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REPORT AND RECOMMENDATION

OF THE

PRESIDENT OF THE

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

TO THE EXECUTIVE DIRECTORS

ON A

PROPOSED LOAN OF US$75.0 MILLION

TO THE REPUBLIC OF ZAMBIA

FOR AN

EXPORT REHABILITATION AND DIVERSIFICATION PROJECT

February 29, 1984

CURRENCY EQUIVALENTS

Currency Unit		Zambian Kwacha (K)
US$ 1.00	=	K 1.60
K 1.00	=	US$ 0.625

(The Zambian Kwacha is officially valued in terms of a basket of currencies, for which the US dollar is the intervention currency. Since July 1983, the Government has followed a flexible exchange rate policy, making periodic adjustments in the official value of the Kwacha. The rates expressed above are as of January 1984.)

WEIGHTS AND MEASURES

1 Meter (m)	=	3.281 Feet (Ft)
1 Cubic Meter (M^3)	=	35.315 Cubic Feet (Ft^3)
1 Kilometer (Km)	=	0.62 Miles
1 Kilogram (Kg)	=	2.205 Pounds (Lb)
1 Metric Ton (Tonne, t)	=	1000 Kg. or 2,205 Lbs.
1 Megawatt (MW)	=	1000 Kilowatts

ABBREVIATIONS

AfDB	=	African Development Bank
CIPEC	=	Conseil Intergouvernemental des Pays Exportateurs de Cuivre
ECU	=	European Currency Unit
EEC-SYSMIN	=	The Minerals System Facility of the European Economic Community
MEMACO	=	Metals Marketing Corporation of Zambia Limited
NCCM	=	Nchanga Consolidated Copper Mines Limited
RCM	=	Roan Consolidated Mines Limited
SRI	=	Stanford Research Institute International of the USA
tpy	=	tonnes per year
ZCCM	=	Zambia Consolidated Copper Mines Limited
ZIMCO	=	Zambia Industrial and Mining Corporation Limited

FISCAL YEAR

Government	:	January 1 - December 31
ZCCM	:	April 1 - March 31

REPUBLIC OF ZAMBIA

EXPORT REHABILITATION AND DIVERSIFICATION PROJECT

LOAN AND PROJECT SUMMARY

Borrower:	Republic of Zambia.
Beneficiary:	Zambia Consolidated Copper Mines Limited (ZCCM)
Amount:	US$75.0 million, including a capitalized front-end fee.
Terms:	Repayable in 20 years, including five years' grace, at the standard variable interest rate.
Onlending Terms:	The loan would be onlent to ZCCM for 15 years, including three years' grace, with a fixed interest rate equal to the IBRD rate at the time of loan signing plus 10 percent.
Project Description:	The Project would review and establish capacity and production levels of ZCCM which — for the short, medium and long-term — can be justified from an economic, financial and market point of view. It would assist ZCCM adopt a management and investment strategy in line with such production and capacity targets. The project represents the first phase of ZCCM's 5-year rehabilitation and modernization program and consists of three major components: (a) replacement and rehabilitation of high-priority equipment and spares for existing mine and plant facilities; (b) training to upgrade the skills of technical and supervisory personnel; and (c) technical studies to rationalize ZCCM's operations. The Project would be implemented by ZCCM.
Project Benefits:	The Project would increase the efficiency and profitability of the mining industry and support Zambia's strategy of economic diversification. It would also improve Zambia's balance of payments by supporting foreign exchange earnings through mineral exports and would provide additional revenues to the Government through mineral and other taxes.
Project Risks:	There are no significant technical or marketing risks. The financial risks include possible shortages of internally generated cash due to lower than expected copper prices or to high production costs. The three components of the Project aim at improving ZCCM's operating efficiency and reducing costs. In addition, ZCCM's contribution to the Project would absorb only about half of ZCCM's internal cash generation. Bank approval of new

additional investments would address the risk of inadequate funds for rehabilitation. There is also the risk that sufficient foreign exchange might not be available to carry out the Project and to allow ZCCM to operate. The Government has agreed to provide the required foreign exchange to ZCCM.

Estimated Cost:

	Local	Foreign	Total
	US$ Millions		
Rehabilitation and Replacement Equipment			
Mining	49.7	141.8	191.5
Surface Plants	6.4	23.1	29.5
Mobile	1.5	7.4	8.9
Subtotal	57.6	172.3	229.9
Training			
Civil Works	0.5	0.6	1.1
Equipment	0.2	1.6	1.8
Training Staff	1.8	6.6	8.4
Subtotal	2.5	8.8	11.3
Technical Studies	0.3	1.8	2.1
Base Cost	60.4	182.9	243.3
Physical Contingencies	6.0	18.3	24.3
Price Contingencies	9.3	22.9	32.2
Total Project Cost	75.7	224.1	299.8
(of which Taxes)	(20.7)	-	(20.7)
Front-End Fee on Bank Loan	-	0.2	0.2
Total Financing Required	75.7	224.3	300.0

Financing Plan:

	Local	Foreign	Total
Debt			
IBRD	0.8	74.2	75.0
SYSMIN	-	45.8	45.8
African Development Bank	-	27.3	27.3
Total	0.8	147.3	148.1
Equity			
ZCCM-Internal Cash Generation	74.9	77.0	151.9
Total Financing	75.7	224.3	300.0

Estimated Disbursements	US$ Millions			
IBRD Fiscal Year:	85	86	87	88
Annual	30.0	25.7	16.7	2.6
Cumulative	30.0	55.7	72.4	75.0

Rate of Return: 36 percent.

Staff Appraisal Report: 4624a-ZA

Maps: IBRD 16492 and 17004

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
REPORT AND RECOMMENDATION OF THE PRESIDENT
TO THE EXECUTIVE DIRECTORS
ON A PROPOSED LOAN TO THE REPUBLIC OF ZAMBIA
FOR AN EXPORT REHABILITATION AND DIVERSIFICATION PROJECT

1. I submit the following report and recommendation on a proposed loan to the Republic of Zambia for the equivalent of US$75 million, including a capitalized front-end fee of 0.25 percent, to help finance an Export Rehabilitation and Diversification Project. The loan would be repaid in 20 years, including five years' grace, with a standard variable interest rate. The proceeds of the loan would be onlent to the Zambia Consolidated Copper Mines Limited (ZCCM) for 15 years, including three years' grace, at a fixed interest rate equal to the IBRD rate at the time of loan signing plus 10 percent. ZCCM would bear the foreign exchange risk and pay the front-end and commitment fees on the loan. The European Economic Community (EEC) through its SYSMIN facility is providing US$46 million equivalent, and the African Development Bank (AfDB) will provide US$27 million equivalent to assist in financing the project.

PART I - THE ECONOMY

2. A Country Economic Memorandum on Zambia (Report No. 3007-ZA) was distributed to the Executive Directors on March 17, 1981. This part is based on the Report's findings and on those of more recent economic missions to Zambia. Country data sheets are attached as Annex I.

3. Zambia's economy is heavily dependent on external trade and on government activity. Imports and exports normally range between 40 and 45 percent of GDP. Government expenditures amount to about 40 percent of GDP, and the Government owns a majority share of mining and most manufacturing enterprises. Mining provides over 90 percent of foreign exchange earnings (mostly from copper) and 30 percent of gross value added. [1] Much economic activity is dependent on expatriate technical, managerial, and administrative skills.

Current Economic Situation

4. Zambia continues to experience an economic and financial crisis initiated by a sharp decline in copper prices in 1975. Zambia's terms of trade have deteriorated steadily since then, and by 1982, were 60 percent below the average for the early 1970s. In 1982, copper prices reached their

[1] In constant 1970 prices. In current prices, however, the contribution of mining has fallen to about 15 percent of GDP in recent years, due to low copper prices.

lowest level in real terms in the post-World War II era. Real GDP has been in a general downward trend since 1975, declining on average by about one percent per year. Real GNP per capita (US$600 in 1981) was 45 percent lower than in 1974.

5. The balance of payments has been in chronic disequilibrium since 1975, with current account deficits averaging 8 to 10 percent of GDP during most of this period and 20 percent of GDP in 1981-82. Nevertheless, the volume of imports declined by over 50 percent between 1975 and 1982 in spite of heavy external borrowing, an accumulation of arrears on import payments, and a draw-down of reserves. It is believed that import volume continued to decline in 1983. The decline in imports has resulted in an economy-wide problem of underutilization of capacity and, especially in the mining sector, a large backlog of maintenance and rehabilitation requirements which has contributed directly to a declining trend in copper production and exports. At the end of 1982 Zambia's total external liabilities stood at almost US$4.5 billion, including about US$1 billion in overdue payments. By comparison, in 1982, merchandise exports amounted to somewhat over US$1 billion.

6. The decline in copper prices also severely affected Zambia's fiscal and monetary positions. In the past, mineral taxes provided a large share of government revenue, but they have been negligible since 1976, until a new mineral export task was introduced in 1983. Deficit financing has absorbed a large share of net domestic credit and contributed to a sharp rise in consumer prices, averaging 18 percent per annum during 1976-78 and 12 percent per annum in 1979-82.

7. There is no doubt that external factors have been an important cause of Zambia's present economic difficulties. Apart from low copper prices, other factors over which the Government has had little or no control include transport difficulties in neighboring countries on which Zambia is dependent for the movement of foreign trade, severe droughts which for the past two years have necessitated substantial food imports, and, last but not least, the fact that copper mining in Zambia is past its peak, and that for technical reasons, such as sinking deeper shafts and tapping less rich ore bodies, higher inputs and costs have to be incurred to maintain past levels of production.

8. Nevertheless, inappropriate policies and shortcomings in economic management have exacerbated the economic difficulties. The main deficiencies in economic policies were that (i) pricing and subsidy policies favored the urban consumer at the expense of the agricultural producer, depressing the latter's income and incentive to produce for the market; also, controlled industrial prices led to low profitability in the manufacturing sector and a decrease in resources available for reinvestment; (ii) tax incentives and low interest rates led to a pattern of capital intensive investment; (iii) exchange rate and tariff policies have encouraged the use of artificially cheap imported raw materials and other inputs and discouraged the use of local materials. As a result, a highly capital and import-intensive productive structure was created that proved to be very vulnerable to

prolonged declines in the availability of foreign exchange. Also, little progress was made in developing the use of local resources and diversifying production and exports.

9. Shortcomings in economic management manifested themselves both at the general government level and at the level of the state-controlled enterprises, including the mining companies. At the general government level, the most obvious weakness was the lack of capacity to carry out economic policy analysis, devise coherent policy packages and take quick and appropriate action. Further shortcomings concerned budgetary procedures and debt management. Because of outdated budgetary procedures, the link between recurrent and capital expenditure has been unsatisfactory. Recurrent cost implications of past and new investments were not considered adequately. As a result, despite an increase in general government consumption, there have been inadequate allocations for the operations of important development ministries, resulting in underutilization of existing capital stock and deterioration in economic infrastructure. The lack of sufficiently rigorous debt management contributed to high levels of borrowing on hard terms partly to shore up recurrent deficits, which is now the main cause of Zambia's debt-servicing difficulties.

10. The performance of state-controlled enterprises has suffered from management problems and lack of clear objectives. The lack of managerial, administrative, and supervisory capacity in individual enterprises has led to increasing inefficiency. In the mining industry this contributed, together with the technical factors mentioned before (para. 7), to Zambia's becoming one of the highest-cost producers in the world. In the manufacturing sector there are also a number of instances where the cost of production is unnecessarily high because of internal inefficiency. Second, the objectives of state-enterprises were often not sufficiently clear in the past. In the choice of projects, economic criteria were often not given enough weight and the cost of pursuing non-economic objectives was recognized insufficiently; as a result, a number of state-enterprises have become persistent loss-makers and a drain on the budget.

<u>Need for Economic Restructuring and Role of the Copper Industry</u>

11. The lack of progress with diversification of production and exports has contributed greatly to the present economic difficulties. Ever since Zambia became independent in 1964, diversification has been one of the Government's most important development objectives. But inadequate policies and management have prevented any significant success so far. Improved policies and management that would bring about economic restructuring are now all the more needed as during preparation of the present Export Rehabilitation and Diversification Project it became clear that economically exploitable ore reserves will only be sufficient to maintain present levels of copper production for another 17 years or so (para. 36). After that, production can be expected to decline sharply. In the long run, therefore, the copper industry cannot be counted on to provide the domestic and external resources required for development. In the absence of policies and programs

to develop new sources of income, employment and foreign exchange, Zambia may expect a drastic fall in living standards and social well-being by the turn of the century.

12. Fortunately, Zambia does have the potential to develop alternative sources of income, employment, and exports. The greatest potential is in agriculture, where there are opportunities for import substitution (cotton, oilseeds, livestock, grains, sugar, forestry products, and fish) and for exports (beef, fish, cotton, coffee, tobacco and groundnuts). Once a good start is made with agricultural development, possibilities will be created for agro-based industries.

13. Paradoxically, policies to lessen Zambia's dependence on copper, and to bring about diversification, have little chance of succeeding without investing first in the rehabilitation of the copper industry. For any long-term growth strategy to succeed, it is of the utmost importance that financial balance in the economy and creditworthiness be restored first. As the main provider of foreign exchange, the copper industry has a major role to play. It is therefore essential that previous levels of efficiency are restored to make the industry profitable again and competitive in world markets.

14. This makes the proposed Export Rehabilitation and Diversification Project the linchpin in the Government's economic restructuring strategy. Without a rehabilitated copper industry, the Government's diversification effort would fail for lack of financial resources. Successful implementation of the project would not only provide those resources, but would also buy time to put an appropriate economic policy framework in place. Indeed, the Government has come to realize that investing in the rehabilitation of an industry whose resources are dwindling will have to be accompanied by improvements in general economic management and policy reforms in order to create the conditions for developing new sources of income, exports and employment.

<u>Government Strategy and Action</u>

15. Over the last two years, the Government, with Bank assistance, has developed a package of policies and measures to bring about better economic management and a policy environment conducive to healthy economic growth and diversification. This program is outlined in a "Memorandum of Development Objectives and Policies", included as Annex IV to this report. The Memorandum was sent to the Bank by a letter from the Prime Minister, dated January 13, 1983. In a more recent letter to the Bank, dated February 1, 1984 (Annex V), the Minister of Finance summarized progress with implementing this program and indicates a number of further actions.

16. The Government's economic restructuring policies, as contained in the Memorandum, may be summarized as follows:

- Providing a system of incentives to producers and exporters of agricultural and industrial products in which prices are responsive to market forces;

- o Allowing greater competition in the procurement and selling of food crops. Ultimately, NAMBOARD, the Government's agricultural marketing agency, will act only as the buyer and seller of last resort to ensure the effectiveness of incentive pricing;

- o Improving planning, and budgetary and other procedures to shift resources to productive sectors;

- o Using wages and interest rate policies to reverse past trends of increasing consumption and declining investment;

- o Improving the management of foreign debt;

- o Strengthening the technical and managerial capacity of ZIMCO, which is the holding company of most state-controlled enterprises;

- o Restructuring the energy sector to bring about lesser dependence on imported oil; and

- o Ensuring the competitiveness of exports through an active exchange rate policy.

17. As indicated in the letter from the Minister of Finance (para. 15), the Government has made commendable progress in translating the intentions expressed in the Memorandum into tangible action. It has introduced institutional reforms to improve economic management and has effected a number of changes in economic policies which constitute the beginning of an integrated program of short-term financial stabilization and longer-term growth and diversification. It is a program in which actions developed in cooperation with the IMF and the Bank complement and reinforce one another.

18. The most important of the institutional reforms was the creation by the President, in April 1983, of a "Special Economic Unit". The Unit, chaired by the Minister of Finance and backed up by a competent secretariat, is composed of senior officials in economic ministries, the central bank, major parastatal units, the Cabinet Office, and the Office of the President. The main function of the Unit is to prepare, coordinate and implement the Government's policies and efforts to stablize and restructure the economy. It has considerable decision-making powers. In the short time of its existence it has already proved invaluable in instituting important policy reforms, and it clearly satisfies the long-felt need of a high-level body capable of policy analysis and quick decision-making.

19. Other recent institutional reforms include the following:

- o Introducing, in the 1984 budget, important changes in budgetary procedures, which, among other things, will ensure consistency between recurrent and capital expenditures and prevent underfunding of existing and new development projects;

- Reorganization of, and improvements in, ZIMCO's management which provides for greater autonomy in decision-making and less direct control by ministries;

- Improvements in foreign exchange management and the establishment of a National Debt Office in the Central Bank; and

- Reorganization and strengthening of agricultural planning.

20. A program to restore financial stability was set in motion in 1983. In April 1983, a one-year stand-by arrangement was agreed with the IMF, and, in May 1983, a debt rescheduling agreement was reached with the members of the Paris Club. As part of the IMF program, the Kwacha was devalued by 20 percent in January 1983; and, in July 1983, the Government adopted a flexible exchange rate system that provides the mechanism for further exchange rate adjustments. Through this system, the Kwacha has undergone gradual further depreciations, so that between January 1983 and January 1984, a cumulative devaluation had been achieved of about 38 percent against the SDR (62 percent in terms of Kwacha). The Government has indicated that it will continue to use the flexible exchange rate system to ensure the profitibility of the mining industry and the competitiveness of exports. Further measures taken under the IMF program include increases in interest rates, tough budgetary measures (including substantial reductions in subsidies and a cap on new government employment) aimed at reducing the Government's domestic borrowing, and limiting wage increases in the private sector to 10 percent in 1983.

