REPUBLIC OF ZAMBIA

AN ACTION PROGRAMME FOR ECONOMIC RESTRUCTURING

Consultative Group for Zambia
June 4 -5, 1985

ABBREVIATIONS

AFC	-	Agricultural Finance Company
cif	-	cost, insurance and freight
EEC	-	European Economic Community
fob	-	free on board
GDP	-	Gross Domestic Product
GRZ	-	Government of the Republic of Zambia
IBRD	-	International Bank for Reconstruction and Development
IDA	-	International Development Association
IMF	-	International Monetary Fund
INDECO	-	Industrial Development Corporation
IPD	-	Industrial Plantations Division
JMC	-	Joint Monitoring Committee
LINTCO	-	Lint Company of Zambia
MAWD	-	Ministry of Agriculture and Water Development
MPTC	-	Ministry of Power, Transport and Communications
NAMBOARD	-	National Agricultural Marketing Board
NCDP	-	National Commission for Development Planning
T & V	-	Training and Visit
UNIP	-	United National Independence Party
US, USA	-	United States of America
ZADB	-	Zambia Agricultural Development Bank
ZAFFICO	-	Zambia Forestry and Forest Industries Corporation Ltd
ZCCM	-	Zambia Consolidated Copper Mines Ltd
ZESCO	-	Zambia Electricity Supply Corporation
ZIMCO	-	Zambia Industrial and Mining Corporation Ltd
ZINCOM	-	Zambia Industrial and Commercial Association
ZR	-	Zambia Railways

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FOREWARD

"Do we have the capacity to survive when our major foreign exchange earner and also the largest single employer in industry - the mining industry - is beset with major problems?

Do we have the capacity to create the jobs for our growing labour force when our industries are operating far below rated capacity?

Do we have the capacity to provide social services and to meet the basic needs of our growing population when government revenue has declined by 30 percent over the last ten years?

Do we, indeed, have the capacity to restructure our economy when most of the foreign exchange required to improve essential inputs has to be used to pay off our external debts?

Did I ask if we had the capacity? The answer is yes, yes, many times over."*

Kenneth D. Kaunda
President of the Republic
of Zambia

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*Speech at the Official Opening of the Third national Convention, 23rd July, 1984.

1. INTRODUCTION

1.1 In May 1984, the Government of the Republic of Zambia (GRZ) presented the report "Restructuring in the Midst of Crisis" to the Consultative Group. The report outlined a development strategy for reversing the trend of economic decline, diversifying the productive structure in order to reduce dependence on the mining sector, increasing the efficiency of resource use and promoting growth with equity. The strategy gives priority to the agricultural sector where GRZ proposes to concentrate resources on smallholders; reform incentives structures to ensure better prices; make marketing systems more open and competitive; get the most out of existing capacity in the commercial farming sub-sector through the provision of critically needed inputs; and increase the availability of consumer or wage goods in rural areas.

1.2 For long-term economic growth, the strategy recognizes that the mining industry, which is the major provider of foreign exchange, must play an important role. This means restoring the industry to previous levels of efficiency in order to make it once again profitable and competitive in world markets. It also recognized that the resumption of economic growth requires attention to other productive sectors, particularly industry which faces serious problems. The most pronounced manifestation of the industry's problems is the severe under-utilization of productive capacity. Given the prevailing circumstances in the industrial sector, it is imperative to concentrate efforts on strengthening the industries that already exist. This involves making them qualitatively better in their output and technical performance, more competitive against foreign products, more supportive of one another and of other economic sectors, a better training ground for management and skilled manpower, and more efficient in their use of scarce resources.

1.3 Lack of budgetary funds and foreign exchange has impaired the maintenance and effective utilization of existing infrastructure. Consequently, an essential aspect of the proposed strategy is to ensure that existing facilities work better; hence the special emphasis on the rehabilitation of existing infrastructure. Recognizing that social progress is an important and necessary component of economic development, GRZ proposes to develop human skills intensively through education for maximum contribution to economic development; to improve standards of health as much as possible with the available resources; and to ensure that economic development results in an equitable distribution of social services.

1.4 In addition to outlining the policies which GRZ proposes to undertake to achieve the above sectoral objectives, "Restructuring in the Midst of Crisis" also stressed: i) the importance of macroeconomic policies, including exchange rate and budgetary policies, in ensuring the efficient allocation and use of scarce resources; ii) the need to ensure that parastatal companies operate efficiently within a commercial environment to the maximum extent possible; and iii) the importance of institutional changes to upgrade economic management.

1.5 GRZ remains fully committed to these development policy objectives. Unfortunately, external events have not been kind to us since last May. Copper prices have declined further instead of recovering modestly as we had expected at that time. Also, external flows have not materialized as was hoped. Consequently, the foreign exchange constraint has been more binding and the prospects for recovery and future growth have worsened. The response from the initiatives that have been taken on the policy and institutional side is threatened by the shortage of foreign exchange that is limiting our ability to produce goods and services. What is needed most, more urgently than projected last May, is a quick injection of resources into the directly productive and major supporting sectors of the economy.

1.6 In view of the difficult times ahead, GRZ has sought to reach a national consensus in support of the required measures. His Excellency the President, Dr. Kenneth D. Kaunda, has led the effort to introduce the new policy environment. He has consistently delivered the message that the days of high copper prices are over and that Zambia must for many years to come accept a lower standard of living; that business needs to be profitable in order to expand; and that to survive in the long run, new types of production and exports must be developed. The efforts in persuading the nation to accept economic policy reform culminated in the convening of the Third National Convention in July 1984, the objective of which was to discuss the economic crisis facing the country, and, in the words of His Excellency the President, "to cause the economic problems to be understood by everyone here....". The Convention was attended by delegates representing the Party, trade unions, the Chamber of Commerce (ZINCON), the Commercial Farmers Bureau, commercial banks, senior government and parastatal officials, and provincial and district leaders. The resolutions passed at the Convention covered the need for the mobilization of revenue resources; reduction of subsidies; fiscal measures to discourage reliance on imported raw materials and encourage utilization of local raw materials; and improvement in the management of public enterprises and the possible closure of uneconomic mining operations, ect. An "Economic Crusade - 1985" has already been launched and as part of this crusade, targets have been set to reduce imports of wheat, cooking oil, rice, barley and petroleum. With immediate effect, imports of official passenger cars have been banned for one year, and no new government or parastatal project may be started that does not have an immediate positive effect on foreign exchange earnings or increased capacity utilization.

1.7 During the past twelve months, GRZ has also deepened its understanding of the causes of the economic crisis, particularly the failures and weaknesses of past policies and development strategies, the prospects and potential for economic growth and diversification, and the specific measures required for economic restructuring and short-to medium-term financial stability. On the basis of this re-examination, new policy and institutional initiatives have been taken and others are being prepared. The purpose of this paper is to convey the Government's current thinking on these issues and the policies and programs proposed to deal with them.

1.8 Chapter 2 of this paper reviews the nature of the challenge facing the Zambian economy, followed in Chapter 3 by an outline of the measures that GRZ intends to undertake over the next two years or so in continuation of the substantial progress that has been made in the last years in economic policy reform. The economic issues and problems to be addressed, the measures already taken by GRZ, and future measures planne in key sectors are summarized in matrix form in Annexes I-IV.

1.9 This paper also identifies a number of sectoral programs considered critical for a resumption of economic growth through the improved utilization of existing capacities plus the promotion of non-traditional exports and efficient import substitution. It is these programs that the donors are being requested to support in the form, principally, of quick-disbursing input support. Without external assistance in the form and amounts described in Chapter 4 below, imports will decline further both in 1985 and 1986. It may be questioned whethe the level of imports is not already below the critical minimum required i the economy to resume growth or even to prevent it from contracting further: in the last three years alone, imports declined by 50 percent. This followed a decline 50 percent in imports between 1974 and 1981. The resulting severe under-utilization of capacity throughout the economy has been accompanied by a growing backlog of rehabilitation and maintenance expenditures. Unless this trend is reversed, GRZ's policy reform effort bound to fail because of lack of imported inputs needed by producers to respond to new incentives to diversify and expand production.

1.10 An integral part of GRZ's economic restructuring program is a public investment and expenditure program based on a realistic assessment of expected resources, both domestic and external, over the next two to three years. Such a program is being designed and is expected to be read for the 1986 meeting of the Consultative Group. It will give priority to the rehabilitation of existing assets and increased capacity utilization. On-going projects will be carefully reexamined, and the initiation of new projects will be strictly based on economic viability and the availability of foreign exchange. The public investment program will result from initiatives currently underway to upgrade development administration and economic management through improvements in planning and budgeting and the strengthening of policy-making institutions. The initiatives involve the following inter-related activities:

- preparation of an annual plan in time to serve as a basis for specifying guidelines for the 1986 budget. The plan will be based on (i) a macro-economic and financial framework that included projections of total resources available to the Government, and (iii) a series of specific sector analyses which, together with the necessary data, will guide the allocation of resources among sectors. While focussing on 1986, the plan will include indicative estimates for the next two-years;

- preparation by ZIMCO of a rolling three-year investment program (1985/86 - 1987/88) for the parastatal sector, emphasizing the completion of viable on-going projects, the rehabilitation of existing plants and infrastructure where those firms have the potential of being viable immediately, and the undertaking of new projects only when these are economically viable and consistent with national priorities;

- completion by the Ministry of Agriculture and Water Development (MAWD) of a rolling three-year investment plan covering, within the resources likely to be available to the sector, all investments of the Ministry and agricultural parastatals. The task involves an evaluation of all on-going agricultural programs and identification and preparation to the pre-feasibility stage of high priority new projects;

- development of a centralized project monitoring and information system to identify major obstacles to efficient project implementation, delineate their causes, and follow up on the elimination of problems;

- changes in the functions, organizational structure, staffing and procedures of the Ministry of Finance and the National Commission for Development Planning (NCDP) in order to: (a) improve their control over the preparation, implementation, monitoring and evaluation of the country's development programs, and (b) ensure that appropriate policy analysis is brought to bear on overall development strategies and the management of the economy.

1.11 In short, GRZ sees institutional reform as an essential component of the economic recovery program. Aid administration and coordination is also an important area of institutional reform. The Joint Monitoring Committee (JMC), which was created following last year's meeting of the Consultative Group, has proved useful in keeping the donor community abreast of developments and has also become a useful forum for discussing the Government's reform program. The JMC's function of monitoring the implementation of externally funded projects and assisting in the effective mobilization of aid has been hampered by some difficulties over the creation of an effective secretariat. The initiatives described in the preceding paragraph should lead to better information on aid flows and clearer responsibilities for donor contact and negotiation and improved links between the plan, the budget, sector ministries, project entities and donor activities. This, in turn, should result in a well-functioning secretariat and measurable progress in the effectiveness of the Joint Monitoring Committee in the coming months.

2. THE CHALLENGE OF ECONOMIC RESTRUCTURING

The Economic Crisis

2.1 Zambia's dependence on the copper industry for virtually all of its export earnings is the primary cause of the current difficulties. With the collapse of copper prices in the last ten years, Zambia has suffered a sharp and protracted decline in its terms of trade. By 1982, the terms of trade were 72 percent lower than in 1974. In 1984, copper prices reached their lowest point in real terms since the World War II period. The difficulties facing the copper industry have contributed to a substantial decline in per capita income. In real terms, gross national income has fallen by 23 percent over the past decade; with population growing at 3.1 percent during this period, per capita income was 44 percent lower in 1984 than ten years earlier.

2.2 The decline in per capita income has affected all sections of society. Workers in the formal wage sector have suffered declines in real terms especially during the past three years, as the Government deliberately sought to hold wage increases below the rise in the cost of living while simultaneously decontrolling prices. As a result, domestic consumption declined by about six percent per annum during 1982-84. Workers in the mining industry have suffered the sharpest decline in income and, over the past decade, have seen their wages vis-a-vis those of other industrial workers fall from nearly twice the average wage to a premium of only about one-third.

2.3 Nearly 60 percent of the population lives in the rural areas where the decline in gross national income has been felt in the form of reductions in critical government services (agricultural extension, health, education, etc.) and in the virtual disappearance of wage goods. The shortage of wage goods has resulted from declines in industrial production stemming from the lack of imported intermediate materials, as well as from the closure of many rural trading shops which have lacked goods to sell because of the previous policies of price control. These developments are particularly unfortunate in view of the sustained increase in agricultural producer prices over the past four years that have led to increased rural incomes in real terms. Thus, while present policies have moved to redress a long-existing bias in the rural-urban terms of trade which favoured the urban consumer with high wages increases and cheap food, the economy has been unable to deliver the wage goods necessary to make improved production incentives effective.

2.4 Zambia is facing up to the fact that its mineral resources are being exhausted. Copper production peaked at 712,000 tonnes in 1976 and has since declined to 525,000 tonnes. Despite extensive mineral surveys, there are no known ore-bodies in the Copperbelt large enough to offset the natural depletion of existing mines in the 1990s. Economically known recoverable reserves allow about 17 years of production at current levels. Thereafter, production is likely to fall substantially; after 1995, copper exports are expected to fall by perhaps one-third in the subsequent five years.

2.5 Zambia's external debt problem is an onerous one. The large current account deficit of the last decade led to heavy external borrowing, accumulation of arrears on import payments, and the depletion of international reserves. At the end of 1983, the country's total external liabilities stood at US$4.5 billion, including drawings from the IMF and about US$500 million in overdue commercial payments. By comparison, merchandise exports amounted to a little over US$1 billion. Despite the rescheduling agreements of 1983 and 1984, Zambia's debt servicing will range between 40 - 65 percent of exports through 1990. Moreover, unless future debt relief is provided on a multi-year basis, with longer grace periods, the debt service ratio cannot be reduced appreciably from these high levels during the remainder of the decade. To a large extent, this is due to the structure of the external debt, which is heavily weighted towards international lending institutions, short-term credit and arrears on commercial payments. Thus, it is estimated that the amount of debt service qualified for rescheduling under the existing framework (i.e. principal and interest due bilateral creditors and private creditors) is on average only 22 percent of total repayments due over the next four years.

