues</td>
<td>10998</td>
<td>26994</td>
<td>41350</td>
<td>11.4</td>
<td>14.4</td>
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<tr>
<td>Current expenditures</td>
<td>11459</td>
<td>28133</td>
<td>37064</td>
<td>11.9</td>
<td>14.6</td>
<td>15.7</td>
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<tr>
<td>Current deficit</td>
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<td>-199</td>
<td>3690</td>
<td>-0.6</td>
<td>-0.1</td>
<td>1.5</td>
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<td>Capital expenditures</td>
<td>847</td>
<td>1019</td>
<td>956</td>
<td>-1.1</td>
<td>-0.7</td>
<td>1.1</td>
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<tr>
<td>Overall deficit</td>
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<td>-1218</td>
<td>2740</td>
<td>-1.1</td>
<td>-0.7</td>
<td>1.1</td>
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### Money, Credit and Prices

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<tbody>
<tr>
<td>Money and Quasi-money</td>
<td>3387.3</td>
<td>4644.9</td>
<td>8857.9</td>
<td>14002</td>
<td>18792</td>
<td>23925</td>
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<td>Bank credit to public sector</td>
<td>2329.4</td>
<td>3763.6</td>
<td>7880.0</td>
<td>10252</td>
<td>13396</td>
<td>14847</td>
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<td>Bank credit to private sect.</td>
<td>1061.1</td>
<td>1435.4</td>
<td>2868.0</td>
<td>3897</td>
<td>5947</td>
<td>9087</td>
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<td>Money &amp; Quasi-money (% GDP)</td>
<td>11.7</td>
<td>11.7</td>
<td>16.5</td>
<td>14.5</td>
<td>18.4</td>
<td>16.9</td>
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<tr>
<td>Consumer Price Index 1975=100</td>
<td>1313.3</td>
<td>1813.1</td>
<td>2487.9</td>
<td>4375.3</td>
<td>6654.0</td>
<td>8651.3</td>
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### Annual Percentage Changes

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<th>1982</th>
<th>1984</th>
<th>1985</th>
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<tr>
<td>Consumer Price Index</td>
<td>38.1</td>
<td>37.2</td>
<td>52.1</td>
</tr>
<tr>
<td>Bank credit to public sec.</td>
<td>62.4</td>
<td>88.6</td>
<td>82.6</td>
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<tr>
<td>Bank credit to private sec.</td>
<td>38.6</td>
<td>86.7</td>
<td>62.9</td>
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**Note:** All conversions to dollars in this table are at the average exchange rate prevailing in the period covered.
### ZAIRE: Economic Indicators

#### BALANCE OF PAYMENTS

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<tbody>
<tr>
<td>Exports of Goods &amp; Services of which Merchandise (FOB)</td>
<td>2371.4</td>
<td>1772.3</td>
<td>1668.2</td>
<td>1775.6</td>
<td>2006.0</td>
<td>2006.3</td>
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<tr>
<td>Imports of Goods &amp; Services of which Merchandise (FOB)</td>
<td>2465.9</td>
<td>2278.1</td>
<td>2085.8</td>
<td>1941.3</td>
<td>1877.8</td>
<td>1886.9</td>
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<tr>
<td>Private transfers (net)</td>
<td>-79.4</td>
<td>-3.6</td>
<td>-8.8</td>
<td>3.2</td>
<td>-91.2</td>
<td>-61.1</td>
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<tr>
<td>Current Account Balance (before rescheduling)</td>
<td>-291.5</td>
<td>-683.7</td>
<td>-598.6</td>
<td>-349.6</td>
<td>-349.5</td>
<td>-300.3</td>
<td></td>
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<tr>
<td></td>
<td>(after rescheduling)</td>
<td>-291.5</td>
<td>-683.7</td>
<td>-598.6</td>
<td>-349.6</td>
<td>-349.5</td>
<td>-300.3</td>
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<tr>
<td>Official Grants (net)</td>
<td>260.8</td>
<td>247.6</td>
<td>160.1</td>
<td>173.2</td>
<td>174.3</td>
<td>169.2</td>
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<tr>
<td>Public Capital (net)</td>
<td>-22.1</td>
<td>-106.6</td>
<td>-178.8</td>
<td>-196.7</td>
<td>-256.2</td>
<td>-296.3</td>
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<td>Priv. Capital (net), Err. &amp; Omits.</td>
<td>59.6</td>
<td>31.0</td>
<td>91.6</td>
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<td>102.6</td>
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<tr>
<td>SDR Allocation</td>
<td>26.9</td>
<td>18.9</td>
<td>17.7</td>
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<td>8.6</td>
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<tr>
<td>Increase (-) in Int. Reserves</td>
<td>-48.2</td>
<td>113.2</td>
<td>36.3</td>
<td>-8.6</td>
<td>33.8</td>
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<tr>
<td>Reduction (-) in Arrears</td>
<td>-1347.1</td>
<td>129.7</td>
<td>380.9</td>
<td>-613.1</td>
<td>-76.9</td>
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<tr>
<td>Other Financing</td>
<td>1529.5</td>
<td>478.7</td>
<td>244.8</td>
<td>1062.9</td>
<td>584.3</td>
<td>477.6</td>
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<tr>
<td>of which Debt Rescheduling</td>
<td>1812.6</td>
<td>371.4</td>
<td>160.1</td>
<td>971.7</td>
<td>477.7</td>
<td>411.4</td>
<td></td>
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</table>

