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ZAMBIA

PUBLIC EXPENDITURE REVIEW

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Country Department VI
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CURRENCY EQUIVALENTS

Currency	Zambian Kwacha (K)
US$1.00	K 8.00 (as of May 1, 1987)
K 1.00	US$0.13

The following are average annual exchange rates for recent years.

1970	K 1.00	=	US$1.40
1975	K 1.00	=	US$1.55
1980	K 1.00	=	US$1.27
1981	K 1.00	=	US$1.15
1982	K 1.00	=	US$1.08
1983	K 1.00	=	US$0.80
1984	K 1.00	=	US$0.56
1985	K 1.00	=	US$0.37
1986	K 1.00	=	US$0.13

WEIGHTS AND MEASURES

1 Metric Ton (Tonne) = 1000 Kg. or 2,205 Lbs

ABBREVIATIONS

CDE	=	Classified Daily Employee
CEM	=	Country Economic Memorandum
GDP	=	Gross Domestic Product
GFCF	=	Gross Fixed Capital Formation
GNS	=	Gross National Savings
INDECO	=	Industrial Development Company Limited
MAWD	=	Ministry of Agriculture and Water Development
MET	=	Mineral Export Tax
MOF	=	Ministry of Finance
NAMBOARD	=	National Agricultural Marketing Board
NCDP	=	National Commission for Development Planning
PE	=	Personal Emoluments
RDC	=	Recurrent Departmental Charges
ZCCM	=	Zambia Consolidated Copper Mines Limited
ZIMCO	=	Zambia Industrial and Mining Corporation Limited

FISCAL YEAR

Government -- January 1-December 31
ZIMCO, ZCCM -- April 1-March 31

Preface

The mission would like to express its gratitude and appreciation to the large number of officials in the Government and ZIMCO who gave generously of their time and experience in discussions with the mission members. In particular, the mission would like to acknowledge the following officers who provided liaison for the mission and were of great assistance in making appointments and other arrangements--
Messrs. C. Chirwa and L. Nkhata (Ministry of Finance), Mr. R. Vanniasinkam (ZIMCO), and the various officers in the Sectoral Planning Department in NCDP.

In addition to the main report, a number of background papers were prepared by the mission and are available on request:

(i) "Sectoral Expenditure Programs-- 1986-88"-- fifteen sectoral chapters providing greater detail regarding the various expenditure programs described in the main report.

(ii) "Improving Parastatal Performance in Zambia," by Ms. M. Shirley.

(iii) "The Social Impact of Expenditure Reform," by Ms. C. Allison

This report is based on the findings of a public expenditure review mission which visited Zambia in February 1986. The mission leader and principal author of the report was Mr. R. Westin. Other members of the mission were Messrs. R. Ridker, S. Khan, Z. Drabek, I. Moreithi, B. Zegge, K. Mitchell, M. Dick, M. Zymelman, A. Griffiths, M. Murray, Ms. A. Vaughn, R. Kayani, Ms. S. Hafeez, R. Lacroix and Ms. C. Allison. Major technical inputs into the report were provided by Messrs. R. Broadfield, J. Moose, K. Kleiner, D. Rouag and J. Mullan.

ZAMBIA

PUBLIC EXPENDITURE REVIEW, 1986-88

Table of Contents

		Page
I.	THE MACROECONOMIC OUTLOOK FOR THE PUBLIC EXPENDITURE PROGRAM	1
	A. The Context for Public Expenditure Reform	1
	B. Investment and Savings Requirements	3
	Investment	4
	Savings	8
	C. Prospects for the Government Budget	8
	D. Planning for Uncertainty	17
II.	SECTORAL PROGRAMS IN THE BUDGET	19
	A. Overview	19
	B. Agricultural Expenditure Programs	25
	Evaluation of Expenditure Strategy	26
	Proposals for Expenditure Reform	31
	C. Health, Education, Roads and Development Administration	36
	Health	36
	Education	39
	Roads	44
	Development Administration	45
	D. Other Sectoral Programs	51
	Water Supply	51
	Housing	52
	Tourism	53
	Information and Broadcasting	54
	Regional Administration	55
	Other Government Programs	57
III.	REFORMING THE GOVERNMENT BUDGET	58
	A. Overview	58
	B. The Core Government Expenditure Program, 1986-88	60
	C. Inter-Sectoral Expenditure Issues	62
	Wages and Employment Policy	62
	Funding of Recurrent and Capital Expenditures	66
	Reduction of Government Services	68
	Social Impact of Expenditure Reform	69
	Increase in Non-Tax Revenues	71
	Maintenance of Government Assets	72
	D. Planning and Budgeting	73
	The Previous Planning and Budgeting Cycle	74
	The Revised Planning and Budgeting Cycle	75
	Content of the Annual Plan and the Budget	77
	Role of MOF, NCDP and Operating Ministries	77
	Next Steps	78

Table of Contents (cont'd)

	Page
IV. THE PARASTATAL INVESTMENT PROGRAM	80
A. Parastatal Investment and Performance	80
Savings and Investment	82
Fiscal Impact	85
B. Sectoral Investment Programs	88
Mining	88
Industry	93
INDECO	93
Nitrogen Chemicals of Zambia, Ltd.	97
Development Bank of Zambia	99
Energy	99
Petroleum	100
Coal	102
Electricity	103
Woodfuel	104
Energy Sector Planning	104
Transport	105
Zambia Railways	106
Zambia Airways	108
Contract Haulage, Ltd.	109
United Bus Company of Zambia	109
Transport Planning	110
Telecommunications	110
Postal Services	113
C. The Core Parastatal Investment Program, 1986-88	114
D. Improving Parastatal Investment Decisions	117
Investment Review	118
Setting Objectives for Parastatals	119
ANNEX A: GOVERNMENT REVENUE AND EXPENDITURES, 1975-1986	121
ANNEX B: SECTOR AND PROGRAM DEFINITIONS IN THE ANNUAL PLAN	126

I. THE MACROECONOMIC OUTLOOK FOR THE PUBLIC EXPENDITURE PROGRAM

A. The Context for Public Expenditure Reform

1.01 The Government of Zambia has introduced major policy reforms to reverse the long economic recession that has been associated with the decline in Zambia's terms of trade. These difficult and far-reaching decisions, such as the introduction of the foreign exchange auction, liberalization of the foreign trade regime, and virtual elimination of price controls, have fundamentally altered the prospects for sustained medium term economic growth. However, while the policy reforms have created incentives for a redirection of resources into productive activities, the resources will not flow at the required rate without further purposeful actions by the Government. Some of the most important measures which need to be taken involve the restructuring of the public expenditure program. To an unusual extent, the public sector exercises direct control over the allocation of resources in Zambia. The large size of the Government budget and the parastatal sector means that matters of investment, pricing, and service delivery are heavily influenced by public sector decision making. Effective control of the public expenditure program implies more than limiting the budget deficit or restraining the growth of public borrowing, as important as these considerations clearly are. Decisions on the sectoral distribution of the Government budget and on cost recovery and parastatal pricing and investment will play a vital role in determining the character and responsiveness of the Zambian economy. The problems of public expenditure reform constitute a difficult agenda for a Government that has already taken many decisions that have caused substantial disruption to the economy. Nevertheless, unless the Government complements its actions on the macroeconomic policy front with equally forceful decisions concerning the allocation of public resources, the potential benefits of what has been accomplished so far may be dissipated in lagging economic growth rates.

1.02 The extent of public sector control over resource allocation in the Zambian economy can be gauged by the indicators given in Table 1.1. In 1982-83, the public sector accounted for approximately 63 percent of value added, 72 percent of formal sector employment, and almost 80 percent of gross capital formation. These shares are unusually large in comparison to other countries. Moreover, in view of the high usage of inputs in comparison to value added, these data indicate that the public sector has contributed to the low aggregate levels of labor and capital productivity that have been identified in the Zambian economy. As such, reform of the public expenditure program is a particularly important policy instrument in Zambia for improving both factor productivity and the composition of final output.

1.03 Given the large size of the public expenditure program, this report has had to adopt certain restrictions in order to maintain adequate coverage of the major topics. The public expenditure review will focus on expenditures for 1986-88, with 1986 representing a base year for the

Table 1.1: Public Sector Shares in Value-Added, Capital Formation and Employment

	Value-Added	Gross Fixed Capital Formation	Employment (Formal Sector)
Government	28	27	35
Parastatals	35	52	37
Total (Public Sector)	63	79	72

Notes:

Based on relative shares in 1982-83. Data for Government expenditures are from the Financial Reports of the Government. Data for parastatals are from ZIMCO Annual Reports and do not include the non-ZIMCO parastatals.

analysis in the report. Within the Government budget, the emphasis will be on expenditure programs for ministries which provide direct services to the population, particularly in agriculture, health, education, roads, and development administration, with additional attention being given to selected topics cutting across ministries (e.g., personnel policies, expenditure planning, vehicle maintenance) which are important for developing a consistent program of budgetary reform. For the parastatal sector, the emphasis will be on the capital investment program. Recurrent expenditures by the parastatals will receive relatively less attention, except as they impinge on important issues (e.g., pricing, cost efficiency) that affect the financial viability of the enterprises or limit the scale of the proposed investment program.

1.04 In the remainder of this chapter, we examine the economic outlook for the public expenditure program, particularly the macroeconomic constraints on public investment and savings and on the Government budget as a result of the economic reform program and Zambia's external resource situation. While the Government has already taken substantial measures to stabilize its external resource position, the internal resource balances (i.e., the investment-savings gap and the budget deficit) are still seriously out of alignment. This means that the outlook for the public expenditure program is intimately linked to such macroeconomic questions as the desired growth rates for public and private consumption, the anticipated sectoral composition of final output, and the prospects for foreign debt-service payments and debt rescheduling. Section B of this chapter

examines the investment and savings requirements for the economy and the breakdown between public and private sources. Section C examines the Government's fiscal prospects and the composition of recurrent and capital expenditures in the budget. Section D considers what policies the Government should adopt to deal with uncertainty in the general economic outlook.

B. Investment and Savings Requirements

1.05 One of the consequences of economic recession in Zambia has been a severe compression of capital investment. Gross fixed capital formation (GFCF) fell from 18.2 percent of GDP in 1980 to 9.5 percent in 1985, representing an average annual rate of decline of 12 percent in real terms. Capital investment in a number of sectors has been below the requirements for replacement and rehabilitation, and there has been a significant deterioration of much of Zambia's capital stock. This situation has a number of implications for the public investment program. First of all, the major share of capital investment over the next several years will have to go into reducing the large backlog of rehabilitation and replacement needs. Much of this investment will not contribute directly to economic growth, but rather is needed in order to avoid further declines in production or to prevent deterioration of the capital stock that could create bottlenecks to economic expansion. This is particularly true of the large investment requirements for projects such as rehabilitation of the major trunk roads, replacement of worn-out mining equipment for the copper industry, repair of the oil pipeline from Dar-es-Salaam, and the ongoing rehabilitation programs for the railroads and the coal and fertilizer industries, all of which are discussed in the subsequent chapters. Much of the capital stock which requires rehabilitation is held by parastatals, so the parastatal investment program will claim a large share of the total resources available for investment. This will place a severe constraint on resources available for Government and private sector investment. Because so much of the capital investment will be tied-up in maintenance and rehabilitation projects, growth in production will have to depend on activities which do not have large capital requirements. In particular, emphasis must be given to stimulating growth through improvements in factor productivity, including greater utilization of existing capacity and reductions in unit costs.

1.06 Given Zambia's large requirements for capital investment, an important objective of the economic recovery program should be to improve aggregate savings in order to provide the resources needed for investment. This effort will require a number of difficult decisions by the Government. Increasing private savings will require constraining the growth of consumption, which has fallen in per-capita terms throughout most

of the past decade.[1] Zambia's ability to attract foreign savings will be limited, due to the large external debt burden. The Government will therefore need to place particular emphasis on improving public sector savings by reducing the budget deficit and improving parastatal profitability, actions which should have high priority as part of the public expenditure program.

1.07 A possible medium term economic framework for Zambia has been proposed in the recent Country Economic Memorandum (CEM).[2] Briefly, this scenario envisions a slow improvement in economic growth over the next five years, sufficient to support a modest increase in GDP per capita. Policies to constrain the growth of public consumption would allow an increase in the level of private consumption per capita, which is necessary to sustain support for the adjustment program. It would also release resources for an increase in investment to support the diversification of the economy into agriculture and economically efficient industrial production, as well as complete the rehabilitation of the mining industry. This would establish the basis for a return to stronger economic growth in the first half of the 1990s, which would complete the diversification of the economy in anticipation of the expected decline in copper production in the latter half of the decade. Table 1.2 summarizes the major economic growth assumptions and resource projections for this scenario. The remaining discussion in this section provides additional detail as to the nature and composition of the savings and investment projections underlying this scenario, particularly with respect to the public share of these quantities.

1.08 Investment. Table 1.3 presents a preliminary estimate of the composition of investment broken down between the Government, parastatals and other (mostly private) sources for the period 1980-84. Parastatals accounted for the major share of gross fixed capital formation (GFCF), followed by direct Government investment and other (including private) sources. The level of GFCF by Government and the parastatals was generally stagnant in nominal terms throughout the period (and therefore declining significantly in real terms), with other (including private) sources showing a decline in GFCF in both nominal and real terms. As such, these data indicate that all sectors have shared in the decline of capital formation in Zambia.

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[1] Between 1980 and 1985, gross domestic consumption increased at an average annual rate of less than one percent in real terms, significantly below the population growth rate of 3.4 percent.

[2] Zambia: Economic Reforms and Development Prospects, World Bank Report No. 6355-ZA, November 19, 1986.

Table 1.2: Macroeconomic Growth Prospects and Domestic Resource Requirements, 1986-95
(in 1985 constant prices)

	Average Annual Growth (%)		Share of GDP (%)		
	1986-90	1991-95	1985	1990	1995
GDP at market prices	3.6	4.5	100.0	100.0	100.0
GDP at factor cost	3.1	4.5	87.6	85.5	85.5
Agriculture	5.6	5.0	12.7	13.9	14.2
Mining	2.1	0.5	11.1	10.3	8.5
Industry	4.2	7.0	23.5	24.5	27.1
Services	1.9	3.7	40.3	37.1	35.7
Exports	2.1	2.4	39.3	36.7	35.2
Imports	4.8	3.3	38.0	40.2	37.9
Consumption	3.9	4.3	86.8	87.7	87.3
Public	0.8	2.0	19.3	16.8	14.9
Private	4.6	4.8	67.5	70.9	72.4
Gross Investment	10.0	6.5	12.0	16.1	17.7
Gross Domestic Savings	2.8	8.2	13.2	12.6	15.0
GDP Per Capita	0.2	1.1			
Consumption Per Capita	0.5	0.8			

Source: Zambia: Country Economic Memorandum.

1.09 Table 1.4 outlines the investment requirements of the medium term recovery scenario over both the near term (1986-88) and the next decade. Zambia will have to increase investment from 9.5 percent of GDP in 1985 to 14.5 percent in 1988 to sustain economic growth. This will support an increase in GFCF from K 600 million in 1985 to K 1020 million in 1988 (1985 constant prices), representing an average rate of increase of 10 percent per year. Total GFCF during the period 1986-88 would equal K 2800 million, of which parastatals would provide approximately K 2000 million.[3] The Government and other (including private) sources would contribute approximately K 300 million of GFCF each. This would represent an increase in the parastatal share of investment from 59 percent in the period 1980-84

[3] In the discussion of the parastatal investment program in Chapter IV, all costs have been estimated in January, 1986 prices at an exchange rate of K 6 = $1.00. Based on the assumption that approximately 70 percent of GFCF represents foreign exchange costs (an estimate based on experience in several sectors), parastatal investment during the 1986-88 period is expected to equal K 3800 million (US$635 million) in 1986 prices.

Table 1.3: Sources of Investment, 1980-85
(K million in current prices)

	1980	1981	1982	1983	1984	1985
Gross Fixed Capital Formation	558	610	618	615	623	600
Government a/	125	130	183	151	121	n.a.
Parastatals b/	391	334	302	338	414	n.a.
Other (including private) c/	42	146	133	126	88	n.a.
Percentages of GFCF						
Government	22	21	29	25	19	n.a.
Parastatals	70	55	49	55	67	n.a.
Other	8	24	22	20	14	n.a.
Changes in Stocks	155	63	-15	-40	101	160
Gross Domestic Investment	713	673	603	575	724	760
Index of Real GFCF (1980=100)	100	102	90	72	61	52

n.a.= not available

Notes

a/ GRZ, Financial Reports, various years. (The estimates have not been adjusted to exclude items financed under foreign loans that may be more properly defined as recurrent expenditures under national income accounting conventions.)

b/ Estimated on the basis of net financial sources available to ZIMCO, defined as internal generation of funds (after-tax profits plus depreciation) plus net external and internal borrowings plus net transfers from the Government. For 1984, this estimate has been adjusted downward (from K 629 million to K 414 million) to reconcile a major discrepancy with the national income accounts. The difference may be attributable to a DC-10 airplane which was purchased by Zambia Airways during 1984 and which may not show up in the national income accounts because of technicalities in the financing plan for the aircraft.

c/ Residual category.

Table 1.4: Investment Requirements, 1985-95
(K million in constant 1985 prices)

	1985	1986	1987	1988	1990	1995
Gross Fixed Capital Formation	600	840	940	1020	1170	1610
of which: Government	n.a.	120	130	150	180	240
Parastatals	n.a.	600	680	720	760	970
Other (including private)	n.a.	120	130	150	230	400
Increases in Stocks	160	20	30	40	50	60
Gross Domestic Investment	760	860	970	1060	1220	1670
Memo Items:						
GFCF/GDP	9.5	13.0	14.0	14.5	15.5	17.0
GDI/GDP	12.0	13.3	14.5	15.1	16.1	17.7

n.a. - not available.

to 70 percent in 1986-88 in order to accommodate the large amount of rehabilitation investment required by the parastatals during this period. The share of Government capital expenditures would decline from 29 percent in 1980-84 to 15 percent in 1986-88 in order to reduce the budget deficit and release resources for parastatal investment. The share of GFCF for other (including private) sources would be 15 percent, slightly above the level achieved in 1984 but below that of 1981-83. Given the unsettled environment for private investment and the high level of unutilized capacity, this amount of private investment should not place a major constraint on increases in production, but greater provision must be made for private investment as the economy begins to recover. In the longer run, GFCF could increase to about K 1220 million in 1990 and K 1670 million in 1995, representing 15.5 and 17.0 percent of GDP respectively in each year, and the share of private investment should increase to at least 20 percent of total investment by 1990 and 25 percent in 1995.

1.10 In order to make effective use of the limited amount of investment resources provided in the recovery scenario, the Government will need to improve its investment planning and decision making. This work has already begun with the preparation of rehabilitation programs in several key sectors. Institutional reforms such as the recent formation of an economic evaluation unit for the industrial parastatal enterprises and the introduction of improved annual planning procedures for the Government budget will help in screening investment proposals for the public sector. Other important actions, including the maintenance of positive real interest rates for commercial borrowing, full implementation of the new

Investment Act, and expansion of credit facilities for agriculture and industry through appropriate financial institutions will be important policy instruments for promoting increased investment and improving efficiency in the use of investment resources.

1.11 Savings. Up until the end of 1982, Government policies strongly favored consumption over investment. Strict price controls on most products, the weak financial performance of the copper industry, and an expansionary budget situation reduced aggregate savings to minimal levels. Following the introduction of economic reforms beginning in 1983, national savings improved but were still below the level needed to support gross domestic investment. Table 1.5 provides estimates of the composition of savings between the Government, parastatals and other (including private) sources for the period 1980-84. Overall, public savings (Government plus the parastatals) provided only a small share of gross national savings (GNS) between 1980-84, being negative in two years and not exceeding 35 percent of GNS in any of the remaining years. The Government has been a major contributor to the poor savings performance of the public sector, with revenues being less than recurrent expenditures in every year. The savings performance of the parastatal sector deteriorated sharply in 1981 and 1982 as a result of the deteriorating financial condition of the copper industry. With the suspension of price controls in 1982 and the reorganization of the copper industry, parastatal profitability and savings recovered steadily. The ratio of savings to investment for the parastatal sector varied from 18 to 69 percent between 1980-84, while the savings effort of the private sector consistently exceeded private investment and thus provided resources to support investment elsewhere in the economy (Table 1.6). In aggregate, however, Zambia relied on foreign savings to finance over half of its total investment requirements in four of the past five years.

1.12 In order to increase public savings after several years of economic decline, the Government will need to apply strict policies regarding taxation, Government employment and wages, expenditure control, and parastatal profitability. Private sector savings should continue to be an important source of resources and can be enhanced through policies such as positive real interest rates on deposit accounts and the development of greater incentives for increased savings behavior, for example through promotion of private sector housing development. Nevertheless, the major burden for increasing domestic savings in the short term must fall on the public sector.

C. Prospects for the Government Budget

1.13 The economic reform policies which have been enacted in recent years have had a major impact on the size and structure of the Government budget. Debt-service requirements for both foreign and domestic debt have increased as a result of devaluation and the increase in domestic interest rates, so that they now constitute a major share of the Government's total expenditure obligations. Fiscal policy has been marked by high levels of taxation and constraints on the Government's operational expenditures, but the budget deficit has continued to be intractable, averaging 13 percent of GDP between 1980 and 1985. In order to improve domestic savings, a major policy objective of the Government should be to reduce this deficit to

Table 1.5: Savings, 1980-85
(K million in current prices)

	1980	1981	1982	1983	1984	1985
Gross National Savings	223	25	32	277	472	661
Government[a]/	-214	-300	-344	-82	-143	-
Parastatals[b]/	240	82	54	179	284	-
Other (including private)[c]/	197	243	322	180	331	-
Memo Items						
Public Savings (Government and parastatals)/GNS	0.12	neg.	neg.	0.35	0.30	-
GNS/GDI	0.31	0.04	0.05	0.48	0.65	0.87
GNS/GNP	0.08	0.01	0.01	0.07	0.10	0.11

a/ Defined as Government revenue minus recurrent expenditures. Repayments of principal have been deducted from the Government's definition of recurrent expenditures to arrive at this estimate.

b/ Defined as after tax profits plus depreciation charges for the ZIMCO group of companies. Data are for the period April 1 of the year indicated to March 31 of the following year.

c/ Residual category.

Table 1.6: Savings Effort by Source, 1980-84[a]/

	1980	1981	1982	1983	1984
Government	neg.	neg.	neg.	neg.	neg.
Parastatals	0.61	0.25	0.18	0.53	0.69
Public Sector (Government plus parastatals)	0.07	neg.	neg.	0.29	0.34
Other (including private)	4.7	1.7	2.4	1.4	3.8

a/ Measured as the ratio of gross national savings to gross fixed capital formation, by source.

manageable proportions. However, while macroeconomic considerations need to be foremost in the Government's concern, the composition of tax and expenditure programs are also important instruments for improving domestic investment and savings. This section will examine the budgetary outlook for the Government over the next few years and the expected composition of Government expenditures in order to provide the context for the program of expenditure reform for the budget which is considered in Chapters II and III.

1.14 Because of the major impact of devaluation on the local currency requirements for foreign debt-service payments, the 1986 budget estimates are given in two formats in Table 1.7. Presentation 1 includes interest payments on an accrual basis and foreign debt-rescheduling is shown as a source of financing for the budget deficit.[4] In Presentation 2, foreign interest payments are included net of expected debt-rescheduling and therefore provide a closer approximation to anticipated cash payments.

1.15 Turning first to the revenue side of the budget, there has been a substantial increase in reliance on revenues based on external trade and aid flows, including import taxes (reflecting recent revisions to the tariff structure), mineral taxes (reflecting an increase in the mineral export tax to 13 percent and the impact of devaluation on copper export earnings) and foreign grants (reflecting local currency received by the Government as counterpart funds for foreign loans and grants channeled through the foreign exchange auction). Taxes on domestic revenue sources, particularly income taxes, domestic excise and sales taxes and non-tax revenues, are expected to yield a much lower proportion of total revenues than previous years. In effect, the Government has financed the 1986 budget by tapping the "devaluation dividend" available from taxes on international trade flows. This approach represents a pragmatic method of financing the Government's substantial increase in revenue requirements (from 25 percent of GDP in 1980-85 to 35 percent of GDP in 1986). However, it cannot be sustained at the same rate of increase, as export and import volumes are expected to grow slowly in real terms in the future. Given the very substantial shifts that have occurred in the tax structure, with domestic tax revenues falling from 70 percent of total revenues in 1980-85 to 31 percent in 1986, there is a need for the Government to reexamine the tax system from the standpoint of long-term requirements for revenue growth and incentives for domestic production and savings. A recent IMF/World Bank mission to Zambia has carried out a review of the tax system, and this study should provide a suitable framework for tax reform.

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[4]/This approach is based on conventions followed by the International Monetary Fund. Government accounting procedures differ, in that all debt-service payments, including both principal and interest, are included on a cash basis as part of Constitutional and Statutory expenditures. The budget data discussed in this report have been revised to correspond with national income accounting conventions and to remove various anomalies caused by shifts in budget definitions over time. Tables A.1-A.4 in Annex A provide details as to the corrections which have been applied to the data.

Table 1.7: Composition of Government Revenue and Expenditure, 1980-86 (All items shown as a percentage of the total)

	Average 1980-85	1986 Budget[a]/ Presentation 1	1986 Budget[a]/ Presentation 2
I. Revenue			
Tax Revenue	89	83	83
Mining Revenue	5	22	22
Income Taxes	33	15	15
Domestic Excise and Sales Taxes	37	16	16
Taxes on International Trade	14	30	30
Non-tax Revenue	8	3	3
Grants and other receipts	3	14	14
	100	100	100
II. Expenditure			
Recurrent Expenditures	85	86	81
Personal Emoluments	24	15	19
Recurrent Departmental Charges	13	9	13
Subsidies	9	7	10
Interest			
Foreign	7	29	4
Domestic	8	13	17
Other Constitutional and Statutory Expenditures	16	6	8
Grants, Transfers and other Payments	8	7	10
Capital Expenditures and Net Lending	15	14	19
	100	100	100
III. Financing of Deficit			
External	28	86	
Domestic	72	14	
	100	100	
IV. Memorandum Items			
Tax Revenue/GDP	22	30	30
Total Revenue/GDP	25	35	35
Recurrent Expenditure/GDP	33	40	28
Total Expenditure/GDP	38	47	35
Government Savings/GDP	(8)	(5)	
Budget Deficit/GDP	13	12	

Presentation 1: Foreign interest payments shown on an accrual basis, with debt-rescheduling included as part of external financing.

Presentation 2: Foreign interest payments shown on a cash basis after deducting rescheduled interest payments.

a/ Expenditures in 1986 exclude K 569 million in one-time extraordinary expenditures for foreign exchange guarantees and transfers to the Bank of Zambia.

1.16 Turning to the expenditure side of the 1986 budget, we first examine the implications of the budget based on an accrual definition of savings and expenditure (Presentation 1 in Table 1.7). The most striking shift is the large increase in accrued interest charges on foreign and domestic debt, from 15 percent of total expenditures in 1980-85 to 42 percent in 1986. As a result, total Government expenditures are expected to increase to 47 percent of GDP, and both the budget deficit and the level of Government (dis)savings are very high at 12 and 5 percent of GDP respectively.[5] Financing for the budget deficit is expected to rely heavily on external sources, particularly through debt-rescheduling of the Government's foreign interest obligations.

1.17 On a "net of rescheduling" basis (Presentation 2 in Table 1.7), the changes in the 1986 budget are less dramatic and represent incremental adjustments from previous budgetary performance. The percentage allocation for capital expenditures and net lending has been increased somewhat, as a large number of capital projects are donor funded and involve a high proportion of foreign costs. The allocation for personal emoluments has been decreased on a percentage basis, reflecting continuing wage restraint and the initiation of a program to reduce Government employment. Because of the significant increase in tax revenues, the budget deficit on a post-rescheduling basis is expected to be less than one percent of GDP. In effect, the large amount of debt-rescheduling plus the positive effects of devaluation on revenue collections will allow the Government to sustain a high level of negative public savings with modest access to domestic borrowing.

1.18 The immediate fiscal impact of the economic reform program has thus been absorbed through adjustments in revenue and financing sources rather than changes in expenditures. It is important that this breathing space not be wasted by failing to recognize the need for fundamental changes in fiscal policy. The major structural shifts implied by the 1986 budget are:

(a) The budget deficit. Reduction of the budget deficit should be a key element of the Government's strategy to increase aggregate savings. This can be accomplished through expenditure reform and increases in non-tax revenues, both of which have been relatively neglected up to now as active policy instruments in the Government's recovery program.

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[5] These figures are lower than the Government's projections for the budget deficit and Government dissavings, due to the exclusion of extraordinary expenditures and other adjustments that have been made to the data.

Past expenditure reductions have been implemented across-the-board rather than through selective reductions in the scope of Government services. As a result, thebudget continues to claim a large share of national resources (35 percent of GDP in 1986 on a post-rescheduling basis), even though there are serious concerns about the declining quality and availability of Government services. On the revenue side, tax revenues have been maintained at a very high level, while non-tax revenues have been allowed to decline from 8 percent of total revenues in the 1980-85 period to 3 percent in 1986. Non-tax revenues, consisting of cost recovery charges, dividends and loan repayments from parastatals and local authorities, and assorted other license fees and charges can make an important contribution to Government revenues as well as providing a mechanism for rationalizing claims on Government services and promoting cost efficiency.

(b) The burden of interest payments. The major shift in expenditure shares toward interest obligations is a permanent feature of the forward budgetary outlook. Moreover, because the Government has extended loan guarantees to a number of parastatals and other institutions with doubtful economic prospects, the burden of local and foreign debt service payments could increase if the Government is required to assume payment obligations for these loans. Foreign debt-rescheduling provides a temporary means by which the Government can absorb the impact of the sharp increases in interest obligations arising from devaluation without creating undue liquidity problems for the domestic economy. However, this approach is not viable in the longer term, as it reduces incentives for increased domestic savings, contributes to a compounding of foreign interest obligations, and could lead to an unsustainable budgetary deficit when debt-rescheduling is ended. The Government

should therefore establish fiscal targets that provide for gradually increasing coverage of the foreign interest obligations according to a realistic schedule.[6]

(c) Prospects for revenues. Zambia's budgeted tax burden for 1986, equal to 30 percent of GDP, represents a substantial drain on the potential savings performance of the nation and could interfere with efforts to increase profitability in the parastatal and private sectors. Further growth in tax yields is likely to be constrained by: (i) the limited prospects for significant growth in exports and imports in real terms; and (ii) the need to reduce the Mineral Export Tax in order to improve the profitability of ZCCM (see Chapter IV). Tax revenues are therefore expected to decline over time as a percentage of GDP.

1.19 Given the extensive changes that have occurred in the Government budget and the need for revenue and expenditure reforms to compensate for these changes, it would not be fruitful to try to forecast the outcome of individual budgetary items over the next several years in any detail. Instead, it is more useful to indicate broad targets for revenue and expenditure growth that would fit in with the medium term recovery scenario provided in the CEM. On the basis of these targets, Government priorities for revenue reform, expenditure control and debt management can be assessed. Table 1.8 presents a scenario for Government revenues and expenditure during the period 1986-90 that illustrates the nature of the trade-offs that the Government must make between the need to stimulate public and private savings behavior, improve efficiency in Government operational expenditures, and make provision for covering an increasing share of foreign debt-service payments within a reasonable time period. In deriving this scenario, it is assumed that the Government sets targets for two key indicators which are important determinants of the growth in domestic savings; i.e., the ratio of Government (dis)savings to GDP, and the ratio of Government tax revenues to GDP. Given the importance of

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[6]/Foreign debt rescheduling need not be accompanied by changes in repayment terms in local currency for foreign denominated debts. As part of the stabilization program which generally accompanies debt rescheduling agreements, it is often agreed that holders of foreign denominated debt will continue to service their loan repayment obligations in local currency (including the impact of devaluation, if appropriate), and the proceeds of the loan repayments will be held in a "sterilized" account in the central bank awaiting repayment in foreign currency when adequate foreign exchange is available. To avoid a deflationary impact from this arrangement, it is necessary for the central bank to provide an increase in the money supply to offset the funds going into sterilized accounts. In Zambia, most institutions have been required to maintain local currency payments on their foreign debt obligations. The major exceptions are ZCCM, which assumed the foreign exchange risk resulting from rescheduling, and the Government, which was exempted from the bulk of local currency repayments in 1986 in order to avoid undue pressure on local borrowing requirements.

increasing national savings, a reasonable target for the first indicator is to eliminate dissavings by the Government by the year 1990, which means that revenue from all sources must be adequate to cover total recurrent expenditures, including foreign interest payments, on an accrual basis. For the second indicator, a realistic assumption is for tax revenues as a percentage of GDP to decline by one percentage point a year, with non-tax revenues increased by enough to compensate for the loss in revenues. Other assumptions included in Table 1.8 are: (i) foreign debt-service payments continue to be rescheduled on the basis of the terms offered by the Paris Club in 1986 (i.e., 100 percent of principal and interest payable, including previously rescheduled payments)[7]; (ii) Government capital expenditures decrease gradually from 7 to 4 percent of GDP; and (iii) grants decrease as a percentage of total revenues (implying decreasing use of local counterpart funds from the auction to support Government recurrent expenditure programs).