2.6 The decline in copper prices has also severely affected the country's fiscal position. In the past, mineral taxes provided a large share of government revenue. Although GRZ has been successful in tapping other sources of revenue to partly make up for declining copper revenues, the revenue/GPD ratio fell from 34.1 percent in 1970 to 25.3 percent in 1983. At the same time, expenditures increased rapidly; the resulting budget deficit at its peak in 1982 was equivalent to 21 percent of GDP. Nonetheless, when inflation is taken into account, expenditure in 1981 was only 60 percent of the level attained in 1975. The efficiency of government services in almost all sectors has deteriorated as operating expenditures in real terms have declined sharply. But the deepest cuts have been made in the capital budget: at constant prices, capital expenditures were 77 percent lower in 1983 than in 1975.

2.7 The socio-economic consequences of such severe budgetary cuts and the limited capacity to import have recently been referred to by His Excellency President Kaunda:

> "Do we have the capacity to create the jobs for our labour force when our industries are operating far below rated capacity? In many cases, manufacturing companies, both public and private, are operating at less than 30 percent of capacity. Today,... out of a total fleet of 6,000 operable tractors in the country, only 2,300, or 38 percent, are in working condition. So, 62 percent of the tractors in this country cannot be used to produce food.
>
> Do we have the capacity to provide social services to meet the basic needs of our growing population when, in real terms, government revenue has declined by 30 percent over the last ten years? In spite of the tremendous strides we have made in education, ... only 15 percent of the children who sit the Selection Test proceed to Grade Eight. Similarly, only 45 percent of our adult population can read or write ... The infant mortality rate is around 105 per 1,000, that is out of every 1,000 babies born, 105 die before they reach the age of one. Although this figure represents an improvement upon the situation that obtained at independence when out out 1,000

babies, 120 died before the age of one, it is both intolerable and totally unacceptable."1/

The Key Sectors: Agriculture and Industry

2.8 Zambia's capacity to create jobs for its growing labor force, expand social services and, indeed, to survive as a nation, depends on the speed and success with which it can develop alternative sources of production, employment and foreign exchange earnings to replace those of the mining sector. In order to recoup the net losses in foreign exchange associated with the expected decline in copper production, non-mineral exports (in constant prices) should increase from the present figure of about US$60 million annually to US$360 million in the year 2000. This would represent a 13 percent annual growth rate. If this happens, the share of non-mineral exports in total merchandise exports would increase from the present seven percent to 38 percent.

2.9 It has been estimated that the agricultural and industrial sectors should each grow by about four percent per annum in real terms to prevent a further fall in per capita income between now and the year 2000 because of (i) the stagnation and eventual decline of copper production; and (ii) the projected high growth rate of population at 3.2 percent per annum. This is a challenging task, especially because agricultural production grew by only 0.4 percent per annum during 1978-83, while manufacturing output in 1982 was 10 percent lower than in 1974. Not only must the sectors expand output to keep per capita income from falling, but they have to generate enough employment to absorbe the bulk of the presently unemployed as well as the expected increases in the labor force--the labor force growth rate is estimated at about 3.6 percent annually. Zambia already faces a serious unemployment problem. Preliminary results of the 1980 census indicate that 27 percent of the eonomically active population were unemployed. In this regard, the wage employment performance of the economy as a whole has been unsatisfactory: total employment fell from 393,490 in 1975 to 363,800 in 1983.

2.10 Has Zambia the potential to meet such a daunting challenge? Yes. The greatest potential lies in the agricultural sector where only 16 percent of arable land is presently cropped annually. Several imported commodities can be produced efficiently for domestic consumption. Some, including cotton, beef, coffee, tobacco and confectionery groundnuts, can be produced profitably for export. Agriculture is the only sector that can provide employment for a larger number of people in the short run and also absorb the population increases projected in the next fifteen years. The sub-sector with the greatest capacity for expansion, the smallholder (emergent and traditional) farmers, uses little foreign exchange and is not dependent on capital-intensive techniques of production.

1/ Speech at the opening of the Third National Convention, July 23, 1984.

2.11 Despite the launching of several programmes and projects during the past twenty years to increase crop and livestock production, the achievements have fallen short of the desired goals. Specifically, both total and per capita crop production have been declining, particularly since the mid-1970s. After rising sharply during the 1960s and early 1970s, the volume of marketed maize has fallen about six percent annually since 1977; and while the country was a net exporter during 1972-76, it has become a net importer of maize. The overall self-sufficiency ratio for cereals fell from 97 percent during 1964-66 to 79 percent during 1979-80. Production of groundnuts and tobacco, the two traditionally major export crops in Zambia, declined during most of the 1970s at an annual rate of 20 percent and 17 percent, respectively. Export earnings from agricultural crops in recent years amounted to a mere K12 million, which is virtually the same as the level in 1964-66, indicating a considerable deterioration in real terms. The sector's contribution to the diversification of the economy from mining has been minimal, with its share of real GDP remaining much the same as it was at independence.

2.12 The agricultural sector is predominantly a traditional farming system characterized by an extremely low level of productivity. The traditional sector comprises about 460,000, or about 76 percent of the estimated 600,000 farm households, who cultivate an average of slightly less than 2 hectares, using family labor and simple hand tools, and producing for subsistence purposes with only occasional marketable surpluses. Crop yields under this system are very low, averaging, for example, 0.9 tons/ha for maize. At the other extreme is a small, but highly productive commercial farming system, comprising about four percent of the farm households, which produces about 40 percent of the value of maize and 55 percent of the other marketed agricultural products. This group uses a full range of inputs to achieve high crop yields estimated at over five tons/ha for maize. The extreme dualism of the agricultural sector has been slightly moderated by the development of market-oriented, smallholder (emergent) farmers, numbering about 125,000 or 20 percent of the farm households, who cultivate an average of 3 ha, using mainly hand tools and labor but also oxen and hired tractors, and modest amounts of purchased seasonal inputs, especially fertilizers. These farmers produce for the market and generally obtain much higher yields compared to traditional farmers, averaging 2.4 tons/ha for maize. Together with the occasional surpluses from traditional farmers, the market-oriented smallholders account for 60 percent of the value of maize and the other marketed agricultural products.

2.13 The past performance of smallholder (traditional and emergent) farmers has not been encouraging. Their share of agricultural output declined from 82 percent at independence to only 59 percent in 1982. By contrast, commercial farmers increased their share from only about 19 percent to 41 percent during the same period. Nonetheless, GRZ is convinced that the greatest potential for agricultural growth in the long run lies with the smallholders and that policies and programmes directed at relieving the constraints on their productivity should be the main thrust of the country's agricultural strategy. In other words, improving and expanding production by traditional and emergent farmers is the surest way of raising the living standards of the majority of Zambians, ensuring an equitable distribution of income and enhancing regional balance in development.

2.14 The industrial sector clearly has an important role to play in the country's future economic development. It is relatively large compared to that of other Sub-Saharan African countries. The share of manufacturing in GDP (18 percent) is second only to Zimbabwe, and only Zimbabwe and the Ivory Coast have higher levels of manufacturing GDP per capita. Production is primarily concentrated in consumer goods, but two sub-sectors producing intermediate and capital goods--chemicals and metal products--stand out for their relatively large shares of manufacturing output. This is the result of the relatively high degree of technical and engineering skills that have emerged to serve the mining industry.

2.15 To date the manufacturing sector as a whole has been uncompetitive in export markets. Nonetheless, there is a potential for resource-based exports. The principal products which have been exported consistently in reasonable amounts in recent years include cement, sugar and mollasses, copper cable, menswear, crushed stones and lime, and explosives. Under appropriate trade policies, there should be scope for producing more resource-based industrial products, particularly those of high value relative to their weight or volume, thus enabling them to bear the high transport costs. Examples of such products are textiles and clothing, agricultural implements, pumps, furniture, household wares and construction materials (such as wood products, floor tiling, ceramic wall tiling and glass).

2.16 From 1965 to 1975, manufacturing output grew at 11 percent per annum in real terms. Starting with the decline in copper prices in 1975, manufacturing output stagnated over the subsequent five years, and has declined by four percent per annum since 1981. In the immediate term, the manufactuiring sector faces serious problems which are reflected in high rates of under-utilization of productive capacity. GRZ realizes that, given the continued scarcity of capital and foreign exchange in the foreseeable future, capital intensity and import dependence of production must be lowered. Exports of manufactured goods will have to increase. This will require the strengthening of the existing industrial structure by increasing capacity utilization and by making firms more competitive at international prices through restructuring of profitable investments, increased productivity and efficient management.

2.17 There is no question that meeting the challenge posed in this chapter will require sacrifices by all the Zambian people. The people are aware of this and are prepared to accept these sacrifices. The challenge will also require resolute action on policy and institutional reform, and it is to the reform programs that we now turn.

3. THE ECONOMIC REFORM PROGRAMME

3.1 While external factors are at the root of Zambia's present economic crisis, GRZ has recognised for some time that inappropriate policies have also contributed significantly to the country's difficulties by preventing the agricultural and industrial sectors from playing their required role in economic diversification. The principal policy deficiencies include the following:

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;

ii. controlled industrial prices led to low profitability in the manufacturing sector and a decrease in the resources available for reinvestment;

iii. tax incentives and controlled interest rates led to a pattern of capital-intensive investment; and

iv. exchange rate and tariff policies encouraged the use of artificially cheap imported raw materials and other inputs and discouraged the use of local raw materials. As a result, a highly capital and import-intensive production structure was created that proved to be very vulnerable to prolonged decline in the availability of foreign exchange.

3.2 In the last few years GRZ has made major changes in economic policy with a view to reducing or eliminating the above policy biases. Details of these changes, which encompass macro-economic and sectoral policies, are described in Annex I-IV. The annexes also list specific policy measures that have been or will be taken this year and in subsequent months. The purpose of this chapter is to relate specific elements of the economic policy reform program to the development objectives that the Party, Government and people of Zambia have, as reflected in the resolutions of the Third National Convention and the 19th National Council2/ set for themselves, namely:

i. to diversify away from copper through new forms of exports and import substitution;

ii. to economize on the use of foreign exchange and to reduce import intensity;

iii. to make better use of existing capacity; and

iv. to relieve the long-term constraints to growth, particularly by improving health services and family planning programmes.

2/ The National Council is the highest policy making body of the United National Independence Party. The 19th session took place in Lusaka in December 1984.

3.3 Exchange rate, trade and pricing policies are among the most powerful instruments that GRZ can use in furtherance of the first two objectives described above. These will be examined first.

Trade and Exchange Rate Policy

3.4 Although Zambia's industrial sector is relatively large and advanced compared to those of other African countries, its manufactured exports are exceptionally small. The fact that exports of products, other than those of the mining industry, have remained so insignificant points to the existence of serious constraints. In the past these have included: quantitative export controls administered through the export licencing system, which imposed administrative burdens on potential exporters; lack of foreign exchange to import raw materials and other inputs; the absence of effective institutional arrangements to support exporters; an over-valued exchange rate which made Zambian goods uncompetitive in external markets; and a foreign exchange control system that offered strong incentives for producing for the domestic market.

3.5 Some important steps have been taken to remove the above constraints. The foreign exchange retention scheme introduced in May 1982 under which exporters are allowed to retain 50 percent of their receipts for meeting their import requirements, is providing some incentive for exporters. Improvements in the operation of the scheme are underway (Annex I, issue 4). The development of an operational framework for an Export Credit Revolving Fund is almost complete. The purpose of the Fund would be to provide immediate, guaranteed foreign exchange for imports needed to meet a firm export order; it would also serve to provide4 working capital for the production cycle. Thirdly, legislation will soon be passed which will set up a semi-autonomous Export Promotion Board, with a full-time secretariat. Its overall objective would be to encourage, promote and develop exports of goods from Zambia through the provision of services and support to exporters and potential exporters. Fourthly, the existing Industrial Development Act will be replaced by an Investment Code (Annex I, issue 5) which will define the incentives, and legal and policy framework within which the business sector can operate. The Code will give specific incentives for non-traditional exports (e.g. a drawback of all import duties, excise tax and sales tax paid on inputs).

3.6 The exchange rate is the most powerful instrument of general economic policy for achieving diversification of exports. There is no question that, given the high cost of domestic production, the overvaluation of the Kwacha has made Zambian exports uncompetitive in world markets. Two important export commodities, tobacco and cotton, for example, have as a consequence required export subsidies in the past. The cost-price of Zambian tobacco in 1981 was about 15 percent higher than the price in neighboring countries, while cotton would only be produced in Zambia at a price more than twice the world market equivalent price. Without a realistic exchange rate such cost-price relationships will not permit Zambia to diversify her export base. Consequently, GRZ devalued the Kwacha by 20 percent in January 1983. In July 1983, the Kwacha was linked to a special basket of currencies and a flexible exchange rate system (i.e. a crawling peg) adopted. Since then the Kwacha has depreciated further, and in real terms, it is now more than 50 percent lower than at the end of 1982. There are indications that the devaluation has given a significant boost to some exporters in both the manufacturing and agricultural sectors. Manufactured goods exports have more than doubled over the past couple of years and agricultural exports have increased sharply. Since these increases start from a very small base, they are not a major factor in relieving the foreign exchange constraint.