21. At the Paris Club meeting, a total amount of US$320 million was rescheduled, US$125 million debt service due in 1983 and US$195 million in arrears. An unusual feature of the agreement was that it included all officially guaranteed short-term commercial arrears. The net effect of the Paris Club agreement is that debt service obligations in 1983 (excluding arrears and payments to the IMF) were lowered from the equivalent of 34 percent of estimated export earnings to about 23 percent. (In addition, another 16 percent of export earnings was due to the IMF.) By itself this would not have been enough to solve Zambia's debt problems in 1983, but the Paris Club agreement set the pattern for rescheduling exercises with non-Paris Club members and other short-term creditors to whom Zambia owes the bulk of its debt. The Government has concluded negotiations with most other creditors, including commercial banks, on debt rescheduling covering the 1983 period.

22. In terms of improving conditions for longer-term growth, the most significant of the above financial measures was no doubt the exchange rate adjustments. Other measures with a significant longer-term impact are increases in producer prices for agricultural crops, freer marketing arrangements for the livestock sector and a complete decontrol of most industrial prices. Over the last three years, producer prices for most agricultural crops have been increased considerably in real terms. This has already led

to a significant increase in the area under cultivation. If it had not been for the severe droughts in the region in the last two years, this would have led to substantial increases in production. Allowing private traders to compete with official marketing organizations in the livestock sector has changed Zambia in a few years time from a substantial net importer of meat products to a small net exporter. In a further attempt to allow market forces to play a more important role in the economy, the Government abolished, in December 1982, the control of all industrial prices (except for three essential commodities: wheat flour, maize flour, and candles). Since then, prices for a wide range of commodities have indeed been increased, thereby helping to restrain domestic demand, while increasing the profitability of firms.

23. Many basic economic policies now appear to be appropriate for long-term development, or are moving at a satisfactory pace. Attention needs to be turned to a second tier of measures, more institutional and technical in nature, and meant to further strengthen economic management and boost agricultural and industrial production. The Government and the Bank continue to cooperate in the development of such policies and measures. With respect to general economic management, the Minister of Finance, in his recent letter (Annex V), indicates the following measures for the near future: increased budget allocations for priority sectors; institutionalizing coordination between capital and recurrent expenditure programs; strengthening the analytical capabilities of the Ministry of Finance; and further improvements in the foreign exchange allocation systems.

24. With respect to agriculture and industry, the cooperation may lead to sector lending, by which the Government and the Bank are expected to agree on further actions of economic reform, covering such subjects as tariff policies, export incentives, investment criteria, criteria for setting agricultural producer prices, agricultural services and further improvements in the management of public enterprises. Several relevant preparatory steps to be taken soon by the Government are indicated in the recent letter from the Minister of Finance. They include, among others, the development of a master plan for research and extension, developing an agricultural sector strategy, strengthening ZIMCO's analytical capacity, reviewing the tariff structure, and revising the Industrial Development Act to make it less restrictive and more promotional.

25. The Government has also asked the Bank to reconvene the Consultative Group for Zambia, which has been scheduled for the spring of 1984. To prepare for the Consultative Group meeting, the Government has recruited a team from the Commonwealth Fund for Technical Cooperation to assist in the preparation of a three-year investment program in which priority will be given to completion of ongoing projects, rehabilitation of capital stock and new projects consistent with the goal of economic diversification.

<u>Creditworthiness</u>

26. Over the past year the Government has taken important measures towards financial stabilization and a program of economic restructuring. More needs to be done, but there are encouraging signs that the Government

is willing and capable to take further appropriate action. Although at this early stage of the restructuring process external financing needs cannot be quantified with precision, it is obvious that substantial inflows of new capital will be needed to support the Government's economic restructuring program.

27. There is, however, reason for considerable concern about Zambia's capacity to service new loans on conventional terms. At today's copper prices, scheduled service on existing external debt will remain at a level of about 35 percent of export earnings for the next three years. In addition, considerable payments are due to the IMF, and it would be desireable to reduce Zambia's pipeline of commercial payment arrears and short-term borrowings. Even with an expected increase in the price of copper, Zambia will continue to experience grave difficulties in meeting its debt-service obligations. The medium-term liquidity problems can only be overcome if the Government for a number of years continues its financial stabilization policies in cooperation with the IMF, continues to seek relief through further debt rescheduling, and, in addition, seeks a significant increase in the proportion of non-project lending available from external sources. In the meantime, the Government should avoid as much as possible borrowing on commercial terms. For some time to come, additional borrowing should carry sufficiently long grace periods and maturities.

28. In the longer term, the restoration of Zambia's creditworthiness depends on the vigor with which the Government continues to pursue its economic restructuring policies. The Government has made a promising start and is fully committed to take the necessary further steps towards economic reform. In these circumstances, we consider the country creditworthy for limited amounts of non-concessionary borrowing. Assuming successful economic policies, careful financial management and an improving world economy, Zambia's debt service ratio could decline to about 30 percent in ten to twelve years.

PART II. BANK GROUP OPERATIONS IN ZAMBIA

29. Since 1956, the Bank Group has made 27 loans and ten credits to Zambia, totalling about US$635.7 million (net of calcellations). Two additional Bank loans were made to Zambia and Zimbabwe jointly to finance shared power facilities on the Zambezi River. Fourteen loans and five credits have financed energy, transportation, communication and rural water supply projects. Four loans and one credit for education have helped expand Zambia's secondary and higher education systems, teacher training, and commercial, agricultural and technical education systems. Two program loans have helped Zambia maintain its development program in periods of severe economic dislocation. In agriculture and forestry, six loans and three credits have been for industrial forest plantations, livestock, commercial crops, integrated family farming, coffee production and smallholder dairy development. Agricultural projects in the Eastern and Southern Provinces are assisting smallholder farmers. Other loans have assisted Zambia's urban

development program and, through the Development Bank of Zambia, its manufacturing, agricultural and industrial sectors. A technical assistance credit is helping the Government improve its planning and project preparation.

30. The International Finance Coperation (IFC) has invested about US$67 million in nine projects in Zambia since 1972. Two investments were in shoe manufacturing, two in a packaging materials plant, and one each in the Development Bank of Zambia, cobalt production, textiles and copper production. The latest IFC investment was approved by the Executive Directors on May 31, 1983. This investment (US$18.7 million equivalent, of which US$7.5 million is for IFC's own account) is helping to finance an expansion and rehabilitation of the Inter-Continental Hotel in Lusaka and rehabilitation of the Musi-o-Tunya Hotel in Livingstone.

31. The implementation of Bank-assisted projects in Zambia has deteriorated significntly in recent years, and serious delays are currently being experienced in the execution of a number of these projects. There are several reasons for this, the main one being the lack of budgetary resources with which to finance local counterpart expenditures and to prefinance local expenditures which are subsequently to be reimbursed by the Bank loan. Most seriously affected have been the Bank's agricultural projects for which funds, although budgeted, have not been released to the executing agencies for several months. Other reasons for the lagging implementation of projects are ineffective project management and inadequate inter-agency coordination. The Bank assisted agricultural projects, which require careful management and effective coordination due to their complex design, have suffered from these problems, as has the Third Highway Project.

32. The deterioration of project implementation has, as expected, substantially reduced the rate of disbursements on Bank Group loans and credits. During the first four years of the five-year period (FY77-81), the disbursement rate on loans and credits to Zambia averaged slightly over 25 percent per annum, higher than the Bankwide average of 21.2 percent, or the 21.5 percent average for the Eastern Africa Region, and well above the 22.2 percent for Tanzania, 23.4 percent for Senegal and 20.2 percent for Bolivia. In FY81, however, the rate dropped to just over 16 percent, compared with 20.7 percent Bankwide, 16.5 percent for Eastern Africa, 23.6 percent for Tanzania, 20.8 percent for Senegal and 21.2 percent for Bolivia. The rate has risen since FY81, reaching 20.1 percent in FY83, which was slightly below the average for the Eastern Africa Region (20.7 percent) and for the Bank overall (20.8 percent). To alleviate the problem, provision is being made for technical assistance in projects to strengthen implementing agencies and increased use of the Resident Mission in monitoring project execution. Revolving funds are being established under new and ongoing projects which should ease the Government's financial burden and accelerate disbursements. The Bank or IDA would make advance deposits into these funds to eliminate the need for prefinancing by the Government of local expenditures financed by the Bank/IDA. In addition, estimates of counterpart funds required and when the funds should be made available are being prepared by Bank/IDA staff well in advance of their need to allow implementing agencies as much lead time as possible to plan for these expenditures. As of December 1982, IBRD loans disbursed and outstanding were about 14 percent of Zambia's total medium and long-term debt disbursed and outstanding.

33. The Bank Group expects to continue supporting government programs to reduce dependence on copper, reduce the energy import bill, narrow the urban-rural income gap and improve managerial and technical skills. Anticipated lending reflects the Government's emphasis on directly productive sectors, particularly agriculture-related activities. Continued assistance to education, transportation and industry is also contemplated.

PART III. THE MINING SECTOR

A. Role of the Mining Sector

34. Copper mining has dominated the Zambian economy since the early 1920's, generating 30-40 percent of GDP, providing a high proportion of wage employment, and producing consistently over 90 percent of the country's foreign exchange earnings. Suppliers and service industries were established in its wake, and the industry was the leader in setting wages and worker benefits, pulling up the general wage level in the process. The copper industry has contributed substantial resources for investments in other sectors of the economy through the payment of taxes and was an important force in lifting the skills of many Zambians through its manpower training programs. The mining of other minerals, including cobalt, lead and zinc, and of coal increased during this period, but were dwarfed in importance by copper.

Mineral Resources

35. Most of the large deposits that form the nucleus of mining in Zambia today were discovered around the turn of the century. Only small additional deposits have been discovered since. With the extensive coverage already given the country, it seems highly unlikely that significant added discoveries will be forthcoming, and there are no known orebodies in the Copperbelt vast enough to provide the basis for offsetting the natural depletion of existing mines in the late 1990s.

36. The known geological reserves of Zambia's Copperbelt exploitable under present economic and technical conditions are estimated at 497 million tonnes, containing an average of about 3 percent copper, which represents about 15 million tonnes of copper. At an estimated overall recovery rate of 63 percent, this would imply potential total copper production of 10 million tonnes. At present production rates, known reserves represent about 17 years of production. Mining conditions are expected to deteriorate gradually, however. Thus, economically viable production levels will depend on market developments and may well be substantially below present levels by the turn of the century.

Structure of the Sector

37. Until 1969, copper mining in Zambia was largely the province of two large foreign multinational mining companies, Anglo-American Corporation of South Africa and Roan Selection Trust International, Inc. of the U.K. (a wholly-owned subsidiary of the AMAX Corporation of the U.S.A.). The Zambian operations of Anglo-American formed Nchanga Consolidated Copper Mines, Limited (NCCM), while those of Roan Selection Trust formed Roan Consolidated Mines, Limited (RCM). The Government purchased controlling interest (51 percent) in both companies in 1969 for a total acquisition cost of US$331 million and set up a holding company, Zambia Industrial and Mining Corporation, Limited (ZIMCO), to hold the shares, although the two companies continued to be managed by Anglo-American and Roan Selection Trust, respectively. By 1974, the Government had redeemed all of the bonds issued to purchase its interest in the companies and at that time bought out for US$79 million the management contracts of the two foreign enterprises, thereby making the companies self-managing.

38. Copper production peaked in 1976 at 712,000 tonnes and has declined since then to its present level of about 575,500 tonnes. When at the same time the international copper price fell sharply after 1974, the industry began to lose money, and to require added injections of capital. Since neither Anglo-American nor Roan Selection Trust was willing to provide more capital, the Government converted some of its outstanding loans to NCCM and RCM into equity, thereby increasing the Government's share of the equity to 60 percent in NCCM and 61 percent in RCM. With effect from April 1981, NCCM and RCM were merged into a new company: Zambia Consolidated Copper Mines, Limited (ZCCM). ZIMCO, on the Government's behalf, remains the major shareholder with 60.3 percent, Anglo-American (through Zambia Copper Investments, a Bermuda-based company) holds 27.3 percent of the shares, and Roan Selection Trust, 6.9 percent. Public shareholders in the U.S.A., and the U.K. hold the remainder. ZIMCO had total assets of about US$515 million as of March 31, 1983 and was the holding company for about 100 subsidiaries operating in the mining, industrial, and agricultural sectors, as well as in trading, hotels, transport, energy and financial services. ZIMCO is represented on ZCCM's Board, and the Chief Executive of ZCCM is appointed by ZIMCO. Marketing of ZCCM's output is undertaken by MEMACO, the wholly government-owned marketing agent.

39. Mining sector policy, in general, and the objectives of ZCCM in particular, have not been explicitly defined during the past two decades of increasing Government ownership and control. While prime responsibility rests with the Ministry of Mines and ZIMCO in consultation with ZCCM, the Party, Cabinet, Parliament, the Ministry of Finance and the Bank of Zambia, in particular, exert considerable influence on the mining industry, through their policies and practices which directly affect ZCCM's financial and foreign exchange positions.

40. De facto, ZCCM has operated in the recent past with the assumed objective of maximizing production, and hence foreign exchange earnings to Zambia, while profit and cost considerations were not paramount. The impact

of ZCCM's financial results has been quite damaging (paras. 49-50) and has jeopardized its ability to sustain its activities without massive Government assistance. To rectify this situation, the Government, as ZCCM's majority shareholder, has established long-term objectives for the company which are to form the basis of its corporate strategy for the coming decade. These objectives are consistent with the Government's broader economic plans, ZCCM's competitive position in the world copper market and copper/cobalt price prospects. They were presented to the Bank in November 1983 in a letter from the Minister of Finance (Annex VI) and are summarized below.

41. In its statement of objectives for ZCCM, the Government has affirmed that, in order for the mining industry to make a net contribution to the rest of the economy, "it is essential that ZCCM remains a financially healthy company and conduct its affairs with accordance with sound business, financial, industrial and administrative practices." Within these limitations, ZCCM is mandated to optimize its foreign exchange earnings and contribution to the Government's budget. The Government recognizes that, for ZCCM to achieve profitability and efficiency in its operations, it may be necessary to take the following measures: (a) reduction in labor force and adjustment of the compensation package for the Zambian workforce; (b) reduction in production levels to limit operating losses; this may entail closure of uneconomic mines; (c) timely availability of foreign exchange; and (d) revision of the taxation and dividend policies to enable ZCCM to accumulate sufficient financial reserves as a cushion against lower copper prices. These objectives are acceptable to the Bank and were adopted by the Board of ZCCM on February 9, 1984 in a memorandum of corporate objectives. ZCCM has engaged consultants, Stanford Research Institute (para. 54), to assist in translating these broad policy objectives into specific production and investment programs.

B. Zambia Consolidated Copper Mines Limited (ZCCM)

42. As mentioned earlier (para. 38), ZCCM was established in April 1981 with a share capital of US$750 million. There are twelve members on ZCCM's Board of Directors, seven of whom are appointed by ZIMCO and five by the minority shareholders, representing primarily the Anglo American and AMAX groups.

Organization and Management

43. The administrative and support divisions of ZCCM are located in Lusaka, while the management of its seven operating divisions are located at the mine sites, mostly in the Copperbelt in north-central Zambia. ZCCM is almost exclusively a production company and nearly all of its sales (exports) are made through the Metals Marketing Corporation of Zambia Limited (MEMACO), a state-owned company responsible for marketing all of Zambia's mineral products as ZCCM's agent. ZCCM's management commissioned a reorganization study at the time of the merger. The top echelons of the management structure have already been reorganized on the basis of the study, which was carried out by Booz, Allen and Hamilton of the U.S.A. Booz, Allen and Hamilton has submitted initial reviews of the organization of ZCCM's

production divisions and associated services, with recommendations to improve information flows among the divisions and with the head offices in Lusaka. This phase of the study is expected to be completed by April 1984. ZCCM has agreed to present by June 30, 1984 for discussion with the Bank the proposed information reporting system (Section 2.02(c), draft Project Agreement).

44. Of particular interest is the establishment of a Corporate Planning Department to strengthen the company's strategic planning capabilities. This department, which is responsible for preparing production and investment strategies, including estimating the human and financial resources required to carry them out, in order to achieve the company's corporate objectives (para. 41), has been strengthened considerably by the appointment to its permanent staff, in addition to its existing personnel, of a geologist, a mining engineer, a metallurgist, a transport specialist, a metals market economist, two financial analysts and two economists which ZCCM has agreed to maintain on its staff at all times (Project Agreement, Section 3.01(c)).

45. ZCCM's organizational structure has been strengthened also by the recent appointment of an experienced director of mining at its head offices who will participate in the management committees dealing with technical and production matters. His presence on these committees will establish the critical linkage between technical and production matters and overall policy and managerial decisions.

Manpower and Training

46. ZCCM is the largest employer in Zambia, with a workforce of about 57,300, including 1,900 expatriates. Although the Zambian workers are unionized, there has been no major labor unrest for ten years, reflecting rather generous employment conditions. The local wage bill accounts for about 26 percent of total production costs, thus the determination of salary levels is highly significant in ZCCM's efforts to contain its production costs. Broader issues, such as income distribution and equity, are involved as well, but have not been adequately reviewed within the industry or nationwide. Labor turnover is low, at less than six percent. Employees' jobs have been protected even under difficult economic conditions, and wage and other benefits have exceeded substantially those available in the rest of the country, although salaries have fallen in real terms over the past several years and the differential between average wages in mining and the rest of the economy has narrowed considerably. The recent financial squeeze on ZCCM has forced the company to reduce its local workforce by attrition and early retirement schemes by about 2,600 in the past two years and an expected 300 this year, with already favorable effects on technical productivity.