1.20 Based on these targets, it is possible to estimate the level of recurrent expenditures that can be sustained by the Government. Table 1.8 indicates that for the scenario outlined above, recurrent expenditures in the budget (other than foreign interest payments) will have to decrease from 27 percent of GDP (which was budgeted in 1986) to 21 percent in 1990. After allowing for expected growth in GDP, this is equivalent to a 10 percent real cut in expenditures between 1986 and 1990. In order to achieve this decrease in expenditures, the Government will have to: (i) progressively eliminate consumer subsidies (budgeted for K 332 million in 1986); and (ii) freeze all other recurrent expenditures at their 1986 level in real terms for at least the next three to five years. This means that expenditure reform will have to focus on the reallocation of budgets between existing expenditure programs.

1.21 It may be argued that the scenario outlined above is too severe, in that it is based on a return to full servicing (in local currency terms) of foreign interest payments on rescheduled debt by the year 1990. The implications of the scenario for Government expenditures are daunting. Foreign interest payments by the Government would constitute 13 percent of GDP in 1990 and would account for 38 percent of total recurrent expenditures. One-half of total tax revenues would be required just to meet the Government's foreign interest obligations. This result should not be surprising, as past budget deficits have resulted in a large stock of outstanding debt, the real cost of which was significantly understated by interest rate controls on domestic debt and overvaluation of the kwacha for foreign debt. Nevertheless, the prospect of zero growth in real terms for Government operational expenditures places very severe limits on the Government's options for expenditure reform.

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[7]/An implication of this assumption is that capitalized interest payments also accrue interest, so that the total level of foreign interest obligations is compounded as a result of rescheduling.

Table 1.8: Projections of Revenue and Expenditures, 1986-90
(Percentage of current GDP)

	1984 Actual	1985 Revised	1986 Budget	1987	1988	1989	1990
				Projected			
I. Expenditures							
Recurrent							
Interest (foreign)	2	7	13	14	14	13	13
Other Recurrent Expenditures	25	28	27	25	24	23	21
Capital	3	6	7	6	5	4	4
Total	30	41	47	45	43	40	38
II. Revenue							
Tax Revenues	20	23	30	29	28	27	26
Non-tax Revenues	2	1	1	2	3	4	5
Grants	1	1	5	5	4	3	3
Total	23	25	35	35	35	34	34
III. Deficit							
Budget Deficit	7	16	12	10	8	6	4
Government Savings	(4)	(10)	(5)	(4)	(3)	(2)	0

1.22 Longer term prospects for the Zambian economy indicate that debt relief will continue to be required for a number of years to come.[8] The outlines of a feasible debt strategy still have to be determined and will depend greatly on the Government's performance in carrying out its program of economic reforms. Nevertheless, it is clear that the sustainability of the recovery scenario will eventually needed a comprehensive solution of the debt problem which limits repayments to an amount which is compatible with the imports required to maintain acceptable growth and the available foreign exchange resources. In the meantime, the Government needs to take the opportunity afforded by current rescheduling arrangements to adjust

[8] See Chap. V of the Country Economic Memorandum for a more detailed discussion of the debt problem.

public expenditures to a level which is consistent with domestic macroeconomic balances. The scenario for recurrent and capital expenditures which is recommended in Table 1.8 satisfies this objective and provides a feasible, albeit difficult, set of targets for the Government's expenditure program. However, the revenue projections in Table 1.8 assume a sustained high level of tax effort which will be difficult to achieve and will limit feasible increases in parastatal and private savings. To the extent that comprehensive debt relief may eventually establish a level of foreign interest payments that is less than the amount shown in Table 1.8, the Government should pass this benefit on to the rest of the economy through lower taxes rather than using it to maintain expenditures. In the meantime, it is recommended that Table 1.8 be used to establish the targets for fiscal policy on both the revenue and expenditure side for the period covered by the public expenditure review (1986-88).

1.23 In conclusion, the outlook and priorities for the Government budget over the period covered by the public expenditure review are the following:

(i) Government recurrent expenditures (excluding foreign interest payments) should decrease as a percentage of GDP by 1.5 points per annum. Allowing for expected growth in GDP, this would be equivalent to a 10 percent real cut in recurrent expenditures between 1986 and 1990.

(ii) In order to accomplish this reduction in Government expenditures, subsidy payments should be reduced according to a phased schedule with the exception of subsidies targeted specifically for the lower income groups. Other recurrent expenditures should be held constant in real terms except for funds reallocated between programs.

(iii) Tax revenues are expected to decline as a percentage of GDP, and non-tax revenues (cost recovery charges, etc.) should be increased to help offset this loss in revenue.

(iv) Clear and consistent policies regarding the realignment of Government expenditures are essential for improving the quality and availability of key Government services and for establishing a credible basis for additional debt relief. Public expenditure reform should constitute a major focus of the Government's policy agenda for restructuring the economy and promoting a rapid return to economic growth.

D. Planning for Uncertainty

1.24 The preceding sections have provided expenditure targets for the parastatal investment program and the Government budget which are consistent with the recovery prospects for the economy as they are currently foreseen. The severity of these targets, particularly the recommendation for zero real growth in the Government budget and the constrained size of the parastatal investment program, illustrate the difficult choices facing the Government. Moreover, the economic scenario

on which these targets are based is itself relatively optimistic and represents the maximum growth that can be realistically expected over the next few years. Given the fragility of the Zambian economy to internal and external shocks, the Government would be prudent to consider what actions should be taken to protect the public expenditure program if the economy recovers more slowly than expected.

1.25 The investment program is particularly subject to uncertainty. The economic scenario calls for a substantial increase in investment during the 1986-88 period in order to carry-out large rehabilitation programs in the various sectors. Much of the investment program is concentrated in a few major sectors (e.g., mining, railroads, petroleum supply) and is highly dependent on foreign financing. The Government should therefore keep a careful watch on discussions with foreign lenders and ensure that first priority goes to sectors with close linkages to the recovery program. Shortfalls in investment resources should be met by cut-backs in sectors less critical to the recovery effort, such as industry, telecommunications, transportation (other than railroads) and tourism.

1.26 Constraints on the Government budget have generally been met by cut-backs in non-wage expenditures, particularly recurrent operating funds and capital expenditures. As a result, many Government services are performing very poorly, and agricultural services, social programs such as health and education, and maintenance of Government assets are major areas of concern. It is recommended that the Government use a core budgeting approach to protect expenditures for these key services and any shortfalls in resources should be absorbed by the remaining sectors in the budget. Open-ended subsidy programs, such as for maize, fertilizer, and Zambia Airways, represent a particularly vulnerable area for cost overruns and need to be carefully controlled.

1.27 The targets for the public expenditure program will need to be reviewed on a regular basis, at least annually, to adjust them for changing economic circumstances. In doing so, the Government will need to keep in mind the appropriate division of resources between the Government budget, the parastatals and the private sector. In the scenario proposed in this report, the parastatals are expected to claim a major share of the total investment program during the next few years, both because of the high priority of the parastatal rehabilitation projects and because the private sector is expected to take some time before it is willing to invest significant resources. As the economy recovers, greater provision needs to be made for private sector investment. Similarly, although significant expenditure restraint is recommended for the budget during the next several years, the Government should take care that expenditure reductions are not pushed too far at the expense of vital services. Too rapid a reduction of the Government budget deficit would go beyond the rate at which resources can be absorbed effectively by the rest of the economy and would ultimately slow the pace of economic recovery. In a broad sense, resources are ultimately substitutable between parastatal investment and the growth of Government services, even though these aspects of the public expenditure program are analyzed separately in the rest of the report on the basis of the targets established above.

II. SECTORAL PROGRAMS IN THE BUDGET

A. Overview

2.01 The quality of Government services has deteriorated drastically in recent years. This is a bitter pill for citizens who have become accustomed to looking to the Government to provide the requisites of a modern society, such as better education, health care and infrastructure. Moreover, it belies the promise of success established after independence in meeting basic human needs, when services were expanded rapidly and effectively to meet the aspirations of a socially conscious society. These expectations and the widely held hope for a rapid return to economic growth (a hope shared by many external lenders) meant that the continuing sequence of budgetary cutbacks was done in a spirit of temporary retrenchment rather than fundamental adjustment. Expectations for improved Government services were maintained, even while budgets were shrinking in real terms and quality problems were becoming more acute. Operating ministries were provided with little guidance or flexibility to adjust their programs to fit within diminishing budgets, other than exhortations to cut costs, postpone capital expenditures, and be more efficient. As a result, the reductions in essential services and compromises with quality have been much deeper and more painful than if a program of expenditure reform had been initiated earlier.

2.02 Unfortunately, the macroeconomic situation forecloses the possibility of any significant improvement in the budget over at least the next five years. This means that improvements in Government services must come from shifts in the internal allocation of funding between existing programs and increases in efficiency. The political leadership in Zambia is aware of this fact and has emphasized in numerous public statements the need for reductions in Government expenditures. Nevertheless, a consensus has not yet been established as to where the cuts should be made and what programs should be maintained. This guidance is sorely needed, as many of the services provided by the Government are vital to the speed and success of the economic recovery program and the future productivity of the Zambian population.

2.03 Even more binding than the financial constraint, however, is the shortage of skilled human resources available to manage Government expenditure programs. The Government is seriously overextended in terms of the capacity of its manpower cadre, and it has become virtually unmanageable in terms of operating efficiency and accountability. The immediate cause of this situation is the severe compression of the civil service pay scale, which encourages better qualified staff to leave and lesser qualified people to stay. Other important factors are the lack of adequate training programs and poor personnel management practices. These are serious problems which deserve prompt attention in order to preserve the integrity of Government service. However, given the shortage of trained manpower throughout the economy, the Government is unlikely to qualified staff to operate its vast array of programs at any time within the foreseeable

future. In order to make effective use of its limited complement of skilled and motivated manpower, the Government needs to reduce the scope of its expenditure programs and concentrate its efforts on those programs of greatest importance for the recovery of the economy.

2.04 In order to provide a perspective on the major issues of expenditure reform, it will be helpful to examine past trends in the structure of Governmment expenditures. Table 2.1 provides indices of the composition of Government expenditures in real terms over the period 1975-86.[1]/ These data confirm a general picture of increasing budgetary constraint up through 1984, followed by rapid changes in budgetary allocations as a result of the economic reform policies. Operational expenditures (personal emoluments, recurrent departmental charges, etc.) fell by 19 percent in real terms between 1977 and 1985 and by 41 percent when measured from a base of 1975. Subsidies, which declined by almost 50 percent in real terms between 1977 and 1984, have risen in the 1986 budget to approximately their 1977 level as a result of increases in maize and fertilizer subsidies. Capital expenditures have been severely depressed, falling by 58 percent between 1977 and 1984, with more recent increases in the 1985 and 1986 budgets due to relative price increases as a result of devaluation. Interest charges are the only budget category that has shown significant growth in real terms over the period, increasing by almost five-fold between 1984 and 1986 as a result of devaluation and the decontrol of domestic interest rates. As a result, total Government expenditures, which fell by 27 percent in real terms between 1977 and 1984 (52 percent when measured from a base of 1975), increased by almost two-thirds between 1984 and 1986 to their highest level since 1975.

2.05 Reductions in operational expenditures have been only partially responsible for the deterioration of Government services. Table 2.2 indicates that the major share of reductions in operational expenditures have been for defense expenditures,[2]/ which fell by 45 percent in real terms between 1977 and 1985, particularly following the conclusion of the liberation war in Zimbabwe. Expenditures on personal emoluments (PEs) fell by 14 percent in real terms between 1977 and 1985, while expenditures on recurrent departmental charges (RDCs)[3]/ fell by 6 percent and grants and other payments were unchanged. Within these reduced budgets, there have

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[1]/The choice of 1977 as a base year in Table 2.1 represents a mid-point between the economic boom lasting up to 1975 and the mini-recovery in 1980-81. It is therefore representative of the economic situation facing Zambia during most of the past ten years.

[2]/Measured as the residual of Constitutional and Statutory expenditures after deduction of debt service payments.

[3]/Recurrent departmental charges cover the normal operating costs of Government services (other than personnel costs), such as purchases of goods and services (not including capital expenditures) and allowances for travel and other expenses.

Table 2.1: Composition of Government Expenditures in Constant Prices (1977=100)

	1975	1977	1980	1984	1985 Estimate	1986 Budget
Operational Expenditures a/	137 (55)	100 (60)	98 (56)	81 (67)	81 (49)	75 (38)
Interest b/	82 (5)	100 (10)	115 (10)	113 (15)	330 (31)	524 (41)
Subsidies	174 (10)	100 (9)	203 (16)	51 (6)	86 (7)	101 (7)
Capital Expenditures c/	214 (30)	100 (21)	89 (18)	42 (12)	63 (13)	82 (14)
Total	151	100	107	73	101	121

Notes:

— All indexes are deflated by the implicit price deflator for Gross Domestic Expenditures.

— Numbers in parentheses are percentages of the total budget.

a/Defined as personal emoluments, recurrent departmental charges, Constitutional and Statutory expenditures (other than debt-service payments), and grants, transfers, pensions and other payments. Data for 1986 exclude K 569 million in one-time extraordinary expenditures associated with the devaluation and introduction of the foreign exchange auction.

b/Includes both domestic and foreign interest on an accrual basis.

c/Includes loans and investments.

been significant shifts in the composition of expenditures. The Government reduced expenditures for PEs through a policy of general wage restraint and by compressing salary differentials between upper and lower grade civil servants. Controls on the hiring of new employees were much weaker,

Table 2.2: Composition of Operational Expenditures in Constant Prices (1977=100)

	1975	1977	1980	1984	1985 Estimate	1986 Budget
Personal Emoluments a/	116 (34)	100 (40)	91 (37)	87 (44)	86 (43)	72 (39)
Recurrent Departmental Charges b/	147 (22)	100 (20)	101 (21)	84 (21)	94 (24)	93 (25)
Constitutional and Statutory (other) c/	186 (37)	100 (28)	109 (31)	59 (20)	55 (19)	44 (16)
Grants and Other Payments d/	82 (7)	100 (12)	93 (11)	101 (15)	100 (15)	123 (20)
Total	137	100	98	81	81	75
MEMO ITEM						
RDC/PE	0.64	0.50	0.56	0.49	0.55	0.65

Notes:

— All indices are deflated by the implicit price deflator for Gross Domestic Expenditures.

— Numbers in parentheses are percentages of total operational expenditures.

a/Salaries, wages and benefits, not including pension contributions.

b/Direct operating costs for materials, equipment, transport, etc.

c/Residual category, consisting primarily of defense expenditures.

d/Grants, transfers, pensions and other payments. Grants and transfers mostly finance activities which are complementary to Government services (e.g., District Councils, University Teaching Hospital, mission schools, UNIP operating expenses) and are therefore included as part of Government operational expenditures.

however, particularly for classified daily employees (CDEs)4/ which are estimated to have increased by almost 10,000 workers between 1978 and

4/CDEs are considered to be temporary workers rather than part of the regular civil service establishment, and their employment is determined by the individual operating departments. No records are kept of the number of CDEs employed by the Government, although departments are required to provide an estimate of the number of CDEs employed by them in support of their annual budget request. Many CDEs have been on the Government payroll for a number of years, and they have thereby become eligible for employment benefits and severance payments if their employment is terminated.

1983.[5]/ As a result, the employment structure of the Government has become excessively "bottom-heavy", with high vacancy rates at the middle and upper levels of the civil service and substantial overstaffing at the lower levels. For RDCs, preference has been given to maintaining funding for transfers to individuals (e.g., student bursaries, boarding costs in medical facilities), while operating funds to support the delivery of essential services (e.g., medical supplies, educational materials, vehicle operating costs) have been cut disproportionately. The result of these shifts is that the efficiency of many key Government services has been reduced to a much larger extent than would be evident from the aggregate trends in operating expenditures. The Government has recently begun to take steps to address both the composition of employment and the internal allocation of RDCs. However, the slow progress in correcting these problems demonstrates the need for a clear and consistent approach to problems of expenditure realignment.

2.06 Budgetary constraint has also produced significant changes in the uses to which Government expenditures are applied (see Table 2.3).[6]/ The major reduction in expenditures (other than defense expenditures) has been for infrastructure support services (roads, power, water supply, housing), which fell by 45 percent between 1977 and 1985 and by 73 percent as compared to 1975. This cutback affected both new capital expenditures and maintenance activities, so that the public capital stock has deteriorated significantly and much of it requires repair or rehabilitation. Expenditures on directly productive activities (such as agricultural services) and social services (health and education) have also declined over time, falling by approximately 20 percent in real terms from their 1977 budgetary allocation.[7]/ The only category of expenditures which has been maintained in real value is administrative services (e.g., Cabinet office, foreign affairs, police, provincial administration), which increased from 25 percent of ministerial expenditures in 1977 to 31 percent in 1985.

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[5]/Based on information in the report "Zambia: Wage Policy and the Structure of Wages and Employment," World Bank Report No. 5727-ZA, May 7, 1986.

[6]/The division of expenditures in Table 2.3 is based on a format proposed for the Annual Plan. It is described in a Bank report entitled "Planning and Budgeting in Zambia", February 1983. Table A.4 in Annex A provides a detailed breakdown of the definition of expenditure categories by operating ministries.

[7]/The apparent increase in Table 2.3 for expenditures on directly productive activities is due to a few large parastatal industrial projects which were passed through the budget, masking the overall declining trend in Government expenditures for services such as agriculture.

Table 2.3: Functional Composition of Ministerial Expenditures in Constant Prices a/ (1977=100)

	1975	1977	1980	1984	1985 Estimate	1986 Budget
Directly Productive b/	166 (13)	100 (12)	131 (17)	84 (14)	108 (16)	143 (20)
Infrastructure Support c/	205 (34)	100 (26)	74 (20)	42 (15)	55 (17)	45 (13)
Social Services d/	119 (28)	100 (37)	79 (32)	81 (41)	79 (36)	80 (35)
Administrative e/	157 (25)	100 (25)	117 (31)	92 (30)	106 (31)	114 (32)
Total	156	100	93	74	83	87

Notes:

— All indices are deflated by the implicit price deflator for Gross Domestic Expenditures.

— Numbers in parentheses are percentages of total ministerial expenditures.

a/Does not include non-ministerial expenditures, such as pensions, subsidies, and Constitutional and Statutory expenditures, including debt service.

b/Agriculture, Mines, Commerce and Industry, and Tourism.

c/Power, Transport and Communications, Works and Supply, Water Supply, and Housing

d/Education, Health, Information and Broadcasting, and Labor and Social Services.

e/All other ministries and provincial administration.

2.07 This analysis indicates that a large part of the blame for the deterioration in services should go to budgetary decisions that have favored the use of Government funds in low priority activities rather than concentrating the dwindling supply of resources on key Government services. Even within the zero growth budget scenario described in Chapter I, there is considerable scope for improving the delivery of Government services through a reallocation of funds to priority uses and by taking actions to improve the cost efficiency of Government services. This process will not be politically easy, as it will involve reductions in areas such as Government employment and administrative expenditures that have strong constituencies within the Government. In order to justify the

reallocation of expenditures, there will have to be a rethinking of sector objectives and priorities at the level of the individual ministries. In some sectors (e.g., agriculture), this process has already begun, but the effort to improve the planning and budgeting of Government expenditures needs substantial strengthening in order to support a coherent program of expenditure reform.

2.08 The remainder of this chapter will summarize the current status of Government expenditure programs in various sectors and outline the policy choices which need to be made in order to improve the delivery of essential services. Section B of this chapter provides an analysis of the agricultural expenditure programs. Agriculture is accorded particular attention because of its importance for the economic recovery program and because it serves to illustrate many of the major issues involved in expenditure reform in Zambia. Following this discussion, briefer descriptions are provided in Section C of four sectoral programs --health, education, roads and development administration--which, with agriculture, form a "core" group of activities for the program of budgetary realignment discussed in Chapter III. In designating five sectors as core programs, it is not intended to imply that other activities of the Government are unimportant or can be easily dispensed with. Expenditures on activities such as Parliamentary affairs, defense and internal security need to be continued at some level despite the pressures of expenditure reform. Nevertheless, the core activities play major roles in the economic recovery program and in human resource development and should receive priority in the future in order to support the Government's objectives for economic growth. Finally, Section D provides a discussion of several additional expenditure programs (water supply, housing, tourism, information and broadcasting, and regional administration), but the coverage of expenditure programs outside the core group of activities is not intended to be complete.

B. Agricultural Expenditure Programs

2.09 The major share of Government expenditures for agriculture (excluding agricultural subsidies) are directed through the Ministry of Agriculture and Water Development (MAWD),[8] with smaller amounts going through the Ministry of Lands and Natural Resources (MLNR) and the Ministry of Cooperatives. MAWD is responsible for overseeing the operations and policies of several important agricultural parastatals, particularly the National Agricultural Marketing Board (NAMBOARD), the Lint Company of Zambia (LINTCO), the Dairy Produce Board, and the National Tobacco Company. In addition, MAWD and MLNR channel substantial amounts of donor

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[8] The Department of Water Affairs in MAWD is discussed in the section on water supply.

financing to ZIMCO-controlled parastatals such as the Cold Storage Corporation, Zambia Forestries and Forest Industries Corporation (ZAFFICO), and the Kawambwa Tea Company. In order to give a coordinated overview of the Government's expenditure policies in agriculture, this section will discuss the programs of these agencies as a single package.

2.10 Agricultural development is the Government's primary strategy for economic diversification. The Government has made significant progress in recent years in eliminating policy distortions which worked against agricultural development, such as controls on producer prices and restrictive marketing practices. While additional reforms still need to be taken to reduce maize and fertilizer subsidies and further improve marketing arrangements, the Government has committed itself to taking these actions. As a result, one of the major problems which inhibited agricultural production in the past, i.e., the lack of adequate producer incentives, has been largely eliminated. In order to complement the policy reforms, the Government needs to improve the agricultural support services which are necessary to obtain an increase in production.

2.11 Evaluation of Expenditure Strategy. Priorities for a substantial proportion of the agricultural budget are ill-defined, poorly implemented and largely ineffective in achieving their objectives. This is not to deny that the Government, MAWD and the donor community have devoted substantial amounts of effort and funds into agricultural programs which have produced many positive achievements. Nevertheless, MAWD provides perhaps the clearest example of how years of budgetary compression, inconsistent wage and employment practices, and public resistance to reductions in existing programs can result in a significant deterioration of public services in the absence of any clear framework for expenditure reform.

2.12 The potential benefits of MAWD's expenditure programs are constrained by:

(a) an orientation towards the needs of commercial farmers rather than small-scale and traditional producers;

(b) inappropriate balance between personnel and operating costs;

(c) diffusion over too many projects and programs;

(d) involvement in activities better left to the private sector; and

(e) dissipation of funds into unproductive uses in the form of subsidies.[9]

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[9] These conclusions are similar to the findings of a recent consultant's report on MAWD's operations: "Evaluation Study of the Ministry of Agriculture and Water Development," draft report, November 1985.

The implication of these conclusions is that priorities for the agricultural expenditure program should be determined less in terms of the success or failure of any particular project or service, and more in terms of strengthening the ability of MAWD (and other agencies) to deliver a minimum package of essential services to targeted groups of agricultural producers. This recommendation is not intended to endorse the concept of integrated regional development, an approach that has largely failed in Zambia. Rather, the focus should be on trimming back agricultural expenditures to a mutually consistent set of programs which support the Government's national objectives for agriculture and which can be implemented within the limited amount of local funding and technical and managerial capacity available in the public sector for agriculture.

2.13 Agricultural support services in Zambia have historically been geared to the needs of medium and large-scale commercial farmers. However, the majority of traditional and emergent farmers, who account for 95 percent of farm households in the country, derive limited benefit from the current programs of agricultural research, extension, credit and other support services. As a result, the general level of productivity of smallholders has remained considerably below that of the large-scale and more modern farmers. This low level of productivity among smallholders and emergent farmers indicates their potential for increasing output; given the large number of these farmers and their limited import and capital requirements, a small increase in crop yields per farmhold would aggregate into substantial increases in production. Therefore, on economic and social grounds (given that smallholders constitute a large reservoir of rural poverty) and labor-absorption considerations (as smallholder farming is one of the few activities that can generate a substantial increase in employment), the Government should realign the major share of its agricultural support services to emphasize smallholder requirements.

2.14 It is recognized that improving the productivity of smallholder agriculture is a long-term task which will require improved technical packages through adaptive agricultural research and strengthening of extension services for dissemination of research results. In the near term, increases in agricultural production will have to come from commercial farmers, and the Government may be reluctant to deemphasize services to these farmers at a time when economic recovery depends on their responsiveness. Nevertheless, the increases in producer prices which have been implemented provide sufficient incentives for increasing production, and the more open availability of foreign exchange through the auction system has helped to eliminate an important constraint on commercial agriculture.[10] Many of the services currently provided to commercial

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[10] Experience has shown so far that the amount of direct agricultural inputs imported through the auction is much less than originally expected, mainly because the remaining controls on maize prices prevent farmers from passing on higher costs of imported inputs to consumers. However, commercial farmers have benefited from importation of a number of goods (e.g., spare parts) that would not necessarily be registered as agricultural goods on the import license.

farmers by the Government could be taken over by the private sector, perhaps with significant gains in productivity (e.g., some types of agricultural research, veterinary services such as artificial insemination, tractor-hire services, etc.). The Government could relieve itself of a substantial budgetary burden by turning these services over to the private sector, or at the very least, setting full cost recovery charges.

2.15 In order to improve the delivery of services to the smallholder sector, a substantial restructuring of the agricultural budget will be necessary, particularly with regard to the allocation of funds between personal emoluments and recurrent departmental charges. It has been estimated that in 1980, RDCs in agriculture were underfunded by approximately 40 percent as compared to the requested budgetary allocation.[11] While the Government increased the budgetary allocation for agricultural recurrent expenditures from 3 percent of the budget in 1980 (excluding debt service) to 6 percent in 1985 and 1986, most of this increase has gone to cover the cost of a rising number of employees, particularly CDEs. As a result, the RDC/PE has deteriorated further, from 0.5 in 1980 to 0.3 in 1986.[12] Even this ratio underestimates the decline in RDCs in real terms, as prices for many components of RDCs (e.g., vehicle operating costs) have increased more rapidly than wage rates, which have been constrained by restrictive wage policies. As a result, there has been a serious deterioration in the quality of services such as agricultural research, field extension and veterinary care that have large requirements for operating funds.

2.16 Another problem is the composition of the personnel establishment in agriculture. Roughly two-thirds of MAWD's estimated employment of 14,260 people (as of 1985) are CDEs, comprising one of the largest contingents of CDEs in the Government. Particular examples of excessive numbers of CDEs include agricultural extension (3100 out of 5780 employees), veterinary services (2100 out of 3100 employees) and agricultural education (80 percent of employees are CDEs). Not only are most of the CDEs employed in jobs with low productivity, but also by their large number and the need to maintain a semblance of useful employment, they stretch the administrative and supervisory capacity of higher level staff. The evaluation report on MAWD mentioned above has recommended that MAWD consider reductions of five to ten percent per annum in the level of PEs over the period of 1986-88, which, if the cuts are made by reducing CDEs, would require a much larger decrease in employment due to the lower pay scales of these workers. At the same time, consideration needs to be given to measures to retain the more highly qualified staff in order to improve the technical quality of agricultural services. In a number of critical areas of MAWD, such as planning, agricultural research, and veterinary services, there are serious shortages of professionally qualified Zambians due to the unattractive conditions of service. This contributes to an excessive

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[11] "Agricultural Recurrent Budgetary Study," Vol. I, March 1981.

[12] By way of comparison, the RDC/PE ratio in agriculture in 1970 was 1.54.

dependence on expatriates provided under technical assistance agreements, which is contrary to the Government's policy of Zambianization and is unsatisfactory to both the Government and the donors due to frequent changes in expatriate staff, unfamiliarity with local conditions, and donor frustration due to poor utilization of technical personnel. The shift in emphasis to the smallholder sector will likely increase MAWD's requirements for qualified managerial and technical staff, and the availability of skilled local manpower will be one of the most important constraints on improving the quality and effectiveness of agricultural services.

2.17 An important aspect of improving the delivery of agricultural services will be to consolidate the project portfolio. At present, MAWD has about 150 ongoing projects of various sizes, most of which are performing poorly. Nearly all of the projects are donor-financed, involving more than 20 donor agencies, and each maintains its own procedures and requirements. Overlaps and conflict between the objectives of different projects are commonplace. For example, there are 12 donor agencies providing support for the agricultural research program with little coordination between the orientation and priority of the various efforts. There are three separate donor financed teams in MAWD headquarters, each of which has a mandate to advise the ministry on agricultural policy. These projects syphon off local manpower and financial resources which are very limited in supply. The performance of the projects is further hampered by MAWD's failure to set priorities for the allocation of funds and staff, so that all projects receive inadequate local inputs. The resulting low rates of disbursement and dissipation of donor funds into poorly performing activities represents a low return use of scarce resources and creates scepticism about the commitment of the Government to its policy of agricultural development. As a first step in improving this situation, there is a need to document each of the projects and evaluate them according to clearly defined criteria. As a longer term strategy, MAWD should:

(a) consolidate the project portfolio into a limited number of well defined programs aimed at achieving specific agricultural objectives and close down those projects which do not contribute to the objectives;

(b) work with the donor community to ensure adequate funding for the overall program, rather than accepting projects on a piecemeal basis that may not be consistent with sector objectives; and

(c) limit new agricultural projects to those which can be supported within the existing supply of local funds and staff.

2.18 In establishing guidelines for trimming the project portfolio, particular attention should be given to reducing public involvement in direct production activities. Zambia has had extensive experience with public agricultural production, including state farms, parastatal projects, and other farming activities, and the returns for most of this effort have been dismal. The 1986 budget continues to allocate substantial sums for

parastatal agricultural activities, accounting for K 98.4 million or 45 percent of the capital budget for agriculture. Many of the concerned parastatals have been operating at high losses. Most of the activities are highly suitable for the private sector, and the reason why the private sector has not been investing has been competition from subsidized public activities and the unfavorable policy environment. As a result, public expenditures have often served as a substitute for private investment, generally with lower returns and increasing the management burden on the public sector. The Government should adopt a more restrictive approach to public sector involvement in agricultural production. Direct involvement in production and processing activities should be minimized at any scale above pilot efforts, and the Government should take steps to make existing public sector production schemes fully self-sufficient, including divestiture to the private sector. Any future Government activities aimed at the promotion of specific crops should concentrate on stimulating private sector involvement in production and processing by providing credit facilities, technical assistance, and research and extension services.

2.19 It is also necessary to address the continuing burden of agricultural subsidies which go through the budget. The Government has taken steps in recent years to reduce subsidies while increasing agricultural prices to provide adequate producer incentives. However, given the predominance of maize in Zambia's agricultural production and the extent to which prices have been raised to correct past price distortions, the maize subsidy continues to consume a large share of the Government budget. The amount budgeted for the maize subsidy in 1986 (K 332 million) equals 11 percent of the total budget (excluding debt service) and exceeds the combined capital and recurrent budget for agricultural services.[13/] The deleterious effect of subsidies on agricultural production and efficiency has been well documented. However, less attention has been paid to the fact that the subsidy program is an inefficient mechanism for distributing assistance to the segments of the population which are in most need of help. For the rural smallholder population, the subsidy program has had a negative impact on income distribution by depressing producer prices and encouraging inefficiency in the collection and marketing of crop surpluses that might otherwise have been available. For urban consumers, the subsidy program has been inefficient in that higher income groups have benefited disproportionately due to their higher consumption of maize meal. A significant proportion of the maize subsidy (perhaps as much as 10-15 percent) has gone to clearly inappropriate cases, such as livestock feed and opaque beer. The Government has recently announced the elimination of subsidies for breakfast meal (a better quality maize product consumed by the higher income group), livestock feed and opaque beer. The remaining maize subsidy will be targeted on roller meal, a lower quality product consumed by poorer households. By providing a phased transition period for eliminating the subsidy on roller meal, consumers will have time to adjust their expenditure patterns and home food-growing activities to accommodate

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[13/] Since the bulk of the capital budget is funded by foreign donors, agricultural subsidies therefore account for 79 percent of all local funds allocated to agriculture.

the increase in maize prices, and the recent decision to open maize and fertilizer marketing to private traders should induce cost efficiencies which will help to reduce the cost of maize products. These steps will help reduce the transition problems arising from the eventual elimination of the remaining subsidy.

2.20 Proposals for Expenditure Reform. Based on the considerations just discussed, expenditure reform for the agricultural budget should concentrate on the realignment of expenditures between various agricultural programs. If there is an improvement in the effectiveness of agricultural programs, there may well be a case for allocating additional funding. Given the willingness of donors to fund agricultural activities, the Government should have no difficulty in obtaining additional funding provided the services are seen to be reaching their objectives. In order to establish a consistent approach to improving agricultural services, MAWD must take the responsibility for developing a specific policy framework for realigning expenditure programs. The other agricultural related ministries and parastatals, while important in determining the effectiveness of implementation for the expenditure programs, do not have the mandate to establish expenditure priorities for the agriculture sector. MAWD cannot operate independently in developing a program of expenditure reform, however. The Ministry of Finance and NCDP need to provide flexibility for MAWD and the other ministries to reallocate funds and staff between different programs in a logical fashion.