3.7 In order to cope with the severe shortages of foreign exchange that have characterized the economy during the past several years, a centralized system of foreign exchange budgeting and allocation has been instituted. It is necessary to have both an import licence and foreign exchange backing prior to importing any item. The system has proved to be cumbersome and costly to administer; officials have to make foreign exchange allocation decisions on a firm-by-firm and product-by-product bases. Budgeting of foreign exchange has also been problematic, with the result that a considerable over-hang of import licences issued without sufficient foreign exchange backing has developed.

3.8 The structure of nominal protection has included high tariffs on final consumer goods and low tariffs or zero duties on capital and intermediate goods. For example, the average import duty collected in Zambia during 1972-78 was a very low six percent of import value, as compared to a simple average of 20 percent for 31 African countries. The low level of duty collection has been due to the low level of consumer goods imports and to the low or zero duties on a majority of imported inputs. The system of low protection on capital and intermediate goods and high protection of import competing consumer goods has induced resources into highly protected activities and allowed inefficient firms to exist. The foreign exchange control and import licensing systems, by excluding a wide range of competing imports of consumer goods from the domestic market, have provided high protection to import substituting activities and tended to reinforce the protection effects of the tariff structure.

3.9 In short, the tariff system and the working of the system of foreign exchange allocation and import licencing exercise substantial influence over decisions made regarding capacity expansion, new investment, production for domestic or export market and the choice of techniques. GRZ accepts that the structure of protection accorded by the existing trade regime has resulted in severe inefficiencies in the allocation of resources. Specifically, it has encouraged import-intensive industry and discouraged the development of domestic industries that utilize local raw materials and labor; favored packing or assembly-type industries, which provide very few benefits to the economy either in foreign exchange, employment or skill development; and impeded the growth of factor productivity. Commenting on the shortcomings of the system of foreign exchange controls, His Excellency the President recently asked:

> "How can we ensure that in the allocation of scarce foreign exchange, firms and activities that are most beneficial and profitable to society as a whole are given priority?"

He continued:

> "To minimize the incidence of inefficient allocations, it is necessary to re-examine the system and to see in what way it can be made less subjective and less dependent on the human factor. The question is what would that allocative formula be?"

GRZ is convinced that the allocative formula must eventually include:

i. increasing the reliance upon market forces rather than administrative mechanisms for allocating resources. This implies the gradual dismantling of the foreign exchange controls, import and export licencing and interest rate regulations;

ii. restoring balance and increasing the uniformity of the incentive system, particularly between exports and import-substitutes, as well as between agriculture and industry. This implies a major reform in the trade regime with greater reliance on the exchange rate as a mechanism for allocating foreign exchange, elimination of import restrictions, rationalization of the tariff structure and review of investment incentives; and

iii. introducing greater automaticity into the determination of the exchange rate consistent with the long-run prospects for exports and terms of trade.

3.10 In the last few months GRZ has taken many measures intended to bring into existence a policy environment on the above lines (see Annex 1). In October 1984, a 10 percent minimum duty on intermediate goods and raw materials was introduced which should significantly increase the incentive (protection) for domestic production of inputs currently imported and reduce the effective protection on assembly-type industries. Second, the basis for levying import duties has been changed from f.o.b. to c.i.f. This, together with the new minimum tariff, should contribute to increased government revenues while reducing somewhat the excess demand for foreign exchange. Further changes in the trade regime and sales tax have been introduced in the 1985 Budget. These are aimed at reducing the overall level and wide dispersion of effective rates of protection thereby encouraging efficient allocation of resources to industry. These changes have the additional objective of increasing government revenue. Specifically, most of the manufacturers' rebate under which specific subsectors were exempted from duties on imports of industrial inputs have been abolished. Also, the existing rate of sales tax on imports of 12.5 percent has been raised to 15 percent, and the sales tax on locally produced goods and services has been increased from 10 percent to a uniform rate of 15 percent.

3.11 Further actions planned include the unification of the domestic and import sales tax rate, so that the sales tax applies uniformly to all goods in the same category, whether of imported or domestic origin. This would make tariffs the sole source of import protection in the fiscal structure and would facilitate further work on tariff reform, by permitting, among other things, the abolition of quantitative restrictions. In this regard, further adjustment of the exchange rate would be required to ensure that the tariff-inclusive prices of importables rise to levels which eliminate excess import demand. A review of the national tariff schedule is planned as a basis for modification, to achieve greater uniformity of incentives between import substitution and exports and between industry and other productive sectors of the economy. A first step in this process will be the establishment of a Tariff Commission to oversee the implementation of the tariff reform measures outlined above. The Commission would also be charged with the task of developing a program for the long-term reform of the incentive structure.

3.12 In order to introduce some measures of decentralized allocation of foreign exchange, it is imperative to reduce the gap between the supply and demand for foreign exchange. The exchange rate is an important instrument to this end. Currently, as indicated earlier, the excess demand is suppressed by import-licensing and foreign exchange allocation systems which create serious distortions. A further real depreciation of the Kwacha should help in relieving pressure on the allocation system. GRZ is currently reviewing various options with a view to introducing a fundamental change in the exchange rate system in order to reduce excess demand for foreign exchange and lessen the reliance on administrative controls. This change should also ensure that the exchange rate is maintained at a level consistent with the long-run prospects for exports and terms of trade.

Pricing Policy

3.13 Another important measure to enable market forces to play a more important role in the economy was the decontrol of industrial prices in December 1982 (except for wheat[3/], flour, maize flour and candles). While the previous policy of controlling prices was justified by the desire to protect consumers from exploitation by producers, it led to economic consequences far beyond what had originally been foreseen or intended. In particular, it reduced the profitability of firms and their ability to invest.

3.14 Since the announcement of price decontrol, the prices of a wide range of commodities, including politically-sensitive products like cooking oil, beer, sugar and washing powder have risen sharply. During the two-year period December 1982-December 1984, price increases for products produced by the INDECO group of public sector companies ranged from 25 and 50 percent. Largely as a result, the combined before tax profits of the INDECO subsidiaries increased by over 35 percent between 1982/83 and 1983/84.

3/ Wheat and wheat product prices were subsequently decontrolled in November 1984.

3.15 Agricultural price policy in Zambia has also undergone considerable reform through consumer (retail) price liberalization. The prices of most food commodities have been decontrolled. Only maize/maize meal remain controlled throughout the marketing system. Similarly, the farm level prices of a number of agricultural commodities have been decontrolled. This is applicable to all animal/animal product prices and some crop commodities--although horticultural crops were never subject to price control. However, the major food grain and export crop prices remain controlled. In the last four years, producer prices for most agricultural goods have been increased substantially with the result that many are now above border price equivalents. This should have led to significant increases in agricultural output but for the drought situation of the last few years.

3.16 Despite the above improvements, reforms are still needed in agricultural pricing policy and marketing arrangements. Marketing has been characterized by monopoly trading rights for parastatals and cooperatives in the controlled products and inputs (principally maize, cotton, coffee, sunflower and fertilizer). The policy of administered prices has provided inadequate incentives for marketing efficiency with the result that parastatals and cooperatives have come to depend on government subsidies to cover their losses. The major features of this policy have included: (a) the simultaneous fixing of both consumer and consumer/user prices; (b) subsidies in the form of restitution for costs incurred by marketing agencies in connection with transportation, handling, storage and management overheads; and (c) pan-territorial pricing of commodities and inputs throughout the crop season. As a result, the pricing system has ignored the locational advantage and relative profitability of crops and, in the event, has required considerable government subsidies.

3.17 In the course of implementing the Agricultural Rehabilitation Project, partly financed by the World Bank and other donors, GRZ will introduce policy and institutional reforms designed to eliminate the above constraints on agricultural development. A pricing policy consistent with regional comparative advantage is being considered. This should promote a more efficient use of resources and thus enhance the general capacity of the agricultural sector to generate alternative sources of income and employment. Secondly, a price structure that allows full-cost recovery is being considered for introduction which would help eliminate marketing subsidies, thereby releasing fiscal resources to support the diversification efforts. To achieve this objective, it would be necessary to improve the efficiency of the produce marketing and input distribution system and make them more competitive by allowing private sector participation. The specific measures that GRZ plans to adopt over the next two years in pricing policy and marketing arrangements are listed in Annex II. In summary they involve:

i. adjusting the structure of maize and maize meal prices to permit margins sufficient to cover the marketing parastatals (NAMBOARD and Cooperatives), transport, handling, storage and other operating costs, within a regionally differentiated price structure;

ii. adopting a better price setting methodology for controlled producer prices to reflect border-price equivalents;

iii. initiating steps towards a system whereby guaranteed producer prices for maize and other major crops would become floor prices, with NAMBOARD becoming a buyer and seller of last resort within a regionally-differentiated price structure; and

iv. allowing increased competition in the marketing of maize and distribution of fertilizer by permitting private sector participation.

3.18 Some of these policy and institutional measures, particularly those aimed at allowing sufficient margins to cooperatives and NAMBOARD and promoting participation by private traders in maize marketing and fertilizer distribution, require further and detailed analysis before implementation. Work is already underway in a number of areas. For example, work on the examination of the magnitude and structure of costs of the cooperative unions has started. These are intended to pave the way for a major study of the marketing system which will make specific recommendations for achieving the objectives outlined above. Further details of the marketing study are presented in Annex II, issue 3.

Making Better Use of Existing Assets and Conserving Foreign Exchange

3.19 The economic policy measures discussed in the preceding sections aim at maximizing growth through the efficient use of resources in the two productive sectors with the greatest potential for export expansion and import-substitution--agriculture and industry. Such policy measures are critical to the success of the first objective of GRZ's economic restructuring program, i.e. to diversify away from copper through new forms of export and import-substitution.

3.20 Because of the prolonged scarcity of foreign exchange and shortfalls in government revenues, there is severe under-utilization of capacity throughout the economy and a growing backlog of rehabilitation and maintenance expenditure. Thus, the second objective of the economic restructuring program is to make better use of existing assets by giving priority to increased capacity utilization and maintenance expenditures over new investments. Such a strategy, if implemented together with the proposed changes in trade, exchange rate and pricing policies, would ensure the realization of the other objective of economic restructuring mentioned above, namely, the need to economize on foreign exchange and to reduce capital intensity.

Mining

3.21 Copper production peaked in 1976 at 712,000 tons, but has since declined to a level of 525,000 tonnes during this past year. In the main, this is the result of the inability to deliver sufficient suitable ore to the concentrators, thereby leaving concentrators, smelters and refineries under-utilized. The factors that have contributed to this development include: declining ore grades as mining operations move into less rich and accessible areas; inadequate development of ore bodies in the underground mines and inefficient overburden removal in the open pit, due in large part to lack of equipment in good working order; and lack of adequate supervision. A combination of technical and management problems have also led to a decrease in labor productivity, with resulting increases in the cost of production. Moreover, shortages of foreign exchange have made it difficult to replace and rehabilitate plant and equipment and the reliability of existing equipment has declined due to shortages of spare parts.

3.22 During the past few years, GRZ has taken a number of significant steps to reduce production costs and to restore profitability (see Annex III). In 1981, the two mining companies were merged into a new company, Zambia Consolidated Copper Mines Limited (ZCCM). The management structure has been reorganized and a corporate planning department was established to strengthen the company's strategic planning in the areas of production, investment, personnel and finance. In 1982, a cost-cutting program was initiated which resulted in a 17 percent reduction in operating costs during the first year alone. This was achieved by reducing the labor force through attrition, and by improved inventory management. Also, an expatriate compensation policy, which provides a total compensation package competitive by international standards, has been introduced. Finally, GRZ now credits ZCCM's account directly with a specified amount of foreign exchange earnings, up to a pre-determined total annual allocation. This is an attempt to ensure timely availability of foreign exchange as a necessary ingredient to ZCCM's successful operations.

3.23 In addition to the cost-cutting and rationalization measures, ZCCM has embarked upon a major rehabilitation programme budgeted at approximately US$300 million over the 1984-86 period. The program consists of numerous projects to increase the productive capacity of existing assets through the replacement of worn and obsolete equipment and the rebuilding and replacing of small components of large facilities in order to improve on their efficiency, availability or safety. As part of the rehabilitation program, ZCCM is undertaking a number of special studies to review its present operations and plans. These studies (see Annex III) are intended to lead to an action program to increase labor productivity, improve cost control practices, and establish a systematic approach to financial and economic cost/benefit analysis of investments. Several of the studies have been completed and their recommendations are being reviewed by ZCCM. Implementation of these recommendations may involve further reductions in the work-force, adjustment of compensation packages, and the possible closure of uneconomic mines. As difficult as these decisions will be, GRZ realizes that they are essential to restoring ZCCM's efficiency and making the copper industry profitable. It also realizes that without a rehabilitated and competitive copper industry, the economic restructuring and diversification efforts would fail for lack of financial resources.

Energy

3.24 The energy sector offers significant scope for making better use of existing assets and conserving foreign exchange. The action plan for achieving this is described in Annex IV and consists of measures to: (a) reduce energy imports, particularly of petroleum; (b) improve the reliability of the existing power system; (c) rehabilitate existing plant and infrastructure; (d) rationalize energy prices to promote efficient consumption; and (e) strengthen the capability of institutions in the energy sector.