47. Traditionally, the mining industry has relied heavily on expatriates at the higher managerial and technical levels. At independence, steps were taken to increase Zambian participation in these positions through fragmentation of jobs and job responsibilities. This has led, over the years, to an increasingly cumbersome staffing structure, with lines of responsibility and authority less and less clear. In 1971, the recruitment of expatriates was made difficult when the Government limited remittances of foreign

exchange by expatriates and reduced the maximum contract terms for expatriates to three years, which tended to discourage them from seeking a life career in the country. Deteriorating living conditions and the personal security problems in Southern Africa have further discouraged mid-career expatriates from accepting positions or remaining in Zambia. As a consequence, expatriate employment in the industry dropped from 16 percent of the labor force in 1964 to 10 percent in 1971 and further to 3.5 percent in 1983. Because there have not been sufficient numbers of qualified Zambians available to fill the positions vacated by the expatriates, and training programs have not been fully effective, in large part because of the lack of trainable secondary school graduates, many important management and technical positions have remained vacant or been filled with under-qualified workers, particularly in mining, metallurgy and engineering. This has led to inefficiencies across-the-board in mine operations, from planning to maintenance, and to decreasing production.

48. Effective April 1982, the Government introduced a new expatriate compensation policy. Designed to attract and retain experienced expatriate staff, this policy provides a total compensation package competitive by international standards, thus resolving a major issue in the recruitment and retention of expatriate staff. The departure of expatriate employees and the shortage of trainable Zambians has forced ZCCM to identify its shortfalls in skills at all operating levels; to define its priorities for filling vacancies; to reformulate its training and skills upgrading programs for its Zambian workers; and to define a realistic program for a more gradual replacement of expatriates by Zambians. ZCCM is actively, and again successfully, recruiting experienced expatriates. Although the expatriate workforce is expected to decline further as the company rationalizes its operations, and thus its staffing requirements, the quality of the expatriate staff has been improved considerably by the departure of less-qualified members and the hiring of staff with higher qualifications. A comprehensive training program is being developed as part of the project with the view to further upgrading of staff.

Production and Productivity

49. Copper production has declined steadily for nearly a decade, from a peak of 712,000 tonnes in 1976 to 575,500 tonnes in 1983. The main problem has been the mines' inability to deliver sufficient tonnages of suitable ore to the concentrators, thereby leaving the concentrators, smelters, and refineries, under-utilized. Several factors account for the declining tonnage. The ore grades are declining as the mining operations move into less rich areas. Mine development is inadequate in the underground mines and overburden removal is inefficient in the open pit mines, in large part because of lack of equipment in good working order. Dilution rates (tonnage of waste rock per tonne of ore mined) increase as mine development and preparation worsen, and copper recovery falls with declining millhead grades. Finally, deteriorating mine management and lack of adequate supervision, discipline and work incentives have led to a decrease in workers' productivity over the years, from an average of 12.2 tonnes per employee in the 1973-76 period to 10.1 tonnes per employee in 1982. This compares to

about 12.6 tonnes per employee in Zaire and 30.8 tonnes per employee in Chile. As a result, ZCCM's present production cost is in the top 30 percent of copper producers worldwide.

50. There is a need to review critically all of ZCCM's mining and processing operations in order: to establish capacity and production levels of ZCCM which — for the short, medium and long-term — can be justified from an economic, financial and market point of view; and to assist ZCCM adopt a management and investment strategy in line with such production and capacity targets. This will require ZCCM inter alia to: assess the technical factors affecting operations and the possibilities of rationalizing existing mining operations; prepare adequate development and mine plans; improve mining controls, e.g., sampling, surveying, and grade control; organize proper supervision and discipline, along with an appropriate incentive program to improve labor productivity; and develop the cost, financial, economic and social implications of mine closures and reductions in production.

Financial Performance

51. ZCCM's financial situation deteriorated sharply in the past couple of years, largely as a result of several years of depressed copper prices and steadily increasing production costs. Net after-tax losses of K 174 million and K 128 million were incurred in 1982 and 1983 (fiscal years ending March 31), respectively. During the longer 1978-83 period, cash generation covered only 24 percent of ZCCM's (including consolidated NCCM and RCM results) sources of funds, with short and long-term borrowings covering 70 percent of the requirements for funds. However, despite the deterioration in its cash flow position, ZCCM's balance sheet improved during the late 1970s as a result of the Government's converting US$131 million in loans to equity, so that by 1980 the company's long-term debt/equity ratio had actually improved to 14:86. In the past two years, however, ZCCM's current ratio declined from 1.4:1.1, and its long-term debt/equity ratio deteriorated from 19:81 to 51:49. In order to ensure ZCCM's financial viability and its ability to implement the project, agreement has been reached on several financial covenants (para. 79).

52. In May 1982, ZCCM introduced drastic cost-cutting measures in response to the company's deteriorating financial situation. The actual results over the ensuing twelve months were much better than the company had expected. Total operating costs were reduced by 17 percent as opposed to an eight percent forecast, and capital cost declined by 34 percent compared with the forecast of 17 percent. To a large extent, these cost reductions can be considered permanent. During the next year, ZCCM expects to reduce its operating costs by another eight percent, mostly through further reductions in the work force, improvements in its purchasing methods and lowering expenditures on some social services. Over the longer term, additional cost savings will have to come from: (a) increases in mine productivity; (b) closures of financially and economically unviable operations; (c) better cost control practices; and (d) the establishment of a systematic approach to budget preparation and financial and economic cost/benefit analyses of capital expenditure proposals. In February 1983, ZCCM's Board adopted a

number of measures to improve the structure of the company's balance sheet. It introduced new accounting practices, in line with Zambian accounting principles, to adjust for the effects of the recent devaluation and authorized negotiations that led in July 1983 to subordination of K 203 million of debt owed the Government and the Bank of Zambia. Also, some of ZCCM's debt was accepted for rescheduling at the May 1983 Paris Club meeting which provided general debt relief to the Zambia Government.

C. Prospects for the Copper Sector

53. The problems of and prospects for mining in Zambia are essentially those of the copper sector. Zambia's copper reserves have an average grade of three percent which is much higher than other producers elsewhere in the world (for example, less than one percent copper grade in North America and 1-2 percent copper grade in Latin America). Despite its higher copper grade, ZCCM is currently one of the world's higher-cost copper producers due to various factors previously noted, including lack of market-oriented objectives, an inadequate organizational structure, insufficiently qualified staff and cost-consciousness, sub-optimal use of production facilities and lack of materials and spare parts due to foreign exchange shortages. It is to be expected that ZCCM's cost competitiveness will improve as the various measures supported by this project are implemented (para. 58) and production levels are rationalized. The establishment of a new entity, ZCCM, combined with the disastrous financial results of the last two years have provided the shock necessary for actions to be initiated to arrest the deteriorating trend, rethink objectives and hopefully push the industry back into a profitable position as a net contributor to Zambia's budget and diversification effort.

54. Cost efficiency and rigorous management are the necessary ingredients to a meaningful recovery program. As mentioned (para. 43) ZCCM has hired the services of Booz, Allen and Hamilton to help define and implement a new management structure and information reporting system. ZCCM is also preparing a document on the monetary and non-monetary benefits available to its local work force; an action plan to obtain an appropriate compensation package for the company's staff; and a comprehensive training program consistent with the company's priorities and resources. ZCCM has also selected Stanford Research Institute International (SRI) of the U.S.A. to assist the company in: reviewing its present operations practices; recommend an action program to increase mining controls, reduce dilution and increase labor productivity; formulating a schedule and action program for shutting down financially and economically unjustified operations; introducing financial and economic cost/benefit analysis of investments; and formulating production and investment strategies consistent with the broad objectives assigned to it by the Government (para. 41).

55. In early 1983, ZCCM prepared a five-year (1984-88) investment program to reduce unit production cost, while maintaining its present level of production and hence its foreign exchange earning potential. The major components to this program are: (a) investments for rehabilitation and maintenance; (b) investments in major projects to prepare new ore blocks

for exploitation, modernize existing plant, and construct the tailings leach plant; and (c) investments to better working and living conditions, including the provision of improved social services. The cost of the program, which was prepared in early 1983, totals about US$0.9 billion, of which about 60 percent is budgeted for rehabilitation, 35 percent for major projects, and five percent for ancillaries. About one-half of the program is for ongoing projects. Present market prospects and ZCCM's financial outlook require urgently a re-examination of production targets in the short, medium and long-term, and investment priorities, particularly for the 1985-88 period.

D. Bank Involvement in the Mining Sector

56. IDA has provided a credit (Credit 1333-ZA, of May 23, 1983) for an engineering study to determine the feasibility of rehabilitating the Maamba Coal mining operation in southern Zambia. This is the only coal mine currently functioning in Zambia and is the supplier for several important industrial and other users, e.g., the copper, fertilizer and cement industries. The engineering study will review the overall operation, assess the rehabilitation needs and recommend an action program to raise production and productivity. The objective of the study is to substitute, where possible, low price indigenous coal for expensive imported petroleum fuels, which are a heavy drain on the country's foreign exchange earnings. The Bank has had no prior involvement in the sector.

57. IFC has approved two investments in NCCM, one in 1979 for an expansion of the cobalt plant of the Nkana Division of that Company and the other in 1981 for an expansion of the Tailings Leach plant of the Nchanga Division. The latter, which is expected to raise refined copper production by 52,000 tonnes per year by late 1988, is just getting underway.

PART IV. THE PROJECT

58. The proposed project was identified in August 1981, following a mining sector survey the previous year, and was appraised in February 1982. A post-appraisal mission, joined by a team from the AfDB, visited Zambia in March 1983 to update the Bank's information on the project. Negotiations were held in Washington, D.C. during the period January 9-16, 1984. The delegation from Zambia was headed by Mr. Francis Kaunda, Chairman and Chief Executive of ZCCM and Mr. F.M. Siame, Senior Under Secretary of the Ministry of Finance. A Loan and Project Summary appears at the beginning of this report, and a Supplementary Project Data Sheet is attached as Annex III.

Project Objectives and Description

59. The main objectives of the proposed project are:

(i) to review and establish capacity and production levels of ZCCM which — for the short, medium and long-term — can be justified from an economic, financial and market point of view; and

(ii) to assist ZCCM adopt a management and investment strategy in line with such production and capacity targets.

Specifically, the project supports ZCCM's effort at improving the performance of its operations through (a) rationalization in the use of its mining and metallurgical facilities, (b) improvement in its labor productivity, and (c) closing down and/or rehabilitating its worn-out or economically inefficient facilities. This effort is expected to improve ZCCM's cost efficiency and permit the company to reduce its production cost, sustain itself financially, and contribute to Zambia's economy, particularly to net foreign exchange earnings and domestic savings. The proposed project covers the 1984-88 replacement and rehabilitation investments needed to improve ZCCM's performance and competitiveness.

60. The project would include the following components:

(i) replacement or rehabilitation of high priority equipment, including mobile equipment, and spare parts for machinery and equipment used in the mining operations, the concentrators, and the metallurgical plants;

(ii) training of mining engineers, technicians and technologists; on-the-job craft training, specialized on-the-job craft training abroad for engineers, technicians and craftsmen; and management training courses for supervisor and managerial personnel; and

(iii) technical studies to rationalize ZCCM's operations and operating methods, including a critical review of all mining, processing and metallurgical opeations and recommendations for specific actions to reestablish ZCCM's competitiveness.

61. The replacement and rehabilitation component would consist of a number of small investments directed toward improving the efficiency of the existing facilities. These investments have a high priority and will be required regardless of the outcome of the technical studies mentioned in (iii) above. Under the training component, the number of mining engineering students enrolling in the University of Zambia would be increased from 30 per year, at present, to 60 per year by the 1985/86 academic year; the number of students in mining, metallurgy, surveying and ventilation would be increased from 20-40 per year, at present, to 120-150 per year by the 1985/86 academic year; an additional 120 craftsmen per year in electrical and plant fitter trades and 50 welding specialists per year would receive on-the-job training; about 90 engineers, technicians and craftsmen would receive on-the-job-training abroad through fellowships; and courses in supervision, finance and budgeting, and communication skills would be provided to management and supervisory personnel. A 120-man hostel would be constructed to accommodate the trainees at the Craft Training Center in Kitwe, and equipment and materials would be acquired for the classrooms and laboratories at the Zambia

Institute of Technology. Complementing this effort, the studies would focus on optimizing ZCCM's operations so as to gain the full benefit of the recent merger of NCCM and RCM, and the training component would provide the trained Zambian manpower required to effectively operate and manage the operations.

Project Cost and Financing

62. The total cost of the rehabilitation project, including taxes and duties and the Bank's front-end fee, is estimated at US$300 million of which US$224 million (75 percent) is foreign exchange costs. Including physical contingencies, about US$254 million (95 percent) would be required for the rehabilitation and replacement component, US$12 million (4 percent) for the training component, and US$2 million (one percent) for technical studies, for a total base cost plus physical contingency of about US$268 million. Physical contingency allowances are estimated at 10 percent of the base costs and price contingencies are based on escalation for foreign costs, in US dollar terms, of 8, 7.5, 7 and 6 percent in 1983, 1984, 1985, and 1986, respectively. Consultant services are estimated on the basis of 139 man-months at a cost of about US$13,500 per man-month, including salaries, subsistence, and economy-class air transportation, which are considered reasonable.

63. About 49 percent of the total project cost, or US$148 million, would be financed through external borrowing and 51 percent, or US$152 million by internal cash generation. The proposed Bank loan of US$75 million would cover 25 percent of the total project cost, including US$0.8 million of local cost, and 33 percent of the Project's foreign exchange cost. It would be extended to the Government for 20 years, including five years' grace, at the prevailing standard variable interest rate. The Zambia Government would onlend the funds to ZCCM for 15 years, including three years' grace, at a fixed interest rate equal to the IBRD rate at the time of loan signing plus 10 percent. ZCCM would bear the foreign exchange risk and pay the front-end fee and commitment change on the Bank loan. Execution of a subsidiary loan agreement between the Government and ZCCM, on terms and conditions satisfactory to the Bank, would be a condition of Bank loan effectiveness (Sections 3.01(c) and 6.01(a), draft Loan Agreement).

64. The balance of the external resources required would be provided by the AfDB (US$27 million) and the SYSMIN facility of the EEC (US$46 million). The AfDB would finance replacement equipment and spare parts with a loan to the company, guaranteed by the Government, which is repayable in 13 years, including three years' grace, at 9.5 percent per annum interest and carrying a statutory fee of one percent and a commitment charge of one percent. The effectiveness of the AfDB loan would be a condition of effectiveness of the Bank loan (Section 6.01 (b), draft Loan Agreement). The SYSMIN loan was approved in April 1982 and became effective in September 1982. The loan to the Government is repayable in 40 years' including 10 years' grace, at six percent interest per annum. The loan proceeds are onlent to ZCCM to be repaid in 20 years, including two years grace, at six percent per annum interest. The financial equivalent of this difference in terms is credited to a fund to be used to improve the industry's social environment.

65. ZCCM is considered capable of providing its share of project costs in local and foreign currencies from internal cash generation. It would be requested to finance any cost overruns by borrowing and/or equity contributions and the Government would ensure that adequate foreign exchange is made available to carry out the project (Section 3.01 (b), draft Loan Agreement).

Project Implementation and Schedule

66. The project would be implemented by ZCCM over a two-and-half-year period from mid-1984 to early-1987. ZCCM has the capacity to carry out all aspects of the project, which would not place an undue burden on its organizational structure. The recent reorganization of the company should facilitate the proper allocation of tasks and their efficient execution.

67. The replacement and rehabilitation component of the project will be carried out in two phases and the Bank loan disbursed in two tranches: the first covering the period from mid-1984 to about end-1985 and the second spanning mostly 1986. The second phase, and the disbursement of the loan for it, would start only after (a) the Bank, the Government and ZCCM have agreed, on the basis of a review of the studies referred to in para. 54, on the implementation of an action program to carry out ZCCM's production and investment strategies, including, for the 1986-88 period, year-by-year targets for cutting overhead costs, reducing dilution and increasing mine productivity, an implementation plan for closure of financially and economically nonviable operations, and priority ranking of replacement and new investments; (b) ZCCM has received adequate foreign exchange to carry out its operations; and (c) the Borrower has made adequate progress in the carrying out of the actions referred to in the letter from the Minister of Finance (Annex V) and, specifically, that it has completed the following actions: changes in the tariff structure, preparation of a master plan for agricultural research and extension and implementation of agreed budget reforms (Section 4.04 and Schedules 4 and 5, draft Loan Agreement). To assure smooth implementation of the rehabilitation component, ZCCM has prepared a schedule of its foreign exchange requirements for 1984-86, which was discussed at negotiations. The Government has agreed to provide ZCCM with a minimum of US$350 million in foreign exchange during 1984, which is the estimated amount needed in that year. It has also been agreed that by October 31 of each year, the Government will present to the Bank for review and approval an estimate of the amount it proposes to allocate to meet the company's foreign exchange needs for the subsequent year, and to make available the amount so provided (Section 3.01 (b), draft Loan Agreement).

68. ZCCM's Department of Manpower Development and Training would manage the training component of the project, with assistance from the University of Zambia, the Zambia Institute of Technology, and the Craft Training Center at Kitwe.

69. The technical studies component would be managed by the company's Department of Rehabilitation, in cooperation with the Technical Department, and would involve nearly every operating division of the company. The major part of these studies would be carried out by the SRI, as lead consultant,

which has submitted a study proposal based on a diagnostic survey it undertook in late 1982. Contracts have already been signed with SRI for some of the tasks in the study proposal, and contracts are expected to be signed by April 1984 for the remaining tasks. Other consultants would be contracted to carry out the rest of the studies. All the studies would be completed by June 1985.