2.21 Table 2.4 provides an overview of existing and recommended funding levels for agricultural programs for the period 1986-88.[14] On an overall basis, an increase in funding in real terms over the next three years is proposed for the agricultural sector, equivalent to 30 percent of the 1986 budget allocation (excluding subsidies). More importantly, however, would be the large reallocations of funding between expenditure programs. Increases in funding would be provided for agricultural credit, agricultural research, crop and livestock production, agricultural extension, and, to a lesser extent, fisheries and administration. Decreases in funding would involve area development programs, input supply and marketing, forestry, and agricultural education. Given the large changes suggested in funding between programs, it will be difficult for MAWD and the other ministries to achieve the recommended allocations by 1988. The recommended amounts should be taken as targets for MAWD to use in discussions with donors concerning the possible reallocation of funding between projects and provision of new funds for agricultural programs. Shifts in local funding and staff resources between programs would be less dramatic,

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[14]/This table follows the classification of agriculture expenditures by programmatic categories that has been proposed for the Annual Plan (see Annex B). Expenditures for MAWD, the Ministry of Cooperatives, the Ministry of Lands and Natural Resources and the agricultural components of the Loans and Investment budget head have been combined to form these program categories. Expenditures under Natural Resources omit the National Parks and Wildlife Service, which is covered under tourism.

but, in practice, could be the deciding factor in how quickly the agricultural ministries can assimilate the proposed changes. Particularly important would be the reallocation of higher level staff positions and increases in RDCs for priority programs such as agricultural research and extension, to be balanced by decreases in employment of CDEs.

Table 2.4: Agriculture Sector Expenditures
(K million in constant 1986 prices)

	Estimate a/ 1985	Budget 1986	Recommended 1988	Percentage Change b/
1. Administration	4.6	6.0	6.3	+5%
2. Area Development Programs	14.7	61.8	11.0	-82%
3. Crop and Livestock Production	24.6	26.5	56.9	+115%
4. Agricultural Extension and Information Services	25.4	44.8	74.7	+67%
5. Agricultural Research	5.3	9.6	58.4	+60%
6. Veterinary Services	14.6	20.2	19.3	-4%
7. Agricultural Education	9.6	13.7	10.6	-23%
8. Input Supply and Marketing	18.5	47.3	13.1	-72%
9. Agricultural Credit	5.0	0.0	90.0	n.a.
10. Forestry	21.8	52.6	31.2	-41%
11. Fisheries	3.9	9.8	12.1	+23%
12. Natural Resources	3.5	6.4	5.9	-8%
Total	151.5	298.7	389.5	+30%

Notes

Includes both capital and recurrent expenditures.

a/ 1985 budget in current prices.
b/ Change between 1986 budget and 1988 recommended allocation.

2.22 The largest increase in funding is proposed for agricultural credit, which would support the Government's decision to create a new credit institution (the Lima Bank) by merging the operations of the Zambia Agricultural Development Bank (ZADB) and the Agricultural Finance Company (AFC). ZADB has had a number of start-up problems, while AFC, which is the major institution involved in providing credit to smallholders, suffers from serious management and financial problems and is currently insolvent. Thus, there is a need to resolve the management problems facing ZADB and AFC and improve the provision of medium and long-term agricultural credit, as well as seasonal credit to smallholders. In practice, the situation is much more difficult. Many of the problems affecting ZADB and AFC have been the result of political interference and lack of managerial autonomy. Without a commitment by the Government to sound management and credit discipline, the formation of a new bank from two troubled institutions will largely avoid rather than resolve the outstanding problems. A second issue regards the new bank's fit into what has become a very complex and disjointed institutional framework. A variety of credit schemes have evolved to circumvent the problems of AFC and ZADB, many of them supported by donors for particular project purposes. There are credit schemes attached to several of the regional development projects, while credit programs for specific crops are administered by parastatals such as LINTCO and the National Tobacco Company. This illustrates the fragmented and costly situation arising from partial solutions to the problems regarding agricultural credit, and additional expenditures in this area should remain conditional on progress towards resolving these basic policy issues.

2.23 The second largest proposed increase in expenditures in both absolute and percentage terms would be for agricultural research. Crop yields in Zambia, particularly among smallholders, tend to be low, and a lack of suitable technical packages limits the effectiveness of agricultural extension services. Despite the high potential payoff to agricultural research and its central role in the agricultural diversification strategy, the Government has placed low priority on this activity, with the 1986 budget continuing a pattern of real cuts in expenditures. Donor activities, although substantial, have suffered from an absence of clear policy guidance from the Government. In this situation, the major priority should be to establish a framework for MAWD's agricultural research activities within which the various donor activities can be integrated and oriented toward clear national objectives. Such a framework has recently been prepared and is currently being discussed with the donor community. It would provide technical assistance for strengthening MAWD's research activities, reorganize and consolidate the research station network, and develop better linkages between research and extension activities along the lines of the training and visit (T&V) system that has worked well in other countries. An important factor in the success of this effort will be the willingness of individual donors to coordinate their ongoing research activities within this framework and maintain their current level of support. Given the critical nature of agricultural research and extension, agreement on this program should have high priority.

2.24 Crop and livestock production activities require particular attention in order to rationalize the agricultural project portfolio. MAWD has a number of ongoing production projects, many of which have been strapped for staff and funds. Some of the projects are working relatively well (e.g., the Zamcan Wheat Scheme, Kawambwa Tea Company) and have ongoing committed donor support. However, they could divert funds in the future from more important activities, and a time schedule should be established for bringing the projects to a satisfactory stage of completion and passing the responsibility for them out of MAWD's hands. Other projects have had a limited impact on production (e.g., the Batoka Dairy Breeding project and the Smallholder Dairy project). These projects should be carefully reviewed and, unless there are compelling reasons for continuing them, should be terminated in the near future. Finally, there are some new projects focusing on particular crops which should be considered for inclusion in the project portfolio. One example is a coffee project expected to start in 1987. Private sector irrigated coffee production appears to have good potential in the northern areas of Zambia and could become an important export crop. Given the weaknesses previously identified in the agricultural credit and research and extension programs, there is justification for initiating new project activities focusing on coffee as long as they are designed to be compatible with long term efforts to strengthen national level programs. The proposed project fits this requirement, as it would concentrate on increasing the production of private coffee growers (including smallholders) by providing credit through existing commercial lending institutions and by strengthening specialized research, extension and marketing services.

2.25 Reductions in ongoing programs, even some that are performing adequately, should be an important part of the expenditure reform program in order to focus available resources on the highest priority programs. In this regard, area development programs should be deemphasized and phased out according to a realistic time schedule. Progress on these projects has been very slow, and they have not met their objectives for increases in agricultural production. They have also suffered from a lack of attention to national level support programs; the extension services initiated in the Southern Province Agricultural Development Project, for example, have had a limited impact on production due to the lack of suitable technical packages from the agricultural research stations. In recent months, the performance of some of these projects has improved due to a substantial effort by ministerial and donor teams. Nevertheless, these improvements can only be sustained with continuing heavy inputs of skilled manpower and local funds, which are the two scarcest resources available to the agricultural sector, and it is doubtful whether the projects can be continued after existing donor funds are exhausted. Emphasis in the area development projects should therefore go into preparations for terminating further intensive involvement, with services which can be integrated into national level programs (e.g., extension services) being transferred to the relevant operating departments.

2.26 Other areas in which funding reductions are recommended include input supply and marketing programs, forestry, and agricultural education. Input supply and marketing largely involves expenditures to support

NAMBOARD and the Provincial Cooperative Unions, including storage facilities, vehicles, and other forms of assistance. The Government has decided to open maize and fertilizer marketing to private traders and restrict NAMBOARD to the role of buyer of last resort. Public expenditures for input distribution should accordingly be scaled back and private sector investment encouraged. Savings in the forestry program can be obtained by reducing ZAFFICO's role in wood processing and concentrating on the maintenance of industrial forest plantations, while encouraging greater private sector involvement in developing this important local resource. Agricultural education for farmers should be deemphasized in its present form, and MAWD should devote more resources to in-field training of farmers through the T&V extension methodology. In addition, guarantees of automatic Government employment for graduates of MAWD's agricultural training institutions should be terminated. Finally, although the proposed budget for veterinary services would decrease only slightly, substantial shifts in emphasis between existing programs are recommended, with more funding going to programs such as tsetse fly control (which has become reestablished due to inadequate spraying) and less to programs serving commercial farmers (e.g., artificial insemination) except on a full cost recovery basis.

2.27 Of all the proposed changes in the agriculture expenditure program, strengthening of the Planning Division of MAWD is probably the most important, as it provides the key input to the effective implementation of the other changes. Despite reorganization and substantial amounts of technical assistance (now comprising 17 expatriate staff), the Planning Division remains largely isolated from decision making and devotes most of its time to following up on relatively routine matters. A major problem has been an inability to attract and retain local professional staff, which has hampered continuity and limited internal communications within the ministry. Major priorities for improvement include strengthening of the Division's analytical capability for planning and policy evaluation, establishment of systems and criteria for project evaluation and monitoring, coordination of external assistance to agriculture, and establishment and maintenance of a sound agricultural data base.

2.28 Mention should also be made of expenditures going through other ministries which are intended to support agricultural development, especially programs for rural infrastructure and the Zambia National Service. A large amount of capital expenditure is scattered through the budget in order to provide such infrastructure as power, roads, and telecommunications in rural areas. These investments are seldom subject to economic evaluation and are often inserted into the budget due to political considerations and without consultation or review by the implementing ministry. Not only do the projects represent a substantial diversion of funds from more important sectoral priorities (e.g., rehabilitation and maintenance), they impose a financial burden on the implementing agency that is generally not matched by adequate revenues to sustain the service. The Government should discontinue funding for any projects which require public investment in infrastructure, except when the investments can be demonstrated to have high economic rates of return and are financially viable. Regarding the Zambia National Service, the ZNS has obtained substantial amounts of

agricultural equipment in order to operate model farms.[15] The productivity of the farms has remained very low; the ZNS had marketed agricultural output in 1984 of about K 2 million, while over K 33 million was provided to the ZNS through the budget. The Government has recently indicated that it will use the ZNS to provide agricultural training and employment to workers who have been declared redundant as a result of the economic reform program. Given the poor performance of ZNS programs, these funds would be better used for an expansion of existing agricultural services to provide support to farmers returning to the land.

C. Health, Education, Roads and Development Administration

Health

2.29 Until 1981, Government health care policy was oriented toward the provision of urban based curative facilities, and by the end of the period, Zambia had one of the highest ratios of hospital beds per capita in sub-Saharan Africa. Rural health services had been relatively neglected, however, so in 1981 the Government adopted a strategy of primary health care to make essential health care services more widely available. The recurrent budget of the Ministry of Health (MOH) was increased by 50 percent in real terms between 1981 and 1982 to accommodate this shift in emphasis. With the worsening economic situation, this increase in funding could not be sustained, and health expenditures have fallen steadily in real terms since 1982. This has resulted in a serious deterioration of the quality and coverage of all health services, including primary health care.

2.30 The response of MOH to the worsening budget situation has been similar to that of most other ministries. The personnel establishment has been maintained and even expanded at the lower levels, while the brunt of expenditure reductions has fallen on RDCs. Hardest hit has been the budget for drugs and medical supplies. Evaluation of the drug situation at rural health centers in 1985 found large shortfalls, and even key drugs such chloroquine, penicillin and oral rehydration salts had been out of stock for up to 30 weeks in some areas. Urban health facilities have experienced a significant increase in patient consultations as a result of deteriorating services in rural areas. As a result, real expenditures per patient at these facilities have fallen by approximately 40 percent, with a decrease in drug expenditures per patient of 70 percent.[16] In an attempt to maintain a supply of drugs, MOH ran-up arrears with Medical Stores Ltd. (MSL) to the amount of K 31.5 million by the end of 1985, equivalent to two years turnover. MSL in turn has run-up arrears to its suppliers, which has caused serious problems with maintaining deliveries.

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[15] The ZNS was established to provide paramilitary training and basic practical skills to Zambian youths after their formal education. From 1981 to 1985, the budget for the ZNS was included in the Ministry of Youth and Sport; before this and in the 1986 budget, the ZNS budget is included as part of Constitutional and Statutory expenditures.

[16] Data based on University Teaching Hospital in Lusaka.

2.31 The constrained budget situation has also affected health services through its impact on maintenance of facilities, transport operations and the retention of skilled staff. Over half the MOH transport fleet is out of running order, and one-third of the remaining fleet is rated in poor condition. Perhaps most serious is the growing shortage of trained medical staff, including specialists, conservatively estimated at a shortfall of 250 physicians. Gaps are covered by junior staff filling-in where possible, including clinical officers and nurses. Without a significant improvement in pay and conditions of service, the shortage of medical staff is expected to worsen.

2.32 Estimation of the magnitude of the funding shortfall for health services is complicated by the fact that the budget structure is not broken down by specific health programs (for example, primary health care is funded through the general allocation to provincial health services). Nevertheless, an estimate based on the requirements for drug supplies, transport operations and primary health care improvements indicates that approximately K 100 million in 1986 prices would be required to restore current health services to minimally satisfactory levels. This would represent a 60 percent increase over MOH's approved 1986 budget allocation. On a relative basis, Zambia is spending a share of its recurrent budget on health which is similar to the amount spent in other sub-Saharan countries. This indicates that MOH should look to more innovative methods of closing its funding shortfall, rather than relying on increased budgetary allocations.

2.33 The first priority should be cost reductions. For example, when UTH was converted to a parastatal, it was recommended that large cuts could be made in the number of CDEs. The resulting cost savings could be used to fund increases in the number of staff at higher levels and provide improved pay scales for skilled personnel, who had become a key constraint on UTH's operations. Another area of potential cost savings is rationalization of health facilities, as bed occupancy rates as low as 38 percent have been reported in some district hospitals. Finally, the Government should reevaluate the role of private health care providers. Private hospital services and health insurance were abolished in Zambia after independence on the grounds of social equity. However, there is a substantial demand for private care which cannot be met at Government facilities. Providing greater scope for private health care would allow the Government to focus its limited resources on those segments of the population who need public services the most.

2.34 The Government should also reconsider its policy toward user charges. The Constitution of Zambia requires the provision of free basic health care services. This policy has been generally interpreted to include all health care services, which is counter-productive to the intention of the Constitution by diverting a large share of public resources into expensive tertiary health care facilities. User fees and charges, if imposed in a manner that does not exclude the most needy members of

society, would promote cost-efficiency in the provision of health services and generate resources to support an expansion of the MOH budget. Experience has shown that moderate and focused user charges will be accepted by the population without undue problems, provided they are applied equitably and are accompanied by an improvement in services. User fees are already being applied in Zambia on a de facto basis, as most prescriptions are now issued on the understanding that the patient will have to purchase the drugs from a private supplier, a situation that has been forced on the Government by the budget situation. A gradual introduction of fees over a five-year period could eventually cover 10-15 percent of MOH recurrent costs.

2.35 In trying to address its problems, MOH should be cautious of partial solutions. For example, the establishment of UTH as a parastatal has had a number of advantages by providing UTH with greater management autonomy and flexibility to rationalize operations. Nevertheless, the increased differential in pay scales between UTH and other Government facilities will, if extended to other large hospitals, reenforce the urban bias in health care by attracting skilled personnel to tertiary facilities and make it even more difficult to staff primary health care facilities. The solution to this problem is not to restrict salary increases at UTH, but rather to provide a balanced increase in compensation for skilled staff in rural health care facilities as well. Another area where the Government should proceed slowly is in the decentralization of health facilities to District Councils. Decision making in MOH is overly centralized and greater delegation of authority would be desirable. However, most of the District Councils have neither the staff capacity nor the revenue base to absorb an increase in responsibilities, and the result of decentralization could be further fragmentation of an already difficult funding situation.

2.36 The responsibility for improving the budgeting of health services rests with MOH headquarters. Senior officials are well aware of the problems in the health sector but are hampered in addressing them by a cumbersome organizational structure and inadequate training of middle-level staff. A particular problem is the low priority given to the Planning and Development Unit in MOH. This unit, which should be a focal point for developing proposals to improve health services, is staffed with too few and inappropriately qualified personnel. Well qualified expatriate advisers are available in the planning unit but are not utilized effectively or provided with counterpart staff. Improvements in the planning unit are essential in order to carry out a reassessment of expenditure priorities for the health sector.

2.37 Many of the problems of cost reduction and quality improvement in Zambia's health care systems can be addressed with well-tested management approaches which have been developed elsewhere. This effort will require additional equipment, training and possibly capital investment, which can be provided from donor agencies. Emergency support in the form of medicines and supplies may also be available. While this aid can play a useful role, it should be accompanied by measures to assist MOH in making longer run adjustments in health care priorities.

2.38 Given the lack of program budget information for the MOH budget, it is not possible to develop expenditure targets for health care programs except in broad aggregate terms. For the K 100 million estimated shortfall in the 1986 budget, MOH should be able to fund at least one-half of this amount by 1988 through improvements in the cost efficiency of existing programs and by introduction of user fees. Cost reductions should focus on rationalization of staffing patterns, particularly through reductions in CDEs, and improvement of the drug procurement and distribution system. User fees should include boarding fees for hospital patients (with exemptions for the poor and other vulnerable groups), a flat rate fee for first prescriptions and first out-patient consultations, fees for major tests such as laboratory investigations and x-ray examinations, and fees for patients who bypass normal referral channels. It is not recommended that Zambia introduce compulsory medical insurance at this stage (a plan known locally as the National Medical Care Fund), as this proposal would act as an earmarked payroll tax on already very heavily taxed formal sector employees. With respect to the remaining K 50 million required for MOH expenditure programs, this should be funded through a combination of reductions in existing services and increased budget allocations. MOH should specify a core program of health services to receive full funding, comprised essentially of primary health care programs such as immunization, basic health care treatment in existing facilities and family planning services. Reductions in expenditures should focus on the closure and consolidation of facilities with underutilized capacity and transferring of responsibilities to the private sector. Based on these changes, there may be justification for limited increases in the budgetary allocations for other services, provided that detailed programs are in place to reduce costs and improve efficiency.

Education

2.39 Responsibility for education has, since 1982, been divided between two ministries—the Ministry of General Education and Culture (MGEC), which is responsible for secondary schools and educational policy (the running of primary schools has recently been transferred to the provincial authorities), and the Ministry of Higher Education (MHE), which is responsible for post-secondary education, technical education, and teacher training. Education traditionally has had high priority, and expenditures on education have accounted for 20-23 percent of the budget (excluding debt service and subsidies) throughout the past decade. While education has shared in the general decline of real expenditures, enrollment levels have been maintained at one of the higher rates in sub-Saharan Africa. However, there is growing concern about problems of educational quality and the ability of the school system to provide for the rapidly increasing number of school-age children due to the high population growth rate.

2.40 The Government's policy statements for education place major emphasis on achieving universal basic education and improving the quality of educational instruction, while providing the higher levels of education on a more selective basis. Recognizing financial constraints, the Government has scaled-back its plans to provide nine years of universal

basic education and adopted an interim structure of seven years of universal primary education, followed by five years of secondary education (two years of junior secondary and three years of senior secondary) for a more limited number of students. However, a recent study of the educational reform program conducted by the University of Zambia (UNZA) has concluded that even the more limited objectives of the Government cannot be achieved without a substantial reordering of expenditure priorities within the education budget.[17]

2.41 Reordering of expenditure priorities is desirable both from a social standpoint and to correct the current gross misallocations of funding between different types of education. Disparities in the unit costs of education are enormous in Zambia, perhaps the largest in the world. It costs 160 times as much to educate a student for one year in the university as it costs to educate a primary school student (Table 2.5). Maintaining a student in a technical or vocational education institution costs 46 times as much as a student in primary school and 10 times as much a secondary school student. These differences in unit costs arise from several factors, of which the most important are:

(i) Student Subsidies. In the 1986 budget, transfer payments (boarding costs, bursaries, etc.) account for 15.4 percent of the cost of educating a student in secondary school and 47.2 percent in teacher training colleges.

(ii) Low productivity. Student/teacher ratios for higher level education are low by world standards, and the number of instructional hours per teacher is also low (less than 15 hours per week for secondary school teachers).

(iii) Cost inefficiency. The ratio of non-teaching to teaching personnel is very high. In the university, the ratio is 6.3 to 1; and in teacher training colleges, the ratio of unskilled workers to teachers is 1.2 to 1.

(iv) Underfunding of primary education. Salaries and wages consume 95 percent of the recurrent funds for primary education, while educational materials (which various studies have shown to be critical in the learning process) account for K 1.5 per student per year ($0.25 at the exchange rate prevailing in early 1986).

2.42 Increases in fees and charges should be an important component of the expenditure reform program. The Government has taken steps in this direction with the reintroduction of boarding fees in secondary schools during the 1986 school year. However, the Government has been reluctant to introduce fees at the university, even though students receive free board

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17/ "Provision of Education for All," Educational Reform Implementation Project, School of Education, University of Zambia, Lusaka, July 1986.

Table 2.5: Unit Costs and Student/Teacher Ratios, 1986

	Average Cost Per Student	Student/Teacher Ratio	Cost as Multiple of Unit Cost for Primary Education
Primary	K 104	45.0	1.0
Secondary	446	26.0	4.3
Teacher Training	2,970	10.8	28.5
Technical and Vocational Training	4,820	5.2	46.3
University a/	16,630	8.0	160.0

Source: 1986 Government Budget.

a/Excludes bursaries for students studying abroad.

and lodging, books and stipends. On an equity basis, the introduction of fees for technical and vocational training and for university students would seem to be a necessity. The educational reform study has estimated that the costs borne by parents of children in primary and secondary school for such items as school uniforms, PTA fees, learning materials and transportation average K 234 per annum in primary schools and K 579 per annum in secondary school (1985 prices, prior to devaluation). It would therefore seem only fair to ask for a greater financial contribution from the small minority of students fortunate enough to obtain higher level training. For truly needy cases, well-designed scholarship programs can ensure that all Zambians have access to education on the basis of academic merit.

2.43 It should be possible to achieve a significant improvements in the quality of educational services, even within the current budget allocation. Table 2.6 provides initial targets for the recurrent budget based on allocations proposed in the educational reform study. In practice, it is recognized that it would require several years to carry out funding shifts on this order of magnitude in Table 2.6. No growth in Government subventions to the sector is assumed. However, an increase in revenue from user fees of approximately K 35 million is provided for, equivalent to 60 percent of current student subsidies. This money would be used to release Government funds from technical and higher level education in order to support an increase in funding for primary education and, to a lesser extent, junior and secondary education. The rest of the increase in funding for primary education would be provided through cost savings in educational administration and at the university. As a result of these changes, funding for primary education could increase by 40 percent in real terms (to 52 percent of the total recurrent budget), to be used for educational materials and reducing class sizes, particularly in urban areas. Junior secondary education would expand in order to maintain the current progression rate (approximately 20 percent), while the growth of senior secondary education would be restrained and greater emphasis placed

Table 2.6: Education Sector Recurrent Expenditures
(K million in constant 1986 prices)

	Estimate a/ 1985	Budget 1986	Recommended 1988	Percentage Change f/
1. Administration b/	28.2 (10)	36.0 (10)	28.0 (7)	-22%
2. Primary	117.8 (44)	148.3 (41)	208.0 (52)	+40%
3. Secondary	51.6 (19)	64.8 (18)	68.0 (17)	+5%
4. Technical & Vocational Training	17.3 (6)	23.6 (6)	24.0 (6)	+2%
5. Teacher Training	8.9 (3)	13.1 (4)	12.0 (3)	-8%
6. University	45.9 (17)	79.1 (22)	60.0 (15)	-24%
Total	269.7 (100)	364.9 (100)	400.0 (100)	+10%

Notes:

- Does not include capital expenditures.
- Numbers in parentheses are percentages of total recurrent expenditures for education.

a/ 1985 estimated expenditures are in current prices.
b/ Includes Examinations and Research.
c/ 1986 budget allocation to 1988 recommended allocation.

on quality improvements. The budgets for technical and vocational training and for teacher training would not change significantly, but a larger share of expenditures would be covered by direct user fees rather than general Government revenues. In addition, improvements in quality could be accomplished through consolidation of the over-extended system of technical and vocational training.[18] Reductions in expenditures for educational

[18] This recommendation is based on the findings of a recent Bank study: "Zambia: Specialized Training Study," World Bank Report No. 6071-ZA, June 3, 1986.

administration and at the university would be accomplished primarily through decreases in staffing. In addition, serious consideration needs to be given to longer term measures to reduce the heavy cost of the university system, including consolidation or dropping of programs with low enrollment, eliminating all construction projects and establishment of new programs, and freezing increases in enrollment except on the Lusaka campus.

2.44 The capital program for education shows only limited relation to priorities in the sector. The largest project is for construction of secondary schools in rural areas, including provision for boarding facilities. Other major capital projects include specialized training facilities at the university. Except for a school maintenance program, very little capital funding is devoted to the critical needs of the primary education system, particularly the need for capacity expansion in urban areas. This situation indicates the failure of both the Government and the donor community to identify priorities in the education sector in a realistic manner. Future capital investment in the education sector should be based on the recommendations of the educational reform study and place greatest emphasis on improvements in the primary education system, while limiting capital expansion in other activities of the sector.

2.45 The educational reform study prepared by UNZA provides a sound basis for realigning expenditure programs in the education sector to fit current needs. The following additional information would be necessary to complete the framework for implementation of the study:

(a) a study of the organizational structure and management capacity of the sector institutions involved in the planning and budgeting of educational activities;

(b) a manpower requirements study, focusing on the demand for specialized training at the higher level, including teacher training;

(c) review of the employment structure and compensation program for educational staff, including fringe benefits; and

(d) development of a detailed action program for the realignment of expenditures within the sector which meets the objectives of the educational reform study.

This framework would provide the basis for developing a consistent medium term plan to guide expenditure realignment in this sector. This plan should be a prerequisite to any increase in the educational budget, and it is suggested that the Government limit its requests to the donor community for additional capital assistance to essential supplies and maintenance of existing facilities (except for construction of new primary schools in urban areas) until the studies are completed.

2.46 Improvement in the planning capability of the education ministries will be an important factor in preparing and implementing the expenditure reform program. The current division of functions between two ministries has created a wide range of overlapping responsibilities which is aggravated by weak coordination. Developing a sectoral strategy which

which addresses the allocation of resources between basic and higher levels of education will require the preparation of an integrated expenditure strategy for the two ministries, at the very least. In the longer term, it may be desirable to reunite MGEC and MHE into a single ministry. The role of the provincial and local authorities in primary education also needs to be addressed. However, these institutional issues can be resolved as part of the studies outlined above, and they should not be allowed to delay progress on preparation of a comprehensive education financing program.

Roads

2.47 Zambia is a large country with a relatively small population and difficult problems of access through neighboring countries to the sea. Roads have therefore been an important part of the Government's strategy to bind the country together, provide access to natural resources and ensure that trade routes remain open. In the decade after independence, road construction (and other transportation infrastructure) had very high priority, and an extensive road network was developed, such that Zambia has one of the highest ratios of road length per capita in sub-Saharan Africa.[19]/ As indicated earlier, however, infrastructure construction was reduced after the fall in Government revenues in 1975, so that extensions to the road network have been limited since then. Because the major part of the road network was constructed almost twenty years ago, much of it is reaching the end of its design lifetime and will require major rehabilitation in order to maintain its structural integrity. This problem has been aggravated by the serious neglect of maintenance over the past ten years and by relatively lax enforcement of vehicle weight controls. As a result, the road network has deteriorated over much of its length, with major surface and foundation failure.

2.48 The Government's expenditure program on roads in recent years has shown little appreciation of the importance of maintenance. Expenditure for all types of maintenance, both for routine and cyclical requirements, has been grossly underfunded, and the large maintenance labor force maintained by the Roads Department in the Ministry of Works and Supply (MWS) has often been idled and generally been employed with low productivity. Grants to District Councils for road maintenance have been meager, and minor access roads have received virtually no maintenance at all. A donor financed project approved in 1978 to improve road maintenance has been implemented slowly, and even now that equipment has arrived and maintenance systems have been strengthened, the project continues to be plagued by low budget allocations for maintenance. At the same time, the Government has funded a significant amount of new road construction. In the 1986 budget, the Government allocated 72 percent of highway funding for new road construction and only 28 percent for maintenance. Many of the roads which

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[19]/Zambia has 20,647 km of classified roads, with an average 2.1 km per 1,000 inhabitants in 1984. Because of Zambia's low population density, the geographic density of the road network is rather low. Nevertheless, the first measure is more important in economic terms, as it indirectly measures the use that can be made of the road network and the relative value of marginal additions to the road system.

have been built have been of low priority. A case in point is the road going between Mansa and Nchelenge, for which construction was initiated in early 1986. An earlier feasibility study had shown that the road would not be economically justified before the 1990s, at the earliest. Nevertheless, the Government solicited donor financing and eventually decided to proceed with the project, even though the funding package included a substantial share of non-concessional loan financing. Decisions such as this, which emphasize new construction at the expense of maintenance, are likely to be counterproductive in the long term, as more roads will be lost through road failure than can be added through new construction.

2.49 The Roads Department recently prepared a three year program for road maintenance and investment covering the period 1987-89.[20] The major components of the maintenance program include rehabilitation of the four major trunk roads in Zambia (K 348 million), regraveling and resealing works (K 200 million), replacement of maintenance equipment (K 163 million), and various other components for a total estimated cost of K 1204 million (1986 prices). This program is generally consistent with priorities in the sector. Nevertheless, the road maintenance program alone would require almost 30 percent of gross fixed capital investment for the economy as a whole during this period and is clearly well beyond the level of resources that can be made available to this sector. A more realistic program on the order of K 100-150 million per year should be prepared.[21] At this level of funding, the implementation period for the maintenance project would have to be stretched over 8-12 years, and the remaining sections of the road network would be left to fail and possibly abandoned. Moreover, such a program would allow for no new road construction for the foreseeable future. In addition to the maintenance components, the capital program prepared by the Roads Department contained requests for K 1180 million in funding for new road projects, virtually all of which are of low priority.[22] A minimum condition for support of the road maintenance program should be agreement that the Roads Department postpone the program for new road construction indefinitely and renegotiate existing contracts for construction of low priority roads, where this is feasible. While such an approach may be difficult for the Government to accept, it is the only technical solution which is justifiable both in terms of the needs of the sector and the competing demand on the budget.

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[20] This does not include the requirements for maintenance of district feeder roads, which are the responsibility of the District Councils.

[21] This would still represent a significant increase in the budget for the Roads Department, which received K 72.2 million in 1985 and K 81.8 million in 1986.

[22] An exception is the Kafue-Chirundu road, which has committed donor funding and provides a vital road link to Zimbabwe.

Development Administration

2.50 The Government has embarked on a far-reaching and difficult recovery program that will involve fundamental changes in the structure of the Zambian economy. The Government also has to restructure its expenditure programs and rethink many of its sectoral policies and objectives. To manage this program well and take corrective actions as they are required, considerable managerial and technical expertise will be needed in the key Government ministries responsible for economic policy. Careful consideration should be given to the manpower and other requirements needed to perform these tasks effectively. For this reason, development administration is included in the core expenditure program, as important in its own right as the agriculture, health, education, and roads programs discussed in the previous sections.

2.51 Development administration involves the key economic ministries in charge of macroeconomic policies, the Ministry of Finance (MOF) and the National Commission for Development Planning (NCDP), the planning units in the operational ministries which are responsible for sectoral policies and expenditure programs, and finally, because it is perhaps the binding constraint on the ability of the Government to implement reform policies, the manpower development functions vested in the Office of the Prime Minister. The expenditure programs for these agencies are small in comparison to those of the ministries discussed up to now. This section will therefore place greater attention on the management capacity of the various agencies and the nature of technical assistance required by them to strengthen their roles.

2.52 The key tasks of development administration are:

(a) economic and financial policy formulation and analysis;

(b) planning and budgeting;

(c) financial management and control;

(d) domestic revenue generation;

(e) aid coordination and debt management; and

(f) manpower development and administration.

In performing these functions, MOF and NCDP are plagued by the same problems that constrain the effectiveness of other operating ministries: lack of qualified staff at the upper levels, causing over-loading of senior officials and excessive centralization of decision making; overstaffing at lower levels, diverting management attention and operting funds from more important functions; and inadequate recurrent funding, constraining the effectiveness of data collection, tax administration and training. While an increase in financial resources will not resolve all these problems, it should be part of the package of reforms designed to improve the effectiveness of the core ministries.

2.53 The economic crisis and the need to monitor policy reforms has put a severe strain on the policy making capabilities of MOF and NCDP. These agencies have not developed the analytical capacity or the administrative machinery needed to cope with the demands of the economic recovery program. This has left the Government overly dependent on the advice of external agencies in developing its basic economic policy framework. The lack of timely information and ability to process the information in order to provide pertinent analysis to top level decision makers is another major problem. Basic data, such as the amount of foreign grants disbursed by executing ministries, is not available to the Ministry of Finance, and information on external trade flows is as much as two years out of date. Macroeconomic forecasting is rudimentary, and the Government has limited capacity to estimate the impact of economic reform measures or determine the resource flows required to sustain the recovery process. An efficient mechanism needs to be established within MOF and NCDP for executing and monitoring the economic recovery program, and better capacity for analysis and formulation of economic policies needs to be developed. Technical assistance is required to upgrade the existing cadre of economists, and improvements in equipment and data systems will be necessary to process information more effectively.

2.54 Planning and budgeting is another area which requires substantial strengthening. In each of the sectoral programs discussed so far, emphasis has been placed on the need for improved planning in order to carry out an effective program of expenditure realignment. NCDP is responsible for the planning of Government resources, a function that it needs to perform in conjunction with sectoral planning units of the operating ministries. The Government established sectoral planning units in the major ministries and the provincial administration several years ago, particularly to monitor and improve the quality of the five-year development plans. However, these planning units have been largely ineffective, understaffed with respect to qualified personnel, and divorced from the main decision making processes within the ministries governing the allocation of resources.