3.25 Several steps are being taken to reduce energy imports that are either unnecessary or can be replaced by domestic output. First, a pre-investment evaluation has shown that the reconfiguration of the Indeni Refinery by the addition of a mild hydrocracker would reduce petroleum imports by about US$10 million per year and increase the scope for product exports. At a total cost of about US$30 million, it would clearly be a high priority investment. Second, preliminary analysis suggests that investment in the substitution of coal for heavy fuel oil in ZCCM's copper smelting operations has a payback period of between three and four years. With foreign exchange extremely scarce, the economic benefit from substituting indigenous for imported energy is probably higher still. Thus, should the feasibility analysis confirm that initial assessment, the investment, which is estimated at about US$20 million, would be regarded as high priority. Thirdly, in the area of energy substitution, progress has been made in the substitution of electric for diesel power in the copper mines. ZCCM has launched a program at the Nchanga Open Pit Mine to convert the waste haulage system from diesel to electric trolley assist. The project is scheduled for completion this year and will reduce diesel oil consumption by about 26,000 tons per year, saving US$8 million annually in foreign exchange for an investment of about $35 million. ZCCM is also testing cable-reel electric drive load-haul dump units as replacement for the present diesel-drive units used underground. Substitution of about 20 percent of the diesel unit appears to be feasible.

3.26 At present about 20 percent of electric power is lost on the transmission and distribution system, owing to worn equipment and lack of spare parts. Zambia Electricity Supply Corporation's (ZESCO) rehabilitation needs were estimated at about US$40 million in 1982. The immediate priority is to improve the reliability of the existing power system, with emphasis on strengthening ZESCO's technical operations and completing the maintenance, repair and reinforcement work necessary to avoid major power interruptions. ZESCO has prepared proposals for the rehabilitation and reinforcement of the Lusaka and Kitwe Urban power stations, the cost of which is estimated at about US$4.4 million. It has also identified about US$1 million of investments urgently needed to rehabilitate the aging Victoria Falls power station. ZESCO also plans to define the scope and focus of a comprehensive power sector rehabilitation program and to identify measures to strengthen its maintenance program and operating procedures.

3.27 Feasibility analysis of the rehabilitation needs of the Maamba Colliery to raise its output sufficient to meet potential domestic and export demand for coal has been completed. It concludes that rehabilitation of the colliery should proceed, at an estimated initial investment of US$32 million. If implemented in 1985, this project will raise the colliery's output capacity to 750,000 tons per annum by 1987, compared to 483,000 tons produced in 1983/84. Increased coal output and improved production efficiency would eliminate the need for coal imports, remove the production bottleneck in some industries caused by inadequate coal supplies and facilitate further possible substitution of coal for imported fuel oil. The Tazama Oil Pipeline is the only source of bulk petroleum feedstock supply to the Indeni Oil Refinery. The pipeline is leaking substantially and increased quantities of feedstock are being lost, particularly over its first 250 km section. Maintenance costs are rising by over 20 percent per year. This, in itself, is a serious cost to the economy. Still more serious is the prospect of a major pipeline breakdown which, with only 20 days feedstock storage at the refinery, would rapidly cause its closure, forcing imports of refined products by land or air at high cost. In view of the severity of the problem, GRZ is launching a project to define the essential pipeline rehabilitation requirements, priorities and scheduling.

3.28 Inappropriate energy pricing, particularly of petroleum products, has caused a sub-optimal pattern of energy consumption. For example, in 1982 heavy fuel oil was priced at just 67 percent of its import parity equivalent, which induced over-consumption. Moreover, as a result of wholesale prices and tax policies, considerable distortions have been introduced in the relative price of petroleum products at the retail level. This has been particularly notable in the case of kerosene, the 1982 retail price of which was 49 percent lower than that of diesel oil, while its import parity price was two percent higher. Increases in petroleum prices between 1982 and December 1984 have significantly reduced these price distortions. Wholesale prices of heavy fuel oil and kerosene have been raised more sharply than those of gasoline and diesel oil. The increases over the same period have also been heaviest on kerosene, although it remains lightly taxed relative to other petroleum products. Future prices and tax changes will attempt to eliminate the remaining weaknesses in petroleum product pricing.

3.29 It is evident from the preceding discussion that difficult issues and painful choices will confront Zambia's energy planners in the next few years. In particular, the rehabilitation and maintenance projects identified by the various pre-investment studies will require resources in excess of those likely to be available to the sector. GRZ' first priority, therefore, is to prepare a carefully structured and selective energy investment programme consistent with current economic priorities and available resources. Institutional reform designed to increase the effectiveness of institutions in the energy sector will also be required. To this end, a body whose functions would include updating a national energy plan (including investment and financial requirements) and the formulation of policies on energy conservations, pricing, taxes and subsidies, is needed for the effective coordination of energy policy (Annex IV, issue 5).

Industry

3.30 Earlier in this chapter the problems facing the industrial sector were described. It was pointed out that the severe scarcity of foreign exchange has contributed to the poor performance of manufacturing enterprises during the past decade. Because of the high capital-intensity and import-dependence of most firms, Zambia's reduced capacity to import has resulted in a severe under-utilization of capacity in the sector. Trade and exchange rate policies have been inward-looking and have adversely affected factor productivity. Thus, the industrial development strategy appropriate at this time should stress policy and institutional reforms designed to increase industrial efficiency, encourage investment and export growth, and reduce import and capital intensity. The required changes in trade and exchange rate policies have already been discussed. Measures that GRZ intends to adopt to increase industrial efficiency through the strengthening of the already viable and potentially efficient existing industries in the public sector will now be described. This will be followed by a description of the incentives and measures that GRZ hopes to introduce in the form of an Investment Code to encourage private investment.

3.31 The public/parastatal sector has come to play a leading role in industrial development. Purchase of controlling interests in existing firms, together with new investments, resulted in a major change in the structure of ownership in manufacturing between 19658 and 1972 from predominantly private (and foreign) to one in which the parastatal enterprises now account for about half of manufacturing output and more than forty percent of manufacturing employment.

3.32 Between 1970 and 1980, the public sector, represented primarily by the Industrial Development Corporation (INDECO), grew at rates exceeding those for the economy as a whole and those for private manufacturing. This growth was accompanied by deterioration in relative productivity both within individual industries (as compared with the private sector) and as a result of a shift in investment within the public sector towards lower productivity activities. The deteriorating productivity performance of the parastatal sector had its counterpart in deteriorating financial performance--from an average gross return on fixed assets of 12 percent in 1969/70 to sizeable losses in 1978/79 and 1979/80. Since 1980, an encouraging recovery in financial performance has taken place. Still, the public/parastatal sector suffers from a number of factors inhibiting good economic performance. Some of these, for example pricing and investment decisions, are the result of policy actions taken outside the firm, but poor performance has also been related to management practices and the organization of the public sector.

3.33 In general, public sector organizational and management changes have been designed to increase the autonomy and accountability of individual firm managers. These efforts at decentralization of decision making were further reinforced by the decontrol of prices in 1982, which made individual enterprises, subject in some cases to approval by the parastatal holding companies, responsible for their pricing decisions. The management and pricing reforms have been partially successful in increasing the autonomy of individual enterprises. A major area of concern for the public/parastatal sector is the lack of appropriate investment criteria for the selection of new projects. Past public sector investments have been characterized by high (and frequently excessive) capital intensity and dependence on imports. These characteristics have contributed to the sector's relatively poor performance in terms of domestic resource costs of generating or saving foreign exchange, and indicate that more effective criteria for screening investment proposals must be implemented in the public sector. Consequently, GRZ's action plan for improving the performance of the public/parastatal sector presented in Annex I stresses first, the introduction of strict economic and financial criteria for project selection and for the evaluation of the performance of existing ones and second, increasing the capacity of INDECO to evaluate investments. More specifically it is intended that INDECO:

i. formulates economic criteria to be applied in evaluating new investments and the performance of existing enterprises;

ii. establishes an Evaluation Unit to apply the above criteria;

iii. restructures, or otherwise discontinues projects that do not satisfy the criteria of economic viability;

iv. implements measures, on the basis of a consultant's review of economic viability and operational efficiency o INDECO's subsidiaries, to improve the performance of enterprises with potential economic viability and to shut down enterprises that are not economically viable; and

v. implements the recommendations of a study into the appropriate level of compensation, as well as other measures, necessary to recruit and retain qualified staff, particularly engineers and financial managers/accountants.

3.34 The Industrial Development Act of 1977 was intended as an instruments for attracting private investment. It has not had the desired impact, partly because the investment incentives contained in it have not been sufficiently clear or well-publicized. Moreover, the Act maintains a strong regulatory environment and its incentives are provided in a discretionary way. The Act has also been criticized for providing incentives (e.g. remission of duties, investment allowances on capital goods) biased in favor of capital-intensive and import-dependent investment. For these reasons, GRZ is replacing the Industrial DEvelopment Act with an Investment Code which, in addition to setting out Government policies towards the business sector (remittances rights to profits, arbitration producers, etc.) will provide a precise definition of the incentives available and of the criteria upon which such incentives are to be granted. (See Annex I, Issue 5 for a summary). It is GRZ's hope that, once promulgated, the Investment Code and the new policy environment that is being create will allow the private sector to play a more dynamic role in Zambia's industrialization effort and economic development in general.

Transport

3.35 Zambia has an extensive and well developed transport infrastructure as a result of large investments made since independence (principally in a pipeline, a road and a railway to the port of Dar-es-Salaam in Tanzania and expansion of the domestic network). Maintenance and rehabilitation of the transport infrastructure and improved use of rail and road fleets are clearly the major issues in the sector. While there is ample stock of transport equipment, the shortage of foreign exchange and spare parts have led to low utilization of the trucking, bus and railway fleets. Workshop and maintenance facilities are poorly equipped and staffed. GRZ's highest priority, therefore, is to arrest the deterioration of existing assets. In this regard, the first phase of the rehabilitation programme for Zambia Railways, which begun in 1979, has been successfully completed. The second phase of the programme is about to begin and seeks to improve the operational efficiency of the railway by providing for:

i. replacement of life-expired rolling stock and equipment needed to meet projected traffic demand;

ii. material and spare parts for maintenance of Zambia Railways' equipment and facilities; and

iii. modern operational facilities.

The total cost of the three-year program is US$83.1 million. The World Bank's affiliate for concessionary lending, the International Development Association (IDA), the African Development Bank (ADB) and other door agencies are providing financing for the project.

3.36 Because of reduced budgetary allocation for road maintenance, the road system has deteriorated considerably in the last several years. Concern with this problem has led GRZ in the last two years to reduce sharply the capital budget for new road construction in favour of increased allocation to road maintenance. Also, after a very slow start, implementation of the Third Highway Project has improved considerably. Orders for new road maintenance equipment, materials and spare parts, totalling about US$20 million, for the rehabilitation of existing equipment have either been received or placed. This should strengthen the capacity of the Roads Department, the agency responsible for road maintenance and reconstruction. GRZ is also preparing a comprehensive inventory of road conditions in the country in order to prepare a high priority program for reconstruction of the road network. Lastly, with the assistance of the EEC, a study is to be undertaken of the feasibility of rehabilitating selected buses and trucks. The study will also identify the equipment, parts and materials needed for both the initial recommended level of rehabilitation and for the following five years. A further objective of the project would be to secure the long-term viability of transport enterprises capable of supplying an adequate volume and quality of services.

3.37 Institutional reforms are also needed in the transportation sector. Poor coordination among the three ministries most directly involved in the transport sector (the NCDP, Ministry of Power, Transport and Communications, and the Ministry of Works and Supply) has prevented effective transport planning. Rationalizing their functions, developing a coherent transport strategy, and introducing economic criteria for project selection are objectives that GRZ will be pursuing in the medium term. To these ends, steps are being taken to:

(a) strengthen the planning unit of the Ministry of Power, Transport and Communications to make it the principal transport sector policy-making and strategy formulating entity within the Government; and

(b) prepare a transport sector strategy and an investment program for carrying it out.

Relieving the Long-Term Constraints

3.38 Improved policies and institutional reforms will succeed only if, in addition to attending to the short-term crisis, they ease the longer-term constraints to growth and development. As pointed out in Chapter 2 above, Zambia's greatest potential for long-term economic development lies in the agricultural sector. Within the sector, the smallholder (emergent and traditional) farmer has the greatest potential for expansion. The productivity of the smallholder farmer, however, is very low. Policies and programmes directed at relieving the constraints on smallholder productivity is, therefore, the main thrust of Zambia's agricultural strategy.

3.39 The reforms in agricultural pricing and marketing arrangements described earlier should increase producer incentives and lead to the expansion of smallholder production in the short to medium term. In the longer term, agricultural research and extension services must be improved considerably before the agricultural sector can move rapidly towards becoming the leading sector in the Zambian economy. Research and extension services have not been as effective as they could be in increasing the productivity of the traditional sector. The reasons are varied. Research has been largely oriented to the commercial sector, and as a result, few technical packages have been developed which are suitable for the smallholder. Second, there has been little adaptive research (i.e., regionally oriented to the various climates and soils in Zambia), with the result that the extension service does not have the right messages to deliver. This is due partly to poor feedback and coordination between the research and extension services. As a result, the needs of the smallholder have not been properly fed into the research effort.

3.40 A different set of problems reduces the effectiveness of the extension service. Although staffing in the extension service is quite adequate (one demonstrator per 350 farmers and one diploma-grade officer per 700 farmers), extension is hampered by inadequate training of present staff, lack of effective supervision, and lack of recurrent resources for transport and field demonstrations.