Environmental and Safety Aspects

70. Large-scale recovery of metals from ores produces significant quantities of gaseous, liquid, and solid wastes that, if not disposed of carefully, can pollute air and water supplies. In Zambia, disposal of these wastes is currently regulated by the Mines and Minerals Act of 1977. While ZCCM's monitoring and control of pollution levels is generally adequate, the policing and enforcing of the Act is not satisfactory because of lack of resources and loose wording in the regulations.

71. ZCCM monitors all environmental aspects of the Company's operations. Monthly water samples from operating areas and various township sites are analyzed for pH, solids, hardness, and mineral content. Air quality is monitored at each operating site to determine carbon monoxide, carbon dioxide, hydrogen cyanide, sulfur dioxide, nitric oxides, moisture, temperature and dust levels. In general, the quantities of effluents exceed levels accepted in the industrialized countries. Sulfur dioxide and particulates emitted by smokestacks exceed standards near the smelters, but are within the standards in the town areas. As regards water pollution, ZCCM's monitoring indicates that pH is within standards but total suspended solids is way above. The Zambian National Council of Scientific Affairs is preparing a more comprehensive regulatory act to address these environmental concerns. At regular intervals the Government will furnish to the Bank for its review and comment reports on the progress made in carrying out the base study for preparing this Act and in promulgating regulations for the industrial and mining sectors to govern the monitoring and control of health, safety and population in industrial and mining operations (Section 4.02, draft Loan Agreement). ZCCM would be required to carry out its operations in accordance with sound health, safety and pollution control standards consistent with international practices (Section 3.04, draft Project Agreement).

72. Health and safety are monitored by both the Government and ZCCM, following codes based on the British Safety and Work Act and the U.S. Occupational Safety and Health Act. ZCCM is required to provide health services to all residents of the copperbelt and not just to its employees and their dependents. The company has a good safety record.

Procurement

73. Procurement of all Bank-financed items would follow the Bank's procurement guidelines. Equipment and about two years of spare parts, including transport to Zambia, would be procured primarily through International Competitive Bidding (ICB). Specialized equipment, equipment supplied

by only a few manufacturers, or items estimated to cost less than US$300,000, will be procured through Limited International Bidding (LIB). The total amount so procured is limited to US$10.0 million, or 13 percent of the proposed loan. The aggregate amount of contracts for goods costing less than US$300,000 will, in addition, be limited to US$3 million. It is expected that some equipment may be manufactured locally or supplied by local agents. Zambian manufacturers would receive a 15 percent preference or the amount of the customs duties, whichever is lower. Approximately US$15 million, about 20 percent of the proposed Bank loan, would be used in direct purchase of proprietary equipment and spares (Section B, Schedule 1, draft Project Agreement). The packaging of the equipment items to be financed by the Bank was agreed at negotiations.

74. The Bank would undertake a prior review of bidding documents for packages estimated to cost more than US$500,000, which is expected to involve about 30 packages with a total value of around US$57 million. Packages below US$500,000 in value, about 40 packages valued at US$13 million, would be subject to post review by the Bank. To ensure proper adherence to Bank procurement procedures, the first two contracts handled by ZCCM's Purchasing Department would be reviewed irrespective of their value and procurement method (Section D, Schedule 1, draft Project Agreement).

75. SRI, which is carrying out the major part of the technical studies (para. 54) was selected from a list of four firms, under World Bank procedures. The remainder of the studies would also be contracted for in accordance with Bank guidelines (Section 2.02, draft Project Agreement). Considering the need to initiate the rehabilitation studies as quickly as possible, ZCCM has, with Bank approval, already contracted with SRI for some of these studies and has requested the Bank to consider retroactive financing for work carried out prior to signing the loan. Consequently, retroactive financing of up to US$0.4 million for consultant services expenses incurred after July 1, 1983 is provided for (para. 4 (a), Schedule 1, draft Loan Agreement).

Disbursement

76. The Bank loan would finance 100 percent of foreign expenditures for imported equipment, materials and spares; 100 percent of the ex-factory cost of equipment supplied by local firms winning under international competition (excluding taxes); 80 percent of local expenditures for items provided by local agents; 100 percent of foreign costs of consulting services provided by foreign consultants; and 100 percent of the total cost of training. A Special Account operated by ZCCM would be established in the Bank of Zambia into which withdrawals of part of the proceeds of the Bank loan would be deposited to ensure that funds for the proposed project would be available when needed (Section 2.02(b), draft Loan Agreement). The initial deposit would be US$1.0 million, which would be withdrawn immediately upon loan effectiveness. This account would be replenished on the basis of documentary evidence provided the Bank by ZCCM as to payments made from the account for goods and services required for the project (Schedule 2, draft Project Agreement).

77. As mentioned earlier (para. 67), disbursement against equipment and spare parts would be divided into two tranches, the first amounting to US$40 million and the second to US$30.0 million. The loan is expected to be fully disbursed by December 31, 1987.

Financial Prospects

78. For illustrative purposes and until the appropriate capacity and production levels have been determined, the financial projections have been developed assuming ZCCM's production remains at 570,000 tpy, with up to an additional 52,000 tpy produced by the Tailings Leach Project (para. 57). Price projections, taking into account likely future price trends and cyclical fluctuations, have been prepared. Because of the volatility of copper prices, it is considered that there is only a 60-70 percent probability that prices will be within 20 percent of these projections for any particular year. The projections indicate copper prices rising in current terms from US$0.71/lb for the year ending March 31, 1983 to US$1.07/lb. in 1989, then falling back in the early 1990s. On that basis, the expected reduction in operating costs is expected to slowly restore ZCCM's profitability, although losses would occur in years of low copper prices. ZCCM would suffer a small loss in 1984 (K 2 million), and then generate an annual after tax profit of K 30 million in 1985 (two percent of sales revenue) increasing to K 102 million in 1987 (four percent of sales revenue).

79. To protect ZCCM's financial position, the Government has converted to subordinated debt K 203 million in loans to ZCCM from itself and the Bank of Zambia. In addition, ZCCM would maintain from March 31, 1986 a current ratio of at least 1.2 to 1, a ratio of debt to equity plus subordinated debt of not more than 50:50, and a projected debt service coverage ratio of at least 1.3 (Sections 4.05, 4.06, and 4.07, draft Project Agreement). ZCCM would ensure that its tangible net worth would not fall below K 900 million (Section 4.08, draft Project Agreement). Until project completion, Bank approval would be required for capital investments additional to the project investment program already approved by the company in excess of US$30 million equivalent in any one year (Section 4.04, draft Project Agreement).

80. If the downturn in copper prices expected in the late 1980s actually takes place, ZCCM would return to a loss-making situation, and need to borrow heavily again. Given the inherent uncertainty associated with future copper price projections, ZCCM would prepare every year a five-year financial projection which would address the effect of different copper price outlooks and take into account ZCCM's foreign exchange and local currency requirements and planned expenditures on an annual basis (Section 4.03, draft Project Agreement). In addition, ZCCM would undertake various measures to reduce the effects of possible future losses. It should develop, in close collaboration with MEMACO, flexible production, investment, and marketing strategies to permit adjustments to limit losses. Also, the Government would study the present dividend and tax regime applicable to ZCCM which, in effect, distributes all of ZCCM's profits to the shareholders and the Government, so that reserves can be accumulated from profits during periods

of high prices which would subsequently be available to cushion losses incurred during periods of weak copper prices (Section 3.02 (a), draft Loan Agreement).

Auditing and Reporting

81. ZCCM would submit to the Bank within six months of the close of the accounting year annual reports examined by independent auditors acceptable to the Bank (Section 4.02 (a), draft Project Agreement). In addition, ZCCM would submit to the Bank 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 month. Within six months of the closing date for the project, ZCCM would prepare and furnish to the Bank a completion report on the project dealing with is implementation and the costs and benefits derived and expected to be derived therefrom (Section 2.05 (d), draft Project Agreement).

Project Benefits

82. The project is an important element in the Government's development strategy. By assisting Zambia in re-establishing its competitiveness in the world copper market by lowering unit production costs and by determining financially and economically optimum production levels, it would support Zambia's balance of payments and generate resources which could be invested in diversification projects. The Zambian authorities recognize the urgency of diversifying the economy and have developed structural reform programs emphasizing agriculture and industry. The project would help provide the foreign exchange and investment resources needed to carry out these programs.

83. Incremental net foreign exchange benefits from the project are estimated at US$44 million per annum over the next five years. These benefits are calculated on the basis of incremental export revenues as a result of the project, minus the direct and indirect foreign exchange portion of the incremental operating and capital costs, including debt service on ZCCM's external financing. Other economic benefits include the revenues that would accrue to the Government through mineral, income and other taxes. During the 1984-88 period, ZCCM is expected to pay about K 1.6 billion in direct and indirect taxes, or about K 0.3 billion per annum. There are also unquantifiable benefits associated with training and technical studies.

84. As would be expected for a rehabilitation project of this nature, the economic rate of return (ERR) in real terms is high at 36 percent. This is the discount rate which equates the streams of incremental costs and benefits flowing from the project over its lifetime. The basis for this calculation is that without a rehabilitation project, production would continue to decline involuntarily at 2.5 percent per annum, as it has in the past. It is, of course, difficult to judge how rapidly output would fall in the absence of such a project. Furthermore, it is clear that the rate of return is highly sensitive to variations in production levels. Should the project prevent a drop in production during the 1984-88 period of only two percent per annum instead of 2.5 percent per annum, the return would still be

high at 22 percent in real terms. It would decrease to 11 percent in real terms should the drop in production without the project be only 1.5 percent per annum during the 1984-88 period. Sensitivity analyses indicate that the rate of return is less sensitive to variations in revenues or operating and investment costs.

Risks

85. The technical risks in the project are small. The technical aspects of the replacement and rehabilitation component are straightforward and well-known to ZCCM's engineering staff.

86. While ZCCM is not expected to encounter difficulties in marketing its copper production, it cannot be excluded that copper prices do not rise in real terms as has been assumed, and that there may be reductions in ZCCM's revenues in individual years, posing financial risks to the project. However, most market experts tend to expect real price increases through 1986, which should allow a marked improvement in ZCCM's finances over the next three years if the company implements the action programs specified under this project. In the longer term, adjustments to the parity of the Kwacha will, to a large extent, influence the ability of the company to sustain itself financially. The project is not expected to influence the general level of copper prices, as ZCCM's share of estimated world copper production is estimated to remain about the same at approximately 10 percent.

87. The principal financial risk facing the project is the possibility of insufficient or untimely availability of internally generated cash for equity financing to complete the project. Internally generated cash may not be available because: it has not materialized, mostly on account of low copper prices; or requirements for the rehabilitation of ZCCM facilities cannot be met because of competing ZCCM investment on new major projects. As noted (para. 79) any copper price projection is subject to a large degree of inherent uncertainty. However, the consequences of low copper prices in the project finances are ameliorated in that equity contribution from internally generated cash will represent only about half of the projected internal cash generation during the two-and-a-half years duration of the Project. As a further safeguard, ZCCM would be required to meet certain financial covenants (para. 78). Other measures taken to help ZCCM cope with insufficient cash generation are the annual review of expenditures and revenues through project completion and the preparation of five-year financial projections which would permit early identification of cash shortfalls (para. 80); and the government cost overrun guarantee. To reduce the risk of the second case, i.e., competition with other investments, the Bank's approval would be requested on the production and investment program prepared after completion of the technical studies; and new investments in addition to the company's already approved investment program in any year higher than US$30 million through project completion (para. 79).

88. Another financial risk is related to the insufficient provision of foreign exchange to ZCCM, not only because ZCCM's ability to produce is dependent on timely availability of foreign exchange, but also Zambia's

foreign exchange earning capability is linked to ZCCM's production levels. To keep this risk under control, the Government and ZCCM would agree each year on the amounts of foreign exchange that should be made available to run ZCCM's operations efficiently (para. 67).

89. Finally, the managerial risk of the project is obvious. The project's success depends heavily on the Government's and ZCCM's commitment in transforming the agreed upon long-term objectives in a consistent action program which implements, inter alia, unpopular but economically justified decisions. To limit the managerial risk and Bank exposure, disbursement of the second tranche is conditioned on the agreed action program (para. 67).

PART V. LEGAL INSTRUMENT AND AUTHORITY

90. The draft Loan Agreement between the Republic of Zambia and the Bank, the draft Project Agreement between Zambia Consolidated Copper Mines Limited and the Bank and the Report of the Committee provided for in Article III, Section 4 (iii) of the Articles of Agreement of the Bank are being distributed separately to the Executive Directors.

91. Special conditions of the project are listed in Section III of Annex III. Additional conditions of effectiveness are:

a) execution of a subsidiary loan agreement between the Government and ZCCM (para. 63); and

b) effectiveness of the African Development Bank loan (para. 64).

92. I am satisified that the proposed loan would comply with the Articles of Agreement of the Bank.

PART VI - RECOMMENDATIONS

93. I recommend that the Executive Directors approve the proposed loan.

A.W. Clausen
President

Attachments

Washington, D.C.
February 29, 1984

TABLE 3A

ZAMBIA - SOCIAL INDICATORS DATA SHEET

ZAMBIA	1960 /b	1970 /b	MOST RECENT ESTIMATE /b	REFERENCE GROUPS (WEIGHTED AVERAGES) /a (MOST RECENT ESTIMATE) /b MIDDLE INCOME AFRICA S. OF SAHARA	MIDDLE INCOME N. AFRICA & MID EAST
AREA (THOUSAND SQ. KM)					
TOTAL	752.6	752.6	752.6	.	.
AGRICULTURAL	398.2	399.5	401.1	.	.
GNP PER CAPITA (US$)	230.0	380.0	600.0	1147.9	1360.0
ENERGY CONSUMPTION PER CAPITA (KILOGRAMS OF COAL EQUIVALENT)	..	707.0	733.0	724.2	810.4
POPULATION AND VITAL STATISTICS					
POPULATION, MID-YEAR (THOUSANDS)	3207.0	4159.0	5842.0	.	.
URBAN POPULATION (% OF TOTAL)	23.1	30.0	43.9	28.5	47.4
POPULATION PROJECTIONS					
POPULATION IN YEAR 2000 (MILL)			11.3	.	.
STATIONARY POPULATION (MILL)			40.2	.	.
YEAR STATIONARY POP. REACHED			2145	.	.
POPULATION DENSITY					
PER SQ. KM.	4.3	5.5	7.5	56.5	36.0
PER SQ. KM. AGRI. LAND	8.1	10.4	14.1	131.8	449.0
POPULATION AGE STRUCTURE (%)					
0-14 YRS	45.0	46.1	47.3	45.9	43.9
15-64 YRS	52.5	51.4	50.1	51.2	52.8
65 AND ABOVE	2.5	2.5	2.6	2.8	3.3
POPULATION GROWTH RATE (%)					
TOTAL	2.4	2.6	3.1	2.8	2.9
URBAN	5.3	5.2	6.5	5.3	4.6
CRUDE BIRTH RATE (PER THOUS)	50.6	49.6	49.4	47.6	42.5
CRUDE DEATH RATE (PER THOUS)	24.4	20.1	16.0	15.2	12.0
GROSS REPRODUCTION RATE	3.4	3.4	3.3	3.2	3.0
FAMILY PLANNING					
ACCEPTORS, ANNUAL (THOUS)	..	..	..	.	.
USERS (% OF MARRIED WOMEN)	..	..	..	..	..
FOOD AND NUTRITION					
INDEX OF FOOD PROD. PER CAPITA (1969-71=100)	99.0	96.0	96.0	95.7	97.5
PER CAPITA SUPPLY OF					
CALORIES (% OF REQUIREMENTS)	87.0	88.0	93.0	97.1	102.3
PROTEINS (GRAMS PER DAY)	58.0	59.0	58.0	56.0	72.0
OF WHICH ANIMAL AND PULSE	14.0	16.0	14.0/c	17.2	17.8
CHILD (AGES 1-4) DEATH RATE	33.0	25.6	19.8	23.6	15.2
HEALTH					
LIFE EXPECT. AT BIRTH (YEARS)	39.7	44.6	50.5	51.9	57.2
INFANT MORT. RATE (PER THOUS)	151.3	125.2	104.1	117.6	104.2
ACCESS TO SAFE WATER (%POP)					
TOTAL	..	37.0	42.0/d	25.4	59.3
URBAN	..	70.0	86.0/d	70.5	84.9
RURAL	..	22.0	16.0/d	12.3	37.5
ACCESS TO EXCRETA DISPOSAL (% OF POPULATION)					
TOTAL	..	16.0	42.0/d	..	..
URBAN	..	12.0	87.0/d	..	..
RURAL	..	18.0	16.0/d	..	..
POPULATION PER PHYSICIAN	9540.0	8140.0	7670.0	12181.6	3536.0
POP. PER NURSING PERSON	9920.0/e	2430.0	1730.0	2292.0	1820.7
POP. PER HOSPITAL BED					
TOTAL	360.0	300.0	270.0/f	1075.4	643.3
URBAN	180.0/e	..	350.0/f	402.3	545.0
RURAL	470.0/e	..	240.0/f	3926.7	2462.0
ADMISSIONS PER HOSPITAL BED	..	..	31.0/f	..	26.4
HOUSING					
AVERAGE SIZE OF HOUSEHOLD					
TOTAL	..	4.4	..	..	..
URBAN	..	..	..	..	..
RURAL	..	..	..	..	..
AVERAGE NO. OF PERSONS/ROOM					
TOTAL	..	2.6	..	..	..
URBAN	..	..	..	..	..
RURAL	..	..	..	..	..
ACCESS TO ELECT. (% OF DWELLINGS)					
TOTAL	..	..	..	..	46.2
URBAN	27.5	..	..	..	77.6
RURAL	..	..	..	..	16.1