2.55 Beginning in 1986, NCDP adopted a new format for annual expenditure planning (to be discussed further in Chapter III), which is designed to integrate the planning and budgeting processes more closely in the context of a medium term financial plan. While the first Annual Plan was produced and issued on schedule in conjunction with the 1986 budget, the process revealed major problems in the capacity of NCDP and the sectoral planning units to produce good quality analysis. It also highlighted weaknesses in the integration of planning and budgeting between MOF and NCDP. NCDP is aware of these problems, but it has not yet established priorities for using its limited planning resources more effectively. During the current fiscal year, NCDP is preparing both an annual plan for 1987 and a separate five-year development plan for the period 1987-91. Working on both plans simultaneously has stretched the available manpower resources thinly and produced confusion as to the focus and intention of the various planning efforts. In addition, the 1986 Annual Plan states that NCDP will give priority to strengthening provincial planning units. This proliferation of planning efforts in an extremely tight manpower situation is unrealistic. NCDP and the operating ministries should concentrate their planning resources on the problems which are most critical for the economic reform program, which should be the annual budgeting process.

2.56 Even with the traditional functions of financial monitoring and control, the capacity of the core ministries, particularly MOF, is not adequate. The problems begin at the most basic level, which is the timely preparation of accurate data on expenditures and revenues. This is largely a problem of inadequate accounting staff. Manpower officers in the operating ministries estimate that more than 400 of the 800 Government bookkeepers and accountants do not have the skills required to perform their tasks. Current procedures for data processing and analysis are cumbersome and slow, with the result that follow-up on the budget is extremely limited. As a result, expenditure control mechanisms are often applied in an ad hoc manner, and funds are released to the operating ministries on a delayed and sporadic basis. This causes serious problems to program managers who cannot depend on an appropriate flow of funds, so that projects are implemented in a sporadic fashion and contractors and suppliers are subjected to late payments and accumulation of arrears. This increases the prices that the Government must pay for services and discourages competition for tenders.

2.57 Increased budgetary allocations for tax administration and collection would have an almost immediate impact on Government revenues. Both the Department of Taxes and the Department of Customs and Excise are chronically short of qualified staff and operating funds. As a result, the Department of Taxes has a two year backlog of income tax returns which have not been cleared, and tax audits and field checking of tax returns are minimal. The Department of Customs and Excise, which must administer 24 border posts spaced over a long and sparsely settled border and collect excise and domestic sales taxes from local producers, is underfunded for vehicles and travel funds. As a result, smuggling along some borders, particularly with Zaire, is believed to be endemic. Every kwacha spent on tax enforcement yields on average K 400 in revenue. Although the marginal revenue contribution from increased enforcement is likely to be less, it would almost certainly yield a significant net positive gain to the Government, as well as improve the equity of the tax system.

2.58 Financial assistance from donors and the management of Zambia's large external debt burden are critical elements in the Government's financial strategy for stabilization and growth. Despite this, aid coordination and debt management have received low priority and suffer from information management problems and lack of clearly defined responsibilities. The Loans and Investment Division in the MOF is charged with the responsibility for coordinating financial assistance provided to the Government of Zambia (with the exception of technical cooperation assistance, which is the responsibility of NCDP). In practice, the individual ministries wield considerable influence in dealing with individual donors, and there is no planning as to where donor resources should be directed. The result is that the Government's capital investment program is determined to a great extent by individual donor preferences. This helps explain why the capital program in most ministries is poorly coordinated with the recurrent expenditure budget. The present capacity of the MOF for debt management is also extremely weak. Neither the MOF nor the Bank of Zambia has complete information on foreign debt outstanding, and almost no analysis is carried out to assist the Government in debt

management. The result is that the Government continues to contract foreign debt with little regard to its eventual capacity to service the loans. The Government has recently accepted technical assistance to improve its debt management capacity, and this should be supported with additional local resources devoted to this effort.

2.59 The need for better training and motivation of staff at higher levels has been consistently identified as a major requirement for improving Government expenditure programs. Part of the solution involves changes in the financial incentive structure, which is discussed in Chapter III. An additional aspect is management practices and staff development programs within the civil service. The Government has made a major effort to improve manpower planning in the civil service through the formation of the Directorate of Manpower Development and Training and the assignment of manpower development officers to individual ministries. Until now, this effort has largely focused on identifying individuals for long term overseas training, rather than on the definition of performance related skill gaps. Overseas training is expensive (even if paid for by donors) and limited in availability, and greater attention needs to be paid to in-service training opportunities. The National Institute for Public Administration (NIPA), which is intended to be the main Government training center, concentrates its efforts on entry level training courses for lower level Government employees. It is constrained by a lack of qualified staff and limited funds from developing higher level courses focused on job-related skills for middle and upper level managers. NIPA's responsibilities in the training field also overlap with those of the Management Services Board (MSB) and, for parastatals, the ZIMCO Institute of Management. Improved coordination of training institutions and greater provision of funds for in-service training of higher level staff should be an important part of the Government's strategy to improve the quality of its manpower cadre.

2.60 The recognition of development administration as a core activity of the Government expenditure program would be a valuable first step in improving this function. Table 2.7 presents budget targets for the Ministry of Finance and NCDP which incorporate donor-financed projects to strengthen aid coordination, debt management, data processing facilities, macroeconomic planning, and staff training. It is also important to recognize a growing problem of donor coordination in providing support for development administration. A recent example occurred in which the Government accepted two separate proposals to strengthen debt management, both with significantly overlapping responsibilities. Given that MOF is assigned the major responsibility for donor coordination, improvements in its own in-house communications should have high priority.

Table 2.7: Development Administration Expenditures
(K million in constant 1986 prices)

	Estimate a/ 1985	Budget b/ 1986	Recommended 1988	Percentage Change f/
Ministry of Finance				
1. Headquarters c/	7.8	10.6	25.0	+136%
2. Tax Administration d/	10.0	15.1	16.0	+7%
3. Data Processing Unit	2.7	4.6	5.0	+9%
Sub-total	20.5	30.3	46.0	+52%
National Commission for Development Planning				
1. Headquarters e/	11.4	11.8	13.0	+10%
Total	31.9	42.1	59.0	+40%

Notes:

Includes both recurrent and capital expenditures.

a/ 1985 estimated expenditures are in current prices.

b/ Excludes all extraordinary items in the MOF budget.

c/ Includes Central Supply and Tender Board and Government Stores.

d/ Includes Department of Taxes and Customs and Excise Department.

e/ Includes Census and Statistics Department.

f/ 1986 budget allocation to 1988 recommended allocation.

2.61 Zambia receives a vast amount of support in the form of technical personnel provided by a wide range of donors and charitable organizations. The UNDP has estimated that in 1985, the value of technical assistance provided to Zambia from all sources was equivalent to US$90 million.[23] This was equal to 16 percent of all donor inflows to Zambia, including capital assistance (US$388 million) and commodity aid (US$103 million). Many of the technical assistance personnel are not being utilized

[23] "Report on Development Cooperation to Zambia, 1985," United Nations Development Programme, Lusaka, Zambia, July 1986.

effectively. Given the serious manpower constraints on the Government and the need to improve program performance and train local personnel, much better use could be made of the substantial human resources which are available to Zambia from abroad, generally at low direct cost to the Government. As part of its National Technical Cooperation Assessment Program (NaTCAP), the UNDP has recently carried out a study on ways to assist Zambia plan and manage its complement of technical assistance personnel more effectively.

D. Other Sectoral Programs

Water Supply

2.62 The responsibility for water supply is shared by the District Councils, which report to the Ministry of Decentralization, and the Department of Water Affairs (DWA), which is part of MAWD.[24]/ The water supply systems in the ten largest urban areas are managed by the District Councils, while in smaller urban and rural areas, DWA is responsible for the construction of water supply systems and assists the District Councils in their operation and maintenance. Because of chronic problems with collections, DWA has also taken over the responsibility for collecting water rates for the systems that it helps to operate. Fragmentation of responsibility in the water supply sector has caused many problems of coordination. A recent evaluation study of MAWD's operations has recommended that DWA be separated from MAWD. This recommendation appears to be accepted in Zambia, although it has not yet been decided whether DWA should be a part of the Ministry of Decentralization or established as a separate parastatal.

2.63 Operations in the water supply sector are hampered by shortages of technical manpower, lack of adequate funds for maintenance and operating expenses, and poor investment planning. DWA currently has 37 expatriate staff holding line positions; a further 27 vacant positions for local staff illustrate the critical shortage of trained local manpower in this sector. Cost recovery has also been a persistent problem. DWA recently improved its financial performance as a result of tariff increases in July 1985 and January 1986. It has also made significant improvements in billing and collection procedures, so that cost recovery for operations and maintenance costs may be possible in the reasonably near future. DWA recently prepared terms of reference for a water sector master plan to guide future investments in this sector. The availability of such a plan will be a substantial improvement, as previously donor agencies virtually carved the country up into non-overlapping areas and carried out investment programs in the different areas according to their own priorities and funding.

2.64 While recent improvements by DWA are starting to create some order in the sector, a great deal of work still remains to be done. There is a large backlog of maintenance and rehabilitation investments to be

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[24]/DWA is also responsible for irrigation and drainage projects throughout Zambia.

identified and prioritized, particularly for water supply systems in larger urban areas such as Lusaka, which have had lower priority from donors in the past. Financial controls also need to be improved. In the larger District Councils, the water fund is often used as a source of financing for general operating deficits, with corresponding neglect of maintenance and rehabilitation requirements for the water systems. Given the serious financial situation facing Zambia, it will not be possible to justify major new investments in water supply facilities for the next several years, despite the fact that Zambia has underinvested in water supply facilities during the past decade. First priority in the near term should go to maintenance, rehabilitation and urgent extensions to existing systems, as well as strengthening of sector institutions and manpower training.

Housing

2.65 For many years, the central tenet of Zambian housing policy has been the responsibility of employers, particularly the Government and parastatal organizations, to provide adequate housing for their employees. District Councils were expected to construct low-cost rental housing for urban residents who do not qualify for employer-provided housing, and, to a limited extent, offer self-help housing options in site and service areas. The general economic situation has forced District Councils and employers to postpone housing investments and delay housing maintenance. As a result, a serious housing shortage has developed in Zambia, particularly at the lower income level. The Government has reacted by urging individuals to build their own housing and by showing greater leniency toward squatter developments. Nevertheless, there has been little attention given to revising the legal and institutional structure and establishing a suitable financing mechanism for promoting housing development. As a result, housing construction has remained essentially stagnant for the past several years.

2.66 Public expenditures on housing are of two general types: (i) loans to District Councils for construction of rental housing and site and service areas; and (ii) allocations to ministries for the construction and maintenance of housing for civil service employees. Neither has been well-planned or effective in addressing the major issues outstanding in the housing sector. Most District Councils run considerable deficits on their low cost housing due to weak collection performance and rental charges that are too low to cover costs. The limited funds that are collected are often siphoned-off to cover other Council expenditures. The central Government has implicitly sanctioned this policy by allowing Councils to run arrears on their Government loans for housing. As of 1984, the central Government had K 108 million in loans outstanding to local authorities for housing, of which 0.01 percent was repaid in 1984 and K 3.8 million (including interest) was in arrears. As for Government expenditures on civil service housing, there is little planning or priority discernable in the budget allocations. Some Government housing is vital for maintaining essential services. For example, poor location and availability of agricultural extension housing has increased transport costs for extension workers and reduced field visits, while housing shortages are considered to be a major problem in posting health workers to rural facilities. On the other hand,

a significant amount of urban housing is included in the budget on very tenuous grounds. Large allocations are included in the 1986 budget for staff housing for the Ministry of Finance and the Ministry of Information and Broadcasting because of transport problems faced by workers in Lusaka. At the same time, funds for maintenance of Government housing were cut by 25 percent in real terms, with most of the funds used to pay a large number of CDEs who are idled due to inadequate funds for maintenance materials.

2.67 It is unrealistic to expect that much new housing construction will be undertaken during the next few years. Nevertheless, there is substantial scope for the Government to begin instituting new policy measures that will assist in reviving housing construction as economic conditions begin to improve. Underlying these efforts should be a recognition that the private sector can carry a much larger responsibility for providing housing in the future. This means that the Government should view its role as facilitating and promoting private initiatives in the housing sector, while limiting direct financial involvement to the minimum amount necessary to achieve well-defined social objectives. Private housing construction can be stimulated by legal changes to improve access to land and provide adequate title security to facilitate mortgage lending, by relaxation of building standards to encourage greater use of local materials, and by institutional changes to broaden the coverage of housing finance and improve the rate of land development for housing. Housing for low and medium income groups can be facilitated by greater emphasis on site and service type developments and a more realistic approach to cost recovery in order to improve the financial viability of the District Councils. The recent efforts of Lusaka Urban District Council to collect payments of housing rents and plot charges should be encouraged and extended to other Councils. Finally, the Government, which is the largest formal sector employer in the country, should consider a phasing-out in its role of providing housing to employees. This can be accomplished by a process of gradually raising house rents to economic levels, ending all new housing construction for civil servants except for housing required for specific development purposes, and instituting a program of voluntary sales of the existing housing stock, combined with adequate incentives to encourage civil servants to purchase their own housing.

Tourism

2.68 Government policy statements have identified tourism as a major potential source of foreign revenue earnings. Zambia has significant tourist assets, particularly the wide variety and high concentration of wildlife in its national parks, the traditional ceremonies performed at certain times of the year, and natural attractions such as Victoria Falls and Kariba Bay. However, tourism development is limited by high internal and external travel costs, lack of adequate infrastructure at major points of interest, intense competition from neighboring countries, and concerns about regional unrest that have disrupted traditional tourism markets. As a result, the level of foreign tourism in Zambia has been small and declining over the past several years. Within the foreseeable future, Zambia's best tourism potential lies in local and special interest visitors rather than attempting to attract a larger share of the mass tourism market.

2.69 The Government established a separate Ministry of Tourism in 1980 in order to coordinate tourism promotion and development. The major activities of the Ministry are conducted through the Zambia National Tourist Board (ZNTB), which is supposed to coordinate the activities of the Government and the various parastatal and private agencies involved in the sector. ZNTB has largely failed to achieve agreement on a realistic strategy for the sector. The latest Tourism Development Plan prepared by ZNTB, which calls for the expenditure of K 474 million (pre-devaluation costs) on tourism development during the period 1986-90, is a shopping list for ongoing and potential projects and bears little relationship to the potential tourism market. Major emphasis is placed on public involvement in the sector, including parastatal investments, accounting for 86 percent of planned expenditures.

2.70 In contrast, tourism is one of the areas where the Government should seek to maximize private participation, using the incentives established in the new Investment Act adopted in 1986. By doing so, the limited funds available to the public sector can be concentrated on activities which are critical for the long-term prospects of the sector. The most important of these is wildlife protection and conservation, which is the responsibility of the Department of National Parks and Wildlife Services (DPW) in MLNR. Poaching is a serious problem in the game parks. According to one estimate, the number of elephants in the Luangwa Valley has declined from 100,000 to 30,000 in the last three years, and the black rhino has been virtually wiped-out in many areas. The activities of the DPW are constrained by a lack of operating funds, the poor condition of the roads in the parks which hampers mobile patrols, and the large area that DPW is responsible for patrolling. An increase in funding for operating expenses and capital equipment (to improve the roads in the national parks) should receive priority for both environmental reasons and to preserve Zambia's valuable natural resources and major tourist attractions. As for tourism promotion under the ZNTB, the Government should seek to make these activities self-supporting through user fees and by contributions from tourism oriented enterprises. By making ZNTB dependent for its funding on outside agencies, the activities of the Board would become more focused and responsive to the needs of the sector. In addition, the Government should encourage parastatal and private agencies in the sector to search for private financing and expertise to develop Zambia's tourist infrastructure.

Information and Broadcasting

2.71 The Ministry of Information and Broadcasting (MIB) includes Zambia Broadcasting Services (ZBS) and other news and information services.[25]/ The Government has invested substantial sums to expand the coverage of ZBS, with the number of radio transmitters expanding from 18 to

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[25]/Subsequent to the public expenditure mission, the Ministry of National Guidance was merged with the Ministry of Information and Broadcasting. No review was carried out of the expenditures of the former ministry.

41 and the number of television transmitters expanding from 9 to 20 between 1977 and 1985. In addition, the sector has benefited from donor assistance for facilities (the Zambia Institute of Mass Communications) and equipment (such as transmitters and cameras). As with most ministries, the MIB suffers from shortages of operating funds and skilled staff. There are no local lecturers available at the Zambia Institute of Mass Communications, and various publications and local information media have had to be curtailed due to the lack of transport and funds. Investment decisions have been based largely on political considerations (e.g., an emphasis on expansion of television coverage rather than improvement in radio broadcasting facilities), and very little analysis is undertaken to justify capital projects. These problems are compounded at a lack of attention to revenue generation. In the 1986 budget, revenues from all MIB operations (including radio and television advertising) are expected to cover only 6 percent of the total expenditures of the ministry. In this situation, the recent decision to establish ZBS as an independent parastatal may be premature. MIB should concentrate on increasing its revenue generation, trimming the capital budget (including dropping the planned investment for staff housing in Lusaka), and improving the quality of its ongoing operations.

Regional Administration

2.72 The Government has adopted plans to decentralize most local functions to the district level. To achieve this objective, the Government revised the Local Government Act in 1980 to replace the former system of semi-autonomous local authorities with a unified system of District Councils. These integrated the functions of the central Government, the former local authorities, and the Party into a single structure. The change in legislation was intended to improve the planning and coordination of local activities, strengthen the financial position of the local Councils, and improve the training and discipline of local Government employees by integrating them into the central Government civil service structure. Responsibility for primary education was turned over to the District Councils in 1986 (with funding for primary education passed as a grant through the provincial administration), and primary health care is supposed to be turned over to the larger urban District Councils by the end of the year.

2.73 Although the 1980 reforms were intended to increase autonomy and accountability at the local level, in practice they have worked in the opposite direction. District Councils are enpowered to impose a wide range of taxes and levies on property, businesses, sales and services within their boundaries. However, the central Government, which must approve all revenue requests, has generally denied or reduced proposals for increases in taxes. The Councils have been urged to raise greater revenues through money making ventures such as taverns and agriculture, but a recent Parliamentary Report of the Committee on Local Administration found that many of the activities are siphons for waste and embezzlement. As a result, the Councils have relied heavily on general purpose revenue grants from the central Government. There has never been an agreed basis for determining these grants, and the Government has varied them from year to

year on an arbitary basis. In the 1986 budget, general purpose grants to the District Councils were cut by K 30 million in nominal terms, representing a real decline of more than 60 percent. This reduction, while difficult enough for the larger urban Councils with a reasonable economic base, will be disastrous for the smaller rural Councils that rely on Government grants as their major source of operating funds. Because the Councils have some autonomy in their financial affairs, many of them have been running up substantial overdrafts on their bank accounts, which represents a large potential liability on the central Government if the Councils are unable to pay. The Councils also routinely ignore their loan repayment obligations to the central Government, as well as loans guaranteed by the central Government from local financial institutions.

2.74 Employment levels and employee discipline are widely regarded as a serious problem at the District Councils. Council employees are responsible to the central Government Public Service Commission, and decisions on hiring, firing and transferring workers all lie outside the control of the local Councils. As such, the ability of Councils to hold employees accountable for their performance is seriously weakened. The existence of a single wage structure for all Councils burdens smaller rural Councils with inordinately high wages and prevents the larger Councils from attracting employees with needed managerial skills. As a result, the Councils tend to be substantially overstaffed, particularly with temporary workers, and the central Government has been trying to reduce employment levels at the Councils without a great deal of success. Another result has been a neglect of training for Council employees, both at the local level and at the central Government training institute at Chalimbana.

2.75 It would be prudent for the Government to reconsider its present plans for decentralization. Assigning additional functions to the local level when the Councils are already poorly equipped to manage their existing affairs would result in a further deterioration of essential public services. Given the critical shortages of trained manpower at both the central and local levels, the Government would be wise to proceed slowly, encouraging the larger urban Councils and minimizing responsibilities for the weaker rural Councils. At the same time, the Ministry of Decentralization needs to redefine its role from one of policing the activities of the Councils to being an effective advocate for stronger local government. This will require a realistic approach to problems of local government finance, with emphasis on strengthening local revenue sources, improving financial discipline, and establishing a consistent framework for grants to local Councils. Problems of manpower training, conditions of service, and local accountability need to be addressed on the same serious basis as these problems warrant for central Government employees.

Other Government Programs

2.76 The public expenditure review covered the budgets of ministries accounting for approximately 71 percent of direct operational expenditures in the 1986 budget.[26]/ The remaining expenditure categories cover internal and external security (Zambia Police - K 75.8 million, Ministry of Home Affairs - K 31.1 million, and Ministry of Defense - approximately K 275 million), foreign affairs (Ministry of Foreign Affairs - K 187.6 million), and Government administrative and legal functions (Cabinet Office - K 38.9 million, and Ministry of Legal Affairs - K 23.7 million). While their budgets have not been reviewed in any detail, these ministries will have to share in the burden for expenditure reduction if the core budgeting principle suggested earlier is adopted.

2.77 The largest budgetary allocation (other than the Ministry of Defense) is for the Ministry of Foreign Affairs. Zambia maintains a very large number (30) of foreign missions for a country of its size. Most of the expenditure for these missions is denominated in foreign exchange. The recent devaluation has substantially increased the cost of the missions in kwacha terms, and the 1986 budget for the Ministry of Foreign Affairs increased by approximately five-fold over the 1985 revised budget allocation. The Government has begun to reduce costs by recalling personnel and by closing missions in Portugal and Saudi Arabia, but given the very large burden that foreign missions are placing on the budget, the Government may have to consider additional closures or consolidation of missions.

2.78 The Government has stated its intention to reduce the administrative share of the budget, but this has been difficult to carry out. For example, the original budget for 1985 called for a reduction of expenditures on general administration by a third in constant prices. However, the revised 1985 budget included substantial supplemental allocations for virtually all administrative programs. This indicates that reductions in administrative programs will only be possible when the Government takes a firm decision to abolish or consolidate particular functions or departments. The Government has shown resolve in some areas. For example, the privilege of Government cars and drivers was abolished for almost all senior politicians and Government officials in early 1986 and officials were given the option of purchasing their own vehicles. This action will have only a limited effect on the budget as officials are being provided with transport allowances in lieu of cars, but it is an important step in beginning to abolish the special privileges that have crept into the budget. A more important action would be to eliminate funding for "prestige" building projects, which have little justification in a period of budgetary constraint. In the 1986 budget, these activities include the construction of UNIP Party headquarters (K 12 million), extension of the High Court (K 4 million), a library extension for the National Assembly (K 1.6 million), improvements to Independence Stadium (K 1 million) and various staff housing and other projects.

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[26]/Estimated as total expenditures less debt-service, subsidies, and pensions.

III. REFORMING THE GOVERNMENT BUDGET

A. Overview

3.01 The budget is in serious trouble. Virtually none of the services that are necessary for the long term development of Zambia's economic and human resources are operating well or being provided in adequate quantity. At the same time, a large amount of resources is being devoted to low priority activities and redundant employment. Zambia risks following the path of other countries undertaking economic recovery programs, which have left Government activities virtually disfunctional and social services moribund. The country simply cannot afford to continue spending a large share of national production on low return activities.

3.02 There are a number of political, institutional and social factors that have allowed Government services to deteriorate without remedial actions being taken. The most important factor has been a lack of clear political guidance for expenditure reform. Senior officials in the Party and the Government, preoccupied with the long economic decline gripping Zambia and the management of a complex economic reform program, have accepted the deterioration of Government services as an inevitable consequence of Zambia's economic condition. Unlike firms in the private and parastatal sectors that are trimming product lines, cutting costs and reducing employment, the Government has made little effort to establish priorities and reform its activities in any fundamental sense other than routine trimming of the budget. Yet, the process of expenditure reform that needs to go on in the Government is no different than what is being undertaken by virtually all other economic entities in Zambia. While difficult, it can be carried out and key services can be restored. A second factor that has hindered expenditure realignment is the failure of the planning and budgeting system to utilize senior officials in the operating ministries who have specialized sectoral knowledge. Planning has been viewed as an abstract process without direct relationship to day-to-day decision making, while budgeting has been conducted in a top-down fashion to meet short term financial constraints and has not been used in an active manner to choose between the Government's many competing priorities. It is unrealistic to expect the Ministry of Finance to develop a coherent program of expenditure realignment without the specialized knowledge available in the operating ministries, and a more responsive system of planning and budgeting will be a necessary part of the reform process. Finally, a third factor that has hampered expenditure reform is a narrow perspective on the social implications without recognizing longer term benefits. Thus, the Government has strongly resisted setting user fees for health and education, even though the resulting deterioration of services due to lack of funds has hurt recipients much more than the imposition of modest charges. Employment levels in the Government have been increased to compensate for the poor performance of the economy, even though the increased tax levels and deteriorating Government services have dampened employment creation in the productive sectors. Ultimately,

therefore, expenditure reform requires a revised definition of the role and functions of the Government in Zambia, one that recognizes the severe limitations of money and skilled manpower and develops a consensus within the Government and population on a coherent program for expenditure reform.

3.03 The program of reform which is proposed in this chapter is based on several principles which were implicit in the preceding discussion of sectoral expenditure programs:

(i) Accountability of Sectoral Ministries. While some shifting of resources between ministries will be necessary in order to meet the Government's development objectives, a major emphasis in expenditure reform must be on the realignment of expenditures within individual ministries to sustain core activities and generate additional revenues to support key objectives. This places much of the burden of expenditure realignment on sectoral ministries, rather than the Ministry of Finance.

(ii) Reduction of Government Services. Even if additional financial resources were available, the Government is overextended in terms of its managerial and technical capacity. Expenditure reform is necessary not only to reduce the budget deficit and improve national savings, but also to concentrate the Government's limited cadre of skilled personnel on delivering key services which are essential to economic recovery and the development of human resources.

(iii) Budgeting for Core Activities. In choosing what activities must be carried out, priority should be given to services which cannot be provided by other means, which are required for the productive growth of the economy and the direct well-being of the population, and which can be implemented at low cost relative to the expected benefits. This means that the Government should emphasize activities such as support services for smallholder agriculture, primary education, primary health care, and maintenance and rehabilitation of essential infrastructure. Programs involving direct participation in agricultural production, new infrastructure construction, and services for the middle and upper income groups should be reduced or transferred to other agencies or placed on a cost recovery basis.

3.04 The program of expenditure reform suggested in the following sections meets the macroeconomic and sectoral objectives laid out in previous chapters. While this program relies on the guiding principles stated above, it is by no means fixed or set in its specific content. Flexibility is available for the expression of national priorities and goals within the definition of individual expenditure programs. Nevertheless, the overall content of the expenditure program is sharply limited

by the highly constrained economic prospects for the budget which are described in Chapter I. Choices within the budget will therefore constitute the major vehicle for expenditure reform and require a careful weighing of trade-offs between relative priorities. Section B of this chapter describes the overall structure of the proposed expenditure reform program. Section C discusses major cross-sectoral issues which require resolution by the Government. Finally, Section D recommends improvements in planning and budgeting procedures.

B. The Core Government Expenditure Program, 1986-88

3.05 Table 3.1 summarizes the core expenditure program for the Government budget based on the discussion of sectoral priorities in Chapter II. Given the qualifications regarding various programs described in the previous chapter, the suggested budgetary allocations shown in Table 3.1 should be taken as indicative. In most cases, the shifts in expenditure would take several years to implement effectively. Nevertheless, the recommended allocations do indicate the order of magnitude of the changes in expenditures that could be expected to result from a realistic program of budgetary reform. The budgetary target used in Table 3.1 is consistent with the macroeconomic projections developed in Chapter I; i.e. consumer subsidies are eliminated by 1988 and other operational expenditures are constrained to zero real growth in aggregate terms. Within this envelope, there would be significant shifts of funds between sectors, with the core sectors (agriculture, health, education, roads and development administration) increasing from 41 percent of the 1986 budget to 58 percent in 1988, while expenditures for all other sectors would decrease from 47 percent of the budget in the 1986 budget to 42 percent in 1988.[1/] Expenditures for the various core sectors would increase in the range of 10 to 83 percent (the latter from a quite low base), while expenditures for sectors outside the core programs would have to decrease by 21 percent in real terms in order to stay within the budget constraint.

3.06 While shifts in funding allocations between sectors would be an important part of the budgetary reform program, it was emphasized in Chapter II that reallocations of funding within sectors would also be required to improve the delivery of services. The increase in funding by 30 percent recommended for agriculture programs in Table 3.1 would not be adequate to improve the delivery of essential services unless funds are also reallocated from programs such as area development to agricultural research and extension and agricultural credit. In the case of roads, the increase in the allocation for road maintenance would require that the Roads Department cease construction on new road projects and request donors to reallocate the remaining funds to road maintenance. Thus, an important prerequisite to any increase in funding for a core sector should be the development of a realistic sector plan which identifies priority activities within the sector and proposes a strategy for allocating funding between activities.

1/ The remaining 12 percentage points in the 1986 budget are attributable to subsidies.

Table 3.1: Core Government Expenditure Program, 1986-88
(K million in constant 1986 prices)

Expenditure Program	Estimate a/ 1985	Budget 1986	Budget As % of Total	Recommended 1988	Recommended As % of Total	Percentage Change g/
Core Sectors						
1. Agriculture	152	299	11	390	16	+30%
2. Health b/	145	203	8	253	11	+25%
3. Education c/	296	466	17	510	22	+10%
4. Roads	72	82	3	150	6	+83%
5. Development Administration d/	32	42	2	59	3	+40%
Sub-total	697	1092	41	1362	58	+24%
Other Sectors						
6. Subsidies	190	334	12	0	0	-100%
7. All others e/	872	1270	47	1000	42	-21%
Sub-total	1062	1604	59	1000	42	-37%
Total f/	1759	2696	100	2362	100	-12%

Notes

a/ 1985 estimated expenditures are in current prices.
b/ Based on K 50 million increase in user fees and general budget allocation and assumes K 50 million in cost savings and reductions in existing services.
c/ Includes capital expenditures.
d/ Based on Ministry of Finance and NCDP only.
e/ Residual category.
f/ Excluding debt-service and extraordinary expenditures.
g/ 1986 budget allocation to 1988 recommended allocation.

3.07 Reallocations of funding between various types of expenditures (such as personal emoluments, RDCs and capital expenditures) would also be a critical part of the program of budgetary reform. Much of the increase in funding for the core sectors would be used for RDCs in order to improve service delivery and maintenance, while cutbacks in the non-core sectors

would generally be at the expense of personal emoluments. Another important action would be improvements in the salary structure in order to attract and retain more highly qualified staff, while tightening controls on the employment of CDEs to reduce gross overstaffing at the lower skill levels. Changes in non-tax revenues will also be an important feature in the program of expenditure realigment. It was recommended in Chapter II that increases in user fees at higher level training institutions should be used to release Government funds for the improvement of primary education, while a large part of the recommended increase in health expenditures is expected to come from user charges. Finally, expenditure reform will involve substantial transition costs. The Government is already facing the problem of how to finance severance benefits for redundant employees and there is serious concern about how to assist terminated employees establish a new livelihood (for example, by using severance benefits to establish themselves in smallholder farming). In many cases, the Government may need to seek outside assistance to implement cost saving measures.

3.08 The recommended program of expenditure reform that results from the detailed sectoral analysis in Chapter II would affect virtually every aspect of the budgetary structure. It is clear that the Government must think of an extended period of implementation for expenditure reform with frequent reassessments and changes in direction. This is an immense and difficult task and one that must be broken down into its component parts in order to be managed successfully. Some of the most difficult tasks will involve cross sectoral issues of expenditure reform.

C. Inter-Sectoral Expenditure Issues

3.09 This section will address the following topics:

(a) wages and employment policy;
(b) funding of recurrent and capital expenditures;
(c) reductions in Government services;
(d) the social impact of expenditure reform;
(e) increasing non-tax revenues; and
(f) maintenance of Government assets.

3.10 Wages and Employment Policy. As of 1983, there were approximately 76,000 established posts in the civil service, of which 7,000 positions (9 percent) were vacant.[2/] The number of CDEs (which are additional to the established positions) is estimated to have been in the neighborhood of 51,000. There are approximately 7,000 established posts in the District Councils and an unknown number of temporary employees. Government employees therefore accounted for 37 percent of formal sector employment in 1983, which, in combination with the parastatal sector (38

2/ "Zambia: Wage Policy and the Structure of Wages and Employment," World Bank Report No. 5727-ZA, May 7, 1986. Due to the hiring freeze on employment in administrative positions since 1983, the number of vacant positions is estimated to have increased to about 10,000.

percent of formal sector employment) meant that three-quarters of the formal sector labor force was covered by public sector wage agreements. As such, public sector employment policies are important not only for their budget ramifications, but also for their impact on the structure and functioning of the labor market.