3.41 These problems suggest that the research and extension effort needs to be reviewed in order to achieve greater orientation towards increasing smallholder productivity. More adaptive research, and a better system of feedback between the two services is needed. Research results should be incorporated in the training programs of extension workers, and future research efforts should be geared towards supporting an agreed long-term agricultural strategy. It is against this background that GRZ is developing a project designed to strengthen the technical capacity and efficiency, and sharpen the focus of the Research and Extension Branches of the Agriculture Department of the Ministry of Agricultural and Water Development so that they can develop and extend to farmers, especially smallholders, a continuing flow of new and improved agricultural technology aimed especially at those crops and livestock enterprises in which increased output would be either economically exportable or import substitutable. The project is being developed with the assistance of the World Bank; it would be the first five-year phase of a long-term national programme covering at least 15 years. The objectives of the project are described in Annex II, Issue 4. In brief, it will attempt to:

(a) strengthen the technical capacity and efficiency of agricultural research and extension services;

(b) increase the productivity and effective utilization of resources in research and extension by rationalizing existing facilities while ensuring that the available facilities are fully used and maintained;

(c) sharpen the focus of research and extension efforts, and strengthen critical linkages between these two services to better address agricultural problems, particularly of the vast majority of smallholder farmers; and

(d) support institution-building in the research and extension subsectors through technical assistance and training in programme planning and analysis, extension methodology, adaptive farming systems research, monitoring and evaluation, ect.

3.42 The project forms part of GRZ's incremental investment program in agricultural research and extension of US$87.7 million (including US$64.7 million foreign exchange) over the next five years; it was prepared in 1984 with the help of consultants. Part of this programme is expected to be covered by continuing assistance of more than a dozen donor agencies, mainly in support of specific commodity research teams, adaptive research planning teams, and overseas training programmes. The implementation period of the project would be five years.

3.43 The population of Zambia was 5.7 million at the time of the 1980 census. It had increased by over 40 percent since the 1969 census when the population was 4.1 million - an average annual growth rate of 3.1 percent. In the absence of any change in fertility, the 1980 population would double by the year 2000 to 11.5 million and would multiply by three and half times over the next 35 years to 21 million. As Zambia seeks to diversify its economy, promote agricultural growth and deepen the social infrastructure per capita, an increasing proportion of resources - financial, technical and managerial - will have to be diverted to investment. The current high rate of population growth will generate consumption demand that will compete directly with resources needed for investment, worsen the dependency burden on the working population, intensify the problems of urban growth and labour imbalance (both through high urban natural increase and through the stronger inputs to urban migration from greater pressure on the land in key sending areas), and hold back the country's progress in feeding and caring for its people. In short, the rapidity of present population growth, more than the ultimate population size, is the main constraint to steady socio-economic progress; it needs to be restrained to a level consistent with growth in agricultural productivity and general economic development if the standard of living of the Zambian people is to rise in the future.

3.44 GRZ believes that fertility reduction is the most humane and practical long-term solution to the problem of rapid population growth. But fertility reduction can only be achieved with public understanding of the problem and through a strengthened programme of family planning services. Although GRZ has yet to formulate a population policy, it has made a positive start in family planning as part of the maternal and child health programme and plans to provide family planning service as part of the primary health care programme. A voluntary agency, the Planned Parenthood Association of Zambia, is also providing population services. In the long run, an effective multi-sectoral population programme designed to reduce fertility and population growth would be needed. Elements of such a programme would include: the development of institutional capacity to analyze population issues and to ensure that the population dimension is fully addressed in national sectoral planning; the strengthening of family planning services, both of GRZ and those operated by non-government organizations; the inclusion of population education in secondary and tertiary curricula; the development of effective family planning demand-creating programmes; and the development of population programmes in key sectoral ministries (such as education and labour) to ensure that the programmes of those ministries assist to the maximum degree possible in meeting overall national demographic goals.

3.45 Experience in Africa and elsewhere has shown that delivery of family planning services through integration with maternal and child health (MCH) services is a cost-effective and an efficient delivery mode. Improvement of family planning services must of necessity involve improvements in the delivery of MCH services which would also have beneficial effects in terms of reduced morbidity and mortality of the client group. At the same time, in the present and likely future climate of constrained resource availability in the Zambian health sector, the resources necessary to suport, on a sustained basis, improvements in the coverage and quality of MCH and family planning services are likely to come only from improvements in the overall efficiency of the health system and/or from resource mobilization through increased cost recovery.

3.46 GRZ is currently preparing a pilot project with components designed to assist in achieving these long-term objectives. The proposed World Bank-assisted project would have four main thrusts:

(a) to support population programmes in some key ministries (e.g., to strengthen demographic analysis and population policy formulation in the NCDP, to develop information, education and communication through the Ministry of Health and the Ministry of Information, and to finance population programmes in one or two sector ministries);

(b) to improve the delivery of primary health care (particularly MCH and family planning services) in the Lusaka area which has significant unmet demand for family planning services;

(c) to improve the operational efficiency of the Lusaka health services, particularly the University Teaching Hospital (UTH), and to introduce a degree of cost recovery for UTH curative services; 4/ and

(d) to strengthen the Ministry of Health's ability to plan and manage the development of the health sector.

3.47 On the basis of the experience gained from the above project, the delivery of family planning services will be expanded to other major urban areas and, subsequently, to other parts of the country in line with increased management capability and rising demand for family planning services. These future projects would also provide for demand generation activities to be further strengthened, and family planning activities would become a national programme. The efficiency of other major urban hospitals would also be improved, building upon the experience gained from the Lusaka (UTH) project, and cost recovery would be introduced to these hospitals.

4/ The UTH occupies a unique position in the country's health sector, as it consumes substantially more resources than any other health facility. It offers significant potential for operational improvements and cost savings. Moreover, as the only medical training institution in the country, any improvements in primary health care achieved at UTH could influence the future practices of all locally trained doctors.

4. PRIORITY PROGRAMMES FOR DONOR ASSISTANCE

4.1 The policy and institutional reforms summarized in the previous chapter and detailed in the annexes to this paper will bring about the restructuring of economic relationship required to ensure recovery and growth, including production and export diversification, reduced import and capital intensity of production and consumption, higher ratios of investment and saving to GDP, and greater self-sufficiency (and security) in basic foodstuffs. This restructuring will take time; several years, in fact, will be required for the new institutions to be set in place and considerable patience and commitment will be needed from all concerned.

4.2 Despite the breadth and depth of the reform programmes in place or to be undertaken, they, alone, will not be sufficient to bring about the restructuring required in the economy. They need to be buttressed by an increased inflow of foreign exchange resources to restore imports and production levels so that the reform programmes can become effective. For example, it does no good to provide incentives for non-traditional exports if those exports cannot be produced in the first place because of a lack of essential imported inputs. Likewise, increased producer prices, tax relief and other incentives provided to agriculture can have no benefit if essential agricultural machinery and other inputs are not available to allow production to increase, or tyres and spare parts are not available for trucks to take the produce to market, or if manufactured goods (domestic) are not available for farmers to spend their increased incomes on.

4.3 It is essential, therefore, that a minimum level of foreign exchange be available to support Zambia's restructuring efforts and that a significant proportion of these resources over the next few years take the form of quick-disbursing input support. As noted earlier, because of continued weakness in copper prices, and higher debt servicing requirements than expected, the amount of foreign exchange available from export earnings falls considerably short of what is needed in the way of input support for the recovery effort. The members of the Consultative Group are requested to assist in filling this gap.

4.4 The need for a comprehensive public investment programme was recognized at the last meeting of the Consultative Group. It was agreed that such a programme would be presented to the next meeting, which at that time, was tentatively scheduled for later this year, or early in 1986. Because the Group is meeting earlier than planned, it has not been possible to present such a programme. However, as indicated in Chapter 1, several initiatives in planning and budgeting are currently underway which would result in a public sector investment programme based on a realistic assessment of expected resources, both domestic and external, over the next two to three years. In the meantime, as His Excellency The President has clearly stated, no public investments are to be undertaken unless they have net positive foreign exchange benefits. Rehabilitation and maintenance projects will receive high priority in the use of investment resources.

4.5 An increasing proportion of the country's foreign exchange receipts, particularly of external capital inflows, must be directed towards raising capacity utilization levels in support of policy and institutional reform initiatives. To channel these quick-disbursing funds to the appropriate uses within the priority sectors (mining, agriculture, industry, transportation and energy), a series of lending instruments (projects) have been prepared. We seek support from the Group members for these projects.

Industry

4.6 The World Bank is preparing an industrial reorientation project that will provide quick-disbursing assistance to the sector with the view to raising capacity utilization and efficiency. By concentrating resources on the more efficient enterprises and emphasizing export and import-substituting activities in the public and private sectors, the project will increase the supply of manufactured goods to the domestic market, help bring about the restructuring required in the sector and raise the competitiveness of Zambia's manufactured goods in external markets. Manufacturing activity will be more outward looking in its product and marketing orientation and more reliant on local resources as regards its use of industrial inputs, including raw materials and intermediate and capital goods. Production and employment will be increased, as will workers' incomes, and manufactured exports may be expected to increase. This project will support and encourage the policy reforms described elsewhere in this paper, including an incentive package that is neutral as between production for export and for the domestic market, the removal of administrative obstacles to exporting, the enactment of an investment code to encourage investment, the introduction of more market determination in pricing, and the maintenance of appropriate exchange rates under a more flexible exchange rate system. Measures are also planned which will increase the effectiveness of project selection and parastatal performance.

4.7 During the next two years (1986-87), the industrial sector's foreign exchange requirements, over and above what can reasonably be expected to be available from the country's foreign exchange earnings, are estimaed roughly at US$200 million. This would raise the capacity utilization level from the present 40 percent to about 60-70 percent. The World Bank's contribution to the sector through the Industrial Reorientation Project is expected to be about US$50 million, on IDA terms. This contribution would finance imported spare parts, raw materials, replacement equipment, intermediate goods, ect, and would contain initial funding for the Export Credit Revolving Fund. Criteria are being established to ensure that only the most efficient and highest priority enterprises have access to resources. Processing of this project is well advanced and approval is expected by the Bank's Board in August/September 1985. Members of the Consultative Group are requested to provide cofinancing for this project.

Agriculture

4.8 A recovery programme for the agricultural sector is already in place, but will require additional external funding due to the reduced amount of foreign exchange likely to be available from the country's export earnings. This programme will provide the imported inputs needed to restore output and productivity levels, thereby increasing the availability of domestically produced food items and providing the basis for an expansion of agricultural exports. The extensive policy and institutional reform package for the sector described elsewhere in this paper is being supported by this programme, as are other measures being taken to increae the efficiency of the marketing and input distribution systems and to improve research and extension services.

4.9 An immediate objective of this programme is to provide a continuous flow of essential farm machinery and implements, spare parts and agro-chemicals into the sector. Included in the items to be financed under the programme are: tractors and spare parts for the tractors; mechanically powered and animal-drawn machineray and implements for land preparation, sowing and weeding, fertilizer and agro-chemical spreading or spraying, and for crop harvesting; ox-carts; spare parts for farm machinery (including trucks) implements, ect; and various crop protection chemicals and insecticides. These inputs will go primarily to the commercial and emergent farmers, who, by virtue of having already the appropriate technical packages and the necessary resources, have the best prospects for increasing agricultural output quickly.

4.10 The Agricultural Rehabilitation Project, financed by the World Bank and other donors, will provide US$65 million during the June 1985-June 1987 period. It is estimated that this amount will cover roughly 40 percent of the sector's requirements for imported inputs, which are estimated at approximately US$160 million for the period.

4.11 The Government is presently negotiating with the US Government on a program of quick-disbursing assistance to the sector which will cover part of the remaining requirements. However, a substantial shortfall will still exist for which other donors' assistance is requested. Subtracting the amount likely to be available from the count y's export earnings would still leave about US$60 million to be financed from additional external soures during this period. The largest proportion of these resources would be used to finance spare parts for on-farm vehicles and machinery, although some would be used also to finance new tractors and spare parts for tractors. Additional commitments by other donors now would ensure that the foreign exchange requirements for the period would be met.

4.12 While the most critical need at present is to provide inputs to the sector, it is also important that programmes be initiated now to resolve the longer-term constraints on agricultural growth. With this in mind, the Government has prepared a project designed to improve the country's research and extension services for which it is seeking donor support. As described earlier, the major objectives of this project, which was prepared with World Bank assistance, are: (a) to strengthen the technical capacity and efficiency of agricultural research and extension services so that they can provide a continuous flow of new technology to farmers, particularly smallholders; (b) to increase the productivity and effective utilization of resources devoted to research and extension by rationalizing existing facilities while ensuring that the available facilities are fully used and maintained; (c) to sharpen the focus of research and extension efforts and strengthen the linkage between them; and (d) to strengthen programme planning and analysis, extension methodology, adaptive farming systems research monitoring and evaluation through training and technical assistance. The research programme will be reorganized and strengthened to include greater emphasis on on-farm adaptive research and on-station applied commodity research. The research station network will be rationalized by phasing out redundant facilities, etc. Extension services are to be reorganized and strengthened through the phased introduction of an incentive system along training and visit (T & V) lines. A comprehensive staff development programme is included in the project and a strong effort will be made to improve the management of both the research and extension programmes.

4.13 The total cost of this project, including contingencies, is estimated at US$60 million, with a foreign exchange component of about US$45 million. The World Bank, through its soft loan affiliate, IDA, is expected to assist in financing the project and additional financial support for the foreign exchange costs estimated at about US$30 million, will be needed from the donor community. Also, given the Government's tight budgetary position, a substantial portion of the incremental recurrent (local) costs, estimated at US$5 million, may also have to be covered by external financial sources.