#### EXCHANGE RATE

<table>
<thead>
<tr>
<th>Date</th>
<th>Zaires/US$</th>
<th>AVG. EXCH. RATE (Z/US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 19, 1981-Sept. 12, 1983</td>
<td>5.6</td>
<td>1982</td>
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<tr>
<td>February 24, 1984</td>
<td>33.0</td>
<td>1984</td>
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<td></td>
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#### EXTERNAL DEBT (Outstanding Dec. 1985, Mill. US$)

Medium Long Term: 5388.

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Debt service ratio</td>
<td>22.7</td>
<td>21.9</td>
<td>13.8</td>
<td>14.3</td>
<td>26.4</td>
<td>27.7</td>
</tr>
</tbody>
</table>

#### MERCHANDISE EXPORT (Mill. US$)

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>1832.5</td>
<td>753.0</td>
<td>790.7</td>
<td>781.2</td>
<td>675.6</td>
<td>597.0</td>
</tr>
<tr>
<td>Cobalt</td>
<td>377.3</td>
<td>168.3</td>
<td>192.8</td>
<td>121.4</td>
<td>225.6</td>
<td>249.0</td>
</tr>
<tr>
<td>Dimonds</td>
<td>113.6</td>
<td>77.2</td>
<td>76.2</td>
<td>138.9</td>
<td>220.4</td>
<td>222.0</td>
</tr>
<tr>
<td>Other Metals</td>
<td>113.1</td>
<td>115.7</td>
<td>84.2</td>
<td>127.2</td>
<td>186.6</td>
<td>76.0</td>
</tr>
<tr>
<td>Coffee</td>
<td>163.1</td>
<td>111.8</td>
<td>185.0</td>
<td>116.5</td>
<td>212.2</td>
<td>186.0</td>
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<tr>
<td>Crude oil</td>
<td>225.1</td>
<td>273.5</td>
<td>274.3</td>
<td>230.5</td>
<td>317.9</td>
<td>389.0</td>
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<tr>
<td>Other</td>
<td>157.8</td>
<td>112.9</td>
<td>127.2</td>
<td>116.0</td>
<td>128.2</td>
<td>148.0</td>
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<tr>
<td>Marketing Cost &amp; Adjustments</td>
<td>-38.9</td>
<td>-186.2</td>
<td>-163.6</td>
<td>-40.8</td>
<td>-2.1</td>
<td>6.0</td>
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<td>Total exports FOB</td>
<td>2143.8</td>
<td>1499.8</td>
<td>1478.8</td>
<td>1597.3</td>
<td>1893.2</td>
<td>1889.0</td>
</tr>
</tbody>
</table>

[1] On September 12, 1983 Zaire introduced a transitional dual exchange rate regime consisting of an official rate and a free market rate, shown in parentheses above. The two rates were unified on February 24, 1984; henceforth the rate is fluctuating and its market price determined in the interbank market were Commercial Banks can buy and sell foreign exchange and the Bank of Zaire can intervene to regulate the market.
### Status of Bank Group Operations in Zaire