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TABLE 3A

ZAMBIA - SOCIAL INDICATORS DATA SHEET

	ZAMBIA 1960 /b	ZAMBIA 1970 /b	ZAMBIA MOST RECENT ESTIMATE /b	REFERENCE GROUPS (WEIGHTED AVERAGES) /a (MOST RECENT ESTIMATE) /b MIDDLE INCOME AFRICA S. OF SAHARA	MIDDLE INCOME N. AFRICA & MID EAST
EDUCATION					
ADJUSTED ENROLLMENT RATIOS					
PRIMARY: TOTAL	42.0	89.0	95.0	97.2	89.6
MALE	51.0	99.0	101.0	103.1	104.8
FEMALE	34.0	79.0	89.0	88.5	72.4
SECONDARY: TOTAL	2.0	13.0	17.0	17.2	41.7
MALE	3.0	17.0	22.0	23.5	52.8
FEMALE	1.0	8.0	11.0	14.2	31.2
VOCATIONAL (% OF SECONDARY)	27.8	3.2	3.0/f	5.2	10.3
PUPIL-TEACHER RATIO					
PRIMARY	50.0	47.0	49.0/f	42.9	31.9
SECONDARY	14.0	22.0	22.0/f	23.7	23.3
ADULT LITERACY RATE (%)	28.5/e	47.3	44.0	37.1	43.3
CONSUMPTION					
PASSENGER CARS/THOUSAND POP	10.2	14.5	18.7/g	18.8	18.0
RADIO RECEIVERS/THOUSAND POP	4.7/i	18.0	23.9	97.8	138.1
TV RECEIVERS/THOUSAND POP	..	4.1	10.6	18.6	45.6
NEWSPAPER ("DAILY GENERAL INTEREST") CIRCULATION PER THOUSAND POPULATION	5.0	13.7	19.9	18.2	31.0
CINEMA ANNUAL ATTENDANCE/CAPITA	..	..	0.3/f	0.6	1.7
LABOR FORCE					
TOTAL LABOR FORCE (THOUS)	1322.0	1621.0	2098.0	.	.
FEMALE (PERCENT)	33.3	32.6	32.4	36.1	10.7
AGRICULTURE (PERCENT)	79.0	73.0	67.0	56.8	42.5
INDUSTRY (PERCENT)	7.0	9.0	11.0	17.5	27.8
PARTICIPATION RATE (PERCENT)					
TOTAL	41.2	39.0	35.9	37.0	25.6
MALE	55.3	52.9	49.5	47.1	45.4
FEMALE	27.3	25.2	22.8	27.0	5.6
ECONOMIC DEPENDENCY RATIO	1.2	1.2	1.4	1.3	1.8
INCOME DISTRIBUTION					
PERCENT OF PRIVATE INCOME RECEIVED BY					
HIGHEST 5% OF HOUSEHOLDS	33.7	23.0/h	..	..	..
HIGHEST 20% OF HOUSEHOLDS	58.2	63.0/h	56.7/g	..	..
LOWEST 20% OF HOUSEHOLDS	5.4	3.8/h	3.6/g	..	..
LOWEST 40% OF HOUSEHOLDS	13.0	10.1/h	11.1/g	..	..
POVERTY TARGET GROUPS					
ESTIMATED ABSOLUTE POVERTY INCOME LEVEL (US$ PER CAPITA)					
URBAN	..	..	247.0/f	534.2	276.1
RURAL	..	..	168.0/f	255.9	177.1
ESTIMATED RELATIVE POVERTY INCOME LEVEL (US$ PER CAPITA)					
URBAN	..	..	126.0/f	491.5	400.0
RURAL	..	..	85.0/f	188.1	283.3
ESTIMATED POP. BELOW ABSOLUTE POVERTY INCOME LEVEL (%)					
URBAN	..	..	25.0/f	..	22.0
RURAL	..	..	..	..	30.8

.. NOT AVAILABLE
. NOT APPLICABLE

NOTES

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

/b Unless otherwise noted, "Data for 1960" refer to any year between 1959 and 1961; "Data for 1970" between 1969 and 1971; and data for "Most Recent Estimate" between 1979 and 1981.

/c 1977; /d 1975; /e 1963; /f 1978; /g 1976; /h 1973; /i 1962.

May 1983

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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 1980 data.

Agricultural - Estimate of agricultural area used temporarily or permanently for crops, pastures, market and kitchen gardens or to lie fallow; 1960, 1970 and 1980 data.

GNP PER CAPITA (US$)

GNP PER CAPITA (US$) - GNP per capita estimates at current market prices, calculated by same conversion method as World Bank Atlas (1979-81 basis); 1960, 1970, and 1981 data.

ENERGY CONSUMPTION PER CAPITA

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 coal equivalent per capita; 1960, 1970, and 1980 data.

POPULATION AND VITAL STATISTICS

Total Population, Mid-Year (thousands) - As of July 1; 1960, 1970, and 1981 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 1981 data.

Population Projections

Population in year 2000 - Current population projections are based on 1980 total population by age and sex and their mortality and fertility rates. Projection parameters for mortality rates comprise of three levels assuming life expectancy at birth increasing with country's per capita income level, and female life expectancy stabilizing at 77.5 years. The parameters for fertility rate also have three levels assuming decline in fertility according to income level and past family planning performance. Each country is then assigned one of these nine combinations of mortality and fertility trends for projection purposes.

Stationary population - In a stationary population there is no growth since the birth rate is equal to the death rate, and also the age structure remains constant. This is achieved only after fertility rates decline to the replacement level of unit net reproduction rate, when each generation of women replaces itself exactly. The stationary population size was estimated on the basis of the projected characteristics of the population in the year 2000, and the rate of decline of fertility rate to replacement level.

Year stationary population is reached - The year when stationary population size will be reached.

Population Density

Per sq. km. - Mid-year population per square kilometer (100 hectares) of total area; 1960, 1970, and 1980 data.

Per sq. km. agricultural land - Computed as above for agricultural land only; 1960, 1970 and 1980 data.

Population Age Structure (percent) - Children (0-14 years), working-age (15-64 years), and retired (65 years and over) as percentages of mid-year population; 1960, 1970, and 1981 data.

Population Growth Rate (percent) - total - Annual growth rates of total mid-year population for 1950-60, 1960-70, and 1970-81.

Population Growth Rate (percent) - urban - Annual growth rates of urban populations for 1950-60, 1960-70, and 1970-81.

Crude Birth Rate (per thousand) - Annual live births per thousand of mid-year population; 1960, 1970, and 1981 data.

Crude Death Rate (per thousand) - Annual deaths per thousand of mid-year population; 1960, 1970, and 1981 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 1981.

Family Planning - Acceptors, Annual (thousands) - Annual number of acceptors of birth-control devices under auspices of national family planning program.

Family Planning - Users (percent of married women) - Percentage of married women of child-bearing age (15-44 years) who use birth-control devices to all married women in same age group.

FOOD AND NUTRITION

Index of Food Production per Capita (1969-71=100) - Index of per capita annual production of all food commodities. Production excludes seed and feed and is on calendar year basis. Commodities cover primary goods (e.g. sugarcane instead of sugar) which are edible and contain nutrients (e.g. coffee and tea are excluded). Aggregate production of each country is based on national average producer price weights; 1961-65, 1970, and 1981 data.

Per capita supply of calories (percent of requirements) - Computed from energy equivalent of net food supplies available in country per capita per day. Available supplies comprise domestic production, imports less exports, and changes in stock. Net supplies exclude animal feed, seeds, quantities used in food processing, and losses in distribution. Requirements were estimated by FAO based on physiological needs for normal activity and health considering environmental temperature, body weights, age and sex distribution of population, and allowing 10 percent for waste at household level; 1961-65, 1970 and 1980 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 Survey; 1961-65, 1970 and 1980 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) - Annual deaths per thousand in age group 1-4 years, to children in this age group; for most developing countries data derived from life tables; 1960, 1970 and 1981 data.

HEALTH

Life Expectancy at Birth (years) - Average number of years of life remaining at birth; 1960, 1970 and 1981 data.

Infant Mortality Rate (per thousand) - Annual deaths of infants under one year of age per thousand live births; 1960, 1970 and 1981 data.

Access of Safe Water (percent of population) - total, urban, and rural - Number of people (total, urban, and rural) with reasonable access to safe water supply (includes treated surface waters or untreated but uncontaminated water such as that from protected boreholes, springs, and sanitary wells) as percentages of their respective populations. In an urban area a public fountain or standpost located not more than 200 meters from a house may be considered as being within reasonable access of that house. In rural areas reasonable access would imply that the housewife or members of the household do not have to spend a disproportionate part of the day in fetching the family's water needs.

Access to Excreta Disposal (percent of population) - total, urban, and rural - Number of people (total, urban, and rural) served by excreta disposal as percentages of their respective populations. Excreta disposal may include the collection and disposal, with or without treatment, of human excreta and waste-water by water-borne systems or the use of pit privies and similar installations.

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

Population per Nursing Person - Population divided by number of practicing male and female graduate nurses, 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 hospital and rehabilitation centers. Hospitals are establishments permanently staffed by at least one physician. Establishments providing principally custodial care are not included. Rural hospitals, however, include health and medical centers not permanently staffed by a physician (but by a medical assistant, nurse, midwife, etc.) which offer in-patient accommodation and provide a limited range of medical facilities. For statistical purposes urban hospitals include WHOs principal/general hospitals, and rural hospitals, local or rural hospitals and medical and maternity centers. Specialized hospitals are included only under total.

Admissions per Hospital Bed - Total number of admissions to or discharges from hospitals divided by the number of beds.

HOUSING

Average Size of Household (persons per household) - total, urban, and rural - A household consists of a group of individuals who share living 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.

Access to Electricity (percent of dwellings) - total, urban, and rural - Conventional dwellings with electricity in living quarters as percentage of total, urban, and rural dwellings respectively.

EDUCATION

Adjusted Enrollment Ratios

Primary school - total, male and female - Gross total, male and female enrollment of all ages at the primary level as percentages of respective primary school-age populations; normally includes children aged 6-11 years but adjusted for different lengths of primary education; for countries with universal education enrollment may exceed 100 percent since some pupils are below or above the official school age.

Secondary school - total, male and female - Computed as above; secondary education requires at least four years of approved primary instruction; provides general, vocational, or teacher training instructions for pupils usually of 12 to 17 years of age; correspondence courses are generally excluded.

Vocational enrollment (percent of secondary) - Vocational institutions include technical, industrial, or other programs which operate independently or as departments of secondary institutions.

Pupil-teacher ratio - primary, and secondary - Total students enrolled in primary and secondary levels divided by numbers of teachers in the corresponding levels.

Adult literacy rate (percent) - Literate adults (able to read and write) as a percentage of total adult population aged 15 years and over.

CONSUMPTION

Passenger Cars (per thousand population) - Passenger cars comprise motor cars seating less than eight persons; excludes ambulances, hearses and military vehicles.

Radio Receivers (per thousand population) - All types of receivers for radio broadcasts to general public per thousand of population; excludes unlicensed receivers in countries and in years when registration of radio sets was in effect; data for recent years may not be comparable since most countries abolished licensing.

TV Receivers (per thousand population) - TV receivers for broadcast to general public per thousand population; excludes unlicensed TV receivers in countries and in years when registration of TV sets was in effect.

Newspaper Circulation (per thousand population) - Shows the average circulation of "daily general interest newspaper", defined as a periodical publication devoted primarily to recording general news. It is considered to be "daily" if it appears at least four times a week.

Cinema Annual Attendance per Capita per Year - Based on the number of tickets sold during the year, including admissions to drive-in cinemas and mobile units.

LABOR FORCE

Total Labor Force (thousands) - Economically active persons, including armed forces and unemployed but excluding housewives, students, etc., covering population of all ages. Definitions in various countries are not comparable; 1960, 1970 and 1981 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 1981 data.

Industry (percent) - Labor force in mining, construction, manufacturing and electricity, water and gas as percentage of total labor force; 1960, 1970 and 1981 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 1981 data. These are based on ILO's participation rates reflecting age-sex structure of the population, and long time trend. A few estimates are from national sources.

Economic Dependency Ratio - Ratio of population under 15 and 65 and over to the total labor force.

INCOME DISTRIBUTION

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

POVERTY TARGET GROUPS

The following estimates are very approximate measures of poverty levels, and should be interpreted with considerable caution.

Estimated Absolute Poverty Income Level (US$ per capita) - urban and rural - Absolute poverty income level is that income level below which a minimal nutritionally adequate diet plus essential non-food requirements is not affordable.

Estimated Relative Poverty Income Level (US$ per capita) - urban and rural - Rural relative poverty income level is one-third of average per capita personal income of the country. Urban level is derived from the rural level with adjustment for higher cost of living in urban areas.

Estimated Population Below Absolute Poverty Income Level (percent) - urban and rural - Percent of population (urban and rural) who are "absolute poor".

Economic and Social Data Division
Economic Analysis and Projections Department
May 1983

ZAMBIA
ECONOMIC INDICATORS

Population: 5.842 million (mid-1981)
GNP per Capita: US$600 (mid-1981)

NATIONAL ACCOUNTS

Indicator	Amount (Million US$ at Current Prices)	Share of GDP at Current Market Prices (percent)				Average Annual Growth (%) (at Constant 1970 Prices)		
	1982	1970	1975	1980	1982	1970-75	1975-80	1980-82
Gross Domestic Product	3,830	100.0	100.0	100.0	100.0	3.0	-0.9	1.3
Agriculture	520	10.7	13.0	14.2	13.6	2.7	0.5	-2.2
Mining	432	36.3	13.6	16.1	11.3	0.0	-3.0	4.3
Other Industry[1]	932	18.5	28.1	23.7	24.3	8.3	-0.2	1.2
Services	1,946	34.5	45.3	46.0	50.8	3.2	0.4	0.3
Consumption	3,631	54.6	79.0	81.4	94.8	3.4	0.0	3.7
Gross Investment	648	28.4	40.5	23.4	16.9	4.1	-16.9	-22.4
Exports of Goods & NFS	1,050	54.0	36.3	42.2	27.4	0.5	-3.5	0.4
Imports of Goods & NFS	1,498	37.1	55.8	47.0	39.1	-1.2	-9.0	-18.5
Gross Domestic Savings	199	45.4	21.0	18.6	5.2	-9.9	0.0	-57.7

GOVERNMENT FINANCE	General Government[2]		Central Government (1982)	
	(K Mln.)	% of GDP	(K Mln.)	% of GDP
Current Receipts			878.7	24.7
Current Expenditures			1,323.0	37.1
Current Surplus			-444.3	-12.4
Capital Expenditures			320.2	8.9
External Financing			192.9	5.4

MONEY, CREDIT and PRICES	1970	1975	1980	1981	1982	1983[3]
	(Million K, End Period)					
Money and Quasi Money	356	493	907	979	1309	1398
Bank Credit to Government	-164	318	1355	1495	1983	2116
Bank Credit to Private Sector[4]	137	393	505	765	905	985
	(Percentage of Index Numbers)					
Money and Quasi Money as % of GDP	28.1	31.3	30.1	28.4	36.7	n.a.
Wholesale Price Index (1966=100)[5]	116.4	188.6	424.2	475.9	542.8	663.0
Annual percentage change in:						
Wholesale Price Index	2.5	16.6	11.1	12.2	14.1	22.1
Bank Credit to Government	-40.8	406.9	20.8	10.3	32.7	6.7
Bank Credit to Private Sector[4]	25.0	17.0	4.6	51.4	18.3	8.8

[1] Manufacturing, construction, electricity, gas and water.
[2] Figures do not differ significantly from "Central Government".
[3] End-September 1983.
[4] Includes parastatal organizations.
[5] All domestically used goods.

EA1DB
Jan. 1984

ZAMBIA
TRADE PAYMENTS AND CAPITAL FLOW

BALANCE OF PAYMENTS

	1980	1981	1982	1983
		(Millions US$)		(Est.)
Exports of Goods, NFS	1,611	1,126	1,050	1,100
Imports of Goods, NFS	1,795	1,608	1,499	1,200
Resource Gap (deficit = -)	-183	-482	-449	-100
Factor Services (net)[1]	-321	-271	-238	-200
Net Transfers[2]	-144	-101	-30	-40
Balance on Current Account	-649	-853	-716	-340
Official Grants	30	26	30	40
Direct Foreign Investment	..	..	..	..
Net MLT Borrowing	437	210	238	230
Disbursements	624	400	334	300
Amortization	187	190	96	70
Net IMF	8	367	-49	64
External Payment Arrears	136	53	186	..
Other Items (n.e.i.)	39	159	396	-34
Change in Reserves (- = increase)	-1	38	-88	40

Memorandum Items

	1980	1981	1982	1983
Gross Int'l. Reserves	90	52	140	100
(weeks of Imports, f.o.b.)	(4.2)	(2.7)	(7.4)	(5.8)
Current A/C Bal. as % GDP	-17.0	-21.6	-18.7	-10.3

RATES OF EXCHANGE

	US$
1980	1.2682
1981	1.1466
1982	1.0748
1983	0.7800

MERCHANDISE EXPORTS 1982

	US$ Mln.	%
Copper	843	90
Cobalt	30	3
Lead and Zinc	30	3
All other commodities	41	4
Total	943	100

EXTERNAL DEBT, Dec. 31, 1982

	US$ Mln.
Public Debt, incl. guarantee	2,380.6
Non-Guaranteed Private Debt	..
Total Outstanding & Disbursed	2,380.6

DEBT SERVICE RATIO FOR 1982[3]

	%
Public Debt, incl. guaranteed	17.5
Non-Guaranteed Private Debt	..
Total Outstanding & Disbursed	17.5

IBRD/IDA LENDING, September 30, 1983

	IBRD	IDA
	(Million US$)	
Outstanding & Disbursed	341.87	20.18
Undisbursed	61.60	87.87
Outstanding incl. Undisbursed	403.47	108.05

[1] Including contract salary and gratuities transfers.