Transport

4.14 Freight services in Zambia at present are unable to handle efficiently and adequately the road transportation needs of the country's external and internal trade. Although the demand for freight services has only increased marginally in the last few years due to depressed levels of economic activitiy, there has been a steady deterioration in the availability of equipment due to the lack of foreign exchange for spare parts, ect. The decline has been most pronounced in the last 24 months when inventory levels of spare parts, tyres and tubes have been depleted. The impact on the availability of transport services has been severe. Out of 1,700 serviceable trucks in the private sector, only 800 (47 percent) are in running condition: of the last 520 serviceable trucks in the public sector, only 25 percent, or 135, are presently on the roads. On average, only 42 percent of the fleet of trucks in the country are in running condition. Consequently, the essential transportation support services to be provided to the mining, agricultural, industrial and other sectors of the economy will be far below desired levels. This will surely have a debilitating effect on the economy.

4.15 Of immediate concern is the impact this decline in transport capacity is having on the agricultural sector. With the cycle of drought at last having been broken and with the improved productivity etc, agricultural production has increased significantly this year, particularly as regards the maize crop. However, because of the low level of transport capacity available, it is proving difficult to get the crops to market. This is likely to have a serious effect on farmers incentives and may negate any benefits expected from the reform programs. Assuming favourable weather conditions continue to prevail, agricultural production is expected to rise even further in subsequent years and the transportation requirements may be expected to increase apace.

4.16 Similar problems affect the passenger transport sector where private operators now have as much as 75 percent of the total bus market, but normally operate only in the urban areas or along paved roads. Whilst private bus transporters had in previous years provided a reasonable service, there has been a visible decline in the availability of buses in this sector. Although the United Bus Company of Zambia (UBZ), a public sector enterprise, operates both in urban and rural areas, 50 percent of its operational fleet is grounded, and its services in the urban, but especially in the rural areas, have deteriorated. A very high proportion of the country's work force in both the rural and urban areas depends upon bus transportation to reach its place of employment.

4.17 GRZ recognizes that efficiency levels in the public sector transport companies has been affected by management, planning and technical problems. A number of steps are being taken to rebuild these enterprises into well-managed commercially viable operations, whilst at the same time encouraging private initiative in the provision of transportation services. To complement these initiatives and to ensure that the basic needs of the road haulage and passenger transportation requirements of the economy are satisfied, there is urgent need for donor assistance in this sector.

4.18 The rehabilitation of existing equipment and the provision of regular supplies of spares, tyres and tubes, etc., take priority. The rehabilitation of grounded vehicles would reduce the need to purchase new trucks in the short to medium term. In addition, a significant proportion of the fleet is no longer serviceable and not amenable to rehabilitation. Consequently, a replacement program needs to be designed with the view to maintaining transport capacity in line with the country's growth prospects over the next few years. It is estimated that the rehabilitation and replacement needs over the next couple of years will be about US$45 million.

4.19 The rehabilitation component could involve about 250 trucks in the public sector and 700 trucks in the private sector, plus the provision of essential spare parts, tyres and tubes, etc. A total of 500 buses in the private and public sectors could also benefit from the rehabilitation program. The EEC has initiated a study with the objective of specifying more precisely the needs for bus and truck rehabilitation as well as for replacement. In addition, the study will address a number of other sub-sector issues, e.g., the adequacy of bus fares and cargo tariffs, improvements in management and workshop practices, the needs of small-owner operators, training and technical assistance needs, etc., with the view to improving its performance overall. The results of the study will provide the basis for a transport sector project for possible EDF financing. This project would have as its ultimate objective the long-term viability of transport enterprises, capable of supplying an adequate volume and quality of services, at appropriate levels of self-financing, and would provide a basis for mobilizing external resources for the sector.

Mining

4.20 It was stated in the previous chapter that the copper industry, as the main provider of foreign exchange, has a major role to play in GRZ's restructuring and diversification efforts. Copper output and profitability have declined in recent years due to a combination of technical and managerial problems. The efforts that are being made to restore previous levels of efficiency and profitability in the industry were also described and details are given in Annex III. In February 1984, the World Bank approved a project to support the Government's efforts at improving the performance of the mining company (ZCCM). The project includes 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 concentrator 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 supervisory 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 operations, including recommendations for specific actions to re-establish ZCCM's competitiveness.

4.21 The total cost of the rehabilitation project is estimated at US$300 million, of which US$224 million (75 percent) is in foreign exchange. About 49 percent of project cost, or US$148 million, is being financed through external borrowing and 51 percent, or US$152 million, by internal cash generation. In addition to the World Bank (US$75 million), external financing is being provided by the ADB (US$27 million) and a SYSMIM facility of EEC (US$46 million).

4.22 The success of the rehabilitation program is also predicated on the Government's ability to provide the industry with systematic and timely access to foreign exchange for its operating expenditure and for a portion of its investment programme. Insufficient foreign exchange allocation in the past has resulted in a shortage of spare parts which is the principal reason the industry now suffers from such a large backlog of maintenance and rehabilitation. The Government has altered its foreign exchange policy and now credits ZCCM's account directly with a specified percentage of

ZCCM's foreign exchange earnings up to a pre-determined total annual allocation. In 1984, the targeted foreign exchange allocation was US$350 million, or 35 percent of ZCCM's earnings. However, because of lower copper prices and other pressing demands on the foreign exchange budget (e.g., debt servicing and oil imports), this target was not achieved. In the event, only US$280 million, or 35 percent of the actual foreign exchange earnings, were provided to ZCCM.

4.23 There have also been delays in receiving equipment and spares ordered under the EEC/IBRD/ADB agreements, in large part due to procedural problems. Consequently, the benefits of the rehabilitation project are yet to be felt and, although these delays are fast being overcome, 5/ there is the real possibility that copper production in the 1985/86 financial year will be lower than in the previous year, resulting in reduced foreign exchange earnings for the country. At the same time, the backlog of unmet need for maintenance, rehabilitation, and mine development has increased.

4.24 The government remains committed to providing ZCCM with the foreign exchange needed for its operating and investment expenditures. Also, with procurement under the loans mentioned above proceeding at a more rapid pace, additional foreign exchange for new equipment, rehabilitation, spare parts, etc., will be available to the company. Nevertheless, because of the delays mentioned above and the lower than expected level of foreign exchange available from export earnings, ZCCM will require about US$30-40 million annually in added capital inflows over the next couple of years. These monies would be used to purchase spare parts, chemicals and lubricants, and other consumables. The UK, the Federal Republic of Germany, Japan, France, Italy and the United States have traditionally been the major sources of supply for these items. Consultative Group members' support is requested for these items.

Energy

4.25 Shortages of foreign exchange have also limited our ability to maintain existing assets in the energy sector. While programs are underway that provide for rehabilitation of Maamba Collieries, the oil pipeline from Dar-es-Salaam and the Indeni Refinery, the power sector's needs have not been addressed. The transmission and distribution systems are in a serious state of disrepair and power losses for this reason have increased steadily in recent months, reaching an estimated 20 percent this past year. In addition, the power stations themselves have not been maintained properly because spare and replacement parts, etc., have not been available. Some of these facilities are now in serious need of rehabilitation.

5/ As of the end of March 1985, only 17 percent of the ADB/EEC/IBRD loans had been disbursed. However, as of that date, 35 percent had already been committed and it is expected that 60 percent will have been disbursed by the year end.

4.26 The foreign exchange requirements to meet only the most urgent needs for maintenance and rehabilitation are estimated at US$40 million. This would provide for rehabilitation of those parts of the transmission and distribution systems that are in the worst condition and would provide the minimum amount of spare parts, materials, etc., for the maintenance programme. The most critical needs of the Lusaka, Kitwe Urban and Victoria Falls power stations would also be provided for out of these resources. Plans are underway to define the scope and focus of a comprehensive power sector rehabilitation project. Donor support for this project is requested.

INDUSTRY

ISSUES	STRATEGY AND OBJECTIVES	RECENT PROGRESS AND CURRENT SITUATION	MEASURES AND ACTIONS BEING TAKEN	
			JAN. - DEC. 1985	BEYOND 1985
1. Exchange Rate Policy	The maintenance of external competitiveness under a flexible exchange rate system in order to promote exports in general and non-traditional exports in particular. A greater reliance on the exchange rate for rationing foreign exchange.	(i) Kwacha was devalued by 20% in January 1983. (ii) A flexible exchange rate system was adopted in July 1983. (iii) Between July 1983 and March 1985 there was a cumulative depreciation of 79% and 93% against the SDR and US dollar respectively. (iv) A moderate improvement in the profitability of exports was achieved. However, the excess demand for foreign exchange remains large and the reliance on administrative rationing mechanisms has not diminished.	The introduction of a fundamental change in exchange rate management in order to reduce excess demand for foreign exchange and lessen the reliance on administrative controls	The continuation of an active exchange rate policy conducive to the maintenance of external competitiveness.
2. Foreign Exchange Allocation System.	Less reliance on administrative mechanisms accompanied by improvements in foreign exchange forecasting and budgeting.	(i) The Foreign Exchange Committee was reconstituted, with private sector representation. (ii) There was little progress towards the harmonisation of import licensing and foreign exchange allocation; hence the build-up of new import licences which were not backed by foreign exchange.	i) The strengthening of the budget section of Foreign Operations Department of Bank of Zambia through recruitment of additional qualified staff and training. ii) The establishment of a ministerial committee to review and approve the foreign exchange budget. iii) The revision of foreign exchange budgeting procedures to make the budget an operational tool of economic decision-making. iv) Adherence to the approved budget, including the quarterly sub-budgets.	i) The reduction to a minimum of the amount of foreign exchange subject to administrative allocation ii) The use of import licensing for purposes of registration rather than control. iii) The streamlining of the foreign exchange allocation system.

ISSUES	STRATEGY AND OBJECTIVES	RECENT PROGRESS AND CURRENT SITUATION	MEASURES AND ACTIONS BEING TAKEN	
			JAN. - DEC. 1985	BEYOND 1985
3. Import Regime	The reduction of the overall level and dispersion of effective rates of protection in order to restore the balance of incentive system between exports and import-substitutes as well as between agriculture and industry.	i) The customs duty on industrial capital goods was raised from 7.5% to 10%. ii) A minimum tariff of 10% was imposed on a large number of imported inputs. iii) The customs valuation of imports was changed from f.o.b to c.i.f. basis. iv) Inspite of the above measures many imported goods still enter the country duty-free because of the existence of industrial rebates and zero-duty categories. v) Duty-free imports continue to be exempt from the sales tax on imports. vi) Effective rates of protection remain high and variable, with some activities accorded negative protection. vii) The structure of production is characterized by high import and capital intensity viii) There is widespread underutilisation of capacity, with the industry average no higher than 50%.	i) The abolition of industrial rebates. ii) An increase in the sales tax on imports from 12.5% to 15% iii) An increase in the sales tax on locally produced goods and services from 10% to a uniform rate of 15% The above measures were implemented in the 1985 Budget. iv) Most of the remaining duty-free categories of exemptions will be abolished. v) The maximum import duty will be set at 100% and an excise tax equal to the difference between the existing rate and 100% will be levied on all imported and locally-manufactured goods. Subsequently, the maximum import tariffs will be reduced to about 80 percent without an increase in the excise tax.	i) The abolition of all other exemptions from 10% minimum tariff. ii) The coverage of the 15% sales tax on locally produced finally manufactured goods will be extended, with a few basic goods exempted.

CHRABF

ISSUES	STRATEGY AND OBJECTIVES	RECENT PROGRESS AND CURRENT SITUATION	MEASURES AND ACTIONS BEING TAKEN	
			JAN. - DEC. 1985	BEYOND 1985
			vii) A tariff commission will be established to study the structure of effective protection and oversee the implementation of tariff reform measures aimed at achieving greater uniformity at effective protection. viii) Import prohibitions which now cover about 50 items will be reviewed and reduced gradually.	iii) Under the aegis of the Tariff Commission, a comprehensive review of the protection system and the formulation of proposals for changes in the structure of tariffs and indirect taxes. iv) The elimination of the remaining import prohibitions and the introduction of appropriate tariffs.
4. Export Promotion and Incentives	Export diversification through the promotion of nontraditional exports; the identification of new exports and markets.	i) Under a foreign exchange retention scheme introduced in 1982 exporters nontraditional products may retain 50% of gross receipts. ii) Profits derived from nontraditional exports attract tax at the concessional rate of 15% compared to the normal company tax rate of 50%. iii) Export licensing continues to have an inhibiting effect on exporting.	i) Exporters will be allowed to open interest-earning foreign currency accounts at domestic banks. ii) The foreign exchange retention period has been lengthened from 21 days to 60 days.	

ISSUES	STRATEGY AND OBJECTIVES	RECENT PROGRESS AND CURRENT SITUATION	MEASURES AND ACTIONS BEING TAKEN	
			JAN. - DEC. 1985	BEYOND 1985
Export Promotion and Incentives (contd)		iv) Institutional support for exporters, including credit and guarantee schemes and marketing assistance, is either absent or weak. v) A feasibility study of an Export Revolving Fund which would supplement the foreign exchange retention scheme is underway.	iii) Export licensing will be replaced by a simple registration system which will do away with the administrative costs of obtaining a licence. iv) An Export Credit Revolving Fund will be established to provide immediate, guaranteed foreign exchange for imports needed to meet an export order; it will also provide working capital for the production cycle. v) An Export Promotion Board will be established to oversee the development of new exports and markets. vi) The duty drawback system will be simplified, with the drawback based on the average percentage of imported inputs in the output for major types or groups of exports.	The Export Promotion Board will be strengthened . The averages used in the calculation of the duty drawback will be reviewed periodically.