**A. Statement of Bank Loans and IDA Credits (As of September 30, 1985)**

<table>
<thead>
<tr>
<th>Loan or Credit Number</th>
<th>Year</th>
<th>Borrower</th>
<th>Project Description</th>
<th>Amount in US$ Million (less cancellations)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Bank</td>
</tr>
<tr>
<td>Prior to June 1960</td>
<td></td>
<td></td>
<td>Congo &amp; Otraco</td>
<td>91.58</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Transport</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Infrastructure</td>
<td></td>
</tr>
<tr>
<td>One Loan Fully Disbursed</td>
<td>100.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sixteen Credits Fully Disbursed</td>
<td>200.34</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **796** 1978 ZAIRE Oil Palm 9.00 5.67
- **902** 1979 ZAIRE Railways 20.00 4.87
- **958** 1980 ZAIRE Fifth Dev. Finance 18.50 2.81
- **1040** 1980 ZAIRE Smallholder Maize 11.00 5.81
- **1069** 1981 ZAIRE Kiliu Ngongo Sugar 26.40 2.80
- **1152** 1981 ZAIRE Kwango-Kiliu Technical Assistance 2.90 0.67
- **1180** 1982 ZAIRE ONATRA Modernization 26.00 14.35
- **1224** 1982 ZAIRE Shaba Power System Rehabilitation 19.00 8.89
- **1241** 1982 ZAIRE Water Supply II 18.00 6.11
- **1244** 1982 ZAIRE Agriculture T.A. 5.00 2.64
- **1264** 1982 ZAIRE Second Cotton 11.30 10.41
- **1273** 1982 ZAIRE Sixth DFC 21.50 7.90
- **1290** 1982 ZAIRE Highway V 43.50 13.77
- **1325** 1983 ZAIRE North East Rural Development 13.00 10.17
- **1335** 1983 ZAIRE Ports Rehabilitation 25.00 20.62
- **1336** 1983 ZAIRE Gecamines T.A. 7.00 4.90
- **1409** 1983 ZAIRE Petroleum Sector T.A. 4.50 3.60
- **1421** 1984 ZAIRE Ruzizi II Hydroelectric 15.00 11.97
- **1475** 1984 ZAIRE Railways II 26.00 26.00
- **1492** 1984 ZAIRE Seventh DFC 36.00 32.14
- **1519** 1985 ZAIRE Education Technical Assistance 9.00 6.89
- **1540** 1985 ZAIRE Lulus Agricultural Development 12.50 12.50
- **1609 3/** 1985 ZAIRE Seeds 14.90 14.90

Total (less cancellations): 191.58 594.82 251.23
- of which has been repaid 140.12 2.85
Total now outstanding: 51.46 591.97

Amount sold: 54.47
- of which has been repaid 54.47
Total now held by Bank and IDA: 51.46 591.97
Total Undisbursed: 0 230.39 230.39

1/ US dollar amounts for credits 1039-ZR and onwards are computed at the rate of Credit negotiation dates.
2/ Guaranteed by the Kingdom of Belgium.
3/ Signed but not yet effective.
### B. **STATEMENT OF IFC INVESTMENTS (As of September 30, 1985)**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Obligor</th>
<th>Type of Business</th>
<th>Amount in US$ Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Loan</td>
</tr>
<tr>
<td>1970</td>
<td>Société Financière de Développement (SOFIDE)</td>
<td>DFC</td>
<td>-</td>
</tr>
<tr>
<td>1984</td>
<td>Société Financière de Développement (SOFIDE)</td>
<td>DFC</td>
<td>-</td>
</tr>
<tr>
<td>1985</td>
<td>Société Textile de de Kisangani</td>
<td>Textile Company</td>
<td>6.3</td>
</tr>
<tr>
<td>1985</td>
<td>Grand Hotels du Zaire</td>
<td>Hotel Company</td>
<td>15.0</td>
</tr>
<tr>
<td>1985</td>
<td>(Company in formation)</td>
<td>Cotton Farming</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td><strong>Total gross commitments</strong></td>
<td></td>
<td><strong>21.3</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Less: - repayments</strong></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- undisbursed</td>
<td>18.3</td>
</tr>
<tr>
<td></td>
<td><strong>Held by IFC</strong></td>
<td></td>
<td>3.0</td>
</tr>
</tbody>
</table>
SUPPLEMENTARY PROJECT DATA SHEET