3.11 Personal emoluments are the largest single component of Government recurrent expenditures other than interest charges (32 percent in 1986), and the Government has recognized that reductions in the level of public sector employment will be necessary in order to reduce the budget deficit. The Government announced the following measures in January 1986:

- no new civil service posts to be created.
- no regrading or upgrading of existing posts.
- except for posts within the professional and technical scales, all vacant posts to be frozen.
- no new appointments except for funded posts in the professional and technical scales, and only after Cabinet Office authority has been obtained.
- reduction in the pensionable age of civil servants from 60 to 55 years for male officers and 55 to 50 years for female officers, with mandatory retirement for all officers at or above the pensionable age.
- more liberal retirement provisions for civil servants who wish to retire before their pensionable age.
- phased reduction in the number of CDEs by 40 percent over the next three years, with one-third of that number (approximately 6700 employees) required to leave by the end of 1986.
- the District Councils have been instructed to prune their staffing levels, and the Ministry of Decentralization is in the process of ensuring that this policy is carried out.
- as a budgetary target, the Government will restrict increases in its nominal wage bill to no more than 25 percent in 1986 and 10-15 percent in 1987 and 1988, implying a substantial reduction in real incomes for Government employees (inflation is envisaged to be about 50 percent in 1986, 35 percent in 1987 and 25 percent in 1988).[3]

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[3] The Government should also terminate the policy of providing guaranteed employment for all graduates of teacher training colleges and agricultural training institutes. The Government will need to scale-back the intake of these institutions until the demand for such graduates catches up with the current supply.

These steps, if fully implemented over time, will result in a significant reduction in the size and cost of the public service establishment. However, the Government should also monitor the impact of certain policies, such as the provision for earlier retirement, which could cause the Government to lose some of its most experienced employees.

3.12 Apart from the substantial financial burden of the present personnel establishment, the Government's most serious employment problem is the severe understaffing that occurs in higher skilled positions. Experience in other countries undertaking economic reform programs indicates that continuing shortages of skilled personnel can cause long term structural damage to the Government's capacity to maintain essential services. In the case of Zambia, the problem has been compounded both by the general decline in living standards and by deliberate Government decisions to impose a larger share of adjustment costs on higher income workers through a policy known as "narrowing the gap."

3.13 Government wage policies are established by salary review commissions appointed specifically for this purpose at roughly three-to-four year intervals. The report of the latest salary review commission (the Lavu II Commission) was accepted and implemented by the Government in late 1985. With a few notable exceptions, the Lavu II Commission continued policies established by previous commissions and awarded substantially higher percentage increases lower-grade civil servants (including CDEs) than to higher-grade employees.[4/] Between 1975 and 1983, the income of civil servants at the upper end of the grade scale (e.g., Undersecretary or Director, Grade S3) fell by 55 percent in real terms, while the income of the lowest level of salaried employees (e.g., Grade S21) fell by 17 percent in real terms.[5/] As a result, the highest and lowest paid salaries in the civil service differ by a factor of 7.3 to 1 (based on minimum salaries in each grade level), which is quite compressed as compared to Government pay scales in neighboring countries. While the original purpose of this policy was to promote social justice and protect lower income workers from the effects of economic decline, the impact on the ability of the Government to attract and retain highly qualified personnel has been devastating. Other results of the policy have been a decline in personal motivation and less incentive to pursue higher-level training, while experience from other countries indicates that salary compression can contribute to a greater incidence of outside business

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4/ The major differences introduced by the Lavu II commission were for higher percentage increases for the professional and technical scales than for administrative staff (such that very highly skilled professionals can now earn more than Permanent Secretaries), while on the lower end of the salary scale, a minimum wage floor of K200 per month was established for all Government workers regardless of qualifications.

5/ During the same period. the level of gross national income per capita fell by 18 percent in real terms. These comparisons do not adjust for the provision of fringe benefits (particularly housing) which have cushioned part of the impact of real wage declines.

interests (with potential conflicts on time and objectivity) and increasing corruption. Many of the core Government services described in the previous chapter are critically dependent on an adequate supply of skilled and motivated manpower, and the Government's own policy of Zambianization makes it a priority to fill these positions with local personnel rather than with foreign technical assistance. It would therefore be in the national interest to improve salaries at the higher grade levels of the civil service, a policy that a growing number of African governments are beginning to accept and implement.

3.14 Improving salaries for highly skilled personnel is necessary, but it will be neither easy nor politically popular. Given the fiscal constraints on the budget, higher salaries for skilled employees will have to come out of wage and employment restraint on the lower grades. The Government's current policy of enforcing a uniform reduction of 40 percent in the number of CDEs for all ministries needs to be reexamined. The previous discussion of sectoral expenditure programs identified several ministries with large contingents of underutilized CDEs (e.g., MAWD, MWS, MOH), and more substantial reductions in CDEs may be possible within these ministries. In the longer term, the Government should consider other methods of reducing its needs for employment of low skilled labor. Because of the large number of benefits and protections that have been extended to CDEs, this system no longer constitutes a useful means for the Government to vary its complement of temporary laborers as the work load requires. The Government should identify those positions currently staffed by CDEs that warrant permanent employment and incorporate the positions into the civil service. Many of the remaining positions should then be transformed over time into various types of contractual arrangements or eliminated. Contracting-out does not necessarily require the employment of an outside firm; for example, the "lengthman" system of road maintenance allows the Government to contract with individuals to perform specified types of routine maintenance on designated sections of roads, with payment made on a performance basis rather than as direct employment. For other types of services, the Government can contract with firms or groups of individuals (e.g., watchmen, building maintenance, simple construction). This approach would imply a substantial revision in current employment policies, but it would provide greater flexibility to the Government in its employment practices and resolve the current inadequacies of the CDE system at potentially lower cost. Alternatively, the Government can restrict the employment of CDEs through a substantial tightening of bureaucratic controls and increased emphasis on supervision and performance monitoring of employees.

3.15 Measures to reduce expenditures on personal emoluments and redress the internal consistency of the wage structure should not be seen in isolation from other steps to improve the management and use of human resources in the Government. The section on development administration in Chapter II has already discussed the need to improve staff development and training programs. Another program that the Government may wish to introduce is to provide information and support services to improve employee participation in manpower redeployment efforts. Many employees, particularly at the higher skill levels, will need to be transferred to other positions to strengthen the delivery of core services. The Government can

gain their support in making these changes by informing employees of the reasons for the policy changes and by providing training to assist them in making career shifts. Properly managed, the redeployment of the civil service can be used as an opportunity to increase professional motivation and reinforce pride in Government service, rather than viewing the process as a grim consequence of the need to reduce Government expenditures. In carrying out the redeployment program, there are likely to be costs for severance benefits and for training programs and other management assistance. This would be an excellent use for earmarked local counterpart funds that the Government is receiving as a result of the foreign exchange auction. Some donors have specified that local counterpart funds should be used to improve the delivery of Government services, but this runs a risk that the counterpart funds may expand services to an unsustainable level. If the Government can identify transitional costs involved in the process of public expenditure reform,this would be an appropriate use for earmarked counterpart funds without any longer-term expansionary consequences on Government services. To make this effort effective, the Government should provide a clear plan for managing the transitional problems of personnel realignment and identify those costs that can be appropriately funded with counterpart funds.

3.16 Funding of Recurrent and Capital Expenditures. Aside from skilled personnel, the scarcest input for expenditure programs is local funds for recurrent operating costs and capital expenditures. Historical PE/RDC ratios give some perspective on the compression of operating funds that has occurred, but they are not an adequate guide as to what the appropriate levels of RDCs should be in the future. Relative prices have changed drastically in recent years, particularly for the foreign exchange component of recurrent costs (e.g. fuel, vehicles, etc.), so that an analysis of the requirements for operating funds will have to be done on an individual departmental basis.

3.17 There are several changes that the Government can introduce to improve budgeting for local funds. The first is to allow greater flexibility for program managers to allocate funds between budget categories. The current budget structure is primarily oriented toward accounting control, and budgetary allocations are distributed over a very fine accounting classification.[6] Controlling officers are prohibited from making transfers between major categories of expenditures without explicit permission; for example, transfers to or from personal emoluments require the sanction of Parliament, while transfers of funds from capital projects to recurrent expenditures are prohibited. The process of budgetary approval and annual review reinforces this bias toward accounting control rather than performance. During the budgetary negotiations between operating ministries and the Ministry of Finance, the allocations for personal emoluments (including expenditures for CDEs) are based on past employment levels. The major attention in the discussions therefore turns to justifying individual line item allocations for RDCs, rather than

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[6]/For example, in the 1986 budget, PEs are broken down into at least 37 separate accounting categories, while RDCs involve nearly 100 categories of expenditures.

adjusting programs (and personnel) to fit the funds available.[7] Similarly, the annual Financial Report of the Ministry of Finance, which reviews the outcome of Government expenditures for the previous year, focuses only on the correspondence between actual and budgeted expenditures, with no consideration as to whether the expenditures were effective in achieving program objectives.

3.18 The protection that the current budgetary process affords to personal emoluments, combined with fairly weak controls over the employment of CDEs, goes a long way towards explaining why the Government budget has become skewed toward overstaffing. Similarly, the emphasis on scrutiny and control of RDCs without any reference to effects on program performance has contributed to the continued deterioration of Government services. Remedying this situation will require a gradual shift in the budgetary process toward greater emphasis on performance considerations and accountability, rather than expenditure control. The system of planning and budgeting introduced in Zambia over the past few years (to be described in the next section) has introduced concepts of program budgeting into the annual budgetary process. This planning process needs to be backed by a greater determination by the Ministry of Finance to:

(i) consider all categories of funding allocations, including personal emoluments and capital projects, to be flexible inputs in the annual budgetary process rather than based on past expenditure decisions;

(ii) link funding allocations for staffing and RDCs to program performance and the policy objectives of the Government, beginning with the core budgeting concept described in this report; and

(iii) involve knowledgeable officials from the operating ministries in the budgetary process, so that the implications of reallocations between programs and types of expenditures can be resolved by direct negotiations where feasible, or raised to a senior decision making level when necessary for policy guidance.

3.19 Apart from improvements in the system of planning and budgeting, the Government can obtain more efficient use of local funds by consolidating services and introducing improved technical and managerial procedures. Experience in Kenya has demonstrated that savings of 30-40 percent in drug costs are possible through adoption of pre-packaged kits for health centers and improvements in storage and distribution systems. Other areas where savings may be possible are in transport operations, maintenance activities and consolidation of agricultural research stations. As part of

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[7] This limited concept of budget negotiations is consistent with the fact that budget discussions are conducted at a relatively low level within the ministries (generally by accounting officers), and there is only limited scope for discussion of the policy implications of budgetary allocations at the level of the Permanent Secretary or above.

the expenditure realignment program for each sector, the Government should request that donors place particular emphasis on assisting with cost saving improvements, so that services can be provided at less cost to the budget. The Government should also reexamine its procurement procedures from the standpoint of cost effectiveness. Even relatively small purchases must follow Government tender procedures, which are cumbersome and result in high inventory costs and stock-outs due to procedural delays. Simpler and more flexible procurement methods could result in significantly lower prices from suppliers.

3.20 The Government also needs to set clearer priorities for the allocation of funds to domestically financed projects. In the 1986 budget, 88 percent of local capital funds are used for domestically financed projects, while only 12 percent are used for donor financed projects.[8] Many of the domestically financed projects involve very low priority activities, such as prestige construction projects and staff housing. It is inconsistent, at best, to use such a large share of local funds in low priority activities when many donor-financed projects are performing poorly due to shortages of local funds. The Government should apply uniform criteria to the selection of both local and foreign funded projects in order to get maximum returns from its scarce resources.

3.21 Reduction of Government Services. An important part of the expenditure reform program would involve reductions in the number of Government services offered to the public. This will involve very difficult decisions, and a number of programs which currently provide desirable services will have to be deemphasized in order to achieve the recommended expenditure targets. The Government should begin by eliminating programs whose justification has ceased to exist or which have not been effective in achieving their objectives, such as the Zambia National Service and the Rural Reconstruction Centers. Scrutiny of the Government budget will identify other areas of overlapping activities or poorly performing programs that can be eliminated. For example, despite the fact that prices in the economy have been decontrolled, the Government has maintained price review responsibilities in at least four separate Government departments and agencies.[9] Even the critical area of manpower development and training in the civil service is fragmented between several agencies, with responsibilities shared between the Directorate of Manpower Development and Training, the National Institute of Public Administration, the Management Services Board, and the Manpower Planning and Research Department of NCDP. In many cases, overlapping agencies have been established to avoid problems with

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[8] The local funding contribution accounts for only five percent of project costs, on average for donor-financed projects.

[9] The Prices and Incomes Commission (budget of K 1 million in 1986), the Price Control Department in the Ministry of Commerce and Industry (budget of K 859,700 in 1986), the Anti-Corruption Commission (budget of K 1,726,101 in 1986), and the Special Investigation Team for Economy and Trade in the Ministry of Home Affairs (budget of K 884,301).

reforming poorly performing agencies. This helps explain, for example, the proliferation of independent agricultural credit schemes described in Chapter II. In other cases, independent boards or commissions have been established to broaden the mandate of agencies or obtain relief from bureaucratic controls (e.g., the Zambia National Tourist Board). A review of these agencies shows, however, that they continue to be hampered by problems of shortages of qualified staff and operating funds. A rigorous program of combining Government departments and eliminating overlapping boards and commissions could therefore result in improved Government services as well as a reduction in costs and better utilization of skilled manpower.

3.22 Beyond eliminating obvious cases of overlapping responsibilities and poor performance, the Government may need to combine agencies in order to improve planning procedures. The most obvious case is in education, where the split between two separate ministries has hindered the development of educational policy and led to a de facto diversion of funds into higher education. The Government should also consider consolidation of the elaborate structure established to promote decentralization, including the Ministry of Decentralization and the nine Provincial ministries as well as the 55 District Councils. In view of the poor results of the decentralization program, a simpler system could well improve planning and performance at the local level as well as streamline the coordination of activities. Beyond these suggestions, however, it is clear that the Government will need to consider more radical surgery on its expenditure programs in order to meet the budgetary targets. The proposed reduction in non-core programs, equal to K 270 million in 1986 prices, cannot be accomplished simply by eliminating marginal activities. It will require a political consensus at the highest level in order to decide how far expenditure programs can be trimmed back in order to release resources for the core activities.

3.23 Social Impact of Expenditure Reform. Social development has had high priority with the Government since independence. The large stock of social facilities (schools, health centers, low-cost housing) that was created when the economy was buoyant has been a buffer against the decline in social services during the past decade. However, the analysis of expenditure programs in Chapter II showed that within the social sectors, there has been a significant redistribution of expenditures in three major ways:

(i) to the recurrent budget, at the expense of capital programs;

(ii) to wages and transfers, at the expense of other operating costs in the recurrent budgets; and

(iii) within the social sectors, to higher-level services at the expense of primary and secondary level services.

These trends have benefited some, while others have suffered. The gainers have been:

-- those employed by the social services; and

-- middle and higher income groups who consume services and transfers in larger quantities, particularly services which have been least pruned of inputs such as university education, urban hospitals, and subsidized employer-provided housing.

The losers are more numerous:

- those living in rural areas where services have not been fully developed and where services are first to be cut; and

- consumers of primary level services. In the education sector, urban residents have suffered most as rapid rural-urban migration has led to overcrowded primary schools and non-admission for many poor children. In the health sector, the expansion of primary health care for the rural poor has been retarded. In the housing sector, the needs of urban slum dwellers who could benefit from site and service programs and upgrading have been neglected.

The social sectors have also been plagued by inefficiencies which have consumed large amounts of resources, pushed up unit costs and reduced the coverage of services, at little benefit to anyone.

3.24 Experience with economic recovery programs in other countries demonstrates that social programs often suffer severely, with major cutbacks in services and deterioration in quality. However, this result is not necessary. Much of the decline in social services for lower income groups has been the result of a failure to adopt adequate programs of expenditure realignment, rather than a necessary consequence of the economic reform program. The Government can no longer offer to provide a wide ranging program of heavily subsidized social services and still maintain adequate coverage for the lower income group. In order for the Government to restore equity concerns in the distribution of social services, a greater emphasis on expenditure reform will be necessary. In particular, the following measures should be taken:

(i) Concentrate Government expenditures on programs which provide basic services to a large proportion of the population at relatively low cost, such as primary health care, primary education, and low cost site and service housing developments.

(ii) Programs which provide transfers to individuals, such as subsidized university education, free boarding in hospital facilities, and subsidized housing, should be replaced with programs based on ability-to-pay.

(iii) Introduce targeted transfer programs, such as the subsidy on roller meal, feeding programs for vulnerable groups such as lactating mothers and children, and education scholarships based on need for those who cannot otherwise afford to attend school.

(iv) Intensify cost reduction efforts in all social programs in order to achieve greater efficiency and lower unit costs.

These measures can ensure that all Zambians have access to a minimally acceptable level of social services, that the system neither penalizes nor excludes those who cannot pay, and that those who can afford to pay for privileged services should do so.

3.25 Increases in Non-tax Revenues. An important part of the expenditure reform program involves increases in non-tax revenues. Some of these revenues, such as delinquent loan repayments from parastatals and District Councils, need better administrative follow-up and more rigorous application of sanctions for non-payment in order to improve their collection performance significantly. However, in most cases, increases in non-tax revenues will have to come from increases in fees and charges on users of Government services. In some cases (e.g., casino license fees, motor vehicle licenses), there is little social justification for maintaining low fees, and the main requirement to raise fees is the political conviction to do so in the face of inevitable public protest. In other cases, the Government will need to make a deliberate choice to emphasize revenue aspects of particular services, such as water rates, mining licenses for precious and semi-precious gems, fees for the use of Government land, charges for veterinary services, and advertising revenues for the Zambia Broadcasting Service. Probably the greatest sensitivity to increased charges, however, will be in the social sectors, particularly health, education and housing.

3.26 Experience from other countries shows that cost recovery in the social sectors can be a powerful factor for improving cost-efficiency. Problems of inefficiency in the social services in Zambia come from both demand and supply factors. Demand problems arise because recipients of Government services consume a greater quantity of services (e.g., through practices such as the over-prescribing of drugs) than would be the case if their cost is borne directly. Supply factors come in because program managers become concerned with problems of internal administration rather than providing services to their clients, who provide no direct input into setting priorities. For example, officials in one of the education ministries indicated that their first objective was to provide employment for the excess number of teachers being produced by the teacher training colleges, rather than increasing the funding for supplies at the primary level. A further problem with subsidized services is the lack of objective criteria to judge the viability of investments. This helps explain, for example, why such a large proportion of locally funded capital projects involve the construction of staff housing to benefit a limited number of employees.

3.27 In fact, many officials in the operating ministries in Zambia are quite prepared to discuss cost recovery and generally agree that present charges are too low and could be increased significantly without disrupting Government services. The two main factors which have dissuaded them from increasing revenues are political opposition and a lack of incentives for the ministry to take on the task. Political resistance is a constant problem. Several officials indicated that they had tried to increase fees and were immediately subject to intense attack from senior political figures. Greater support and political consensus on cost recovery will be necessary in order to make much headway. The problem of incentives can be addressed at a technical level, however, and can be of assistance in gaining the political commitment for increased fees. All revenues are currently credited directly to the central account of the Ministry of Finance, and operating ministries receive no benefit from improved revenue collections. The budget circulars published each year encourage ministries to increase revenues wherever possible. In practice, budget discussions are directed almost entirely to matters of expenditure control, and revenue performance receives little attention in this process. As a result, ministries have little motivation to take the political heat resulting from revenue increases. There are a variety of procedures available by which the operating ministries can be given more incentives to raise revenues. One of the simplest methods is to budget for the release of funds from the Ministry of Finance on the basis of approved expenditures net of revenue collections, so that the ministries are expected to cover the remainder of their operating costs directly from revenues. Under this system, setting of cost recovery charges should be an important part of the annual budgetary discussions. In some cases (e.g. the Department of Lands), the budget would call for a net contribution of funds to the Ministry of Finance after deduction of all operating costs. This system has been tried in limited form in Zambia (e.g. the Department of National Parks and Wildlife Services is allowed to retain revenues from hunting licenses to support anti-poaching activities), and it desires a broader trial in other operating ministries.

3.28 Maintenance of Government Assets. The Government holds a substantial stock of capital assets, including office buildings, staff housing, and motor vehicles, almost all of which have been allowed to run down for lack of maintenance. The situation with Government vehicles is the most graphic. Between 1981 and 1984, the number of Government vehicles expanded from 9400 to 16,000, an annual rate of increase of 20 percent. During the same period, the number of vehicles receiving maintenance services from the Mechanical Services Department (MSD) in the Ministry of Works and supplies declined from 4670 to 3770, an annual rate of decline of 9 percent. By the end of 1984, less than one-quarter of Government vehicles were receiving maintenance from MSD, which is supposed to be the main provider of maintenance services for all Government vehicles. By the beginning of 1986, less than 50 percent of the vehicle fleet in the Ministry of Health was in operating condition, and one-third of the operating vehicles rated in poor condition. Eleven out of 12 mobile X-ray units were out of service and the last vehicle was running poorly.

3.29 The poor performance of MSD is partly due to a lack of spare parts, a situation that has been eased by the introduction of the foreign exchange auction. However, MSD's problems also reflect the low priority assigned to maintenance services by both MWS and the Ministry of Finance. A donor financed project approved in 1978 was designed to strengthen the operations of MSD and improve the provision of spare parts. The project has been implemented very slowly due to low allocations of local counterpart funds. The 1986 budget allocation for MSD provided K 12.6 million for personal emoluments and only K 1 million for spare parts, a cut of 66 percent in nominal terms from the budget for spare parts in 1985. As a result of this situation, other operating ministries have persuaded donors to purchase new vehicles to replace those which have failed from lack of maintenance. In addition, a large share of the locally financed capital projects (other than construction projects) are used for the purchase of new vehicles. Ministries with particularly favorable access to donor financing (e.g., the Ministry of Health) are developing their own maintenance facilities, to be staffed and funded by the donor agencies. In the meantime, the Government is considering establishing MSD as a parastatal in order to improve salary scales and reduce bureaucratic constraints on its operations. There are a number of private garages already available in Zambia which could take over responsibility for a large part of the maintenance of Government vehicles, and the Government should permit ministries to use private facilities for vehicle maintenance and reduce reliance on MSD to a more manageable level.

3.30 Maintenance of Government buildings and staff housing has also received low priority. In the 1986 budget, expenditures for housing maintenance are budgeted at K 25 million, a decrease of 50 percent in real terms from 1985. As with other departments, the allocation of maintenance expenditures is overwhelmingly skewed to personal emoluments. The Government's best solution in the case of staff housing would be to divest itself of much of the housing stock over time and raise rents on the remaining stock to economic levels in order to support a higher level of maintenance. For other Government buildings, the Government should allocate a larger share of expenditures to maintenance activities as part of the overall program of expenditure realignment.

D. Planning and Budgeting

3.31 A fundamental requirement for making progress on expenditure reform is to have a system for planning and budgeting that provides information to decision makers about the implications of expenditure choices and provides guidance and direction to the operating ministries on how to modify their expenditure programs to conform with the priorities of the Government. In this regard, the system of planning and budgeting that was in operation in Zambia until recently did not meet these requirements.

3.32 Over the past several years, efforts have been under way to introduce a revised system of planning and budgeting that will address these problems. Beginning with the 1986 fiscal year, the Government budget was accompanied by an Annual Plan which was intended to explain and justify the choices which had been made in developing the budgetary allocations.

By necessity, the system was operated in the first year by the Ministry of Finance and NCDP. The next step is to include the active participation of the operating ministries. This section will analyze the changes which are being introduced in the planning and budgeting system and the further developments that will be required to make it a flexible and efficient mechanism for guiding expenditure choices. In view of the evolving nature of the system, the discussion will begin by providing an overview of the planning and budgeting system as it operated up to 1985, present a picture of how the system ought to work once the changes currently being implemented are in place, and analyze the steps required to complete the process.

3.33 The Previous Planning and Budgeting Cycle. Up until 1985, the planning and budgeting cycle began with a request from MOF that ministries should submit bids for their next year's recurrent and capital budgets, the former to the MOF and the latter to the NCDP. In principle, these bids reflected what each ministry felt it needed to carry out its functions; but they often included tactical elements meant to improve bargaining positions, and in any case they bore little resemblance to what could be afforded. Separate review processes in MOF (for recurrent expenditures) and NCDP (for capital programs) focused on cutting these bids down to fit available resources. The revised bids, plus proposals for non-ministerial expenditures such as subsidies and Constitutional and Statutory expenditures, were submitted to Cabinet where further changes might be introduced, and then to Parliament for final approval. About midway through the budget year, an Annual (Development) Plan was issued by NCDP, which described the approved capital estimates in the context of the current Five Year National Development Plan.

3.34 While this system worked reasonably well when revenues were abundant, it was incapable of managing a situation of increasing scarcity. The principal deficiencies of the system resulted from a variety of factors:

(i) Inadequate information. Operating agencies had little knowledge of the likely amount of resources they would receive or the Government's overall priorities. The MOF and NCDP, while possessing knowledge of overall resource constraints, had little detailed knowledge of individual programs and no analytically sound basis on which to cut bids to size.

(ii) Insufficient degrees of freedom to affect budget allocations. As resources became more limited, pressures to protect personal emoluments, transfer payments and administrative services increased. This in turn led to a serious deterioration in program performance and failures to complete projects on schedule.

(iii) Lack of accountability. Line ministries had only limited influence over the allocation of funds and little sense that budget allocations were affected by performance. As a consequence, they did not see the need for careful analysis to determine how best to allocate the funds they received.

(iv) Low priority accorded to planning. The only relevant document in the planning and budgeting cycle was the budget itself. The Annual Plan was prepared after the budget was approved and was largely irrelevant.

(v) Lack of multi-year planning horizon. Because the planning and budgeting system was concerned only with the next budget year, insufficient attention was paid to the future implications of decisions made in the current year.

3.35 Analysis to establish budget allocations in conformity with development priorities was further inhibited by other aspects of the budget structure. Recurrent and capital accounts were agreed separately, with little correspondence between the priorities in each. Budget heads were organized by functional departments rather than programs or activities, so that total spending on a program (e.g., primary health care) was not readily apparent. Expenditure categories were not organized by meaningful input types; for example, expenditures on personal emoluments were presented in two separate places. It was not even possible without reorganizing budget categories to determine whether the stated principles for budgeting were being followed — for example, whether economic sectors were being given priority over administrative services or whether ongoing projects were being completed before new projects are begun.

3.36 The Revised Planning and Budgeting Cycle. Table 3.2 presents an outline of the steps involved in the new planning and budgeting cycle as it is now envisioned. The cycle begins with a projection of the Government's resources and major expenditure obligations for the coming three years. Tentative allocations indicating how the available resources will divided between sectors are also developed. From these materials, each ministry responsible for a sector is given a set of tentative expenditure guidelines on which to begin their analysis.[10/] In order to allow adequate time for the analysis, the cycle should begin early in the year, perhaps by April.

3.37 Using the expenditure guidelines, each ministry or group of ministries would develop a strategic plan for its sector which answers the following questions: How should resources be allocated among programs within the sector? What changes are necessary in sector programs in order to make most effective use of the funds? To what extent can the goals of the sector be achieved over this period with the given budget allocation? What would be the implications of a reduction or an increase in funds? The draft sector chapters are intended to provide a complete justification for the answers to these questions; the answers without supporting evidence would be of little use in the budget process.

10/ A program may involve more than one ministry, as in the case of agriculture or education.

Table 3.2: Major Steps in the Revised Planning and Budgeting Cycle

April	-Development of work programs, terms of reference for special studies and chapter outlines, and assignment of responsibilities.
	-Preliminary projections of Government resources and major expenditure obligations.
May	-Tentative expenditure guidelines issued to ministries.
June/July	-Completion of special studies and analyses for use in Annual Plan.
August	-Submission of draft sector chapters by ministries.
September	-Revised projection of Government resources and expenditure obligations.
	-Submission of draft budget paper to Central Committee and Cabinet for approval.
October	-Budget circular with final ministry ceilings and instructions issued to ministries.
November	-Submission of budget estimates by ministries.
December	-Final revisions of revenue and other estimates.
January	-Submission of Annual Plan and Budget to Parliament for approval.

3.38 The submissions containing answers to these questions and any supporting materials will be reviewed by NCDP and MOF and used as a basis for revising the allocations between sectors. By August when they are received, revised estimates of total resources should have been developed. From these materials, a draft budget paper will be prepared for presentation to the Central Committee and Cabinet. This document should present the principal issues of economic policy--most importantly, the resource constraints and major sector problems--and propose policies and expenditure allocations to deal with them. Once accepted by the Central Committee and Cabinet, MOF will prepare a Budget Circular with instructions for the ministries and final ceilings for preparing the budget estimates. It should be possible to issue this circular in October and receive back responses within a month to a half. At that time, adjustments can be made based on the latest macroeconomic forecasts, so that the final version of the Annual Plan and the budget can be issued by the end of the year.

3.39 Content of the Annual Plan and the Budget. The Annual Plan is intended to cover a three-year period and be updated each year. This extension has been introduced to provide a longer term prospective on the resources likely to be available and to force future commitments and consequences of current decisions to be taken into account in making budget decisions. In addition, it will encourage the planning of phased series of changes in expenditure programs, for example in Government employment. To facilitate analysis, the Annual Plan uses an expenditure classification system that is different from the budget. The revised system organizes budget items into sectors and, within sectors, programs which are more homogeneous with respect to activities. Expenditures on each program are broken down by types of economic inputs (personal emoluments, RDCs, capital expenditures, etc.), as is done in the budget. This categorization permits one to observe just how much is being spent to achieve different objectives and to combine expenditure estimates with other materials to assess program performance. A table that presents the definitional correspondence between budget line items and sector and program heads has been developed (Annex B). From this table, a computer program can be prepared that permits rapid translation in either direction.

3.40 The Annual Plan is comprised of three main parts:

A. Macroeconomic and Financial Plan. This chapter presents the expenditure ceilings for the budget and justifies the overall revenue and expenditure targets on the basis of a medium term financial plan.

B. Overview of Sector Allocations. This chapter is meant to summarize the expenditure priorities of the Government and to justify the final allocations of expenditures between sectors in terms of these priorities.

C. Sector Chapters. These chapters assess the performance of various programs within each sector and analyse and explain allocations to these programs and to subprogram categories. They will follow a common outline and include a standard set of tables which explain the detailed budgetary allocations and provide a common basis for comparisons across sectors and programs.

In order to correspond with this integrated planning approach, the budget structure was revised in 1985 to combine the recurrent and capital accounts and consolidate expenditures of similar economic types (e.g., all expenditures on personal emoluments are now in one category).

3.41 Role of MOF, NCDP and Operating Ministries. The new system of planning and budgeting requires that Government agencies operate somewhat differently than they have in the past. The division of labor between MOF and NCDP is no longer based on the division of the budget into recurrent and capital accounts. Instead, MOF will have responsibility for all aspects of managing the budget and NCDP for all aspects of the Annual Plan. However, these two agencies cannot operate independently of each

other. The MOF must be intimately involved in establishing the medium term financial plan and in reviewing sector submissions. NCDP must be involved in establishing budget guidelines that correspond with priorities stated in the Annual Plan; it must also strengthen its analytical capabilities, particularly at the sector, program and project levels, in order to review the sectoral submissions from the operating ministries.

3.42 The participation of the operating ministries is much more important under the new planning system. In the past, budget requests were gathered from various spending agencies within a ministry, added up and reviewed by budget or accounting officers, and submitted to MOF. In the end, by cutting these requests down to size, MOF (and NCDP for the capital budget) effectively determined, item by item, just what a ministry's budget would be. The new system requires ministries to take more responsibility for the outcome of the budget discussions. They can affect the ceilings allocated to them by the quality of the submission they provide to the Annual Plan; and they are required to decide just how they wish to allocate this ceiling to budget line items under their jurisdiction. These tasks require the skills of planners and policy makers rather than accounting officers, and the operating ministries will have to reorganize their work loads and strengthen their planning units to accommodate these new functions.

3.43 Next Steps. During 1985, a draft Annual Plan was produced before the budget guidelines were established and a final Annual Plan was submitted to Parliament along with the 1986 Budget. This was a significant accomplishment in a relatively short time. However, the quality of the analysis included in the Annual Plan was generally regarded as inadequate, and the proposed allocations had far less effect on the budget than was intended. The reasons for this were: lack of time and priority for the task; lack of experienced personnel; failure to involve the most experienced and knowledgeable individuals in the operating ministries; inadequate guidance from senior policy makers; and the extreme uncertainty about the budget allocations because of the rapidly changing economic climate.

3.44 The experience of the first year suggests that a number of mid-course corrections are required to complete the transition from the old procedures to the new system:

(i) The Central Committee and Cabinet should sanction the new planning procedures. In particular, they should indicate that the critical decision point for them will be the budget allocation between ministries and that this will be based on the analysis presented in the draft Annual Plan. This is a key step in forcing the ministries to take more responsibility for the quality of their analysis and to abide by budget ceilings and guidelines once decided upon.

(ii) NCDP should work with the ministries to improve their understanding of the new procedures. This can be facilitated by developing written materials and holding seminars to explain

the system and by developing chapter outlines and providing assistance to the ministries as needed. Motivation will come with increased understanding, as well as through directives from the Central Committee and the Cabinet endorsing these new procedures.

(iii) Development of performance indicators for monitoring expenditure programs is an important long term task. It can be speeded up by the establishment of working parties that include program specialists.

Numerous other steps should be undertaken at the same time, such as starting the cycle much earlier in the year, appointing a high level steering committee to guide the process, and developing a series of special studies on major expenditure problems. However, the above steps are of highest priority in order to press forward rapidly with the institutionalization of the new system.