CHKABP

ISSUES	STRATEGY AND OBJECTIVES	RECENT PROGRESS AND CURRENT SITUATION	MEASURES AND ACTIONS BEING TAKEN	
			JAN. - DEC. 1985	BEYOND 1985
5. Investment Climate	Greater clarity and precision of Government policy towards the business sector in general and the private sector in particular. The maintenance of a stable policy framework less regulatory and more promotional in nature and a well-defined system of incentives	i) The inhibiting effect of the Industrial Development Act of 1977 was recognised. ii) A new Investment Act has been prepared. The draft Act is designed to assure among other things: a) management of public enterprises on commercial lines. b) full and open participation of the private sector in business development. c) less bureaucracy by shifting from investment licensing to registration only. d) remittance rights to profits, dividends, interest and capital relating to foreign investment. e) a simple but effective arbitration procedure. f) specific incentives for non-traditional exports of goods and services, rural industries, small-scale and priority enterprises, and activities with a high local content. g) automatic access to specific incentives, subject to safeguards.	The new Investment Act will be promulgated.	The Investment Commission will, through its Secretariat, carry out studies and formulate proposals aimed at improving the investment climate further.

CHKABF

ISSUES	STRATEGY AND OBJECTIVES	RECENT PROGRESS AND CURRENT SITUATION	MEASURES AND ACTIONS BEING TAKEN	
			JAN. - DEC. 1985	BEYOND 1985
6. Interest Rate Policy	Improvements in savings mobilisation and investment decision-making through greater reliance on market-determined interest rates.	i) increased flexibility was achieved in adjusting interest rates. ii) The maximum commercial bank lending rate was raised in stages from 13% in 1983 to 17.5% at the end of 1984; the maximum deposit rate went up from 8.5% to 15.5%. iii) In spite of the above increases, real interest rates remain negative.	Both lending and deposit rates will be increased gradually in order to achieve positive real rates.	A market-determined interest rate structure will be adopted.
7. Public Enterprises	Improvements in efficiency through better review and evaluation of existing operations and proposed new investments, and through better management based partly on the recruitment and retention of qualified staff in key areas.	i) The profitability of some public enterprises has improved following the removal of price controls. ii) The combined before-tax profits of INDECO subsidiaries increased from K.13.1 million in 1982/83 to K.17.7 million in 1983/84. Of 36 operating INDECO subsidiaries 13 made losses amounting to K.35.5 million in 1983/84.	i) INDECO will adopt sound economic criteria for evaluating new investments and the performance of existing enterprises. ii) It will establish an Evaluation Unit to apply the above criteria.	

ISSUES	STRATEGY AND OBJECTIVES	RECENT PROGRESS AND CURRENT SITUATION	MEASURES AND ACTIONS BEING TAKEN	
			JAN. - DEC. 1985	BEYOND 1985
7. Public Enterprises (cont)		iii) Direct Government funding has been substantially reduced. iv) Poor management and inefficient operations persist at several enterprises. v) The contribution of non-mining public enterprises to export earnings remains very low. vi) Investment selection and evaluation criteria are deficient and analytical capacity is weak. vii) INDECO's inability to recruit and retain qualified and experienced staff in key areas continues to hamper technical and financial operations.	iii) Pending the establishment of the Evaluation Unit, it will review (with the help of consultants) all large projects started recently, scheduled to start soon, or proposed for inclusion in its 1985/86-1987/88 investment programme; it will also review the economic viability and the operational efficiency of existing enterprises. iv) It will not undertake investment projects which do not satisfy the economic viability criteria, v) It will undertake, with the help of consultants, a study regarding the appropriate level of compensation and other measures necessary to recruit and retain qualified and experienced staff.	i) Based on the consultants' review, INDECO will implement an action programme to: (a) improve the performance of enterprises with potential economic viability; and (b) restructure or otherwise shut down enterprises which are not economically viable. ii) It will implement the recommendations of the study on the compensation of key personnel with a view to becoming a competitive employer vis-a-vis the private sector.

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CRKABF

AGRICULTURE

ISSUES	STRATEGY AND OBJECTIVES	RECENT PROGRESS AND CURRENT SITUATION	MEASURES AND ACTIONS BEING TAKEN	
			JAN. - DEC. 1985	BEYOND 1985
1. Pricing Policy				
a) Producer Prices	Adoption of a pricing policy which is consistent with regional comparative advantage, thereby promoting a more efficient use of resources and enhancing the general capacity of the agricultural sector to generate alternative sources of income and employment.	i) Producer prices for all the major agricultural commodities have been increased to levels close to or above border price equivalents. However, price- setting methodology remains inappropriate and the data base is poor. Furthermore, uniform prices, which take no account of regional comparative advantage, and relative costs are set throughout the country, with the result that the production of crops other than maize is depressed.		
		ii) A study to formulate a more appropriate methodology for setting producer prices has been completed.	Based on the results of the study, a new price-setting methodology is being formulated.	A new methodology for setting producer prices based on border price equivalents will be established. In addition a regionally differentiated price/ structure of floor and trigger prices will be introduced, with NAMBOARD becoming the buyer and seller of last resort.
b) Consumer Prices	The adoption of a price structure which allows full cost recovery, thereby helping to eliminate subsidies and thus releasing budgetary resources to support diversification efforts.	The prices of most food commodities, including wheat, livestock and animal products, have been decontrolled. Horticultural crops were never subject to price control. Only the prices of maize and maize meal remain controlled.	NAMBOARD and PCU to be allowed sufficient margins to cover one third of amount needed to attain full cost recovery.	NAMBOARD and PCU to be allowed sufficient margins to cover full trading costs.

CHKABF

ISSUES	STRATEGY AND OBJECTIVES	RECENT PROGRESS AND CURRENT SITUATION	MEASURES AND ACTIONS BEING TAKEN	
			JAN. - DEC. 1985	BEYOND 1985
		The present consumer price does not cover fully the cooperatives' trading margins.		
c. Fertiliser Prices	The adoption of a fertilizer price which, after rehabilitation of NCZ, would cover the full costs of production and distribution.	Fertilizer prices which are controlled were increased by 10.3% - 14.7% in 1984 but this was not sufficient to cover the full costs of procurement and distribution. Moreover, fertiliser consumption is comparatively high.	Fertilizer prices be increased further in order to reduce subsidies and encourage a more efficient use of this input. A study on fertilizer consumption will be undertaken to determine the causes of the extraordinarily high level of usage and propose corrective action.	i) Fertilizer prices will be raised to a level sufficient to cover procurement, transport, handling, storage and other operating costs, within a regionally differentiated price structure. ii) The findings of the fertilizer consumption study will be evaluated and the appropriate recommendations implemented.
	Rehabilitate NCZ to raise capacity utilization and lower domestic cost of producing fertilizer to at least the import parity level.	Fertilizer is produced domestically at twice the import parity prices. A project to rehabilitate NCZ has been prepared and external financing arranged. Work on the Japanese Plant has begun.	Firming up arrangements for the remainder of the external financing (World Bank and KFW) will be completed and work will begin on the German built plant and the offsites.	iii) The rehabilitation of Nitrogen Chemicals of Zambia, the domestic producer of fertilizer will be completed. The project aims at increasing NCZ's efficiency so that the cost of domestic fertilizer is reduced to import parity equivalent.

ISSUES	STRATEGY AND OBJECTIVES	RECENT PROGRESS AND CURRENT SITUATION	MEASURES AND ACTIONS BEING TAKEN	
			JAN. - DEC. 1985	BEYOND 1985
D. Tractor Hire Charges	The adoption of charges for Government tractor hire services would cover full costs and generate resources for maintenance of the tractor fleet.	The charges are still below the level needed to achieve full cost recovery and thus generate resources for the efficient maintenance and operation of the tractor fleet.	The charges for Government tractor hire services were increased by 40% in January 1985.	Tractor hire charges will be raised to a level sufficient to achieve full cost recovery.
2. Non-price Producer Incentives	Maintenance of non-price incentives in order to encourage marketed production for local consumption as well as for export.	i) Since 1982 agricultural incomes have been taxed at the rate of 15% compared to the current company tax rate of 50%. ii) Farmers can write off 100% of the capital cost of farm machinery and implements within two years. iii) Farm machinery is exempt from customs duty. iv) As with other non-traditional exports, agricultural exports benefit from the 50% foreign exchange retention scheme.	Non-price producer incentives will be maintained.	The draft Investment Code will streamline and strengthen non-price incentives.
3. Produce Marketing Input Distribution	Improvements in the efficiency of the marketing and distribution system through streamlining the operations of NAMBOARD and the Provincial Co-operative Unions (PUC) as well as by allowing competition among parastatals, co-operatives and private traders.	i) NAMBOARD handed over to the PCU's all its intra-provincial functions in the marketing of maize and the distribution of fertilizer. ii) Only maize marketing and fertilizer distribution are reserved for parastatals. Private traders play the major role in the marketing of other agricultural products. Moreover, the distribution of agro-	Because of the need to strengthen administrative capacity and financial controls in the PCUs, NAMBOARD has temporarily again been given primary responsibility for intraprovincial maize marketing and fertilizer distribution, with the PCU's acting only as agents of NAMBOARD.	PCU's are expected to takeover responsibility for intra-provincial maize marketing and fertilizer distribution as their capacities increase.

ISSUES	STRATEGY AND OBJECTIVES	RECENT PROGRESS AND CURRENT SITUATION	MEASURES AND ACTIONS BEING TAKEN	
			JAN. - DEC. 1985	BEYOND 1985
		chemicals, farm machinery and implements is largely in private hands.		
		iii) Given the current level of efficiency, the margins allowed the parastatals are not sufficient to cover their costs. The resultant dependence on Government subsidies is not conducive to improvements in efficiency.	(See Section above on Consumer Prices)	(See Section above on consumer prices)
		iv) For the purpose of establishing an empirical basis for determining the appropriate margins a study of the magnitude and structure of PCU's and NAMBOARD's costs was initiated.	Having identified the nature and magnitudes of PCU's and NAMBOARD' costs, a more comprehensive study on how to reduce these costs and create a system which would sustain an improved level of efficiency will be carried out. The study would cover: a) ways and means of improving marketing efficiency, especially through cost reduction with private sector participation acting as an essential spur to that end; b) legal channels that are needed to facilitate private sector participation; c) a workable mechanism to guard against widespread commodity	The recommendations of the marketing and parastatal efficiency study will be implemented In particular, private traders will be allowed to compete with the co-operatives and NAMBOARD, with the latter's primary role becoming that of buyer and seller of last resort.

CHKABF

ISSUES	STRATEGY AND OBJECTIVES	RECENT PROGRESS AND CURRENT SITUATION	MEASURES AND ACTIONS BEING TAKEN	
			JAN. - DEC. 1985	BEYOND 1985
			hoarding and/or smuggling, and against the bulk of the trade falling into non-Zambian hands; d) ways and means of improving the financial and operational management of PUCs; e) measures needed to enable NAMBOARD to establish and manage food grain reserves, and carry out the role of buyer and seller of last resort within a system of guaranteed floor and trigger prices; f) policy and operational guidelines for the management of food grain reserves, and g) required investments and financial resources for the operation of such reserves.	
4. Research and Extension	Rationalisation and reorientation of research and extension in order to ensure that farmers, especially smallholders, have access to effective technical packages.	i) Budgetary allocation for research and extension have been increased. Research allocations were doubled between 1983 and 1984, and the ratio of operating and maintenance expenditures to personal emoluments raised from 18.1% to 27.[illegible]%.	i) Budgetary allocations have been maintained at a level consistent with the general shortage of resources.	

CHKABP

ISSUES	STRATEGY AND OBJECTIVES	RECENT PROGRESS AND CURRENT SITUATION	MEASURES AND ACTIONS BEING TAKEN	
			JAN. - DEC. 1985	BEYOND 1985
		ii) A comprehensive review of research and extension has been completed and the following major weaknesses identified: a) There is no systematic mechanism for setting priorities and allocating resources; b) There is poor co-ordination and review of objectives, programmes and donor assistance c) The number and size of existing research stations are such that overheads consume a disaproportionate share of available resources, thus leaving too little for research programme; also the distribution of research facilities among agro-ecological zones is unbalanced d) There is little or no agronomic research on a number of crops which are mainly cultivated by smallholders; e) The linkages between research extension are often weak and sometimes non-existence; f) The application of the training and visit method of extension lacks focus and adaptation;	ii) A high powered Zambia Agricultural Research and Extension Council (ZAREC) is being established. ZAREC will provide the focal point for a more systematic formulation and review of priorities policies and programmes. iii) Initial steps will be taken to re-orient research and extension towards smallholders; in particular, a pilot project designed to develop appropriate smallholder technical packages will be started in the Northern Province. iv) On the basis of the Lint Company model, steps will be taken towards applying uniform service conditions to extension staff. v) A soil Services re-organisation study will be completed.	The recently formulated research and extension strategy will be implemented over a five-year period with a view to: a) institutionalizing the role of ZAREC in policy guidance, priority-setting and programme review; b) upgrading the quality of research facilities and eliminating redundant facilities; c) supporting and strengthening the adaptive research planning teams; d) streamlining the commodity research programmes; e) reorganising the research and extension branches; f) upgrading the quality of staff through formal and in-service training

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ISSUES	STRATEGY AND OBJECTIVES	RECENT PROGRESS AND CURRENT SITUATION	MEASURES AND ACTIONS BEING TAKEN	
			JAN. - DEC. 1985	BEYOND 1985
)		g) The selection and training procedures as well as the incentive structure are not conducive to the recruitment and retention of qualified staff, the upgrading of skills and general motivation of staff.		g) developing linkages between research and extension; and h) adapting the training and visit method of extension to local conditions
5. Institutional Support	Improvements in the policy formulation and investment programming capacity of agricultural sector institutions in order to ensure that the sector plays a leading role in the restructuring of the economy.	i) The Planning Division of the Ministry of Agriculture and Water Development (MAWD) has been re-organised and strengthened. ii) In order to identify weaknesses in policy formulation and the overall management of agricultural development an evaluation study of MAWD has been initiated. The study will, among other things, assess: a) the effectiveness of MAWD's existing orgnisational structure and administrative procedures in meeting the present and future needs of the sector b) The appropriateness of MAWD's investment programme in relation to sectoral objectives and to overall staffing and the resource base; and	The evaluation study of MAWD will be completed and an action programme based on the recommendations of the study formulated.	The action programme on improving the institutional capacity of MAWD to formulate policies, review programmes and manage new and existing investments in agriculture will be implemented.