Section I: Timetable of Key Events

(a) Identification and Preparation: During supervision of the Gecamines Technical Assistance Project (Credit 1336-ZR)

(b) Appraisal Mission: May 1985

(c) Cofinancing Meetings: September 1985 and March 1986

(d) Negotiations: March 1986

(e) Planned Effectiveness Date: August 1986

Section II: Special Project Implementation Actions

Signing of and adherence to a Marketing Agreement between Gecamines/Exploitation and Gecamines/Commerciale (para. 46) and a Purchasing agreement between Gecamines/Exploitation and SONATRAD (para. 49).

Section III: Special Conditions

(a) Government would consult the Bank prior to any decision affecting the organization of the Gecamines Group (para. 34) or Gecamines' tax regime (para. 42);

(b) Government would allow Gecamines to retain 45 percent of its foreign exchange earnings (para. 44);

(c) Government and Gecamines would submit to the Bank an appropriate policy for dividends distribution by December 31, 1986 (para. 45); their financial relations would be solely governed by the existing tax regime and dividend policy; and no sale would take place without prompt and proper compensation (para. 45);

(d) Gecamines would submit to the Bank: (i) by December 31, 1986, a comprehensive training program for supervisory staff; and (ii) by December 31, 1986, a policy for gradual wage increases and decreases in fringe benefits (paras. 37, 38);
(e) Gecamines would, by December 31, 1986, submit a plan to reorganize its mine planning in all mining divisions, especially Kolwezi's open pits (para. 49);

(f) Gecamines would by December 31, 1986 submit a program for cost accounting, cost control, and cost reduction by production center (para. 41);

(g) Gecamines would: (i) prepare every year (a) 5-year financial projections, including its foreign exchange and local currency requirements, and (b) foreign exchange and local currency budgets on an annual basis; (ii) in any given year during the Project's period, not make capital investment in addition to the already approved Investment Program, exceeding in aggregate US$15 million, without prior Bank approval; and (iii) maintain a current ratio of at least 1.3 and a ratio of debt (excluding short-term maturities thereof) to equity of not more than 40:60 (para. 78);

(h) Gecamines would, at all times, maintain a Marketing Agreement with Gecamines/Commerciale giving the production company full ownership of its mineral production up to the final sale, full control over its sales receipts, and increased influence in defining the strategy for marketing its production (paras. 31 and 46); and commercial operations would be externally audited quarterly (para. 46);

(i) Gecamines would, at all times, maintain a Purchasing Agreement with SONATRAD defining the companies' respective responsibilities this agreement would not be modified without the Bank's prior approval (para. 49); and purchasing operations would be externally audited quarterly (para. 49); and

(j) Gecamines/Commerciale would market Gecamines's products in accordance with regular commercial practice, on the basis of arm's length arrangements, ensuring that, at no time, Gecamines/Exploitation will receive less than full ex-works commercial price (subject to normal trade discounts) for its products (para. 46); and marketing operations would be externally audited half-yearly (para. 46).

Conditions of Effectiveness

(a) Effectiveness of the loans of the co-financiers (EEC, EIB, African Development Bank, and CCCE); and

(b) Effectiveness of satisfactory repayment arrangements (para. 71).
## Geocamines - Summary of Financial Performance, 1978-84