3.45 Expenditure priorities are often undone during the process of supplemental appropriations. For example, supplemental appropriations to 1985 budget equalled 19 percent of the budget as originally presented, and the Government was in arrears to its suppliers by an additional K 100 million at the end of the year. This occurred despite the fact that the Minister of Finance announced in the budget speech in January 1985 that planned expenditures in the budget were too high and would be constrained during the year. To some extent 1985 was an exceptional year, as it included a large devaluation in the final quarter and a wage settlement with the civil service union in the middle of the year. However, the supplemental appropriations also included a significant increase in the allocation for administrative services, despite earlier policy statements to the contrary. In order to maintain the credibility of the budgeting system, the planning process and the review of supplemental appropriations will need to be more closely integrated. This should involve:

(i) In the initial planning for the next fiscal year, cuts in ministerial budgets should be related to specified reductions in services or other activities. This is intended to ensure that an element of realism exists in the initial estimates and to notify the ministries of the actions expected of them.

(ii) In the supplemental appropriations process, the revised estimates should be compared to the initial budget by NCDP and the reasons for any departure identified. Where the problem was an unrealistic initial estimate, this should be used to modify the budgetary provision for the next year; but where a ministry has overspent its budget by expanding services or by failing to contract activities, this should be reviewed at a senior level for appropriate action.

IV. THE PARASTATAL INVESTMENT PROGRAM

A. Parastatal Investment and Performance

4.01 Parastatals play a major role in the Zambian economy, and their economic viability and responsiveness will be important factors in determining the speed at which economic recovery resumes. Zambia currently has some 147 parastatals operating in every major sector of the economy. Of these, 120 companies are grouped together under the Zambia Industrial and Mining Corporation (ZIMCO) state holding company. Eighty-two of the ZIMCO companies are wholly state-owned, 28 are majority state-owned, and 10 companies have minority state participation. The non-ZIMCO parastatals (approximately 27; sources vary on the actual number) consist of corporations and boards established by Parliamentary statute and controlled directly by sectoral ministries. The most important non-ZIMCO companies are in: agriculture (NAMBOARD and the Lint Company of Zambia, LINTCO); finance (the Development Bank of Zambia and the Zambia Agricultural Development Bank); housing (National Housing Authority); and railways (TAZARA). While the number of parastatals in Zambia is not particularly large in comparison with other developing countries, their economic importance is unusual. Parastatals produce over 30 percent of Zambia's GDP, as compared to 10 percent of GDP on average in countries such as Bolivia, Ivory Coast, Niger, Togo and Kenya. Parastatals account for 60 percent of investment in Zambia, as compared to approximately 40 percent in Bolivia and the Ivory Coast and 21 percent in Malawi. They also provide for 37 percent of formal sector employment, as compared to 32 percent in Tanzania and 8 percent in Kenya.

4.02 Given the economic importance of the parastatals, it is worthwhile considering the past performance and the problems facing the parastatal sector on a general level as a background for the subsequent discussion of the parastatal investment program. Most attention will be placed on the ZIMCO group of companies. While the non-ZIMCO companies also play important roles in the economy, their policies and operations are tied much more directly to ministerial direction, and accordingly their expenditure programs were included, where appropriate, in the discussion of the Government budget in Chapter II. For the ZIMCO group of companies, mining is by far the most important activity, accounting for about one-third of turnover, followed by energy and industry with about 20 percent of turnover each (see Table 4.1). Other important sectors are transportation and trading, with 8 percent of turnover each. Finance, communications, hotels, agriculture and real estate (including construction) complete the ZIMCO portfolio. Given the dominant role of the mining industry in Zambia and the heavy concentration of ZIMCO in public utility-type activities (e.g., railroads, pipelines, airways, telecommunications), it is not surprising that a large share of parastatal activity is characterized by monopoly and monopsony type relationships. Outside ZIMCO, NAMBOARD's monopoly control of maize marketing has created a number of problems and inefficiencies which led to the Government's recent decision to open maize marketing to the participation of private traders. Even beyond these sectors, however,

the limited size of the Zambian market and the policies of the Government have encouraged a high degree of concentration in economic activity. Within the industrial sector, ZIMCO maintains an effective monopoly position in the domestic production of fertilizer, cement, and automobile assembly, while oligopoly-type structures exist in textiles and oilseed processing.

Table 4.1: ZIMCO: Turnover by Sector, 1981-86

Sector	1981-82		1982-83		1983-84		1984-85		1985-86 a/	
	K million	%	K Million	%	K Million	%	K Million	%	K Million	%
Mining	1,005.7	33.7	1,003.1	30.9	1,461.2	35.3	1,950.3	37.1	1,343.8	40.5
Industry	685.0	22.9	787.7	24.2	923.9	22.3	1,077.6	20.5	633.3	19.1
Agriculture	19.0	0.6	21.6	0.7	36.5	0.9	39.4	0.7	35.3	1.1
Energy	604.3	20.2	679.1	20.9	790.8	19.1	973.8	18.5	494.8	14.9
Finance	104.8	3.5	120.8	3.7	144.5	3.5	173.6	3.3	160.1	4.8
Transport	246.8	8.3	256.9	7.9	281.1	6.8	441.1	8.4	273.7	8.2
Communications	56.5	1.9	65.2	2.0	89.4	2.2	103.3	2.0	68.7	2.1
Trading	224.9	7.5	272.0	8.4	373.3	9.0	449.2	8.5	282.6	8.5
Hotels	18.7	0.6	24.1	0.7	32.5	0.8	40.2	0.8	22.4	0.7
Real estate	19.8	0.7	18.3	0.6	8.2	0.2	13.8	0.3	7.0	0.2
Total	2,985.5	100.0	3,248.8	100.0	4,141.4	100.0	5,262.3	100.0	3,321.7	100.0

Source: ZIMCO

a/ 6 months

4.03 A number of institutional and managerial changes have been introduced by ZIMCO over the past several years to provide enterprises with greater capacity and autonomy to respond to the changing economic environment. These initiatives include termination of direct political control of ministries over the parastatals, improvements in corporate planning procedures, and elimination of most direct subsidy payments to the parastatals. These institutional factors can be important in determining the performance of macroeconomic indicators. For example, the poor profitability of the parastatal sector after 1982 was attributable to strong political pressures which continued to hold down prices despite the fact that they were formally decontrolled. The large and rapid price increases which occurred following the introduction of the foreign exchange auction were at least partially based on the desire of parastatal managers to reestablish an adequate level of profitability, as well as an implicit decision to relax informal price controls.

4.04 Greater dependence on market forces and competitive pressures has been generally accepted by the Government as an essential step in improving efficiency in the use of foreign and domestic resources. Nevertheless, given the prevailing market structure of economic activity in Zambia, it is clear that competition will be only one factor, although a critical and in many cases a dominant one, in setting prices and guiding investment decisions for the parastatal sector. The remainder of this section examines additional factors that affect the environment for parastatal performance and investment. The major topics discussed in this section are the level of investment and savings by the parastatals and the contribution of the parastatal sector to the Government's budget deficit and the external debt problem.

4.05 Savings and Investment. Consolidated accounts of the ZIMCO group of enterprises show a mediocre financial performance.[1] Since 1981, the group has earned a pretax profit in three out of five years (see Table 4.2). After tax profits were last earned in 1980. As expected, these results are heavily influenced by the performance of the mining industry. If mining is excluded, the remaining enterprises earned a consolidated pretax profit throughout the period. The group's overall return on assets was low throughout this period, between 2.4 and 4.1 percent even in the profitable years. Again, this result masks considerable variation, with financial enterprises showing a return of over 10 percent while trading and, more recently, energy and hotels also showed better returns than average. Industry, agriculture, transport and real estate have been consistently poor performers, the latter three showing losses throughout the period. Even the modest profits and returns shown in Table 4.2 are overstated, however, as they are calculated on the basis of historical asset costs up until the end of 1984 and partially revalued assets (in the mining sector only) thereafter. If profits were calculated on the basis of fully revalued assets, they would be much lower due to higher depreciation charges and would probably be negative for capital intensive sectors such as mining, energy and industry.

4.06 Parastatal pricing policy is a major instrument for improving aggregate savings performance in the Zambian economy. Because of low profitability, companies have been unable to generate adequate funds to cover maintenance and replacement costs. Low profitability has also contributed to liquidity problems for the parastatals and an unfavorable capital structure. Three sectors (agriculture, energy and transport) had negative working capital in September, 1985, and the current ratios for the remaining sectors were generally poor (see Table 4.3). The group debt/equity ratio stood at 57 percent; this was a significant decline from the debt/equity ratio of over 100 percent in 1984 as a result of Government conversion of loans to Zambia Railways and Nitrogen Chemicals of Zambia Ltd (NCZ) into equity. Following the auction, which caused a large increase in the kwacha value of the foreign exchange portion of the debt, total ZIMCO indebtedness is estimated to have increased to K 6,000 million.

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[1]/Consolidated accounts exist for the ZIMCO group for the period since 1980. Accounts for enterprises outside of ZIMCO are not available on a consistent basis.

Table 4.2: ZIMCO: Profit (Loss) Before Taxes and Rate of Return, 1981-86
(K thousand in current prices)

Sector	1981-82		1982-83		1983-84		1984-85		1985-86 a/	
	Profit	ROCE	Profit	ROCE	Profit	ROCE	Profit	ROCE	Profit	ROCE
Mining	(141.6)	neg	(122.7)	neg	100.9	[illegible].3	149.9	3.6	(1.6)	neg
Industry	25.6	3.1	12.6	1.7	12.7	1.6	(2.5)	neg	19.5	2.1
Agriculture	(9.7)	neg	(21.0)	neg	(30.3)	neg	(28.2)	neg	(10.4)	neg
Energy	14.9	3.1	6.9	1.4	31.3	5.7	36.6	5.6	(14.0)	neg
Finance	41.3	10.3	46.1	10.2	55.4	10.6	65.4	10.7	46.8	10.1
Transport	(27.0)	neg	(30.6)	neg	(58.6)	neg	(63.8)	neg	6.8	2.1
Communications	5.3	7.1	7.2	7.6	14.8	13.2	5.0	3.4	2.5	1.6
Trading	10.8	17.4	14.8	22.1	8.8	11.2	6.8	6.4	4.0	3.7
Hotels	0.7	2.3	0.8	2.5	1.9	5.4	3.3	6.7	3.0	4.9
Real estate	(2.5)	neg	(14.3)	neg	(3.8)	neg	(1.8)	neg	(0.6)	neg
Group Total	(82.2)	neg	(100.2)	neg	133.1	3.1	170.7	2.4	56.0	4.1

Source: ZIMCO

ROCE = Return on Capital Employed.

a/ 6 months

Table 4.3: ZIMCO: Summarized Balance Sheet as of September 1985

Sector	Fixed Assets		Current Assets	Current Liabilities	Net Working Capital	Current ratio	Net Assets	Shareholders Funds		Long-Term Debt	
	K million	%	K Million	K Million	K Million		K Million	K Million	%	K Million	%
Mining	4,487.4	62.0	1,313.5	(1,281.2)	32.3	1.0	4,519.7	3,255.5	68.5	1,264.2	49.8
Industry	822.6	11.4	704.5	(612.9)	91.6	1.1	914.2	598.7	12.6	315.4	12.4
Agriculture	138.8	1.9	128.6	(198.0)	(69.4)	0.6	69.5	23.4	0.5	46.1	1.8
Energy	713.5	9.9	382.9	(442.3)	(5.4)	0.9	654.1	383.5	8.1	270.6	10.7
Finance	361.7	5.0	1,138.4	(1,036.2)	102.2	1.1	463.8	171.4	3.6	292.5	11.5
Transport	420.8	5.8	148.2	(236.2)	(90.0)	0.6	330.7	134.1	2.8	196.6	7.7
Communications	123.9	1.7	66.2	(37.9)	28.3	1.7	152.2	60.4	1.3	91.8	3.6
Trading	98.0	1.4	144.0	(134.6)	9.4	1.1	107.4	93.8	2.0	13.6	0.5
Hotels	53.7	0.7	24.5	(17.2)	7.3	1.4	61.0	32.9	0.7	28.2	1.1
Real estate	18.6	0.3	17.2	(16.5)	0.7	1.0	19.3	1.2	0.0	18.0	0.7
Total	7,239.0	100.0	4,068.0	(4,014.0)	53.0		7,291.9	4,754.9	100.0	2,537.0	100.0

Source: ZIMCO

Note: Assets for ZCCM have been partially revalued on a current cost basis. All other assets are valued on a historical cost bais.

4.07 Table 4.4 summarizes the sources and financing of gross capital formation by the ZIMCO group over the past several years. Over half of parastatal investment has been undertaken in the mining sector, followed by industry, transport, energy and telecommunications. The parastatals have been dependent on various forms of debt financing for over three-quarters of their investment needs, and self-financed resources provided just 23 percent of the required funds during the period 1980-84. This heavy dependence on debt-financing has contributed to the debt-servicing difficulties being experienced by many of the enterprises. An additional problem has been the poor performance of many of the investments. As regards the economic efficiency of the investments, data which are available for 1965-80 indicate that in industrial sectors dominated by parastatals (food and beverages, textiles, wood and wood products, chemicals and non-metallic mineral products), there has been a tendency for the capital/labor ratio to increase over time and capital productivity to decrease.[2/]

Table 4.4: ZIMCO: Sources and Financing of Gross Capital Formation (1980-84)

Sources of Investment [a/]		Financing of Investment	
Mining	53%	Self-financing	23%
Industry	14%	Capital Grants	1%
Energy	9%	Long-Term Loans	20%
Transport	13%	Insurance Funds	5%
Telecommunications	4%	Government Loans and Equity Contribution	27%
Agriculture	3%	Short-term Debt and Increase/Decrease in Accounts Payable [b/]	24%
Other (finance, hotels trading, real estate)	4%		
	100%		100%

Source: ZIMCO

a/ Data for period 1981-84.
b/ Residual category.

4.08 Improvements in parastatal pricing policies would undoubtedly contribute significantly to better investment decisions by providing a clearer indication of the economic return on investments and making enterprises aware of the financial implications of their investment decisions. For enterprises which operate in a competitive environment, either from

2/"Zambia: Industrial Policy and Performance," World Bank Report No. 4436-ZA, August, 1984.

local or foreign competitors, market forces can be largely relied on to set prices and provide incentives for improved investment behavior. For parastatals which operate in monopolistic or monopsonistic environments, however, more direct interventions in pricing policies may be required. Target rates of return based on fully revalued assets can provide a reasonable guide for price setting. Due to the complexity of the calculations, technical assistance may be required to advise on appropriate pricing policies for particular parastatals, although price changes based on approximate indicators can be carried out immediately. In practice, the process of changing prices may need to be done in several stages. In many cases, economic prices will be substantially above current prices prevailing in Zambia, and some phasing of price increases is warranted to allow consumers time to make adjustments. Price changes should also be combined with measures to control costs and improve operating efficiencies, so that price increases do not simply provide a cost cushion to protect inefficient firms. In view of the critical need to improve the savings behavior and liquidity of the parastatal sector, the process of reviewing prices for the major parastatals should be initiated immediately.

4.09 One option that the Government has for directly improving savings and investment performance that has not been utilized much up to now is to close down or otherwise dispose of poorly performing enterprises. The overvaluation of the kwacha and high rates of domestic protection that prevailed in Zambia until recently allowed a number of enterprises to be established that may no longer be viable in the new competitive environment. A recent World Bank study of 31 industrial enterprises identified seven firms with negative value added, meaning that they consume more intermediate inputs than the value of their output (evaluated at world prices). This should be taken as a strong indicator that the initial investment decision may have been faulty, and INDECO is currently doing in-depth studies of several of the firms to decide if they can be made viable. There is an understandable reluctance on the part of the Government to liquidate any parastatal. Nevertheless, non-viable firms tie up resources, both human and financial, in unproductive activities, and they raise costs for downstream industries and make them less competitive. While in some cases a change in management may be sufficient to turn poorly performing enterprises around, an effort should be made to weed-out those which are economically unviable in order to reduce the burden that they place on the rest of the economy.

4.10 Fiscal Impact. As a matter of general policy, the Government does not pay operating subsidies to ZIMCO companies.[3/] Government transfers to the ZIMCO parastatal primarily consist of loans and increases in tax arrears. In terms of flows to the Government, the ZIMCO group pays sizeable taxes, especially ZCCM, and even money losing firms are supposed to pay an equity levy. Companies pay management fees and, in a few cases, dividends to ZIMCO or their subholding company, but the group as a whole

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3/ However, the 1986 budget contained a K 20 million payment to Zambia Airways in the form of a soft loan to assist with devaluation. This substantially underestimated the amount of funding subsequently transferred to Zambia Airways during 1986 to sustain its operations.

does not pay any dividends to the Government. The net cumulative flow from the Government to the ZIMCO group over the past six years was K 110 million (see Table 4.5), and these flows became net transfers to the Government in the most recent two years (due primarily to the Mineral Export Tax on ZCCM).[4] Besides the direct financial transfers, however, the Government has converted substantial amounts of parastatal debt into equity, and it has passed along loans from foreign sources on soft terms or as grants. Year by year data are not available, but by the end of 1984, the total capitalized debt of the ZIMCO group was K 922 million. ZIMCO companies were in arrears on their debt service payments to the Government by K 5.7 million at the end of 1984, and additional amounts of external loans guaranteed by the Government were in arrears and represented a potential liability to the Government. Thus, the original expectation that the parastatals would be a net contributor to the Government has not in general proved true. Since these companies control some of the country's major resources and dominate key sectors of the economy, their low returns give serious cause for concern.

Table 4.5: Government Payments to ZIMCO
(K million)

	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85
Direct financial flows from (to) Government	113.4	207.0	(2.9)	66.1	(119.2)	(154.1)

Source: ZIMCO and various Financial Reports of the Government.

4.11 The non-ZIMCO parastatals are a significant drain on the Government budget. Many of them are not self-supporting, and some of them, particularly NAMBOARD, have been used to pass pricing subsidies to consumers. The Government has recently been creating new parastatals, such as the University Teaching Hospital, which have little or no funding base outside of the Government budget. The delegation of financial control to agencies outside the Government budget should be undertaken very cautiously in a time of severe budgetary constraint.

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[4] These data do not account fully for loan repayments from the parastatals to the Government, which would increase the net flow to the Government.

4.12 Given the difficult situation with the budget, the Government has a right to expect a greater contribution from parastatal enterprises. In many cases, it would be optimistic to expect to receive dividends in the near future, but prompt payment of taxes should be a minimum condition. The Government should be particularly concerned about implicit subsidization through debt-to-equity conversions or by allowing parastatals to run-up overdrafts or accumulate arrears on Government guaranteed debt. Based on the precedent established by the conversion of debt to equity as part of rehabilitation programs for Zambia Railways and NCZ, a number of parastatals, including such perennial loss-makers as Livingstone Motor Assemblers, have asked for similar financial restructurings from the Government. Given the large and growing burden of interest payments in the budget, the Government should agree to assume parastatal debt only as a last resort and where the economic benefits can be clearly demonstrated. In considering requests for parastatal debt relief, it should not be enough to show that the firm may not survive or be profitable without capital restructuring. The Government should follow a consistent policy which requires specific reforms to improve efficiency and profitability, agreed targets for cost cutting measures, and (in all but the most exceptional cases) a reasonable expectation that the firm can eventually repay the debt on a revised schedule. Prior to any decision in this regard, the firm should revalue its assets in order to give a clearer picture of its eventual financial prospects. These strict conditions are necessary not only to minimize additional pressure on the Government budget, but also to maintain credibility with the Government's creditors that the budget will not be used to rescue nonviable parastatals.

4.13 As an alternative to financial assistance, the Government may at times be tempted to bend the rules in order to protect parastatals. A recent example in this regard is the decision to reduce the domestic sales tax on locally assembled automobiles in order to benefit Livingstone Motor Assemblers and thereby reduce imports of finished automobiles. This precedent should be strongly resisted, even at the cost of allowing such firms to go out of business. Changing the rules in favor of parastatals will weaken the competitive pressures needed to instill cost efficiency and may lessen incentives for private investment due to skepticism about the business environment.

4.14 Despite concerns about the financial problems of the parastatals, it is important to recognize the positive contributions that ZIMCO has made to establishing a sound business environment. This includes such seemingly mundane matters as the fact that financial accounts for ZIMCO companies are prepared on a regular basis and audited according to international standards within a reasonable time after the end of the fiscal year. There are very few developing countries in which one could hope to obtain audited accounts for a holding company with 120 subsidiaries or review a comprehensive investment program for the combined group, but ZIMCO achieves this on a regular basis. The result is a standard of transparency and regularity in parastatal financial transactions that is a very valuable asset for economic development. Beyond these technical considerations, ZIMCO has adopted various operational policies that are designed to ensure that firms operate in a more competitive environment. Internal cross-subsidies

between firms are limited in scope (although transfer pricing remains a serious problem), and parastatals have been instructed to bid separately in the foreign exchange auction rather than try to cooperate on their bids. This pragmatic approach has helped to develop a cadre of managers who are generally technically competent and, given adequate incentives to adjust from the protected economic environment prevailing until now, can adapt in many cases to the new competitive situation.

4.15 In the next section, we turn to an evaluation of the forward investment program for the major ZIMCO parastatals in the mining, industry, energy, transport and telecommunications sectors. Section C summarizes the recommended core investment program for the parastatals, and Section D discusses measures to improve the composition and financing of the investment program in the future.

B. Sectoral Investment Programs

Mining

4.16 The mining sector is dominated by Zambia Consolidated Mines Ltd. (ZCCM), the sole producer of copper, cobalt, lead and zinc. The only other mining company of appreciable size is Maamba Colleries Ltd., which is discussed in the section on energy. While the Government has identified a wide range of other minerals occurring in Zambia (e.g., uranium, phosphates, semi-precious gems, iron ore, etc.), none of these deposits have been demonstrated to be commercially viable, with the exception of emeralds and aquamarines which are reportedly mined illegally on a widescale basis. Two small parastatals, Reserved Minerals Corporation and Mindeco Small Mines, are currently engaged in the exploration and mining of non-copper minerals, but both are operating at a loss and neither is expected to have significant investment requirements over the next few years.

4.17 Except for cobalt, which is recovered as a by-product of copper production, ZCCM's mining output has been on a downward trend for the past ten years. In part, this has been due to natural causes associated with the slowly depleting mineral reserves, particularly declining quality of ore grades as the best ores are mined and greater difficulty in mining operations as mine depths increase. A more important factor, however, has been the advanced age and poor state of repair of ZCCM's equipment, which has been brought on by ZCCM's poor financial condition and the declining availability of foreign exchange as copper prices have fallen. Shortages of operational equipment caused ZCCM to reduce its mine development activities in order to maintain current production levels, which contributed in subsequent periods to further decreases in production because of inefficiencies in mining operations. ZCCM has also suffered from serious shortages of skilled manpower and internal management problems.

4.18 In January 1986, ZCCM announced a comprehensive five-year production and investment plan designed to increase copper production and improve mining productivity. The essential elements of this plan are:

(a) Restoration of mining operations. The plan calls for investment of K 2700 million in order to repair or replace worn-out mining equipment, expand mine development activities and rehabilitate metallurgical plant facilities.

(b) Closure of high cost mining operations. The plan calls for the closure on a care and maintenance basis of three operating copper mines (Kansanshi, Konkola No. 3 shaft and Chambishi). Kabwe lead and zinc mine will be closed when its ore reserves are exhausted in two years. All of these mines are net foreign exchange earners, but their closure will release skilled personnel for other mining facilities and conserve on ZCCM's investment requirements. Several metallurgical plants which are no longer required will also be closed.

(c) Management Reorganization. ZCCM will be reorganized into four operating divisions (from seven at present), and increased authority and responsibility will be delegated to the operating levels. Management attention will focus on financial performance rather than output as the key indicator. Greater emphasis will be placed on training at all levels to improve the supply of skilled manpower.

(d) Cost reductions. ZCCM will reduce costs by laying off redundant workers (up to 10,000 workers over the five-year period, out of a current labor force of 57,000 employees). Social services (schools, hospitals, housing) currently provided in large parts of the Copperbelt will be transferred to the District Councils or placed on a cost-recovery basis. Finally, ZCCM will rationalize its structure of subsidiary companies, with some firms incorporated into the operating divisions, some divested, and the remaining firms (some of which are involved in activities unrelated to copper production) placed on an arms length relationship in a separate holding company.

4.19 ZCCM's proposed rehabilitation program provides a realistic plan for resolving its operating problems and restoring an adequate level of copper production. As this is a key requirement for stabilizing Zambia's foreign exchange earnings, the program should have high priority as part of the overall public investment program. Nevertheless, the plan is very ambitious in scope and will place a severe constraint on the investment resources available for the rest of the economy. For this reason, it is important to examine the program in detail in order to identify possible areas where the program can be cut to release resources for other uses.

4.20 In order to carry out its rehabilitation program, ZCCM will require access to both local resources and external finance:

(i) Recurrent foreign exchange requirements. Sixty percent of ZCCM's operating costs are denominated either directly or

indirectly in foreign exchange. Approximately two-thirds of these costs require payments of foreign exchange for imported equipment and supplies, foreign shipping costs, expatriate salaries, debt repayments, etc., while the other one-third represents indirect foreign costs through general imports into the economy (petroleum, chemicals, etc.). In order to cover its ongoing operations, ZCCM estimates that it needs to retain 40 percent of its export earning for its own use, equivalent to approximately US$320 million per annum. While the Government has agreed to this, in the past the Government has responded to shortfalls in foreign exchange by reducing the allocation of foreign exchange to ZCCM. This practice disrupts ZCCM's relationships with its suppliers and can undermine the financial viability of the rehabilitation program.

(ii) Local currency requirements. ZCCM's financial position is weak. Several years of low or negative profitability and mediocre cash generation have reduced its cash reserves and contributed to an unfavorable debt-to-equity ratio. The recent devaluation has improved ZCCM's revenues significantly, but this may not be adequate to increase its cash position enough to take on the large investment program and reestablish its creditworthiness. One major problem is the high rate of taxation applicable to ZCCM, particularly the 13 percent Mineral Export Tax (MET) on copper revenues pertaining in 1986. ZCCM requested that the MET be reduced to no more than 10 percent as of 1987 and reduced further to 7 percent when ZCCM begins paying income tax again. Serious consideration of this request will be necessary to sustain the continued rehabilitation of the mining company.

Foreign exchange borrowing requirements. ZCCM will also require access to a substantial amount of foreign loans to finance the foreign exchange requirements of its investment program. ZCCM's access to commercial loans is limited by its weak financial position and its record of debt reschedulings. Further reschedulings will undoubtedly need to be made in the future in view of Zambia's highly constrained foreign exchange situation. Thus, ZCCM will have to depend heavily on official bilateral and multilateral sources for its borrowing requirements.

4.21 While ZCCM's recurrent foreign exchange allocation and the MET have been hotly debated in Zambia, relatively little attention has been paid to ZCCM's investment requirements. Table 4.6 summarizes the investment program along with the estimated cost, foreign exchange requirements, economic viability and current status of the projects. The projects can be grouped into four categories:

Table 4.6: ZCCM Investment Program, 1986-88
(K million in constant 1986 prices)

Project	Expenditure through March 1986	Proposed Expenditure 1986-88	Foreign Exchange Requirements, 1986-88 a/ (US$ million)	Economic Viability b/	Current Status
A. Equipment Replacement and Rehabilitation					
(i) Ongoing	K 406.1	248.6	$ 33.5	36% (1984) ERR	IBRD/Sysmin/ADB Project
(ii) Proposed	578.2	1311.2	123.9	n.a.	new
	984.3	1559.8	157.4		
B. Mine Development					
(i) Nchanga Deepening	15.3	18.4	2.0	25% (1986) ERR	ongoing
(ii) Mufulira Deepening	111.7	168.3	5.8	27% (1986) ERR	ongoing
(iii) Mindola Deepening	0.0	30.8	0.7	22% (1986) ERR	new
(iv) Baluba Stage II	144.1	67.8	2.4	34% (1983) ERR	ongoing
	271.1	285.3	10.9		
C. Metallurgical Plants					
(i) Tailings Leach Plant III	670.9	112.4	13.7	25% (1982) IFR	virtually complete
(ii) Acid Plant Rehabilitation	0.0	206.5	30.7	20% (1986) IFR	new
(iii) Smelter Rehabilitation	0.0	92.3	12.8	n.a.	economic return not established
	670.9	411.2	57.2		
D. Other					
(i) Technical Assistance	0.0	72.0	12.0	n.a.	new
(ii) Parts Manufacture	1.8	330.5	32.7	n.a.	doubtful project
	1.8	402.5	44.7		
Total	1928.1	2658.8	270.2		

a/Estimated at K 6=US$1.

b/ERR-Economic Rate of Return; IFR = Internal Financial Rate of Return.

(i) Equipment Replacement and Rehabilitation. This addresses ZCCM's major operational problem and should receive the highest priority. However, the proposed program for equipment replacement has not been reviewed outside of ZCCM, and it should be possible to reduce the cost by careful screening of the program (e.g. by stretching out the purchase of computer equipment).

(ii) Mine Development. These projects are necessary to sustain efficient mining operations in the medium term. They have relatively low direct requirements for foreign exchange as they involve a large component of direct labor. Three of the projects are at least half completed and should continue, but the start of the Mindola deepening project could be postponed if necessary.

(iii) Metallurgical Plants. The Tailings Leach Plant III (TLP III) is virtually complete and is undergoing start-up activities. The acid plant rehabilitation project is designed to prevent a shortage of acid for TLP III. It could possibly be delayed for additional technical investigations, but this would pose a significant risk if the existing acid plants deteriorate much further. The smelter rehabilitation project at Nkana involves a conversion to new smelter technology. The technical and economic feasibility of this technology is currently being studied, and a decision on the project should be postponed until it is shown to have a high rate of return.

(iv) Other Projects. ZCCM has requested funds to help it recruit skilled technical and managerial personnel and consultants on short term assignments. This has high priority in order to speed-up the rehabilitation program and put new equipment to use promptly. The proposed parts manufacturing plant has not been economically justified. It would divert scarce skills and management attention from more important tasks, and it duplicates a less expensive facility proposed by INDECO. It should therefore be dropped from further consideration.

4.22 ZCCM's core investment is expected to cost up to K 2105 million over the period 1986-88.[5] Taking account of committed financing for ongoing projects amounting to US$100 million, ZCCM will have external financing requirements for an additional US$112 million in new loans for the period 1986-88. ZCCM will also be looking for commitments beyond this period in order to cover its remaining investment requirements up to 1990. The viability of the rehabilitation program depends critically on ZCCM reestablishing a sound financial position. A financial analysis of the program prepared for the public expenditure review indicates that if the MET remains at 13 percent, ZCCM will suffer a shortfall in both foreign exchange and local resources during the initial years of the program.

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[5] Assuming that the smelter rehabilitation project is postponed, the parts manufacturing plant is dropped, and the proposed program for equipment rehabilitation is reduced by 10 percent.

A key factor is the expected pace at which copper production recovers. ZCCM has estimated that copper production can recover to the level of 550,000 tonnes per annum over the next three years. Based on recent experience and a review of mining problems at Nchanga open pit and in the underground mines at Mufulira, this appears to be overly optimistic. It would be prudent to make a more conservative estimate for planning purposes, in the range of 10 percent lower. On this basis of this assumption, the financial viability of the rehabilitation program will require a reduction in the MET in order to provide an adequate cash flow to carry out the investment program. On the foreign exchange side, ZCCM will require a continuing allocation of US$320 million per year from copper export revenues, additional debt rescheduling to reduce its debt-service payments and, as indicated above, new loans of US$112 million over the three year period.

Industry

4.23 The public investment program in industry has three major components: (i) the INDECO project portfolio; (ii) the rehabilitation of the NCZ fertilizer plant; and (iii) loans to the Development Bank of Zambia (DBZ) to expand lending to public and parastatal enterprises. Analysis of the INDECO investment program is limited to large projects (estimated to cost at least US$1 million) which are either ongoing or expected to begin implementation during the period April 1986-March 1987, which coincides with INDECO's fiscal year.

4.24 INDECO. The Industrial Development Corporation Ltd. (INDECO) is a sub-holding company under ZIMCO which oversees the operations of parastatals in the industrial sector. These include approximately 34 subsidiary companies as well as minority shares in several associated companies. Public sector involvement in the industrial sector has been substantial. In 1980, INDECO accounted for more than half of gross manufactured output in Zambia and more than 40 percent of manufacturing employment. The manufacturing sector as a whole is large compared to other sub-Saharan African countries, contributing a share of GDP (18 percent in 1983) that is second only to Zimbabwe. Thus, the performance of the public enterprises in the industrial sector will play an important role in determining the responsiveness of the domestic economy to the Government's reform program.

4.25 Past analyses of the performance of INDECO firms have characterized the choice of investments as being highly capital and import intensive and oriented toward import substitution behind high protective tariff barriers.[6] Thus, the recent policy reforms have had a major impact on the economic prospects of INDECO firms, particularly the liberalization of imports and reform of the tariff structure to reduce the rate of effective protection on import substitution industries. In order to adapt to these changing conditions and improve the quality of investment decisions, INDECO established an Economic Evaluation Unit in 1984 to carry out appraisals of proposed projects and review the economic and financial viability of

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6/ "Zambia: Industrial Policy and Performance," op. cit.

ongoing enterprises. The initial investment program compiled by INDECO covered a shopping list of projects which have been under discussion for several years, containing 35 projects at a total cost of approximately US$240 million. This list has been pruned to about one-third of its original size, and the resulting investment program is summarized in Table 4.7. In this section, we will discuss the composition of the investment program according to three criteria:

(i) the economic and financial viability of the individual projects;

(ii) their consistency with the overall economic prospects of the enterprises; and

(iii) their strategic "fit" with Zambia's economic recovery program.