CHKABP

ISSUES	STRATEGY AND OBJECTIVES	RECENT PROGRESS AND CURRENT SITUATION	MEASURES AND ACTIONS BEING TAKEN	
			JAN. - DEC. 1985	BEYOND 1985
		c) the extent to which some of MAWD's functions can be transferred to provincial authorities within Government's overall decentralization programme.		
6. Agricultural Credit	Rationalisation of the institutional framework for agricultural credit in order to make it more supportive of production, processing transportation, storage and marketing of agricultural products and inputs.	i) The Zambia Agricultural Development Bank (ZADB) was established in 1983 with the intention of phasing out the Agricultural Finance Company (AFC). A study is being carried out to determine the desirability of phasing out AFC. ii) The problems affecting agricultural credit include: a) lack of an effective link between end-users, especially smallholders, and credit intermediaries or primary lenders; b) poor co-ordination between marketing and input distribution systems and the credit system; c) weaknesses in funding, organisation, management and staffing of existing public lending institutions; and	i) ZADB is being strengthened in the areas of funding, management and staffing. ii) Based on the recommendations of the AFC phase-out study, a decision will be made regarding the status of AFC iii) A project is being formulated to: a) rationalize the agricultural credit system; b) design new village level credit institutions and strengthen existing intermediaries; and c) provide incremental financial resources required for seasonal medium and long term lending to farmers for specific crops, and	

CHKABF

ISSUES	STRATEGY AND OBJECTIVES	RECENT PROGRESS AND CURRENT SITUATION	MEASURES AND ACTIONS BEING TAKEN	
			JAN. - DEC. 1985	BEYOND 1985
		d) lack of complementarity between lending operations and savings (except for the commercial banks and Zambia State Insurance Corporation).	small scale enterprises for trading, transportation and agro-industries.	The agricultural credit project will be implemented.
8. Export Promotion	Formulation of export programs for crops with export potential to ensure that the sector contributes the maximum to balance of payments.	The incentives provided through the exchange rate, tax relief, retention scheme, etc, will provide incentives for export. Policy and institutional constraints particular to specific export crops need to be reviewed and actions taken.	i) Policies on irrigation and livestock will be formulated. ii) A development strategy for cotton will be prepared. iii) A development strategy for coffee will be prepared.	Development strategies for groundnuts, tobacco and other crops with export potential will be prepared.

CHKABF

MINING

ISSUES	PROBLEMS	PROGESS TO-DATE	FUTURE ACTION
1) Long-term Strategy for the Copper Industry	Lack of clear statement from the Government of its objectives for ZCCM	The Government has issued a statement of its objectives for ZCCM which emphasize the need for ZCCM to remain financially healthy and to conduct its affairs in accordance with sound business, financial industrial and administrative practices.	ZCCM must develop a long term strategy around these objectives - define specific targets of its own against which to assess plans and measure progress.
	Lack of long term production and investment strategies	ZCCM's Corporate Planning has been actively working on this issue. Initial work on the development of a 5 - year production and investment plan is in hand and using these basic data, and the situation referred to below a series of strategic alternatives will be examined before the most effective strategy is adopted.	Complete strategic assessment and 5 - year plan
2. Organisational Structure	The merger of NCCM and RCM created a need for a major re-organisation of management to ensure effective running of a very large and complex company	A major re-organisation of the senior management structure and responsibilities was carried out and made effective April 1, 1985	Monitor the effectiveness of the new structure and correct any deficiency
		New reporting and information systems have been developed	Implement new reporting and information systems.
3. Rationalization of Operations	Opportunities for rationalizing operations were made possible as a result of the merger and need to be exploited	A major study addressing this problem is well advanced and will be completed in May 1985.	Complete the study and implement appropriate recommendations
4. Efficiency of Operations	Historical tendency to regard maximizing output as the prime consideration and the subsequent neglect of productivity and costs	A series of technical studies carried out by outside Consultants and the Company have highlighted areas where efficiencies and productivity can be improved	The Company will actively pursue the development of these improvements
		A new bonus scheme has been implemented to improve productivity of miners	Expand bonus scheme where appropriate to cover other workers and supervisors
		Reviews of ZCCM's mining and metallurgical operations by consulting firms have been completed and recommendations made for improved methods and practices. These are being studied by the Company	Implement appropriate recommendations

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ISSUES	PROBLEMS	PROGRESS TO-DATE	FUTURE ACTION
		Studies of ZCCM's maintenance systems and stores/purchasing functions have been completed with a view to improving operating practices and productivity.	Implement appropriate recommendations
		Comprehensive training programme is under-way. The need to supplement existing programmes with accelerated and on-the-job training has been recognised and invitations to bid on development of such programmes have been sent to outside consultants	Establish effective accelerated training and on-the-job training programmes
		Successful cost-cutting measures have been been implemented	Continue to emphasise cost-containment
5. Rationalisation of Investment Decisions	Lack of systematic cost/benefit analysis and procedures for effective investment decision-making leading to sub-optimal use of ZCCM financial resources	Study into ZCCM maintenance and replacement policies by outside consultants has been completed and recommendations made to establish improved policies. The recommendations are being studied by the Company	Implement appropriate recommendations
		Review of ZCCM investment decision making practices by outside consultants has been completed and improvements to procedures have been suggested. These are being examined by the Company	Implement appropriate recommendations
		Investment criteria in line with corporate objectives have been defined	Adoption of improved investment criteria
		A review of ZCCM budget procedures and accounting system by outside consultants has been completed. Recommendations for improved practices have been made and are being studied by the Company	Implement appropriate recommendations

CHRABP

ISSUES	PROBLEMS	PROGESS TO-DATE	FUTURE ACTION
6. Impact of Production Cutbacks	Output maximisation without regard to economic considerations	A study has been initiated to assess the economics of all operating units and to assess the social and economic implications of closing any uneconomic operations	Study to be completed in June 1985 and action plan for implementation developed
7. Rationalisation of Factors Exognous to ZCCM	Inadequate and erratic allocation of foreign exchange disrupting ZCCM's ability to plan and maintain smoothly running operations Tax regime adversely affect ZCCM's capacity to accumulate reserves, strengthen its financial structure and maintain investment at adequate levels in rehabilitation and replacement.	Commitment by Government to allocate adequate foreign exchange on regular basis	Continue appropriate allocation of foreign exchange to ZCCM Review to be undertaken of the changes in tax regime to permit at the same time adequate tax revenues to Government and adequate reserves on ZCCM's account to protect its financial standing

CHKABF

ENERGY

ISSUES	STRATEGY AND OBJECTIVES	RECENT PROGRESS AND CURRENT SITUATION	FUTURE MEASURES AND ACTIONS
1. Rehabilitation of existing assets	Rehabilitation of existing plant and infrastructure in order to: a) increase coal output sufficiently to meet domestic demand, with a surplus for export;	i) A coal engineering study which identified the rehabilitation requirements of the Maamba Colliery has been completed. Coal output has fallen from 610,000 metric tons in 1980/81 to 483,000 metric tons in 1983/84 when coal imports became necessary.	i) A colliery rehabilitation project which is expected to raise output to 750000 metric tons per annum will be implemented.
	b) eliminate leaks in the TAZAMA oil pipeline and forestall a major disruption of feedstock supply; and	ii) A preliminary analysis of the corrosion damage to the first 250 Km of the TAZAMA Pipeline (which accounts for over 80% of the leakage) has been undertaken. Feedstock losses attributable to leakage have risen from US$1.7 million in 1982/83 to $2.2 million in 1983/84.	ii) Following a comprehensive survey of the oil pipeline the first 250 Km will be rehabilitated. The remaining 1450 Km will be rehabilitated thereafter.
	c) reduce transmission and distribution losses in the electric power system while at the same time improving the reliability of the system.	iii) A comprehensive power system development study has been completed. The installed capacity of 1608 MW is well in excess of domestic and export demand of about 1400 MW, so no system expansion is needed before the year 2000. As a result of the growing backlog of deferred maintenance and repair, about 20% of the electric power generated is lost through the transmission and distribution system. Moreover, interruptions of power supply are worsening	iii) A power system efficiency and rehabilitation audit will be carried out. This will pave the way for rapid modifications to existing operations and methods. Thereafter, the rehabilitation of major works will be undertaken on the basis of a detailed feasibility study.
2. Reduction of Energy Imports	Reduction of petroleum imports through the adjustment of the oil refinery product mix so as to better match demand and increase the scope for the substitution of coal for heavy fuel oil.	i) A pre-feasibility analysis of possible modifications to the refinery has shown that the addition of a mild hydrocracker will reduce petroleum imports by US$10 million per annum and increase the scope for exports.	i) A full appraisal of the refinery modification project will be carried out and a mild hydrocracker installed at the refinery if its economic viability is confirmed.

ISSUES	STRATEGY AND OBJECTIVES	RECENT PROGRESS AND CURRENT SITUATION	FUTURE MEASURES AND ACTIONS
		ii) Largely as a result of a fall in consumption of heavy fuel oil in the copper mines, domestic petroleum consumption declined from 683000 metric tons in 1980/81 to 602000 metric tons in 1983/84. A preliminary study has concluded that, with the exception of the Nkana wire bar furnaces, all copper smelting plants could convert from heavy fuel oil to coal, thus saving about 50000 metric tons of heavy fuel oil per year.	ii) A project designed to substitute coal for heavy fuel oil in copper smelting will be appraised and implemented. The project will take account of the substantial investments which would need to be made in new and rehabilitated equipment for coal handling, pulverizing, conveying and drying.
		iii) A project is underway at the Nchanga Open Pit Mine to substitute electric power for diesel oil in waste haulage. The project will reduce diesel oil consumption by 26000 metric tons per year.	iii) On the basis of tests being carried out by ZCCM, 20% of diesel-drive load-haul-dump units will be replaced by electric-powered units.
3. Pricing Policy	Rationalization of energy prices in order to promote efficient consumption of energy resources and encourage substitution, especially of domestic energy resources for imported fuel.	i) Between 1982 and 1984 wholesale petroleum prices increases ranged from 26% for regular gasoline to 100% for fuel oil. Taxes were also increased, with the tax on kerosene rising by 78%. These changes, together with the price increases announced in January 1985, have resulted in substantially higher retail prices for petroleum products.	
		ii) By international standards the price structure for petroleum products still remains distorted. In December 1984 the wholesale prices of premium and regular gasoline were 50% and 39%, respectively, above import parity. At the consumer level relative prices are further distorted owing to differentials in tax rates, allowable dealers' margins and distributors' transport costs.	i) The wholesale price of fuel oil will be increased further in order to achieve import parity and the remaining price and tax distortion in the relative price of kerosene and diesel oil eliminated.

ISSUES	STRATEGY AND OBJECTIVES	RECENT PROGRESS AND CURRENT SITUATION	FUTURE MEASURES AND ACTIONS
		iii) The ex-mine price of Maamba coal was increased from K32.1 per metric ton in 1981 to K68.60 in 1984. The price is now roughly in line with import parity. iv) In May 1983 retail electricity tariffs were increased by an average of 25% and the bulk supply tariff to CPC raised by 79%. However, tariffs are still too low to cover ZESCO's operating and maintenance costs. v) A power tariff study is underway.	ii) The price of coal will be maintained at its import parity equivalent. iii) The findings of the power tariff study will be evaluated In the interim electricity tariffs will be raised to levels needed to cover the costs of maintenance and re-habilitation.
4. Household Energy Supply	Adequate supply of woodfuel and protection of the environment through afforestation and conservation measures.	i) A comprehensive woodfuel resource and consumptions survey is underway. ii) Deforestation remains a serious problem in urban centres. This is partly responsible for the 50% rise in charcoal prices since 1982. iii) Charcoal prices have been decontrolled However, the stumpage fee of K0.17 per cubic metre is too low to encourage a more efficient use of woodfuel resources. iv) Field testing of the prototype of a more efficient charcoal stove is due to begin in 1985.	A household energy strategy will be drawn up. Two options, which are not mutually exclusive, will be analysed. One option is to increase the supply of woodfuel and encourage more efficient charcoal production, marketing and consumption methods; the other is to accelerate the pace of electri-fication, thus facilitating the substitution of electricity for woodfuel.

ISSUES	STRATEGY AND OBJECTIVES	RECENT PROGRESS AND CURRENT SITUATION	FUTURE MEASURES AND ACTIONS
5. Institutional Support	Improvements in the capacity of energy sector institutions to set priorities, formulate policies and implement programmes.	The National Energy Council (NEC) has been strengthened by providing it with a small technical secretariat. In addition, the staffing position of the Energy Department has been improved. However, no comprehensive strategy for the sector has been drawn up.	Various options for energy sector co-ordination are being considered, including: a) Reconstitution of NEC into an inter-ministerial Energy Council which will draw up and update a national energy plan and review policies affecting energy conservation, pricing, taxation and subsidies; b) Combining the Energy Department with the NEC Secretariat to form an Energy Planning Unit; and c) Rationalizing ZIMCO's corporate structure in the area of petroleum procurement, transportation, refining and wholesaling in order to make better use of existing technical skills.

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