*(in Z Million)*

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Production (000 tons)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copper</td>
<td>391.3</td>
<td>369.8</td>
<td>425.7</td>
<td>468.2</td>
<td>466.4</td>
<td>465.8</td>
<td>464.0</td>
</tr>
<tr>
<td>Cobalt</td>
<td>13.1</td>
<td>14.0</td>
<td>14.5</td>
<td>11.1</td>
<td>5.6</td>
<td>5.4</td>
<td>9.1</td>
</tr>
<tr>
<td>Zinc</td>
<td>43.5</td>
<td>43.7</td>
<td>43.8</td>
<td>57.6</td>
<td>64.4</td>
<td>62.5</td>
<td>66.1</td>
</tr>
<tr>
<td><strong>Income Statement</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copper Revenues</td>
<td>n.a.</td>
<td>959</td>
<td>2,473</td>
<td>3,612</td>
<td>4,592</td>
<td>7,791</td>
<td>22,021</td>
</tr>
<tr>
<td>Cobalt Revenues</td>
<td>n.a.</td>
<td>1,313</td>
<td>1,206</td>
<td>2,231</td>
<td>864</td>
<td>1,312</td>
<td>8,385</td>
</tr>
<tr>
<td>Other Metal Revenues</td>
<td>n.a.</td>
<td>165</td>
<td>159</td>
<td>441</td>
<td>550</td>
<td>953</td>
<td>2,169</td>
</tr>
<tr>
<td>Other Revenues</td>
<td>n.a.</td>
<td>147</td>
<td>275</td>
<td>350</td>
<td>237</td>
<td>590</td>
<td>1,483</td>
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<tr>
<td>Total Revenues</td>
<td>977</td>
<td>2,564</td>
<td>4,113</td>
<td>6,636</td>
<td>6,243</td>
<td>10,646</td>
<td>34,058</td>
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<td>Costs Before Depreciation and Taxes</td>
<td>569</td>
<td>914</td>
<td>2,380</td>
<td>3,790</td>
<td>6,222</td>
<td>5,898</td>
<td>21,659</td>
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<tr>
<td>Depreciation</td>
<td>99</td>
<td>137</td>
<td>231</td>
<td>137</td>
<td>1,355</td>
<td>4,128</td>
<td>6,089</td>
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<tr>
<td>Total Taxes Paid</td>
<td>204</td>
<td>1,321</td>
<td>811</td>
<td>1,167</td>
<td>500</td>
<td>2,049</td>
<td>5,192</td>
</tr>
<tr>
<td>Net Income After Taxes</td>
<td>145</td>
<td>212</td>
<td>691</td>
<td>1,542</td>
<td>(1,834)</td>
<td>(1,429)</td>
<td>1,508</td>
</tr>
<tr>
<td><strong>Cash-Flow Statement</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal Cash Generation</td>
<td>204</td>
<td>349</td>
<td>922</td>
<td>1,679</td>
<td>(479)</td>
<td>2,699</td>
<td>7,397</td>
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<tr>
<td>Capital Expenditures</td>
<td>95</td>
<td>229</td>
<td>493</td>
<td>368</td>
<td>117</td>
<td>935</td>
<td>2,140</td>
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<td><strong>Balance Sheet</strong></td>
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<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Assets</td>
<td>851</td>
<td>2,970</td>
<td>6,178</td>
<td>8,901</td>
<td>6,429</td>
<td>17,069</td>
<td>25,479</td>
</tr>
<tr>
<td>Net Fixed Assets</td>
<td>480</td>
<td>940</td>
<td>1,318</td>
<td>1,250</td>
<td>10,886</td>
<td>37,314</td>
<td>43,706</td>
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<tr>
<td>Other Assets</td>
<td>2</td>
<td>16</td>
<td>30</td>
<td>31</td>
<td>11</td>
<td>679</td>
<td>899</td>
</tr>
<tr>
<td>Total Assets</td>
<td>1,333</td>
<td>3,926</td>
<td>7,526</td>
<td>10,482</td>
<td>17,326</td>
<td>55,062</td>
<td>70,085</td>
</tr>
<tr>
<td><strong>Liabilities and Equity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Liabilities</td>
<td>352</td>
<td>2,033</td>
<td>2,499</td>
<td>4,193</td>
<td>3,263</td>
<td>9,044</td>
<td>9,744</td>
</tr>
<tr>
<td>Long-term Debt and Liabilities</td>
<td>205</td>
<td>361</td>
<td>751</td>
<td>1,113</td>
<td>1,064</td>
<td>4,581</td>
<td>5,886</td>
</tr>
<tr>
<td>Deferred Revenues</td>
<td>-</td>
<td>-</td>
<td>1,890</td>
<td>1,167</td>
<td>31</td>
<td>99</td>
<td>66</td>
</tr>
<tr>
<td>Provisions</td>
<td>97</td>
<td>160</td>
<td>196</td>
<td>249</td>
<td>564</td>
<td>2,030</td>
<td>4,122</td>
</tr>
<tr>
<td>Net Capital</td>
<td>679</td>
<td>1,372</td>
<td>2,190</td>
<td>3,760</td>
<td>12,404</td>
<td>39,308</td>
<td>50,267</td>
</tr>
<tr>
<td>Total Liabilities &amp; Equity</td>
<td>1,333</td>
<td>3,926</td>
<td>7,526</td>
<td>10,482</td>
<td>17,326</td>
<td>55,062</td>
<td>70,085</td>
</tr>
<tr>
<td><strong>Ratios</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exchange Rate (Z/US$)</td>
<td>0.9</td>
<td>1.7</td>
<td>2.8</td>
<td>4.4</td>
<td>5.8</td>
<td>12.9</td>
<td>36.1</td>
</tr>
<tr>
<td>Current Ratio</td>
<td>2.4</td>
<td>3.5</td>
<td>2.5</td>
<td>2.1</td>
<td>2.0</td>
<td>1.9</td>
<td>2.6</td>
</tr>
<tr>
<td>Quick Ratio</td>
<td>1.6</td>
<td>1.1</td>
<td>1.8</td>
<td>1.6</td>
<td>0.7</td>
<td>1.1</td>
<td>1.4</td>
</tr>
<tr>
<td>LT Debt/Equity Ratio</td>
<td>23.77</td>
<td>21.79</td>
<td>26.74</td>
<td>23.77</td>
<td>8.92</td>
<td>10.90</td>
<td>10.90</td>
</tr>
</tbody>
</table>