4.26 Each of the investment projects in Table 4.7 has been analyzed, where adequate information was available, using a standard cash-flow type model which provides both economic and financial rates of return. In general, these indicators are all quite satisfactory. Discrepancies between the economic and financial viability of the projects have been largely removed as a result of the recent economic reforms.[7] The major remaining differences (for the two maize mill rehabilitation projects) are attributable to continuing price controls on maize products. The ongoing projects and those intended to start in 1986 (excluding those listed as possible starters) are mostly rehabilitation projects with existing firms. The only new investments include the wheat silos at Kabwe, which are largely completed, and the proposed central engineering workshop. The latter project is a smaller version of the facility proposed by ZCCM (although with a total estimated cost of US$8.8 million, the INDECO project is still a significant investment), and it is projected to have good technical, economic and financial viability. The availability of spare parts in Zambia has improved due to the introduction of the foreign exchange auction, but given the landlocked position of Zambia and the long order time for most imports, a spare parts manufacturing facility that concentrates on the production of a limited range of relatively uncomplicated parts which are in substantial demand appears to have good potential.

4.27 For the projects listed in Table 4.7 as possible starters in 1986, the glycerine project will recover glycerine as a by-product from spent lye produced in the course of soap manufacturing by Refined Oil Products Ltd. Glycerine is used primarily for the manufacture of

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[7] These differences were much more important prior to the reform program, as the overvaluation of the kwacha and distortions embedded in the tariff code and the import licensing system gave preference to the domestic production of goods that were not economically viable based on border price comparisons.

explosives for the mines, and current imports of glycerine cost about US$2-3 million annually. This project was first identified in the late 1970s and has been demonstrated several times to have a high return. As regards the remaining projects, serious reservations are outstanding on the sawmill and the steel re-rolling plant, and no information was available on the chlor-alkali manufacturing plant. The Zambesi Sawmills project is designed to support logging operations west of the Zambesi river near Angola. For military reasons, this area is off-limits and the project has been delayed. Moreover, the company has had a troubled history and is insolvent. Unless there are management changes in the company, the project should not be executed. The steel re-rolling mill has been discussed in Zambia for a number of years and regularly shows up as part of the five-year development plans. It is usually justified as the first step for establishing an iron and steel industry in Zambia in order to stimulate mining of Zambia's iron ore deposits. In its present form, the steel re-rolling mill is intended to use locally available scrap steel, which has not been shown to be available in adequate quantities. Alternatively, it has been proposed that the project would rely on imported steel billets from Zimbabwe. Using imported billets, the project would achieve very little domestic value added, and even with a very high rate of protection on value added, the project has an expected financial rate of return of only 14 percent and a negative economic rate of return. As such, this project characterizes the type of high capital cost and low value added investment that has contributed to Zambia's economic problems in previous years, and it should not be given serious consideration.

4.28 While INDECO's Economic Evaluation Unit is showing an increasing capacity to provide economic evaluations of individual investment projects, the analysis needs to be broadened to assess the various managerial and financial factors that may be important for the success of the project. For example, the two maize mill rehabilitation projects in Table 4.7 are extensive maintenance and repair undertakings necessitated by prior lack of adequate maintenance. This is largely the result of internal inefficiencies and price controls on maize products which have restrained profit margins and cash generation. For as long as this situation continues (although the Government is committed to eliminating the subsidy on maize meal), the company's capacity to maintain the assets will be reduced. This type of strategic analysis suggests that the investment should be delayed until price controls are eliminated. In other cases, management factors will need to be identified and addressed before a potentially viable investment can proceed. This includes the Zambia Breweries rehabilitation project, where INDECO has now brought in a foreign firm to manage the brewery in order to resolve theproblems which led to the deterioration of the plant facilities. As mentioned earlier, INDECO is currently engaged, with the assistance of consultants, in carrying out management audits of firms identified as poor performers on the basis of a preliminary study. The experience gained by INDECO in carrying out these management audits should provide a basis for improving the evaluation of investment projects to include institutional and managerial factors as well as economic and financial viability.

Table 4.7: INDECO Investment Program, FY86/87[1]
(K million)

Project	Type of Project	Total Project Cost	Expenditure through Jan. 1986	Expected Expenditure 1986	Funding	Expected Rate of Return	Comments
A. ONGOING PROJECTS							
1. Kafue Textiles	(E+R) Modernization of sacks and tarpaulin manufacturing.	58.1	4[illegible]	11.2	Loan and equity	FRR 25% ERR 20%	— advanced stage of realization
2. Zambia Sugar	(E) Nakambala factory expansion.	52.6	45.0	7.6	Loan and equity	not avail.	— same
3. National Milling	(N) Wheat Silos at Kabwe.	12.0	8.0	4.0	Soft loan	FRR 65% ERR 44%	— same
4. Kabwe Industrial Fabrics	(E+R) Polypropylene woven bag manufacturing.	13.2	1.3	11.8	Loan and equity	FRR 44% ERR 41%	
5. Zamox	(R) New oxygen plant.	43.7	13.7	26.6	Loan and equity	FRR 23% ERR 16%	— concerns about marketing and high production capacity of new plant.
Sub-Total		179.6	114.8	61.2			
B. PROJECTS INTENDED TO START IN 1986							
6. INDECO	(N) Central engineering workshop and spare parts manufacturing.	52.9	0	6.0	Unknown	FRR 29% ERR 36%	— no reservation on project concept
7. National Milling	(R) Kabwe maize mill rehabilitation.	13.4	0	[illegible]	Unknown	FRR 33% ERR 100%	— rehabilitation justified; operational environment of still price controlled industry should be discussed.
8. INDECO Milling	(R) Ndola maize mill rehabilitation.	9.4	0	5.9	Unknown	FRR 17% ERR 81%	
9. Zambia Breweries	(R) Replacement of bottling line in Lusaka.	30.2	0	30.2	Company Equity	FRR 55% ERR 101%	— investment to be put into context of overall rehabilitation plan.
Sub-Total		105.8	0	48.1			
Total		285.5	134.2	109.3			
C. PROJECTS POSSIBLY STARTING IN 1986							
10. Refined Oil Products (ROP)	(N) Glycerine recovery.	17.3	0	5.4	Unknown	FRR 47% ERR 64%	— no reservations on project concept.
11. INDECO	(N) Chlor-alkali manufacturing	48.8	0	4.5	Unknown	not avail.	— no information available.
12. Zambezi Saw Mills	(E+R) Saw-mill expansion.	32.2	0	n.a.	Unknown	not avail.	— reservations on wood availability.
13. Zambia Steel and Building Supplies	(N) Steel re-rolling mill.	156.6	0	3.0	Unknown	FRR 14% ERR -18%	— project not justified.

1/ As presented by INDECO, and only for projects estimated to cost in excess of US$ 1 million.

2/ Based on the use of imported steel billets.

R=Rehabilitation Project; E=Expansion Project; N=New Project
FRR=Financial Rate of Return; ERR= Economic Rate of Return

4.29 The last and perhaps most difficult question about INDECO's investment program is its compatibility with Zambia's strategy of economic diversification. The composition of the ongoing projects and those intended to start in 1986, which primarily emphasize rehabilitation and/or expansion of existing facilities, meet the immediate objectives of the economic recovery program. However, for the other projects, only the central engineering workshop and the glycerine recovery plant appear to be based on long-run comparative advantage under the new policy environment. In discussions with officials in Zambia concerned about the course of industrial development, no consistent long term strategy was evident regarding the role that INDECO should play in responding to the new set of economic incentives.

4.30 Given the dominant role of the public enterprises in the industrial sector and the expertise that has been developed there, it is important that INDECO take a clear and positive view of the contribution it can make to economic diversification. In the first instance, INDECO should concentrate on ensuring that managers have the capacity to respond to changing market conditions and to develop new export and efficient import substitution activities. This should include training in skills such as marketing, export promotion, and cost control. Beyond this, INDECO needs to redefine what its relationship should be to existing enterprises and how active a role it should play in the creation of new firms. One of the major rationales for public ownership of industrial enterprises has now largely disappeared. The economy is extensively Zambianized, and the public sector can concentrate its attention on activities that only it can perform. This implies providing existing enterprises with increasing levels of autonomy to manage their internal affairs, with INDECO monitoring financial results (such as profitability and dividend payments) and reviewing major decisions affecting the viability of the enterprises (e.g., major investments, contracting of foreign loans, etc.). Within this framework, firms should have substantial leeway in matters such as pricing, employment, production, and wage levels. Managers should be held accountable and rewarded for the performance of their enterprises, based on a well-defined system of performance evaluation. With respect to possible new ventures, INDECO should limit its participation to those where public involvement is both economically justified and necessary to achieve clearly specified results. In practice, this may limit INDECO to pilot ventures where the risks are too high to attract private capital or to projects which are too large in scale to obtain adequate financing in Zambia's limited capital market. For other activities, INDECO should adopt a promotional stance toward private sector involvement. This should include selective joint ventures with private firms, including cases where INDECO would participate as partner without making a financial contribution. Such general terms of reference would enable INDECO to bring its considerable expertise to bear more effectively on matters involving industrial development, while limiting the demands on the public sector for scarce managerial talent and funds to those instances where the resources can obtain the greatest benefit.

4.31 Nitrogen Chemicals of Zambia Ltd. By far the largest investment project to be undertaken in the industrial sector over the next three years will be the rehabilitation of the NCZ fertilizer plant located in Kafue.

This plant was originally established in 1967 to process coal from Maamba Collieries into ammonium nitrate for use both as a fertilizer and for further processing into explosives for the mining industry. In 1982, a second plant was added to expand production of ammonium nitrate fertilizer and undertake production of compound fertilizer products. The second plant has been plagued by major design and technical deficiencies as well as shortages of the principal feedstock, coal, due to operational problems with Maamba Collieries and Zambia Railways. Its capacity utilization has never exceeded 35 percent. Spill-over effects and the cumulative impact of several years of deferred maintenance and management deficiencies have reduced production from the first plant as well. As a result, fertilizer production by NCZ has been substantially below Zambia's requirements, forcing the Government to import large quantities through bilateral aid programs and commercial purchase agreements. The unit cost of fertilizer production by NCZ has been substantially above both the local retail price of fertilizer and the c.i.f. landed cost, requiring the Government to provide large subsidies to NCZ to cover its operating costs.

4.32 Rehabilitation of the NCZ complex is expected to cost approximately US$84 million by the time it is completed in 1990, of which US$38 million (K 230 million) is expected to be spent in the period 1986-88. Repairs and modifications to the first plant were initiated in 1984 and completed in early 1986, and work on the second plant is expected to begin in 1987 under a contract which incorporates strict performance guarantees in order to minimize risk. An additional part of the project involves improvement of NCZ's management and technical operations through a substantial input of external technical assistance. An experienced operations management firm has taken over responsibility for managing the NCZ plant and supervising the technical rehabilitation program. The management team has already introduced various cost reduction measures, including elimination of redundant personnel. When completed, the project is expected to achieve an economic rate of return of 27 percent (treating previous capital investment as a sunk cost) and produce average net foreign exchange savings of US$29 million annually. Output from the project is expected to satisfy approximately 75 percent of Zambia's domestic requirements for fertilizer. The Government agreed to increase the retail price of fertilizer to cover the c.i.f. landed cost of imported fertilizer, which, with the improvement in operating efficiency expected from the rehabilitation project, should allow NCZ to operate on a financially viable basis and eliminate the need for Government subsidies on fertilizer.

4.33 While the project is expected to provide significant benefits to Zambia, it is subject to substantial technical and economic risk. Some of the risks are inherent in the technical design of the plants, particularly the second plant, which is based on technology (coal conversion) that is no longer preferred in the fertilizer industry. Beyond this, the project is dependent on improvements at Maamba Collieries, Zambia Railways, and Nampundwe mine (for the supply of pyrites), each of which is undergoing its own difficult rehabilitation program. Ensuring the financial viability of the project has required that the Government assume responsibility for a substantial amount of NCZ's outstanding loans. Thus, while the NCZ rehabilitation project makes sense in the current circumstances, it illustrates the burden that poor investment decisions in the past can place on future economic choices.

4.34 Development Bank of Zambia. Although the public sector's plans for major investment projects are important, much of the supply response in the industrial sector should come from smaller firms, either public or private, that are able to identify new opportunities opened up by the change in economic policies and move to exploit them. For this reason, it is important that resources be made available for firms to undertake new ventures. One of the more important mechanisms by which this can be facilitated is by the provision of medium-term credit to support new investment. DBZ has been the major domestic institution providing investment financing in Zambia and has developed good capacity for evaluating investment projects. Additional resources to support an expansion of DBZ's lending activities should be an important part of the core investment program.

4.35 In spite of the increasingly adverse economic circumstances of the past five years, DBZ has continued to be profitable and remains a sound development bank. Administrative costs have been kept low (at 2 percent of average total assets, they are one of the lowest rates in the region for this type of institution), and the management and staff are competent. Nevertheless, deteriorating economic conditions have resulted in an increasing level of arrears, a problem has been compounded by DBZ's relatively weak management of collections. By 1985, 47 percent of the DBZ portfolio was affected by arrears. During the past year, DBZ instituted a special debt recovery action program which has led to a significant improvement in collections; for the quarter ended March 31 1986, DBZ's collection ratio was 144 percent of billings. In addition, the Government provided relief by allowing firms in DBZ's portfolio to pay off their foreign-denominated loans at the exchange rate prevailing just prior to the introduction of the auction. With the arrears problem now beginning to be resolved, it is important to look forward to DBZ's financing requirements over the next five years. It is estimated that DBZ will require about K 450 million in new resources over the period 1986-91. During the period 1986-88, this would imply an increase in borrowing by DBZ (net of loan repayments) plus additional subscriptions of share capital of approximately K 235 million, of which K 140 million (US$23.3 million) would represent the the foreign exchange requirement.

Energy

4.36 The major parastatals involved in the energy sector are the Zambia Electricity Supply Corporation (ZESCO, involved in electric power generation and distribution), Tazama Pipeline Ltd. (a joint Tanzania-Zambia corporation in charge of the oil pipeline from Dar-es-Salaam), the Indeni Petroleum Refinery, and Maamba Collieries Ltd. These parastatals control virtually the entire supply of commercial energy in Zambia. The only other significant energy source, fuelwood, is exploited primarily by private entrepreneurs and individual households.[8]/ Domestic final energy

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[8]/ZAFFICO, which was discussed in the agriculture section in Chapter II, is involved in forestry plantation management for industrial wood supply.

demand has stagnated since 1980 at an annual level of about 7 million tonnes of oil equivalent, of which fuelwood supplies 65 percent, followed by indigenous hydropower (20 percent), imported petroleum (9 percent) and indigenous coal (6 percent). The household sector consumes virtually the entire supply of fuelwood, while the major users of commercial energy are the mining industry, accounting for 60 percent of total consumption, followed by industry (20 percent), transport (10 percent), and other consumers (10 percent).

4.37 The major public investments in the energy sector were largely completed prior to 1980, and the sector is generally marked by under-utilized supply capacity. However, neglect of essential maintenance and repair over the past several years has put many parts of the energy supply system in need of rehabilitation. The most serious problem is the Tazama pipeline, which is leaking significant quantities of petroleum feedstock, requiring frequent shutdowns in order to repair leaks and posing a potentially serious pollution problem. Other energy parastatals also require rehabilitation investments of various orders of magnitude to maintain efficient operations. In large measure, these problems are attributable to financial constraints resulting from price controls and political resistance to price increases. These problems have been aggravated by poor energy planning by ZIMCO and the Government, which allowed available investment resources to be diverted to low priority uses, and by weak management practices which deferred maintenance to the point where major rehabilitation is now required.

4.38 Table 4.8 summarizes the proposed investment program in the energy sector over the period 1986-88. The largest sub-sectoral investment program is for petroleum, accounting for K 225 million over the three year period, or 50 percent of investment in the sector. The remaining investments are for coal (K 135 million, or 30 percent of total sector investment), and electricity (K 84 million, or 19 percent of total investment). Non-parastatal investments include K 6 million for research and development projects on charcoal and technical assistance to the Department of Energy to prepare an energy sector strategy and investment plan.

4.39 Petroleum. The Tazama pipeline has deteriorated to the point where action is required in the near future. The major problems of leakage are in the first 250 km section outside of Dar-es-Salaam in Tanzania, where the pipeline has experienced severe corrosion problems due to acidic soils and intrusion of sea water into the petroleum feedstock during unloading at the port. If no action is taken, a major pipeline failure will eventually occur, severing Zambia's only bulk petroleum supply link and causing considerable ecological damage. Despite the fact that oil pipelines require continual routine maintenance to operate efficiently, the pipeline has never been cleaned or properly maintained since it began operations in the early 1970s. It is therefore likely that corrosion has occurred in additional sections of the pipeline that must be repaired.

Table 4.8: Energy Sector Investment Program, 1986-88
(K million in 1986 constant prices)

Subsector/Project		Proposed Expenditure 1986-88	As % of Total	Foreign Financing Required (R)/ Committed (C) 1986-88 (US$ million)
Parastatal Investments				
1. Petroleum:	Exploration	K 7	2	$ 1 (C)
2. Petroleum:	Tazara Pipeline Rehabilitation	180	40	22 (R)
3. Petroleum:	Refinery and Distribution	38	8	6 (R)
4. Power:	Rehabilitation	40	9	6 (R)
5. Power:	Transmission and Control Facilities	44	10	6 (R)
6. Coal:	Maamba Colliery Rehabilitation	135	30	20, of which 5(R)
Non-Parastatal Investments				
7. Renewable:	Charcoal and Cookstove Efficiency	3		
8. Planning:	Technical Assistance to Department of Energy	3	1	1 (R)
Total		K 450	100	$ 62, of which 46(R)

4.40 An engineering survey was initiated in late 1985 to clean the pipeline, identify the extent of the corrosion problems, and prepare a comprehensive rehabilitation project. Preliminary indications from this survey are that, except for 56 km which are very badly damaged and require immediate replacement, the damage to the remaining pipeline occurs in discrete sections and does not justify replacement of major sections of pipeline. If this finding is sustained when the survey is complete, the cost of repairing the pipeline is estimated to be on the order of K 280 million (US$47 million), of which approximately K 180 million will be required during the period 1986-88. Rehabilitation of the pipeline is expected to have an economic rate of return of 20 percent as compared to the next least costly option for maintaining Zambia's petroleum supply, which would require shipping bulk petroleum by tank car up the Tazara railway. This latter option would involve substantial investment costs for locomotives, tank cars, and other equipment, as well as increasing the management burden on the Tazara railway.

4.41 Given the large cost of the pipeline rehabilitation project, any other major projects in the petroleum sub-sector will have to be postponed. In particular, several studies have been carried-out in recent years of the Indeni petroleum refinery. This facility is rather inflexible by current technological standards, and it has not been possible to adjust the mix of outputs from the refinery to reflect a reduction in the demand for fuel oil by ZCCM. The addition of a mild hydrocracker to the refinery was proposed to remedy this problem, costing about US$38 million. However, the international petroleum market has become more unstable since the study was completed, and there has been a sharp fall in refining margins which has reduced the project's potential economic return and increased the risk. Zambia can obtain approximately the same results by altering its import mix of refined and crude petroleum products, and investment in the refinery should be limited to relatively low cost improvements to enhance energy efficiency. The remaining investments in the petroleum sub-sector include improvements in the petroleum distribution system by using rail tank cars and expanding storage facilities, and completion of an ongoing project to promote petroleum exploration in Zambia. These projects have high expected returns at relatively low cost and should be included in the investment program.

4.42 Coal. Zambia has several large deposits of high ash coal, with proven and accessible reserves sufficient for over 100 years of production at the current rate of output. The only coal company in operation at present is Maamba Collieries Ltd., which was designed to produce 1.2 million tonnes of washed coal per annum. However, output has never reached more than 60 percent of capacity, and in recent years has slumped to under 500,000 tonnes. This has been insufficient to meet domestic requirements, estimated at approximately 700,000 tonnes per year by 1990, and some coal has had to be imported from Zimbabwe. A high ratio of overburden removal and shortages of foreign exchange to purchase spare parts for mining equipment are partially responsible for Maamba's disappointing performance, but weak management and inadequate technical control are major contributing factors. The two largest consumers of coal are the mining industry and the NCZ fertilizer plant, so that improvements in the performance of Maamba Collieries are important for the success of the rehabilitation programs in these two industries.

4.43 The first phase of the rehabilitation program for Maamba Collieries was launched in 1985 at a total estimated cost of K 170 million, with a target output level of 750,000 tonnes by 1988. Devaluation of the kwacha has improved the competitiveness of Maamba coal for possible export to neighboring countries, and the domestic price of coal has been increased, improving the financial prospects of the company. The current phase of the investment program will be sufficient to repair or replace equipment needed for overburden removal and rehabilitate the coal preparation plant. However, additional funds will be required to complete technical improvements in Maamba's management and operations, address environmental problems, and improve the 12 km aerial ropeway to the railhead. An additional K 45 million (US$7.5 million) is estimated to be required to complete the rehabilitation program satisfactorily.

4.44 Electricity. In 1985, Zambia had installed hydropower capacity of about 1,700 megawatts (MW), more than 450 MW in excess of combined domestic (850 MW) and export (400 MW) demand. In the near term, export demand is expected to fall off sharply as Zimbabwe brings new thermal capacity on stream and reduces its purchase of power from the jointly owned Kariba complex. Electricity demand by ZESCO's most important consumer, the mining industry, is expected to fall toward the end of the century as miningproduction declines due to ore depletion. Therefore, Zambia is likely to have a surplus of electric power generation capacity for the foreseeable future.

4.45 The priority areas for investment in the power sector are rehabilitation and reinforcement of existing facilities, particularly the transmission and distribution network, and possibly some expansion of the transmission network to open export opportunities. The deterioration of the existing network is due in large part to Government control of electricity prices. As a result of financial constraints, ZESCO neglected maintenance and repair activities, and it has been unable to service its loan obligations, which have been met by the Government. Two recent tariff increases have improved ZESCO's financial position somewhat, although there is a continuing dispute with ZESCO's largest customer, the Copperbelt Power Company, concerning payment of the increased tariffs. ZESCO's financial problems have been worsened by investments in low-return projects for rural electricity supply and distribution. In most cases, these investments have been mandated by the Government without a proper feasibility analysis. The Government previously provided either loans or grants for the projects, but in recent years the funds have often failed to be released, forcing ZESCO to cover the construction cost itself or delay project completion. The power extensions have often been poorly planned and in some cases are not compatible with long run technical standards for efficient development of the power network. To address these problems, a Power Sector Master Plan was recently prepared to guide ZESCO's investment activities. A major weakness of the plan is the lack of economic and financial analysis to prioritize the investments. Nevertheless, the plan does specify technical standards that investments should meet, so it is a positive step in planning power sector requirements.

4.46 Despite the poor condition of much of the power system, the investment program recently prepared by ZESCO for the 1986-88 period is heavily weighted toward expansion of the power transmission system (K 160 million) and provides only a modest sum (K 9.2 million) for rehabilitation activities. This is clearly unjustifiable. There are a number of high priority rehabilitation investments which should be considered for inclusion in the investment program, including the Lusaka and Kitwe urban distribution systems (K 20-35 million), the Northwestern Province diesel generators (K 17 million), and some limited repairs to the Kafue Gorge hydroelectric generating station (K 3 million). Investment in the power transmission system should be largely limited to completion of ongoing investments, and even some of these should be scaled-back due to poor economic viability. ZESCO should also drop the proposed rural electrification projects which are included in the current investment program and eliminate the large share of investment funds allocated to unspecified distribution projects. As noted in Chapter II, current priorities in the

agricultural sector do not require using rural infrastructure investments to open up new farming areas, except when such investments can be shown to be fully economically and financially viable in their own right. A reformulated investment program for the power sub-sector stressing rehabilitation activities and completion of ongoing projects could justify investment on the order of K 84 million over the period 1986-88. These investments should be examined carefully on the basis of technical, economic, and financial viability, and this analysis should be a prerequisite to any further investment in the power sub-sector.

4.47 Woodfuel. Natural regeneration of Zambia's extensive forest cover is sufficient to satisfy current aggregate wood demand. There are serious localized problems of deforestation around the headwaters of major rivers and near the larger towns, particularly Lusaka, where charcoal has to be brought in over increasing distances and at higher cost to the consumer. However, the viability of energy forestry plantations in the vicinity of Lusaka is uncertain and would require substantial increases in stumpage fees and very efficient management in order to be successful. Until these issues are resolved, the Government should restrict investments in woodfuel to conservation efforts by promoting improved production techniques for charcoal and more efficient charcoal stoves.

4.48 Energy Sector Planning. Zambia is fortunate to have an abundance of energy resources and a well-developed infrastructure to utilize this supply. Nevertheless, the large amount of investment needed for this sector, almost all of which is required because of inadequate maintenance practices, points to fundamental flaws in energy planning and the process of setting investment priorities that have existed for a number of years. Zambia has starved its energy supply corporations by inadequate pricing, which encouraged deterioration of the vital infrastructure through poor maintenance. Continued scarcity of capital and misallocation of funds to low priority activities are likely to continue unless the planning of energy activities is substantially improved.

4.49 Preparation of an energy sector strategy and investment plan is critical and will involve the following analytical tasks:

(a) detailed forecasts of long-term energy demand by major energy consuming sectors -- mining, industry, agriculture, commerce, and households -- and review of the potential for exports of power, coal and petroleum products;

(b) estimation of the long-term economic costs of supply of alternative energy resources, both indigenous and imported;

(c) identification, on the basis of comparative economic cost, of the least-cost mix of energy supply and demand management measures that would satisfy the forecast demand;

(d) specification and justification of the associated investments, pricing decisions and other policy initiatives necessary to implement the least-cost energy strategy and the optimal timing of these actions; and

(e) identification of the human resource requirements of the sector and the least-cost method (training, external recruitment, etc.) for obtaining an adequate supply of skilled manpower.

A recent report has recommended strengthening the Department of Energy in the Ministry of Power, Transport and Communications and providing assistance to the energy adviser of ZIMCO to improve energy planning activities.[9] Technical assistance will be required to accomplish this, and US$450,000 (equal to approximately 0.5 percent of the total energy sector investment program) has been included in the core investment program to strengthen the Department of Energy and complete the energy sector strategy study.

4.50 Beside providing a basis for mobilizing and coordinating donor assistance, the proposed study should also address the actions required to increase internal resource mobilization in the energy sector. The investment projects contained in Table 4.8 will require a substantial improvement in the cash flow of the energy supply corporations to meet the domestic financing requirements of the program (estimated at K 52 million). Two of the enterprises -- Tazama Pipelines and Maamba Collieries -- made losses in 1984-85 and the third -- ZESCO -- made a small profit of under K 7 million. As a medium term objective, the energy supply corporations should earn revenue sufficient to cover at least their current operating costs, including maintenance requirements, their debt-service obligations and the local cost of their ongoing investment programs. The needed improvements in cash flow will depend on a combination of improved efficiency and higher prices. However, the more emphasis there is on higher prices, the more downward pressure there will be on consumption, creating problems in cutting unit costs. This argues for a major effort to improve cost-efficiency over the next two years through staff reductions, greater productivity, and especially important in the context of long-run cost minimization, improvements in maintenance.

Transport

4.51 The major parastatals involved in the transport sector are Zambia Railways (ZR), TAZARA (Tanzania-Zambia Railways, jointly-owned by Tanzania and Zambia), Zambia Airways (ZA), Contract Haulage (CHL - trucking) and the United Bus Company of Zambia (UBZ - rural and urban passenger services).[10] In addition, the Zambia National Clearing and Forwarding Company (ZNCFC) is a small ZIMCO parastatal established in 1983 to provide freight clearing andforwarding services in the port of Dar-es-Salaam. Except for ZNCFC, all of the transport parastatals registered pre-tax losses in every year since 1981, and most of them

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9/ "Zambia: Energy Sector Institutional Review," UNDP/World Bank Energy Sector Management Assistance Program, May 1986.

10/ TAZARA is not a ZIMCO parastatal and only limited information was available on its operations.

had negative working capital levels as well. Prior to the introduction of the foreign exchange auction, the financial position of the transport parastatals had improved significantly due to capital restructuring and tariff increases in the case of ZR, tariff increases for UBZ, and productivity improvements for CHL and ZA. However, the substantial increase in both operating and capital costs as a result of devaluation worsened the financial position of the transport parastatals dramatically, and ZIMCO and the Government are having to face difficult decisions as to their long term viability.

4.52 Table 4.9 summarizes the parastatal investment program in the transport sector over the period 1986-88. Given the uncertainties regarding the financial viability of several of the corporations, this investment program should be considered to be preliminary. Nevertheless, it does indicate the direction of priorities for public sector investment. The major emphasis should be on the railways, accounting for almost three-fourths of the total investment (including Tazara).[11]/ Several investment projects described in earlier sections (e.g., mining rehabilitation, Maamba Collieries, NCZ fertilizer rehabilitation) are critically dependent on the efficient operation of Zambia Railways for their success. Outside of Zambia Railways, investments should be limited to the most essential maintenance and rehabilitation requirements pending an improvement in the financial situation of the various parastatals.

4.53 Zambia Railways. Zambia Railways is in the process of implementing a multi-year rehabilitation program which will provide it with adequate capacity to handle current and expected demand for freight services. The major constraint on ZR's operations is locomotive availability. Current programs to rehabilitate locomotives, improve spare parts availability and improve operating procedures are expected to provide an adequate supply of motive power without having to purchase additional locomotives. Wagon availability is low and many of the existing wagons are in poor shape and should be scrapped. Ongoing improvements in spare parts and maintenance facilities can provide better utilization of the existing stock of wagons, but a small number of new wagons (less than 170) will be needed over the next several years. ZR's rehabilitation program also includes track maintenance and replacement, improvements in signaling and telecommunications, and staff training and technical assistance. The track maintenance component is part of a continuing program to replace worn out rails and sleepers and is necessary to maintain safe and efficient railway operations. On the other hand, the signaling and telecommunications

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[11]/The mission was unable to review the investment program for Tazara, which is included on a memorandum basis only. Tazara's operations in the near term are limited by locomotive availability, a situation that reflects underlying weaknesses in operations, maintenance and staffing that need to be addressed as part of long term improvements in the capacity utilization of the railway. The estimated investment cost included in Table 4.9 covers 50 percent (the Zambian "share") of the first three years of Tazara's current ten-year investment program.

Table 4.9: Transport Sector Investment Program, 1986-88
(K million in 1986 constant prices)

Agency	Proposed Expenditure 1986-88	As % of Total	Foreign Financing Required(R)/Committed(C) 1986-88 (US$ millions)	Economic Rate of Return
1. Zambia Railways	K 430	68	$ 66, of which 11 (R)	22%
2. Tazara a/	29	5	4(R)	n.a.
3. Zambia Airways	48	7	8(R)	n.a.
4. Contract Haulage	36	6	5(R)	n.a.
5. United Bus Company	85	13	11(R)	n.a.
6. ZNCFC	4	1	1(R)	n.a.
Total	632	100	$ 94, of which 39 (R)	

a/One-half of proposed investment program (other half Tanzania).

improvements, while justified on technical grounds, could be scaled back in response to financial constraints without having a significant impact on ZR's current operations. The training and technical assistance components support an ongoing program of manpower development that has received high priority by ZR management and has been fairly successful in upgrading the qualifications of ZR staff and allowing the gradual replacement of expatriate technical assistance personnel (e.g., out of 8,000 employees, only 22 positions were held by expatriates in early 1985).

4.54 The recent devaluation had a significant impact on ZR's recurrent costs, particularly for fuel, and regular tariff increases will be necessary for the next several years to maintain an adequate cash flow. ZR's financial performance has been poor due to Government delays in approving tariff increases on a timely basis. Tariff increases in 1984 and 1985 were adequate to restore an adequate cash flow and allowed ZR to reduce its arrears to creditors, but profitability has continued to be inadequate. The Government capitalized K 138 million in ZR debt (including accrued interest) during 1985, an action which improved the financial position of ZR but imposed an additional burden on the Government budget. Given the difficult financial situation of both the Government and ZR, prompt approval of future tariff increases will be necessary to maintain the momentum of the rehabilitation program. Although ZR has taken a number of cost reduction measures already, continued emphasis on cost savings will be necessary. One possibility is the elimination of passenger services in

order to allow ZR to concentrate on the movement of freight. Current passenger demand is approximately two million passengers per year, most of whom could shift to bus services. Another step would be closure of the Mulobezi branch line, which does not cover its operating costs and is maintained by a Government subsidy budgeted at K 200,000 in 1986.

4.55 Zambia Airways. ZA operations have a very high foreign exchange component, up to 80 percent according to ZA's own analysis, and only a limited share of their revenue is paid in foreign exchange. As a result, the devaluation seriously affected the financial situation of ZA. The company recently increased its fares substantially on both foreign and domestic routes, but ZA required a large budgetary subsidy during 1986 in order to continue its operations. This drain on Government resources is not sustainable, and the Government will need to take drastic actions to improve ZA's financial performance. Suspension of operations is an option, but a recent study has suggested that this would not be a least-cost solution and has recommended that cost reductions and revenue increases be tried instead.