[2] Excluding official grants and contract salary and gratuities transfers

[3] Ratio of debt service on MLT debt, excluding arrears and IMF repayments, to exports of goods and non-factor services.

..not available

January 1984

STATUS OF BANK GROUP OPERATIONS IN ZAMBIA

A. STATEMENT OF BANK LOANS AND IDA CREDITS
as of September 30, 1983

Loan No.	Credit No.	Year	Borrower	Purpose		Bank	IDA	Undisbursed Loan	Undisbursed Credit
						Amount in US$ Million (Less Cancellation)			
			17 Loans fully disbursed			358.63			
900-1		1973	Zambia	Education		33.00		0.62	
1131		1975	Posts & Tele.	Telecommunications		32.00		4.81	
1356		1977	Zambia	Education		13.30		4.89	
1424		1977	Zambia	Industrial Forestry		16.80		0.88	
1566	798	1978	Zambia	Third Highway		11.25	11.25	11.25	10.39
	863	1979	Zambia	Coffee Production			6.00		2.16
	873	1979	Zambia	Technical Assistance			5.00		3.72
1790	973	1980	Zambia	Third Railway		25.00	15.00	15.87	2.78
1923		1981	Development Bank of Zambia	Second Development Finance Company		15.00		3.37	
2001		1981	Zambia	Eastern Province Agric. Development		11.00		10.10	
	1193	1982	Zambia	Southern Province Agric. Development			18.00		17.72
	1196	1982	Zambia	Smallholder Dairy Dev.			7.50		7.29
	1251	1982	Zambia	Fifth Education			25.00		23.51
2151		1982	Zambia Industrial & Mining Company	Oil Refinery		5.10		4.87	
2152		1982	Zambia	Pet. Exploration		6.60		4.94	
	1333	1983	Zambia	Maamba Coal Eng.			4.30		4.30
	1362	1983	Zambia	Rural Water Supply			10.00		10.00
	SF2	1983	Zambia	Rural Water Supply			6.00		6.00
		Total				527.68	108.05	61.60	87.87
		of which has been repaid				124.10	-	-	-
		Total now outstanding				403.58	108.05	-	-
		Amounts sold			28.58				
		of which has been repaid			28.47	0.11	-	-	
		Total now held by Bank/IDA				403.47	108.05	-	
		of which is undisbursed				61.60	87.87		

NOTES: The US$22.4 million credit for the Industrial Forestry Project - Phase III, approved by IDA on January 10, 1984, has not yet been signed.

The status of the projects listed in Part A is described in a separate report on all Bank/IDA-financed projects in execution, which is updated twice yearly and circulated to the Executive Directors on April 30 and October 31.

B. STATEMENT OF IFC INVESTMENTS
(as of September 30, 1983)

Investment No.	Year		Type of Business	US$ Million Equivalent Loan	Equity	Total
216-ZA	1972	Zambia Bata Shoe Company Limited	Shoe Manufacturing	0.85	0.23	1.08
250-ZA	1973	Zambia Bata Shoe Company Limited	Shoe Manufacturing and Tannery	1.20	-	1.20
307-ZA	1975	Century Packages Limited	Packaging Materials	0.78	0.21	0.99
324-ZA	1976	Development Bank of Zambia	Development Finance Company	-	0.54	0.54
394-ZA	1978	Century Packages Limited	Packaging Materials	0.10	-	0.10
483-ZA	1979	Zambia Consolidated Copper Mines	Copper and Cobalt Production	28.00	-	28.00
527-ZA	1980	Kafue Textiles of Zambia Limited	Textiles & Fibers	7.60	-	7.60
600-ZA	1981	Zambia Consolidated Copper Mines	Copper Production	28.85	-	28.85
		Total gross commitments		67.38	0.98	68.36
		Less cancellations, terminations, repayment and sales		14.18	0.81	14.99
		Total now held by IFC		53.20	0.17	53.37
		Total undisbursed		26.96	-	26.96

NOTE: An investment of US$18.7 million in Zambia Hotel Properties Limited was approved by IFC on May 31, 1983, but is not yet signed.

SUPPLEMENTARY PROJECT DATA SHEET

I. Timetable of Key Events

(a)	Time taken to prepare project	: 22 months
(b)	Project prepared by	: ZCCM
(c)	First presentation to the Bank	: February 1981
(d)	Departure of appraisal mission	: February 1982
(e)	Post-appraisal mission	: March 1983
(f)	Negotiations	: January 1984
(g)	Planned date of effectiveness	: May 1984

II. Special Bank Implementation Action

(a) Review of conditions precedent to, and approval of, release of the second tranche of the Bank loan (para. 67).

(b) US$0.4 million retroactive financing for cost of consulting services incurred after July 31, 1983 (para. 75).

(c) Contributions to a Special Account to facilitate procurement out of Bank resources (para. 76).

III. Special Conditions

(a) Release of second tranche of Bank loan is conditoned on:

- satisfactory progress by the borrower on an action program for economic reform (para. 67);

- the Bank, the Government and ZCCM having agreed on the implementation of an action program to carry out ZCCM's production and investment strategies, including, for the 1986-88 period, year-by-year targets for cutting overhead costs, reducing dilution, and increasing mine productivity, an implementation plan for closure of financially and economically nonviable operations, and priority ranking of replacement/new investment (para. 67); and

- satisfactory amounts of foreign exchange having been made available to the Company in the preceding 12 months by the Government (para. 67).

(b) ZCCM to carry out its operations in accordance with international health, safety and pollution control standards (para. 71).

GOVERNMENT OF THE REPUBLIC OF ZAMBIA

MEMORANDUM ON DEVELOPMENT OBJECTIVES AND POLICIES

PURPOSE

1. This memorandum sets out the Government's current development objectives and describes a number of actions and measures which the Government intends to take to help achieve structural change in the economy and better economic management.

BACKGROUND

2. For a number of years, the Zambian economy has experienced severe external and internal financial difficulties. Foreign reserves have dwindled and external payment arrears have built up. Fiscal deficits have led to a high rate of domestic inflation. The scarcity of external and domestic financial resources has caused imports, investments and maintenance of capital stock to decline. As a result, the economy's productive capacity has become increasingly under-utilized, production and employment have stagnated.

3. To a large extent, external factors beyond the Government's control account for these developments. Weak copper prices and increasing costs of production in the mining sector have adversely affected foreign exchange earnings and government revenue. Droughts in recent years made substantial food imports unavoidable. Zambia's economy has also suffered from the unsettled political situation in the region, from increases in oil prices, and from disruptions of transport routes outside its borders.

4. The Government recognizes that in the changed circumstances a number of economic policies need to be made more conducive to achieve financial equilibrium and economic growth. Pricing, exchange rate and tariff policies need to provide the incentives necessary to realize the country's potential of agricultural and industrial production and to stimulate diversification and export growth. Large budget deficits have led to a pattern of over-consumption and falling investment as a result of these deficits being used to finance recurrent expenditure. As a consequence, the composition of Government expenditure has become less and less supportive of the development effort. Also, although many parastatal enterprises have become less unprofitable and less dependent on subvention from the budget a greater degree of efficiency is still required.

5. Achieving the Government's prime goal of healthy economic growth requires first of all the restoration of financial stability. But equally important and urgent is the initiation of a programme of structural adjustment which will bring the economy back on a path of sustainable growth and which will lead to economic diversification. In drawing up a programme of growth and diversification, the Government will be guided by three key considerations:

(i) to provide adequate economic incentives for production of both agriculture and locally manufactured exports;

(ii) to enhance the international competitiveness of the economy; and

(iii) to allocate resources in such a manner that they support the preceding objectives.

GOVERNMENT MEASURES

6. The Government has already taken a number of steps to correct the financial imbalances in the economy. In May 1981, an agreement was reached with the International Monetary Fund (IMF) on the use of a three-year Extended Fund Facility (EFF). The policies pursued under the EFF aimed at the resumption of a sustainable rate of growth while achieving progressive improvements in the Balance of Payments. Under the programme, measures related to ceilings on domestic bank financing and external borrowing, limits to credit expansion and external payment arrears were pursued. Some progress has been made in the attainment of several of the objectives spelled out in the EFF programme, while some difficulties have been encountered with others. The Government is currently engaged in disucssions with the IMF on targets and policies to be pursued in the near future in respect of its latest application for a standby facility. It is the Government's firm intention to retain access to the facilities of the IMF.

7. Meanwhile, a number of other measures to affect both demand and supply conditions in the economy were initiated, including the following:

- A commitment to eliminate subsidies over a period, as well as to reduce fertilizer and maize subsidies. In the 1981 budget K125 million was allocated to these subsidies but only K107 million was spent. The provision for 1982 was reduced to K89 million. However, the actual expenditure rose to K153 million mainly due to maize imports necessitated by the drought. The provision for 1983 is set at K62 million.

- In the 1981 budget, the maximum tax rate on farming income was reduced from 80 to 25 percent, while in the 1982 budget this rate was reduced further to 15 percent.

- Annual review and adjustment of agricultural producer prices to provide adequate incentives to farmers so as to efficiently substitute imports and promote exports.

- Adoption of the principle of economic pricing for parastatal enterprises.

8. In drawing up the annual capital expenditure budget, consideration has been given to changes in resource availabilities and it is the Government's commitment to increase in real terms the "recurrent departmental charges" available to the productive sectors, particularly agriculture.

9. The proposed mining rehabilitation programme is intended to arrest the decline in copper production and enhance the efficiency and profitability of the mining sector. It is expected to increase net export earnings and Government revenues in the medium term. It is therefore an important element in the programme of redressing financial imbalances, and it will allow, through larger foreign exchange allocations, an increase in the capacity utilization of the productive sectors. It is not, however, a solution to the longer-term structural problems of the Zambian economy. Because of the projected long-term decline in production and exports of copper resulting from the depletion of ore reserves, there is an urgent need to develop viable alternative sources of production and exports. Zambia is endowed with alternative sources of wealth. It has excellent potential for increasing agricultural production and exports, and prospects for export-led industrial development based on agricultural products and other domestic resources are also good.

FURTHER ACTION

10. The Government is resolved to take such further action as is necessary to bring about a resumption of economic growth and diversification of production and exports, and to continue with the policies which would promote structural change in the economy.

11. Developing a comprehensive and coherent set of adjustment policies, and devising concrete measures to effect the desired changes in the economy is a difficult task that may take a number of years to implement. In several instances, studies will be necessary to provide the proper analytical underpinning of policy objectives. The Government recognizes that its own analytical capabilities need to be strengthened, and it therefore welcomes the World Bank's technical assistance in training Zambians to plan and implement its programme of economic adjustment and in carrying out supporting studies.

12. It is possible and necessary, however, to initiate a number of new adjustment measures before the results of those studies are available. Building on institutional arrangements already made, the Government intends to take in the immediate future a number of steps which are supportive of its objective of diversifying production and exports and achieving better management of resources. These measures will be aimed at:

- Providing a system of incentives to producers and exporters of agricultural and industrial products in which prices are responsive to market forces.

- Evolving a system that encourages co-operatives and other agents in the procurement and selling of food crops in which, except for maize, NAMBOARD will as the buyer and seller of last resort to ensure the effectiveness of incentive pricing.

- Mobilization and allocation of resources for development through improved planning, budgetary and other procedures to shift resources to productive investment.

- Using wages and interest rate policies to reverse past trends of increasing consumption and declining investment.

- Improving management of foreign debt.

- Continuing the programme of reform already started in respect of parastatal enterprises by strengthening the technical and management capacity of ZIMCO.

- Restructuring the energy sector with a view to bringing about lesser dependence on imported oil.

- Ensuring the competitiveness of exports through an active exchange rate policy.

The programmes to implement the above measures are spelt out in more detail in the following paragraphs:

PRODUCER INCENTIVES

13. Past policies, which held prices for agricultural and industrial products too low, are, to an appreciable extent, responsible for the disappointing performance of the economy. As stated before, the Government has already instituted annual review of agricultural producer prices with a view to providing adequate incentives to farmers so as to efficiently substitute imports and promote exports. For industrial prices the Government has adopted the policy that they should be based on a clear definition of economic prices in terms both of reasonable rates of return based on current replacement costs and the international competitiveness of production. Producer prices for agricultural products and prices of several industrial products have recently been increased.

14. In May 1981, the Government established the Prices and Incomes Commission (PIC). PIC is set up as a semi-autonomous body, under guidance of a Consultative Council of Prices and Incomes. With the assistance of a full-time Secretariat, it has assumed full executive powers in executing the Government's pricing policies. The members of the Commission and of the Consultative Council have been appointed and the Secretariat is being provided with adequate and experienced staff. The Government's role will be to lay down, through the Consultative Council, general principles and policy guidelines to be followed. The application of the guidelines are left to PIC, who will now exert a "post facto" price control. In this respect, except for a few essential commodities, the primary responsibility for setting economic prices now rests with the enterprises, and PIC will review those prices in the light of the Government's guidelines on a "no objection" basis.

15. The general principles on which the Government's pricing policies are based have been set forth above. However, operationally useful guidelines will need to be defined with greater precision. Objective methodologies and criteria need to be developed to be used in setting comparative agricultural producer prices and in determining economic prices for industrial products in such a manner that the policy of economic pricing is not abused by the inefficient producer. The Government also intends to draw up work programmes for the generation and maintenance of data bases in the Ministry of Agriculture and Water Development and PIC, which would provide support for informed pricing decisions and rational allocation of resources based on the principle of comparative advantage. The Government welcomes assistance from the World Bank in these matters.

AGRICULTURE

16. The Government intends to strengthen the Agricultural Planning capability of the Ministry of Agriculture and Water Development to enable policies to be formulated on the basis of a well defined agricultural development strategy and welcomes World Bank assistance in this area. Since Zambia possesses adequate land and water resources to enable a dual approach to agricultural development which emphasises both small scale and large scale farming including irrigation, the Government will examine the potential and requirements of both in the production of food and export crops within the total resources likely to be available.

17. The Government gives high priority to the promotion of agricultural small-holder production as an effective means of increasing output and redistributing income. Equal in importance to proper price incentives is the provision of adequate services. The Government intends to review the whole range of services available to the small-holder, including extension, research, input supply and marketing, to identify inadequacies in the system and to effect improvements where necessary. The Government welcomes World Bank assistance in the form of a study on agricultural services and financial support. The Government will then draw up an action programme for the improvement of agricultural services.

18. Improving marketing services is particularly important in this respect. The Government intends to increase the efficiency of the marketing system by allowing a degree of competition among the official marketing organisations, co-operative unions, and private traders. This should eventually lead to a system in which official producer prices become floor prices. Such a system already operates for a number of crops such as Sorghum, Millet and Cassava. However, the volume of marketed output is constrained by, among others, poor transportation facilities, lack of facilities for processing and inadequate credit for farmers. The Government has already made a start in relieving these constraints.

INDUSTRY

19. The Government is concerned about the performance of the industrial sector. Although implementing the policy of economic pricing will increase the profitability of the sector, the Government feels that further measures

are necessary to redress the low efficiency of manufacturing operations of enterprises; the heavy import dependence of the sector; its small contribution to exports and its high capital intensity.

20. The Government also intends to review its tariff and other industrial policies, and to consider such changes in policies and incentives as may be necessary to bring about increased efficiency, high labour intensity and better export performance. To this end, the Government looks forward to receiving the findings and recommendations of the Industrial Sector Policies Mission of the World Bank which could form a basis for further measures aimed at intensifying import substitution, encouraging exports, improving capacity utilisation and increasing the efficiency of the sector. The measures aimed at improving capacity utilisation and increasing efficiencies may require financial assistance in the form of foreign exchange support for the purchase of essential raw materials, spare parts and equipment from the Bank and other donors.

21. Because of the foreign exchange constraints and the critical need to develop alternative lines of exports, the Government intends to take necessary measures to promote manufacturing exports. To this end the Government has already introduced a foreign exchange credit system by which any exporter who earns foreign exchange is given credit of up to 50 per centum of the foreign exchange earned. Additionally, it has been decided to establish an Export Guarantee Agency to protect the interests of Zambian exporters. World Bank assistance in the form of an Export Revolving Fund will be welcome.

IMPROVING BUDGETING AND PLANNING

22. In the past, lack of co-ordination among the Ministry of Finance, the National Commission for Development Planning, and executing ministries led to the preparation of Government investment programmes which were too large in relation to available resources. Also, the coordination between the annual recurrent and capital budgets has been less than satisfactory. The recurrent cost implications of past and new investments were not adequately considered. As a result, there has been an increasing disinvestment and under-utilization of existing capital stock. Also resources have been spread too thinly over too many projects and this has led to delays in execution.

23. At the request of the Government, the World Bank has recently carried out a Forward Budgeting Study which is intended to help develop an overall financial framework for projecting the main budget aggregates, establishing linkages between recurrent and capital budgets, and defining procedures for monitoring and setting priorities. These should enable the Government to increase the share of spending for development purposes. The Government looks forward to receiving the results and recommendations of this study, on the basis of which it intends to adopt the practice of medium-term financial planning and introduction of annual three-year rolling budgets for both recurrent and capital expenditure. The Government will ensure that capital budgets will be consistent in size with estimated available resources, and in conformity with the Government's goals of diversifying production and exports, and increasing the utilization of existing capital

stock. For this purpose, a co-ordinating Committee composed of inter alia, representatives of the Ministry of Finance and the National Commission for Development Planning will be set up. Executing ministries and agencies will be instructed to include in their submissions for the capital and recurrent budgets, estimates of the recurrent cost requirements of the various projects, including estimates of costs associated with improving utilization of existing capital stock. In addition, objective economic criteria will be developed for investment projects to be included in the capital Budget. The World Bank assistance in training Zambians would be welcome.