**Notes:**

(a) Starting in 1982, revenue accounting was changed, in accordance with the Geocamines-Soxacon Marketing Agreement.
(b) Starting in 1982, metal sales are accounted as inventories (as versus receivables before), in accordance with the Geocamines-Soxacon Marketing Agreement.
(c) Starting in 1982, special prefinancing arrangements were gradually eliminated.
(d) In 1982, Geocamines revalued its gross assets and depreciation allowance.

**Source:** Geocamines Annual Reports until 1983; Financial Statements 1984.
SYNOPSIS OF KEY POLICY ELEMENTS IN GECAMINES REHABILITATION PROGRAM

1. MANAGEMENT, PERSONNEL, AND ORGANIZATION IMPROVEMENTS

   Action Taken up to December 1985
   Action Planned
   Completion Date

(a) Stability of present organisation
   The Gecamines Group reorganised to a
   Holding with three subsidiaries in
   November 1984
   Consultation with Bank before
   change in organisational
   structure
   Continuous

(b) Creation of Strategic Planning Unit
   None
   Preparation of terms of reference
   January 1986
   Recruitment and organisation of Unit
   September 1986
   Design of comprehensive manpower
   development and training program
   December 1986
   Preparation of action plan to
   increase wages/salaries and
   reduce fringe benefits to establish
   more effective incentive system
   December 1986

(c) Manpower development and training
   Programs exist but need improvement
   Design of comprehensive manpower
   development and training program
   December 1986

(d) Change of balance between wages/salaries
    and fringe benefits
   None
   Preparation of action plan to
   increase wages/salaries and
   reduce fringe benefits to establish
   more effective incentive system
   December 1986

2. OPERATIONS AND MAINTENANCE

(a) Mining
   Re-organization of medium- and long-term mine planning
   None
   Preparation of a decentralisation
   schedule
   December 1986
   Technical assistance hired in 1984 but
   results not yet satisfactory
   Introduction of new truck dispatch
   and communication system;
   continuation of equipment
   maintenance training
   June 1987
   Studies under way
   Carrying out of projects with high
   priority:
   - preparation of investment
     schedule
   March 1986
   None
   Studies on mining optimisation in
   selected areas to be initiated
   December 1986
   Started in 1984 as part of investment
   program
   Revision of initial plans in
   accordance with results of studies
   on new mining equipment
   June 1986
   Minimum investments carried out 1983/84
   Review of current schedule for
   investments to make it consistent
   with mine planning requirements
   June 1986
   Investments to be contracted out, have
   not been defined
   Review of investment program in
   accordance with implementation
   capacity of Gecamines feasibility
   and engineering studies for future
   orientation at Kipushi mine and
   development of Tenke deposit
   December 1987
   Much of necessary work on future develop-
   ment (e.g., exploration) carried out but
   certain areas need to be further explored
   Kipushi: December 1987
   Tenke: December 1989
3. PROCUREMENT AND PURCHASING SYSTEM

(a) Definition of procurement responsibilities
SONATRAD, created in March 1965, does not have clear responsibilities
Contractual responsibilities of SONATRAD
Continuous and Cecamines in procurement defined in agreement acceptable to all, to be reviewed periodically

(b) Improvement of requisitioning/ordering system
None
Study of present procedure and recommendation on improvements
December 1986

4. FINANCIAL SYSTEMS

(a) Accounting system
Technical assistance hired in 1983
Complete reorganization to improve reliability of accounting data
December 1986

(b) Cost control
Introduced 1982/83 with consultants' assistance
Broadcasting of system over whole Company and linking to revised accounting system
December 1986

(c) Training of accounting staff
Technical assistance hired in 1983
Training seminars and on-the-job training for accounting staff linked to revised accounting system
Continuous

(d) Financial forecasting
Financial forecasting systems designed
Further refinement of system and use as management tool and for preparation 5-year financial forecast
Continuous

(e) Tax regime
New tax regime introduced in 1963
Stability of tax regime
Continuous

(f) Foreign exchange allocation
45% allocation effective since 1962
Stability of foreign exchange allocations
Continuous

(g) Dividend policy
None
Design of dividend policy to be introduced
December 1986

5. OVERHEAD COST REDUCTION

Social Services
Some social services transferred to subsidiaries on costs for some other services being reimbursed by Government
Clariication of Cecamines' role in social services through comprehensive review of their extent and costs
December 1986

6. COMMERCIAL ACTIVITIES

(a) Definition of commercial responsibilities
Cecamines/SOZACON Marketing Agreement of August 1982 gives Cecamines/Exploitation better control over commercial strategy
Marketing Agreement to continue to govern relations between companies of the Holding
Continuous

(b) Financial Autonomy
Marketing Agreement gives Cecamines/Exploitation full control over sales receipts
Maintenance of Cecamines' financial autonomy including Controller's and Treasurer's functions; limitation of payments to affiliate companies to clearly defined levels; monitoring through regular audits of financial transactions
Continuous

(c) Commercial practices
Better and uncompensated sales stopped in June 1986
Strict adherence to normal commercial practices monitored through regular commercial audits
Continuous

(d) Wires and cobalt markets
Options under review
Preparation of Action Plan for marketing of wires and their progressive replacement; development of marketing strategy for cobalt
June 1987
PROCUREMENT SCHEDULE

Allocation of IBRD Loan
(US$ million)

The proposed loan would finance 100 percent of foreign expenditures for all categories.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Loan Allocation</th>
<th>Amount</th>
<th>percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pit crushing and conveying facilities</td>
<td></td>
<td>60.0</td>
<td>55</td>
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<tr>
<td>2. Metallurgical Plant</td>
<td></td>
<td>10.0</td>
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<tr>
<td>3. Equipment and spare parts</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>(a) Mining</td>
<td></td>
<td>12.5</td>
<td>11</td>
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<tr>
<td>(b) Mobile and rail equipment</td>
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<tr>
<td>(c) Data processing and communications</td>
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<td>12.0</td>
<td>11</td>
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<tr>
<td>(d) Training equipment</td>
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<tr>
<td>4. Training</td>
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<td>5. Pre-investment and technical studies</td>
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<td>6. Studies on marketing wire-bars and cobalt*</td>
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<td>7. Consultants and experts' services</td>
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<td>8. Unallocated</td>
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<tr>
<td>Total</td>
<td></td>
<td>110.0</td>
<td>100</td>
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</tbody>
</table>

* To be carried out by Gecamines/Commerciale under financing arrangements with Gecamines/Exploitation satisfactory to the Bank.