DEBT MANAGEMENT

24. As a result of large borrowing, Zambia's outstanding debt on medium and long term more than doubled between 1975 and 1980. The servicing of these loans, and of the drawings from the IMF and the short-term arrears, will increase substantially the country's debt service obligations in the near future. This means that the Government needs to exercise great caution in contracting external debt. The Government, therefore, will enforce strictly the existing legislation, which places the sole authority to contract external debt with the Minister of Finance. It will also strengthen the present debt management unit in the Bank of Zambia in order to avoid omissions in debt reporting and advise the Government on the implications of its external borrowing programme. The Government intends to evolve a system by which integrated annual borrowing programmes will guide its decisions on external financing. Zambia will seek World Bank's technical assistance in training local personnel to man the unit.

PARASTATAL ENTERPRISES

25. In the past three years, the Government already has moved to improve the efficiency of parastatal enterprises in the ZIMCO Group. Representing a major restructuring of ZIMCO's management, the changes include:

(i) the severing of direct links between company management and government ministries previously responsible for operating decisions; and

(ii) the establishment of a new Board of Directors and an executive management group in ZIMCO Headquarters responsible for Group policies, financial and corporate planning, conditions of service for Group employees and investment decisions.

These measures aim at increasing the commercial orientation of the enterprises and have resulted in the institution of a Corporate Salary Structure and new Conditions of Service, an annual Corporate Budget to establish performance criteria and to review policies including investment decisions, monthly and quarterly reviews of performance and production constraints, the carrying out of Management Audits aimed at identifying areas for improvement in companies, project evaluation, and a weekly fact sheet to inform the ZIMCO Board, Managers and Government Agencies of the current status of major financial indicators.

26. There has been a substantial effort towards coordination of Group activities, reduction in costs and improvement in managerial efficiency. The merger of the two mining companies will result in significant cost savings and greater rationalisation of operations. Many individual companies in the Finance, Energy, Commercial and particularly in the Manufacturing sectors have shown improved profitability. Positive steps have been taken to reduce costs in the Trnasport sector and improve overall operations. The management group, guided by the objectives of cost reductions and improved efficiency is also responsible for the review and evaluation of ZIMCO's pricing policies.

27. The Government intends to continue to improve the operations of the ZIMCO Group by strengthening the technical capacity of the management Group in the field of investment analysis and managerial support to Group companies. A set of investment criteria oriented towards efficient import substitution and export promotion will be drawn up. The Government also looks forward to the early conclusion of the Mining Rehabilitation loan and to seeking World Bank assistance on other mining projects including small scale mining to exploit other mineral resources.

28. The Government will continue to welcome private participation in joint equity ventures with ZIMCO, recognising the technical contribution which private participation can offer to the success of existing or new enterprises.

ENERGY

29. Although Zambia's own energy resources are substantial, a considerable proportion of commercial energy is provided by imports of oil. The mining and commercial transport sectors are the major users of oil and reduction in oil fuel consumption has occurred due to the general decline in economic activity. However, the Government is concerned about the increasing burden of oil imports on the Balance of Payments and realises that a restructuring of energy inputs is necessary.

The Government has already initiated a number of projects in this direction and these include:

- Indeni Refinery Modification Study - (financed by the World Bank)
- Review of energy use in the Mines with a view to substitution of oil fuel by hydropower and coal where feasible.
- Study on the electrification of the railway system (financed by the World Bank).
- Study on the rehabilitation of the Colliery - (financed by the World Bank).
- Exploration for petroleum deposits - (financed by the World Bank).

- Review of energy pricing.
- Planned studies on Energy Conservation measures in the mines, refinery and major consuming industries.
- Restructuring of institutional arrangements in the energy sector for improved planning.

The Government intends to develop a comprehensive energy policy. It looks forward to receiving the results of the World Bank's recent Energy Assessment Mission, and intends to consider implementation of its recommendations.

CONCLUSIONS

30. The Government considers the actions spelled out above as significant steps towards the formulation of a comprehesive structural adjustment programme. The Government recognizes that the degree of progress with the economic recovery programme is an important factor in determining the extent to which external assistance can be used in a meaningful way. To ensure satisfactory progress, the Government intends to continue to discuss with the World Bank the implementation and further planning of its programme of structural adjustment.

OFFICE OF THE MINISTER
MINISTRY OF FINANCE
P.O. BOX 50062
LUSAKA

MF/101/22/1

1st February, 1984

Mr. W. Wapenhans
Vice President
Eastern Africa Region
World Bank
1818 H Street, N.W.
Washington, DC 20433

Dear Mr. Wapenhans:

1. It has been now a year since my Government sent to you the Memorandum of Development Objectives and Policies. The Memorandum, you will recall, was a statement of the Government's development objectives and its intentions as regards policy reforms for achieving those objectives. Considerable progress has been made during the past year in carrying out the macroeconomic and sector reforms specified in the Memorandum, and we believe that we are well on the way towards establishing the policy framework essential for undertaking actions needed to bring about the structural changes urgently required by the Zambian economy.

2. Of course, much remains to be done, particularly as regards boradening and deepening the reforms already underway and developing investment strategies and policies in the major economic sectors. In most cases, this will require further economic and sector work, including in certain circumstances in-depth studies. We are committed, I assure you, to carrying out the reforms specified in the Memorandum of Development Objectives and Policies, which we see as vital to Zambia's economic recovery and long-term development.

3. The purpose of this letter is to inform you of the progress that has been made on the policy front over the past year and to indicate to you the specific actions we plan to take in coming months to advance further the policy reforms enumerated in the Memorandum.

4. First, let me confirm that it is our intention to negotiation a standby agreement with the IMF covering 1984 and to seek further debt rescheduling under the auspices of the Paris Club. As you know, we have so far been able to meet the IMF's requirements under the 1983 standby and anticipate that the full amount will be released.

We, in accordance with the goodwill clause in the Paris Club Agreement, expect to reschedule a large portion of our 1984 maturities with Paris Club members and our non-Paris Club creditors, as well as our debts with commercial banks. We had very good success with our 1983 reschedulings and expect the same favourable results in 1984.

5. You will recall that our major development objectives as specified in the Memorandum of Development Objectives and Policies included, inter-alia, production and export diversification, the reversal of past trends towards excessive consumption, lessened dependence on imports in consumption and production, lower capital intensity of production and greater economic efficiency all around. The main policy actions taken in the context of the IMF program that are pertinent to achieving these objectives are as follows:

(a) In January 1983, the Kwacha was devalued by 20 per cent against SDR. In July 1983, the Government adopted a flexible exchange rate system that provides a mechanism for further exchange rate adjustments. Through this system, the Kwacha has undergone gradual further depreciations, so that between January 1983 and January 1984 a cumulative devaluation had been achieved of about 38 per cent against the SDR. As a result of this, import prices in terms of Kwacha have increased by 62 per cent. The Government is firmly committed to continue to use the flexible exchange rate system to ensure the profitability of the mining industry and the competitiveness of exports;

(b) decontrol of wholesale and retail prices of industrial goods and utility services, with the exception of maize meal, wheat flour, bread and candles. As a result of a further reduction in subsidies, consumer prices of maize meal increased by 30 per cent in May 1983;

(c) cutbacks in government expenditures in real terms, reductions in subsidies, tax increases (including an 8 per cent tax on mineral export receipts), a freeze on government employment and wages and a 10 per cent limit on wage increases in the private sector for 1983. There were no salary and wage increases in the civil service in 1983;

(d) establishment of ceilings on net credit to the Government; on Bank of Zambia credit to ZCCM; and on the amount of external commercial payment arrears;

(e) an increase in interest rates to 13 per cent from 12 per cent on medium-term lending and to 9 per cent from 7 per cent on deposits; and a

(f) reduction in the wage bill in the mining sector.

6. The measures that have been taken are having a favourable impact on the economy, although inflation has jumped to the 18-22 per cent level because of price decontrol and devaluation. The consequences of price decontrol would not have been so severe had the supply situation been provided for at the same time. The real exchange rate has improved and has thus enhanced the competitiveness of Zambian goods and will raise the profitability of local industry involved in the export trade. The restraint on wage increases has been an important factor in this regard, and it is significant that the

Government has been able to enforce the constraint on wages in the face of the large devaluation. These effects have been particularly evident in the case of the mining industry where a major cost-saving effort has been underway concurrently. During its past fiscal year (April 1982 - March 1983), ZCCM reduced its labour cost by 19 per cent from the original budgeted amount. We plan to continue with and to strengthen the measures needed to restore the competitiveness of Zambian goods in external markets.

7. We have also experienced favourable results from the budgetary measures. The deficit has been cut from 21 per cent of GDP in 1982 to an estimated 7 per cent in 1983. Subsidies, which have been a major expenditure item, were reduced from K154 million in 1982 to K83 million in 1983. Subsidies have been reduced further in this year's budget to K56.6 million and will be further reduced in subsequent budgets. Perhaps most important is the increased control that we expect to have over expenditures as a result of the budgetary reforms introduced recently. We are now in a much better position to forecast revenues and expenditures and to ensure consistency between the recurrent and capital budgets. We also are not better able to formulate a public investment programme that is consistent with our resource availability and external borrowing capacity. These are major improvements for our economy.

8. Among other important results of the reform measures is the impact of producer price increases on crop plantings. Producer price increases since December 1982 for some of the more important crops are the following: sorghum, 167 per cent; rice, 43 per cent; groundnuts 15 per cent; tobacco, 13 per cent; and wheat, 12 per cent. The farm-gate price of maize, by far the most important crop in Zambia, has been increased by 53 per cent during the same period. The rise in producer prices has increased the hectarage under plantation significantly, however, output has not increased commensurately because of the drought.

9. I hope this gives you some idea of the positive things that have been happening to our economy. We expect more of the same. For example, the exchange rate adjustment, increase in interest rates and limit on wage increases, complimented by decontrol of prices will help to correct existing capital/labour price distortions, thereby bringing more appropriate factor proportions in production, and should help to reverse past trends of excess consumption and imports. These measures should also contribute to improvements in economic efficiency and help to relieve pressure on the balance of payments and the budget. The budget will also be supported by the reduction and eventual elimination of subsidies by a freeze in public sector employment, reduction in real wages, and by restrictions on government spending and borrowing.

10. Substantial progress has also been achieved with regard to the other economic restructuring policies referred to in the Memorandum. The prices of practically all goods at the wholesale and retail level are now free of controls and thus responsive to supply and demand. Private traders are not free to market agricultural products (with the exception of maize cotton and tobacco) at whatever price the market will bring. NAMBOARD, whose function is to offer guaranteed floor prices and markets for agricultural

products, has increased the number of such products for which it offers a floor price, thus providing greater incentives for the production of traditional crops such as cassava, sorghum, millet, etc. As a result of these changes, producers and traders of agricultural goods have strong incentives to increase their output and activities. Moreover, with the increased productivity and exchange rate movements mentioned above, Zambian goods are becoming increasingly competitive in domestic and foreign markets.

11. Institutional reforms beyond those cited in the Memorandum have been introduced to improve economic management. The most important of these is the creation of a "Special Economic Unit" composed of senior officials from the main economic ministries, the Cabinet Office, State House, the Bank of Zambia and the Parastatal Organisations.

Its main function is to prepare and recommend strategies for economic stabilization and structural adjustment and to monitor their implementation. It has considerable decision-making powers and has proved invaluable for instituting important policy reforms, including monitoring of the IMF programme and the introduction of new budget procedures. Other institutional reforms recently introduced include improvements in ZIMCO's management, leading to greater autonomy for firms under its purview; improvements by the Bank of Zambia and the Ministry of Commerce and Industry in foreign exchange budgeting and allocation, with the involvement of the private sector; the adoption of proper debt-mamagement procedures; and improvements in investment programming functions of the National Commission for Development Planning. The Bank's recommendations for reorganizing the Planning Office and the Ministry of Agriculture and Water Development have been accepted and partially implemented. This work is continuing.

12. The foregoing are some of the more important policy reforms implemented thus far. We are developing further policy changes which we feel are needed to extend the gains already achieved and we will, of course, be making further adjustments in these policies based on our experience of their effects.

13. As regards specific actions that we propose to take in coming months, I would like to mention the following:

Related to General Economic Management:

(a) We propose to continue to increase budget allocations for recurrent departmental charges in priority sectors (particularly in agriculture and highway maintenance) in both absolute and relative terms. The 1984 budget contains such increases, and we will continue this practice in subsequent budgets.

(b) We are preparing a three-year public investment programme consistent with forecasts of likely-to-be available financial resources and with the development objectives set out in the Memorandum. We expect to institutionalize this effort so that the annual preparation of a three-year rolling investment programme for the public sector may become standard practice. The programme currently being prepared for the planned Consultative Group meeting is expected to be ready for review before the end of March 1984, and the next revision will be completed with the time frame prescribed for the 1985 budget.

(c) We plan to implement the medium-term recommendations of the Bank's Forward Budget Study as follows:

(i) We will prepare by July 1984 an annual plan for 1985 which will be used to allocate available resources among ministries and form the basis for establishing the 1985 budget guidelines.

(ii) We intend to establish by April 1984 a Planning and Budgeting Committee comprising of staff from the Ministry of Finance, the National Commission for Development Planning and the Bank of Zambia. This Committee will be charged with drawing up and revising on a semi-annually basis the Government's medium-term financial plan, which will be used as the basis for each year's budget guidelines. It will also be responsible for reconciling the financial resources availabilities and overall expenditure plans over the rolling three-year public investment program, the annual plan and the budget.

(d) We intend to identify measures to strengthen the capacity of the Ministry of Finance in economic policy formulation, debt management, accounting, expenditure control, etc. To this end, with the assistance of the Bank, we intend to carry out a review by June 1984 of the functions and organisation of the Ministry based on which an action plan will be drawn up which will include professional staffing requirements, a training programme and appropriate systems and procedures to make it possible for the Ministry to play its required role in economic management. Technical Assistance from the Bank for the implementation of this Action Plan will be needed. Meanwhile we have applied for technical assistance from the Commonwealth Fund for Technical Cooperation (CFTC) revaluing and strengthening the Ministry's information system for recording and administering debt both domestically and externally. We plan to have a new computerized debt management system operational by July 1985.

(e) We plan to continue improvements in the foreign exchange budgeting and allocation systems. Specifically, we are developing proper procedures for forecasting and budgeting foreign exchange resources with the help of consultants and we are involving the private sector in foreign exchange allocation by including their representatives on the committee responsible for such allocations. Methods of ensuring consistence between quarterly foreign exchange allocations and licence authorizations have not worked satisfactorily and we are reviewing these methods as well. We expect to introduce improvements in these areas prior to end of June 1984.

(f) In the same vein, we plan to modify exchange rate and tariff policies with the objective of providing more appropriate incentives to non-traditional exports. Some possible options in this regard include the introduction of an auction window or parallel market for foreign exchange and/or the introduction of uniform import surcharges and subsidies for non-traditional exports. To assist the Government in instituting the necessary reforms beginning in 1985, we welcome a detailed set of proposals from the Bank and IMF by September 1984.

(g) We have already undertaken a number of reforms to the tariff structure recommended in the DUE Report. In addition, in the 1984 budget duties on certain capital goods were increased. Subject to a study to be undertaken in 1984, the findings of which we shall discuss with the Bank, we intend to apply generalized duties to intermediate goods in the 1985 budget, and plan to shift the tariff basis from f.o.b. to c.i.f. effective with the FY85 budget. Over the longer run, we intend to initiate a comprehensive review of the tariff structure, with the view to providing greater rationality in effective protection and incentives. We will also investigate the possibility of using export subsidies to encourage non-traditional exports. This would be done in connection with the proposed Industrial Reorientation loan. Our ultimate goal is to do away with quantitative controls and rely on tariffs for protection (only as required) and to provide incentives for expanding non-traditional exports and for import substitution.

Related to the Industrial Sector:

(a) We propose to establish in ZIMCO greater capacity for economic analysis and to incorporate such analysis into their procedures for project and performance evaluations. This capability would also be used in their review of the pricing decisions of publicly-owned enterprises. The objectives of thie are: first, to avoid future uneconomic investments; second, to identify existing plants that are operating uneconomically and third, to encourage economic pricing.

Establishing this capacity will require the services of a consultant working closely with staff within ZIMCO companies on the relevant concepts, the introduction of appropriate procedures into manuals, and to carry out actual analysis as a training instrument. A detailed proposal for the consultants' work will be ready by June 30, 1984, so that the consultant could be in place as early as November, 1984.

(b) We expect to introduce a new Industrial Development Act before December 1985. The new Act, on which work has already begun, will be much less restrictive and more promotional in nature than the old Act.

Related to the Agriculture Sector:

14. In agriculture, we are developing a sector strategy which draws heavily on the sector work carried out in cooperation with the Bank's Southern Agriculture Division. This strategy will emphasize improvements in the provision of basic services in research and extension, improvements in the operating efficiency of the parastatal organisations handling major commodities in the sector, and improvements in pricing and marketing reforms, all of which will lead to diversification and increases in production for exports and import subsitution. It will focus on crops in which Zambia has comparative advantage, and is being prepared to coincide with the proposed Agricultural Rehabilitation project for which we are seeking Bank support. In the short-term, we intend to continue the pricing and other reforms already introduced for the sector.

15. In the interim before the agricultural rehabilitation credit is ready, we intend to move ahead in the following areas:

(a) Development of a master plan for research and extension. We have already invited proposals from consultants and expect to sign a contract by the end of March 1984. We have established a working group within the Ministry of Agriculture to develop this master plan and expect to complete it by September 1984. This plan, which will draw upon the Bank's Research and Extension Report, is critical for improving the services provided to farmers and for coordinating donor assistance in this regard;

(b) Increasing budget support for programs in the agricultural sector, both in absolute and relative terms. In particular, recurrent departmental changes will be increased significantly in both the FY84 and FY85 budgets. This will allow for more rapid implementation of programs and projects in the sector and, along with the budget reform mentioned above, will provide for more effective implementation;

(c) Undertaking, on a priority basis, a fertilizer usage study with the view to determining the causes (other than pricing) of the excessive use of fertilizer that appears to be occuring. This study should indicate whether or not such overusage is occuring (or whether there may be losses in the distribution system), if so the causes of the excessive use, and what the proper applications should be. Some work has already been done and the Government, with support from consultants, plans to finalise this investigation by January 1985. We look forward to discussing the completed study with the Bank soon thereafter.

(d) Completing and beginning to implement the agricultural sector strategy, (referred to above) during this (1984) calender year. We hope to discuss the proposed strategy with the Bank and internally in the Government by March 1984 and expect to begin implementing the agreed strategy, by mid-1984, and would expect to seek donor support for our agricultural sector investment program at the Consultative Group meeting scheduled later this year. Further implementation of this strategy will be effected in connection with the proposed Agricultural Rehabilitation project.

16. This obviously is an ambitious program we have set for ourselves over the next several months. However, we feel a great urgency to move ahead with these reforms so that the structural changes required in industry, agriculture, etc., can get underway. These changes will take time, so we must set the policy framework and the investment programs in place now. Of course, the Mining Rehabilitation Loan is crucial to this program since we are counting on it to buy time for these reforms to have their effect.

Yours sincerely,

L.J. Mwananshiku, MP
MINISTER OF FINANCE

OFFICE OF THE MINISTER
MINISTRY OF FINANCE
P.O. BOX 50062
LUSAKA

SF/312

21st November, 1983

Mr. W. Wapenhans
Vice President
Eastern Africa Region
World Bank
1818 H Street, N.W.
Washington, DC 20433

Dear Mr. Wapenhans:

ZCCM - MEMORANDUM ON
CORPORATE OBJECTIVES AND POLICIES

In early 1983, the Government of Zambia set out its current development objectives and described a number of actions and measures which it intended to take to help achieve structural change in the economy and better economic management. These objectives and policies were presented in a document to the World Bank, entitled "Memorandum on Development Objectives and Policies." The Memorandum specifically refers to a proposed mining rehabilitation programme intended to arrest the decline in copper production and enhance the efficiency and profitability of the mining sector. The purpose of this memorandum is to briefly review the contexts in which ZCCM operates, to reaffirm its commitments to Zambia's economic development and its mandate to increase net export earnings and Government revenues, and review the policies that will need to be implemented in the near term to fulfill this mandate.

Over the next 20 years the context in which ZCCM will have to operate is a combination of lower copper grades, depletion of deposits, scarcity of foreign exchange, shortage of skilled personnel, and unreliability of the transportation network. These effects, felt most intensely at the time when copper prices are low, have in the past resulted in ZCCM incurring large financial losses, and being unable to contribute positively to the Government budget.

In order to optimise its contribution to Zambia's development, and in particular in order to become again a net contributor of resources to the rest of the Zambian economy, it is essential that ZCCM remains a financially healthy company, and conduct its affairs with accordance with sound business, financial industrial and administrative practices. The mandate of ZCCM, under those conditions, is to optimise net foreign exchange earnings, and net contribution to the Government's budget.

Because they are not synonymous, and may in fact be incompatible with other related considerations (e.g. maximising tonnages produced, maximising employment levels, or reducing investment costs), the above objectives, to be realistic and achievable, will require that their implications be duly recognised by both ZCCM and the Government.

An effort by ZCCM to improve its productivity at the mine, at the plant and in its central services, is bound to be linked with decisions concerning labour. It may mean that some labour would have to be released (permanently or temporarily), or that the overall compensation package presently available to the Zambian workforce would have to be adjusted.

During years of low copper prices, sales and hence production levels would need to be reduced in order to limit financial losses, maintain ZCCM's financial creditworthiness, and preserve for the future Zambia's limited and valuable mineral resource. The closure of uneconomic operations has to be an option open to ZCCM and accepted by the Government.

Timely availability of foreign exchange is a necessary ingredient to ZCCM's successful operation, not only because it permits the financing of the necessary input needed to produce, and hence to generate foreign exchange, but also because the survival of the Company is based on its ability to make long-term production plans, and the corresponding large development investments.

In order for ZCCM to accumulate sufficient financial reserves to arrive at a sound structure, present taxation regime and dividend policy may need to be revised in order to permit ZCCM to absorb in the future the effects of lowering copper prices.

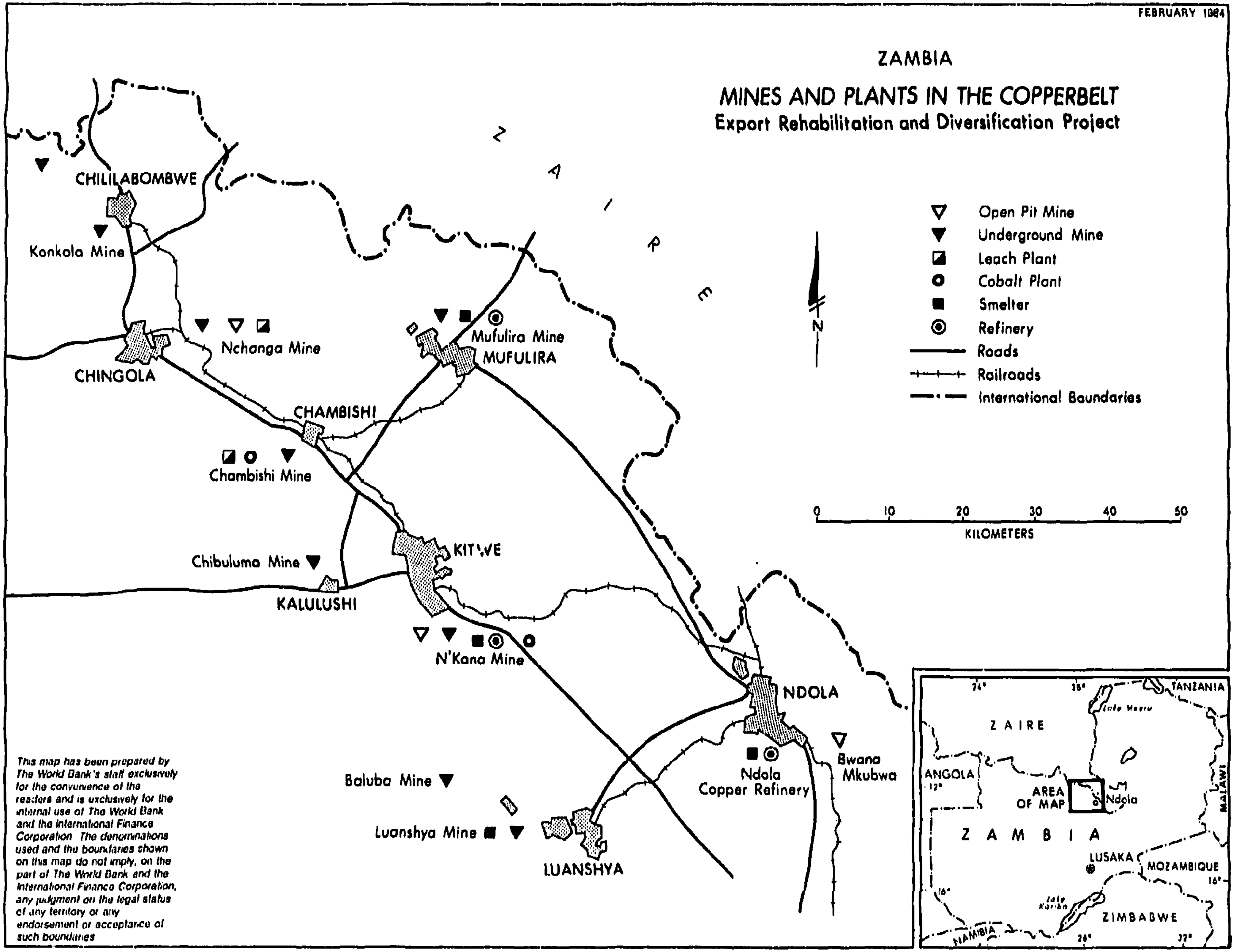
The paragraphs above have only briefly described the conditions under which ZCCM, while maintaining the financial, commercial, managerial and business standards expected from a company of this size and of this importance to ZAMBIA, can contribute to Zambia's earnings and efforts towards economic diversification. In order to assist ZCCM in translating such broad corporate objectives into specific production or investment programmes, ZCCM has asked Stanford Research Institute International (SRI) to carry out a series of studies to review and rationalise its mining and metallurgical operations, and to introduce technical, accounting, purchasing and other financial practices permitting further improvement on ZCCM's efficiency.

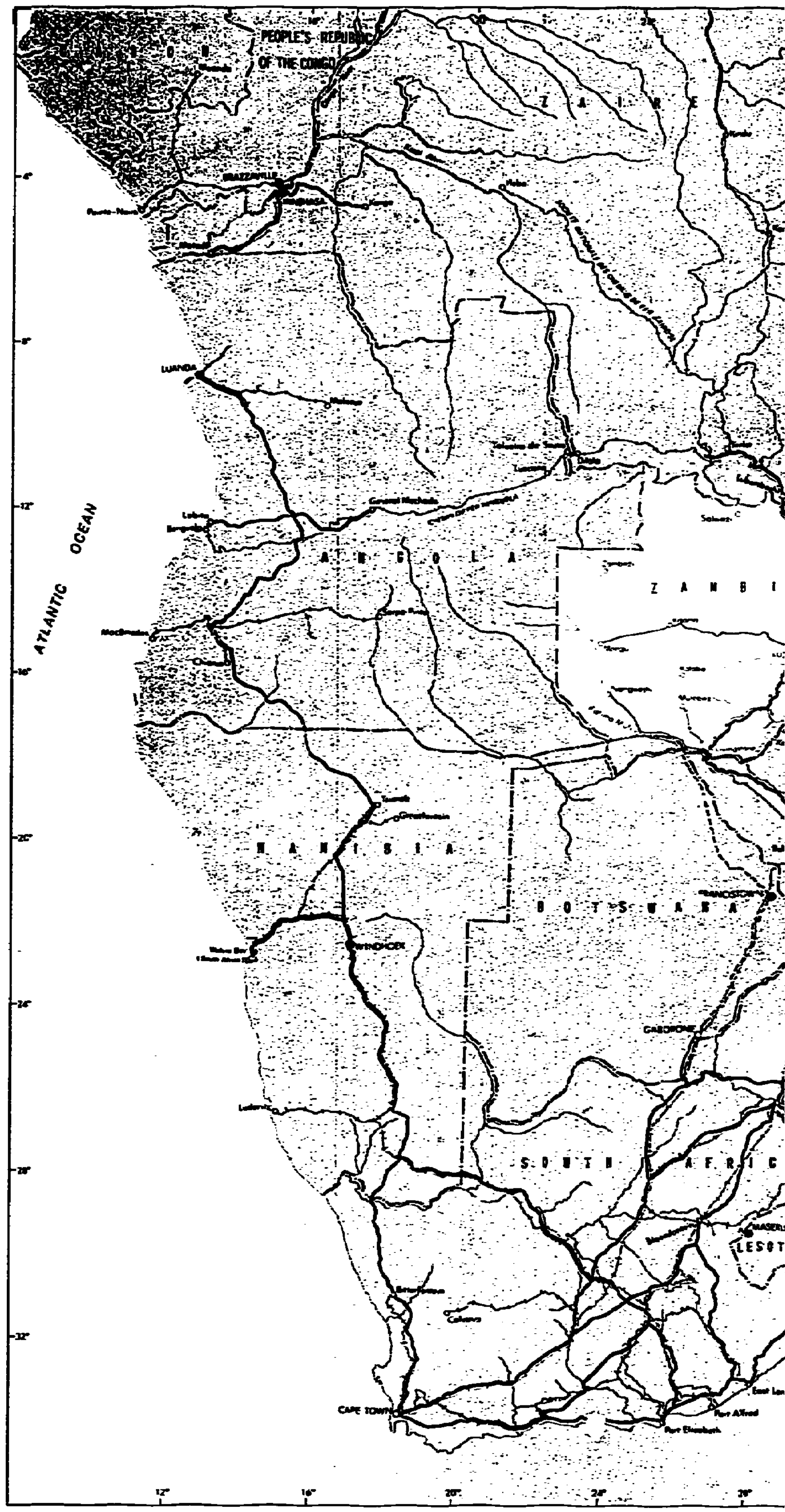
The above statement of corporate objectives and policies for ZCCM has been discussed with and approved by His Excellency the President.

Yours sincerely,

L. J. Mwananshiku
MINISTER OF FINANCE

IBRD 16492R
FEBRUARY 1984





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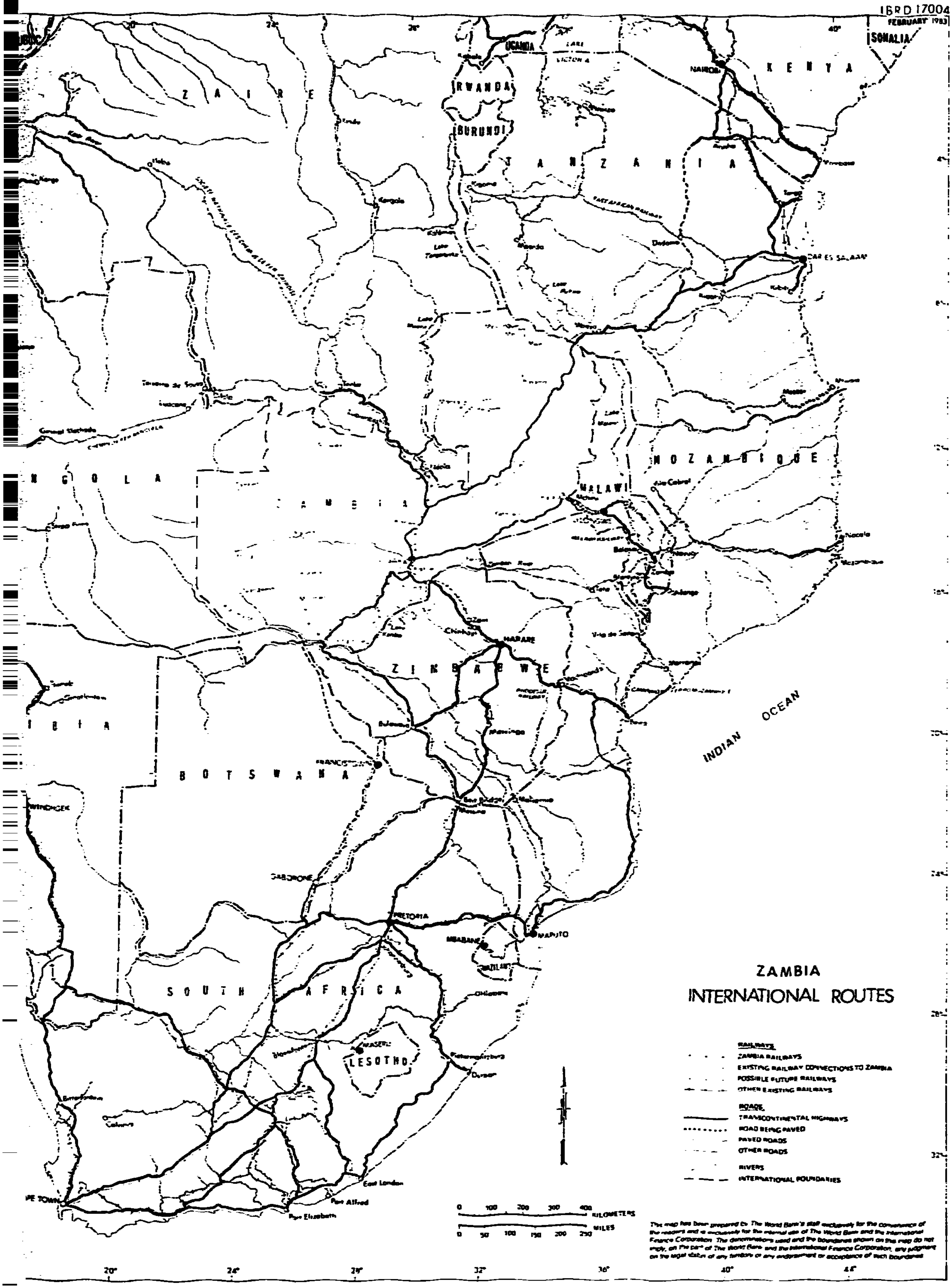
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FEBRUARY 1983
ZAMBIA
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EXISTING RAILWAY CONNECTIONS TO ZAMBIA
POSSIBLE FUTURE RAILWAYS
OTHER EXISTING RAILWAYS
ROADS
TRANSCONTINENTAL HIGHWAYS
ROAD BEING PAVED
PAVED ROADS
OTHER ROADS
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