4.56 Specific recommendations on ZA's investment program must await the outcome of decisions on a proposed restructuring program for the company, but the major outlines of changes required in ZA's operations can be indicated. ZA claims that domestic operations have already been reduced to a minimum (serving only Lusaka, Ndola, Livingstone and Luangwa National Park), that regional routes are essential feeder services to the international routes, and that the latter are potentially profitable. However, preliminary information indicates that only the Lusaka-London and potentially the Lusaka-Bombay international routes are profitable. A reduction in the international route network would therefore reduce costs and release the DC-10 aircraft (which was acquired at great expense in 1984) for regular charter services with other airlines. This change would also allow restructuring of ZA's regional route network, for which the existing fleet of airplanes (two B-707s and one B-737) should be adequate or even excessive. Priorities for the domestic route network will have to be reassessed once the impact of recent sharp increases in domestic fares (72 percent as of June, 1986) have been absorbed. The domestic routes are served mainly by HS 748 aircraft, which are old and fuel-inefficient. However, a cost/benefit study has not yet been carried out to determine whether the replacement of these aircraft would be economically justified. With restructuring of its route network and increases in fares, it is expected that ZA could improve its profitability significantly. These actions should be a precondition to any additional investment by ZA. Dependent on a return to reasonable financial performance, ZA's investment requirements should be limited to the following possible items:

(i) Noise-reduction modifications to the engines of the B-707s in order to continue them in European service. ZA has two passenger B-707s and a B-707 outfitted for cargo service. The planes have no significant resale value. However, engine modifications are expensive and need to be justified on the basis of either: (a) the need to have a back-up capability for the DC-10 for regularly scheduled services, or (b) the need for additional air cargo service, once the cargo capacity of the D-10 is fully utilized; and

(ii) Replacement of the HS 748 aircraft, dependent on a detailed cost/benefit analysis of their current operations.

4.57 Contract Haulage Ltd. CHL's fleet of 220 trucks accounts for 10 percent of the estimated fleet of 2,500 trucks in Zambia, of which 600 are "own-fleet" (non-hire) vehicles and the remainder are privately owned and operated.[12/] In general, the trucking companies complement the services provided by Zambia Railways, except during times of large bulk movements (particularly during the maize harvest) when the Government directs all carriers to provide services in the national interest. Trucking tariffs have been decontrolled, with the exception of the maize haulage charge which is in the process of being liberalized. Therefore, CHL is operating in a competitive market and should be judged as if it were a private operator.

4.58 After a number of years of uncertainty about its role and direction, CHL is pursuing a rehabilitation program aimed at improving efficiency and profitability. This has resulted in improved staff productivity through a reduction in employment by about one-third between 1981 and 1985 and an increased emphasis on maintenance and better utilization of its vehicle fleet. CHL's profitability and cash generation improved substantially prior to the devaluation. However, despite Government capitalization of several loans, CHL has a substantial foreign debt outstanding due to several years of large losses in the early 1980s. Therefore, CHL should limit further investment to ongoing vehicle rehabilitation and replacement programs until its profitability improves. CHL is quite a large organization in an industry which is not characterized by significant economies of scale. Additional cost savings should be possible through staffing reductions and better use of CHL's large maintenance facilities, perhaps by providing contract maintenance services to other trucking firms. The Government objectives in the road haulage sector should be to facilitate the growth of the industry as a whole, rather than providing particular assistance to CHL.

4.59 United Bus Company of Zambia. Until recently, the operations of UBZ were characterized by increasing financial losses, declining vehicle availability due to neglect of maintenance and lack of spare parts, and falling passenger volumes. As a result, urban services were progressively turned over to private mini-buses, and both legal and unlicensed operators took over a large part of inter-city services. An increase in urban bus fares in Lusaka in October 1985 following the introduction of the auction precipitated one of the few cases of serious social unrest. In this situation, UBZ's financial prospects are problematic. The company is technically insolvent and had outstanding loans plus interest arrears of K 44 million as of December 31, 1985. Capital restructuring with an extended period to repay the loans will be a minimum requirement for UBZ to establish a viable financial position.

12/ In 1985, a second parastatal trucking company, the Zambia-Tanzania Road Service, was liquidated due to continuing financial losses.

4.60 ZIMCO has been soliciting proposals from outside companies to improve UBZ's operations. In the meantime, the increase in bus fares has allowed UBZ to pursue a vigorous policy of bus rehabilitation. This could improve UBZ's financial position (except for the debt overhang) if it continues to receive fare increases adequate to offset inflation. Over the next few years, UBZ will face significant investment requirements for rehabilitation and replacement of buses, on the order of K 85-100 million. Before this program is carried out, the Government needs to address the issues of fare increases and management improvements for UBZ. Greater scope should be given for private participation in both urban and inter-city bus services, as experience in other countries has demonstrated that private operators can provide flexible and efficient services with no direct cost to the public sector.

4.61 Transport Planning. Many of the problems faced by the transport parastatals have been inflicted by the Government through its unwillingness to take timely decisions on tariff increases. The parastatals have survived with sporadic inputs of capital funds and debt relief while neglecting maintenance and reducing services in order to continue operations. This is a highly inefficient way of providing transport services and negates any advantage of having public participation in the sector. At the current time, the Ministry of Power, Transport and Communications (MPTC), which is supposed to be responsible for transport planning, has little capacity to advise the Government on the needs of the sector. A project proposal is currently being prepared by MPTC to strengthen its Transport Planning Unit. This activity should have high priority in order to develop a coherent approach to further investment in this sector. An important function of the planning unit should be to develop policies to assist private sector participation in trucking and bus services, so that public funds can be concentrated on transport modes such as the railways where public involvement is necessary.

Telecommunications

4.62 Telecommunications and postal services are provided by the Posts and Telecommunications Corporation (PTC) based in Ndola. In view of the wide spatial dispersion of population centers in Zambia, the Government has provided PTC with access to substantial amounts of foreign financing to support the rapid expansion of telecommunications facilities. As a result, Zambians enjoy a better level of telecommunications service than is generally available elsewhere in sub-Saharan Africa.[13/] Nevertheless, technical problems, particularly in the provision of control equipment, limit the capacity utilization of the telecommunications network. PTC has prepared a long list of rehabilitation proposals for replacement of obsolete plant and equipment and improvement of maintenance standards. A more serious problem, however, concerns PTC's financial performance and the financial viability of the large capital investment program currently being undertaken by PTC.

[13/]For example, the number of direct exchange lines in Zambia is 0.7 per 100 population as compared to an average of 0.4 per 100 population for sub-Saharan Africa.

4.63 In order to support PTC's operations, the Government has provided t number of financial concessions. PTC is exempt from income tax payments. (However, telephone subscribers are subject to a 15 percent Government sales tax.) In addition, most of PTC's capital funds have been on-lent on the basis of 50 percent grant and 50 percent loan denominated in local currency terms. As a result, PTC had continued to be a net user of Government funds, rather than being a contributor of funds to the Government as is the case in many countries. This situation needs to be reversed as a matter of priority before PTC undertakes any additional capital investments. As a first step, PTC should ensure that it can cover the full financial cost of its ongoing operations and committed capital investments. Due to cost increases arising from devaluation and because of increased debt service payments for the limited share of PTC's outstanding loans which are denominated in foreign currency, it is expected that PTC will require tariff increases in each of the next two years just to break even. Beyond this, the Government should remove PTC's exemption from income taxation and require either regular dividend payments or renegotiate the terms of past loans extended to PTC in order to obtain a larger contribution to cover the cost of debt-service payments. The Government should not extend any additional loans to PTC on a concessional basis. This applies in particular to a major multilateral loan obtained by PTC during the past year to finance its current expansion program, the on-lending terms for which have not yet been established between PTC and the Government.

4.64 PTC's proposed investment program for 1986-90 calls for the expenditure of K 960 million, equivalent to US$160 million, of which the foreign exchange component represents about 71 percent. This large expenditure of funds is incompatible with the current financial position of PTC and, given the urgent requirements for capital investment elsewhere in the economy, does not reflect an appropriate balancing of sectoral priorities. Nevertheless, PTC, with the agreement of the Government and encouraged by the willingness of various donors to fund telecommunications projects, has already secured the external financing required for over 80 percent of this capital program and is actively negotiating financing for the remaining part. PTC cannot absorb this large amount of capital investment and remain financially viable, and it has requested that the Government on-lend a substantial portion of the funds on a concessional basis. Instead, PTC should scale-back its investment program substantially and ZIMCO should review the financing plan to ensure that any investments are viable without financial concessions from the Government.

4.65 Table 4.10 outlines a proposed investment program for PTC for the period 1986-88. PTC should concentrate on the completion of ongoing projects which are at an advanced stage of implementation. These projects include microwave links in Luapula and Eastern provinces, new telephone and telex exchanges and rural radio channel systems, and ongoing projects for replacement and maintenance of equipment, including telephone cables, telephones, and other items. In addition, a program of technical assistance is proposed (described in more detail below) which would assist PTC in preparing a revised financing and investment program which is viable and contains a detailed action plan for improving PTC's financial contribution to the Government. This program of technical assistance should be a

precondition for any further investments by PTC beyond the core program. Depending on the outcome of this study, additional investments (labeled as non-core projects in Table 4.10) could be initiated by PTC in the latter part of the period. These include several projects to improve common control and terminal equipment, thus addressing PTC's major technical bottleneck to improved utilization of existing exchange equipment and trunk transmission capacity. Several minor rehabilitation projects are also included to improve maintenance and replace obsolete equipment. These projects are expected to have a high pay-off and should be considered on an individual basis for inclusion in PTC's investment program, subject to confirmation of their economic viability and PTC's financial ability to take-on additional investments. The remaining projects in PTC's current investment plan should be postponed pending the outcome of the technical assistance program.

4.66 The program of technical assistance would include:

(i) a tariff study and revision of the investment program to be compatible with PTC's financing capacity;

(ii) improvements in PTC's management information systems;

(iii) improvements in operations and maintenance systems, including procurement procedures for spare parts;

(iv) a manpower study; and

(v) improvements in training systems.

4.67 Scaling-back of the telecommunications investment program would mean that PTC has excess external financing available to meet its investment requirements. PTC and the Government should review the financial implications of each loan agreement and prioritize sources of financing in accordance with the benefits accruing to PTC and the Government. Some of the secured financing should be postponed or cancelled.

4.68 The situation with PTC demonstrates the need for the Government to prepare a detailed public investment program and undertake a more consistent approach to obtaining donor financing. Telecommunications equipment, because it is a highly competitive export industry for a number of countries, is an attractive component for the aid budgets of many bilateral agencies. Because of this, PTC has been able to obtain financing to carry-out its ambitious expansion program, even though the projects may not have highest priority for the economic recovery program. This assistance has not necessarily constituted a net increase in funds available to Zambia, as aid budgets are fungible and support for the telecommunications sector often comes at the expense of other sectors. Even where the assistance has constituted a net increase in funds available for Zambia, the financing terms have not necessarily been compatible with longer-term prospects for managing the country's severe debt burden.

Table 4.10: Telecommunications Investment Program, 1986-88
(K million in 1986 constant prices)

	Project	Proposed Expenditure 1986-88	Foreign Financing Committed (C) Required (R) (US$ million)	Type of Investment a/
Core Program				
(i)	Provincial Microwave Links	K 82	$ 13 (C)	O
(ii)	New Telephone, Telex and Radio Channel Exchanges	42	7 (C)	O
(iii)	Ongoing Replacement and Equipment	117	14 (C)	O
(iv)	Technical Assistance	12	2 (R)	N
		253	36, of which 2 (R)	
Non-Core Program				
(i)	Extensions to Existing Exchanges in Lusaka	25	4 (C)	R,E
(ii)	Upgrading of Lusaka-Livingstone Microwave Link	9	1 (C)	R,E
(iii)	Earth Station Multiplex Expansion	4	1 (C)	R,E
(iv)	Other Projects	15	2 (C)	R,E
		53 b/	8 (C)	

a/ O=ongoing
N=new
R=rehabilitation
E=expansion

4.69 Postal Services. PTC also provides postal services. Unlike telecommunications, postal services have not received much priority from the Government. Neither PTC nor the Government provides subventions to cover operating costs, and although the Postal Division has been able to break even in recent years, it has done so at the cost of serious deterioration in the standard of service. The volume of mail handled decreased at an average rate of 8 percent per annum between 1980 and 1985,

average number of units of mail handled per postman in 1985 was 40 percent below the level in 1980. Substantial delays in delivery are common, due partly to erratic services provided by Zambia Airways and Zambia Railways and partly to deterioration of the Postal Division's vehicle fleet. The development plan proposed by the Postal Division in 1984 focuses mainly on construction projects (post offices and staff housing) and vehicle replacement and does not address the management factors contributing to this decline in services. Given the importance of postal services, there is a need for PTC to prepare a realistic assessment of the financing and management needs of the Postal Division.

C. The Core Parastatal Investment Program, 1986-88

4.70 By and large, most of the parastatal investment projects discussed in this chapter appear to be well-justified and consistent with the objectives of the economic recovery program. There are some obvious candidates for elimination (e.g., the ZCCM parts manufacturing facility, the INDECO steel re-rolling mill, most rural electrification projects), but the majority of the proposals represent realistic rehabilitation and expansion investments designed to improve capacity utilization and restore production as the economy economy begins to recover. However, the total size of the parastatal investment program (Table 4.11) after eliminating all doubtful investment projects and making other reasonable cuts, still exceeds the amount of resources that is expected to be available for parastatal investment by approximately K 450 million (US$75 million).[14] This means that ZIMCO and the Government will have to maintain very tight control over the parastatal investment program. Only projects which are critical for the recovery of the economy should be allowed to proceed, with other projects delayed or postponed until economic conditions improve.

4.71 The major share of summary investment program is composed of large rehabilitation projects. Five of the projects (ZCCM, NCZ fertilizer plant, Tazama pipeline, Maamba Collieries and Zambia Railways) account for almost three-fourths of the core investment program. With the possible exception of the NCZ project, each of these projects has critical linkages to other sectors of the economy and would cause substantial disruption if significantly postponed. This situation illustrates the serious resource constraint facing the recovery of the Zambian economy. Investment levels have been severely depressed by the low level of national savings, while there is a large backlog of high priority maintenance and rehabilitation projects facing the economy. The available resources are needed to restore Zambia's basic economic infrastructure, and it will not be possible to justify new investments or significant expansions of capacity until the urgent rehabilitation needs of the economy have been met. This process is likely to take several years at least before the investment constraint becomes less binding and new investments can be considered.

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[14]/As indicated in Chapter I, K 3800 million in constant 1986 prices is expected to be available for parastatal investment during 1986-88.

Table 4.11: Summary Parastatal Investment Program, 1986-88

Sector/Project	Proposed Expenditure Proposed Expenditure 1986-88 (K million)	As % of Total	Foreign Financing Committed (C)/Required (R) During 1986-88 (US$ million) c/
Mining			
ZCCM Rehabilitation	K 2105	50	$ 212, of which 112 (R)
Industry			
INDECO Investment Program	344 a/	8	44, of which 37 (R)
NCZ Rehabilitation	230	5	31 (C)
Other	240 b/	6	29 (R)
Sub-total	814	19	
Energy			
Tazama Rehabilitation	180	4	22 (R)
Maamba Collieries	135	3	20, of which 5 (R)
Other	129	3	18, of which 18 (R)
Sub-total	444	10	
Transport			
Zambia Railways	430	10	66, of which 11 (R)
Other	202	5	28 (R)
Sub-total	632	15	
Telecommunications			
PTC Investment Program	253	6	36, of which 2 (R)
Total	K 4248	100	$ 506, of which 264 (R)

a/ Based on INDECO's 1986 investment proposals (including the glycerine recovery plant) and multiplied by 3 to obtain an estimate of investment expenditures for 1986-88.

b/ A residual category to cover industrial investments not captured by the review of INDECO large projects. This could include projects financed by IBZ, as well as from other sources.

c/ Financing based on information available as of February, 1986. Required and committed financing is pro-rated over the period 1986-88 and does not necessarily reflect the total financing cost for the project.

4.72 The next step is to reconcile the proposed investment program for 1986-88 with the resources that will be available. The Government and ZIMCO should review the investment program in Table 4.11 and identify whether the proposed program is consistent and whether the proposed costs and implementation schedules are realistic, whether the phasing of various projects is optimal, whether some of the components can be delayed, and which of the investments can be scaled-back or cancelled to reduce the total size of the program without serious repercussions on economic recovery. In addition, economic and financial rates of return should be prepared for all projects to provide a consistent basis for choosing alternative investments. This process should be able to bridge the remaining investment gap, provided that the various cuts recommended in the parastatal investment program are maintained. Nevertheless, the economic scenario on which the projection of investment resources is based is relatively optimistic about how quickly the economy can recover. ZIMCO would therefore be prudent to plan its investment program on a more conservative basis in order to ensure that the highest priority projects receive adequate funding. Additional cuts in the investment program, particularly in less-essential areas such as the INDECO investment program, should be seriously considered. The type of questions that need to be raised in making these choics include:

(a) Intersectoral linkages: Will postponing an investment have major implications on other sectors (e.g. the Tazama pipeline rehabilitation) or is it relatively isolated in terms of its impact on the economy (e.g. the INDECO project portfolio)?

(b) Relation to the recovery program. Does the investment play an important role in reviving growth in the economy (e.g. mining rehabilitation) or is it required to support more medium term development (e.g. the PTC investment program)?

(c) Alternative approaches. Can an investment be turned over to the private sector (e.g., trucking rehabilitation)? Is there an alternative approach that can postpone the investment cost until the economy improves (e.g., avoiding improvements to the Indeni refinery by importing a different mix of oil products)?

4.73 The Government and ZIMCO should also develop a coordinated plan for mobilizing the financing required to support the investment program.[15/] As much of the investment cost is associated with major

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15/In order to provide an analytical basis for the financing plan, the Government should prepare an aggregate statement of sources and use of funds for the investment program, covering both foreign and domestic financing sources. This would provide a linkage between the total investment expenditure of the economy in real terms (which was used in Table 1.4 to derive the aggregate expenditure constraint on parastatal investment) and the monetary flows within the economy necessary to finance the investment program. Given the good data base which is available for the parastatal financing decisions, this analysis could be completed within a relatively short time period and would provide additional insights on a feasible financing program.

projects rather than small discrete investments which can be financed through local channels, access to foreign financing will be an important factor in deciding which of the investments can proceed. In the past, the Government has allowed parastatals to negotiate with foreign lenders in an uncoordinated fashion and without attempting to provide guidelines or set priorities. This approach is unlikely to produce a satisfactory investment program, and greater control and direction over the financing discussions will be required. To deal with this situation, the Government and ZIMCO need to approach foreign donors and other lenders with a clear view of the relative priorities of the investment proposals and the preferences of the donors in supporting different types of projects. The preparation of a detailed public investment program along the lines suggested in this report would be an important step in thisdirection. In order to focus attention on the core investment program, the Government should exclude projects that are not part of the public investment program from external financing discussions. The public investment program should then form the basis for discussions at aid coordination meetings and with bilateral and other lending agencies to develop a program of financial commitments adequate to support a consistent set of the core investment proposals. The Government should be prepared to renegotiate existing financial agreements (as in the case of PTC) or turn down offers of financial assistance for particular sectors in order to ensure that funds are directed to the priority investment areas. This will be a difficult process, and the Government and ZIMCO may need to obtain outside assistance to develop a consistent financing program. In addition, the Government should be prepared to consider alternative methods of encouraging greater investment inflows, including private participation and debt-for-equity swaps in public enterprises.

4.74 Some of the most difficult decisions will involve the rehabilitation program for ZCCM. This investment program alone, if maintained at the level indicated in Table 4.11, would consume over 50 percent of the resources available for parastatal investment during the period 1986-88. While additional cuts would be desirable in view of the urgent needs of other sectors, these will need to be weighed against their possible impact on the recovery of copper production, which the viability of Zambia's economic recovery program is based on. This trade-off indicates the serious nature of the choices involving the parastatal investment program and the urgency with which this problem needs to be addressed.

D. Improving Parastatal Investment Decisions

4.75 In the remainder of this chapter, we will discuss longer term institutional reforms to strengthen decision making and investment planning for the parastatal sector, including:

a) improving the review of investment proposals within ZIMCO and the individual enterprises; and

b) setting objectives for the parastatals which are consistent with the Government's economic recovery program.

4.76 Investment Review. Investment review within ZIMCO is part of the corporate planning process introduced in 1981. All firms are expected to prepare five year corporate plans, which are updated by annual budgets and investment programs. ZIMCO provides enterprises with macroeconomic assumptions and financial guidelines as the basis for their corporate and annual plans. Investment proposals are expected to be prepared according to a standardized format (spelled out in detail in the ZIMCO financial manual), giving information on the project concept, estimated costs and expected financial rate of return and payback period. Projects costing in excess of K1 million (K 2.5 million for ZCCM) must be approved by the ZIMCO Board, while smaller projects must be approved either by the boards of the individual enterprises (for projects costing up to K250,000) or by the boards of subholding companies (for projects up to K1 million). These limits have not been adjusted since 1984 and should be reviewed to adjust for the impact of devaluation.

4.77 The quality of investment review varies considerably within the group. Not all companies adhere to the ZIMCO manual or have qualified staff to prepare investment proposals according to the standardized format. As a result, there is a tendency to rely on feasibility studies prepared by representatives of suppliers (this has been a particular problem for the INDECO group). In some cases, the investment guidelines have been ignored, either because the project has strong political backing or because the company is strong enough to proceed on its own. For example, ZCCM recently undertook a large hotel expansion project without a feasibility study. Another problem has been the tendency for donor financed projects to be approved without an independent review of their feasibility, even in cases where they have not been part of a corporate plan. In a number of cases, this has placed a large financial burden on the Government without sufficient justification for public involvement (as in the case of the PTC investment program). Despite these problems, the ZIMCO guidelines are gradually eliminating instances where investments proceed without some form of feasibility analysis. There have been several cases where ZIMCO has refused to implement projects with high political support but dubious economic prospects (including, in recent years, an ethanol plant and a tractor assembly plant).

4.78 ZIMCO should obtain assistance to improve the quality of its investment appraisals and expand the number of staff reviewing projects. This type of assistance is already being provided to the INDECO Economic Evaluation Unit, and ZCCM is improving its investment review procedures as part of its five-year rehabilitation program. ZIMCO, however, has only nine financial staff, with responsibilities for a wide variety of financial assignments. This provides very little time to perform serious financial appraisals of any projects except for the most important ones. Training courses in investment analysis through the ZIMCO Institute of Management would be helpful; another improvement would be greater use of standardized forecasting models such as the cash-flow computer model developed for INDECO which provides both financial and economic indicators of a project's viability.

4.79 The Government should place high priority on improving the capacity of the Ministry of Finance to carry-out financial appraisals of parastatal investments that would involve a financial obligation on the Government. This should include all proposals for on-lending of Government funds (involving either domestic or donor provided financing), provision of Government guarantees, and Government assumption or rescheduling of parastatal debt. Besides looking at the ability of the enterprise to cover financial obligations arising from the investment (including the need for price increases), major factors that the Ministry of Finance should consider in approving investments include the self-financed share of the cost ofthe investment and the record of the enterprise in repaying previous loans and maintaining tax payments to the Government.

4.80 In the longer term, consideration should be given to improving the investment planning and appraisal capacity of the planning units in ministries that are responsible for Government policy in major sectors. The reorganization of ZIMCO in 1978, which terminated direct ministerial involvement in the internal affairs of individual enterprises, has left many ministries unclear as to their policy role. This has allowed individual parastatals to develop investment proposals in a fragmented fashion and with little consideration of intra-sectoral priorities. This situation is particularly evident in the energy and transport sectors, which have largely neglected issues such as inter-fuel substitution possibilities or road-rail competition. There is a need for the sector ministries to have stronger technical capacity to develop sectoral policies and assess the priority of proposed investments in the light of such policies. Given the severe manpower constraints in the operating ministries, this effort will likely require a substantial input of external technical assistance and should be carried out on a selective basis.

4.81 Setting Objectives for Parastatals. The system of corporate planning established by ZIMCO is a valuable management tool, but it does not provide a method for establishing performance targets for individual enterprises or achieving consensus on the steps required to achieve the specified targets. It would be useful to establish a system of clear, negotiated annual targets for ZIMCO enterprises, which are set down in an agreement that spells out the mutual obligations of the enterprise and, where appropriate, the Government and/or the holding company, and specifies the results expected from the enterprise if the agreements are upheld. These agreements could take a number of forms, being more or less detailed depending on the circumstances facing the enterprises. Competitive firms which do not need financial assistance or guarantees would have the simplest agreements, specifying a performance target (rate of return, for instance), dividend policy (or approval by ZIMCO or the Government for any reinvestment of profits), and the autonomy that the enterprise can expect in terms of pricing decisions, hiring and firing practices, closure of production lines, etc. On the other hand, where an enterprise operates in a non-competitive situation, requires significant financial assistance from the Government (including debt relief), or is expected to achieve non-commercial objectives (such as providing a consumer subsidy or operating a non-profitable activity), these conditions need to be fully specified and the mutual obligations of all relevant actors clearly defined, including, where appropriate, the specific approval of the Government through the

Ministry of Finance. The agreements should be the result of negotiations between the enterprises and ZIMCO (or between subholding companies and their subsidiaries), and the process of negotiating the agreement can be incorporated into the ongoing system of annual management review which is currently conducted by ZIMCO. The large number of companies included in ZIMCO and the experience of other countries indicates that a major premium should be attached to simplicity and clarity of the agreements,[16/] with senior management attention focused primarily on major financial decisions, such as large investment proposals, debt restructuring or pricing changes, which require serious review.

4.82 In order to implement the system proposed here, several changes would be desirable. Enterprise managers need to be provided with assistance and incentives to take on greater autonomy and responsibility. This can be accomplished through regular performance reviews of individual managers, introduction of financial incentive systems based on the performance of enterprises against their agreed targets, and programs of technical assistance and training for managers in areas such as marketing, cost and quality control, and export promotion. Negotiation of the annual performance plans would permit streamlining of the various reporting requirements within ZIMCO by focusing management reviews and performance evaluations increasingly on the annual target setting exercise.

4.83 It would also be desirable to clarify the roles and responsibilities of the Government and the ZIMCO Board of Directors (and the boards of the subholding and subsidiary companies) in formulating policies concerning the parastatals and setting performance criteria on the basis of these policies. ZIMCO has established a useful role as a buffer between the enterprises and the operating ministries. Without returning to a situation where the ministries exercise direct influence over the internal affairs of parastatals, it should be possible to provide a more coherent forum for coordinating Government policy concerns with the objectives of the parastatals. One possibility would be to restructure the ZIMCO Board as a policy-making body at which parastatal issues are discussed. The responsibilities of the Board would include: (i) determine the multi-year and annual strategic priorities for the parastatal sector; (ii) approve the annual agreements negotiated between the enterprises and ZIMCO management, including all major investments and Government guarantees, loans and other financial transactions with parastatals; (iii) decide on the liquidation and creation of parastatals; and (iv) appoint the heads of ZIMCO and the sub-holding companies. The executive committee of ZIMCO would then take on the responsibility for monitoring and implementing the policy guidelines, including appointment of the members of the boards of direct ZIMCO subsidiaries and negotiation and follow-up of the annual performance agreements. This structure of accountability and control would clarify those areas in which the Government retains a mandate for providing policy guidance, while allowing individual managers to exercise greater initiative in achieving their specific objectives within the confines of the overall policy guidelines.

16/For example, an often-cited French system, the "contrat-plan", requires a legal agreement between the enterprises and other agencies and has proved to be very time-consuming to negotiate. In contrast, the system suggested here could rely on letters of understanding that are updated annually or form part of the approved budget for the enterprise.

Table A1: ZAMBIA — REVENUE, GRANTS AND FINANCING, 1975-86
(K million)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985 Prelim.	1986 Budget
TAX REVENUE	390.5	382.8	442.5	482.7	531.2	702.6	745.6	767.4	954.7	1009.2	1433.8	2880.2
Company Income Tax	64.7	61.9	77.5	82.9	85.9	113.1	131.9	132.7	222.6	167.3	205.3	272.0
Individual Income Tax	75.0	88.4	109.0	117.7	117.1	137.3	151.7	142.7	131.2	157.4	188.0	233.0
Selective Employment Tax	2.9	8.8	13.4	17.1	15.3	20.9	24.2	21.0	15.8	12.8	15.4	20.0
Taxes on International Trade	62.5	58.2	64.2	55.1	78.3	112.5	121.0	131.1	92.7	140.4	341.4	1039.5
Excise & Domestic Sales Taxes	125.9	153.9	179.6	209.8	239.4	277.1	315.8	339.9	439.0	436.8	491.5	565.7
Mineral Revenue	59.5	11.6	-1.2	0.1	-9.8	41.7	1.0	0.0	53.4	94.5	192.2	750.0
NON-TAX REVENUE	72.0	81.4	63.5	82.1	74.8	80.3	82.5	82.3	91.9	87.6	75.1	98.1
Rents, Fines & Licences	26.4	30.8	26.4	27.0	27.7	32.7	38.8	36.1	43.4	52.9	57.8	65.7
Interest & Financial Dividends	30.9	28.2	28.9	39.4	32.9	30.5	25.0	35.7	17.3c/	29.5	12.8	20.4
Capital Repayments	14.7	22.4 a/	8.2	15.7	14.2	17.1	18.7	10.5	31.2	5.2	4.5	7.0
GRANTS	13.5	6.4	33.8	19.5	28.7	25.6	24.0	29.0	53.7	23.0	51.5	499.2
Total Revenue & Grants	476.0	470.6	539.8	584.3	634.7	808.5	852.1	878.7	1100.7	1119.8	1560.4	3472.5
EXTERNAL FINANCE	84.8	30.1	19.0	20.5	137.9	141.9b/	267.4	111.6	100.8 d/	59.5	169.2	942.3
DOMESTIC FINANCE	260.8	226.0	197.9	143.8	140.0	292.2	211.0	515.3	224.1	291.5	818.2	160.0
Total Revenue & Financing	821.6	726.7	756.7	748.6	912.6	1242.6	1310.5	1505.6	1425.6	1470.8	2547.8	4574.8

a/ Includes K 164.9 million book entry for transfer of TAZAMA assets from GRZ to Zambia Railways.
b/ Includes K 162.1 million book entry for Government assumption of NCZ external debt.
c/ Includes K 2.5 million equity levy for parastatal organisations.
d/ Includes K 44.3 million book entry for refinancing of pipeline arrears.

Sources: Annual Financial Reports and IMF.

Table A2: ZAMBIA — CENTRAL GOVERNMENT EXPENDITURE BY ECONOMIC CLASSIFICATION, 1975-86
(K million)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985 Prelim.	1986 Budget
Personal Emoluments a/	152.8	176.9	184.5	189.0	203.8	256.6	335.3	353.2	380.4	429.6	527.1	661.9 h/
Recurrent Departmental Charges b/	97.9	86.4	93.0	84.2	109.7	144.0	137.9	236.8	197.4	209.3	290.8	431.2 i/
Grants, Transfers & Other Payments	32.4	53.7	55.1	53.2	61.5	78.5	92.3	136.2	145.2	148.0	183.0	339.4
Grants & Other Payments	27.6	29.1	30.7	27.9	35.3	51.6	59.4	100.8	106.2	107.4	138.3	288.1
Rural Beer Surtax Fund c/	-	8.4	6.8	7.6	7.3	6.9	7.3	10.4	8.4	8.9	12.5	11.0
Pensions	4.8	16.2	17.6	17.7	18.9	20.0	25.6	25.0	30.6	31.7	32.2	40.3
Subsidies	82.8	59.8	66.2	45.5	102.1	206.4	110.2	154.1	82.2	90.6	190.6	333.8
Constitutional & Statutory d/	210.1	187.3	197.6	208.4	270.1	337.1	478.5	342.6	401.2	414.3	1019.9	2154.0
Interest e/	42.3	60.6	71.8	90.1	103.3	126.8	117.7	149.6	193.8	216.1	789.0	1879.0
- foreign	(17.9)	(23.5)	(22.1)	(33.7)	(43.8)	(62.6)	(47.1)	(75.2)	(46.3)	(71.8)	(452.0)	(1307.0)
- domestic	(24.4)	(37.1)	(49.7)	(56.4)	(59.5)	(64.2)	(70.6)	(74.4)	(147.5)	(144.3)	(337.0)	(572.0)
Other f/	167.8	126.7	125.8	118.3	166.8	210.3	360.8	193.0	207.4	198.2	230.9	275.0
Total Recurrent	576.0	564.1	596.4	580.3	747.2	1022.6	1154.2	1222.9	1206.4	1291.8	2211.4	3920.3
Capital Expenditure	245.6	162.6	160.3	168.3	165.4	220.0	156.3	282.7	219.2	179.0	336.4	654.5
- direct outlays	(131.1)	(122.9)	(114.5)	(91.7)	(88.6)	(121.3)	(128.6)	(178.6)	(144.5)	(118.2)	(224.6)	(483.1)
- loans & investments g/	(114.5)	(39.7)	(45.8)	(76.6)	(76.8)	(98.7)	(27.7)	(104.1)	(74.7)	(60.8)	(111.8)	(171.4)
Total Expenditure	821.6	726.7	756.7	748.6	912.6	1242.6	1310.5	1505.6	1425.6	1470.8	2547.8	4574.8
Percentage Distribution												
Personal Emoluments	18	24	24	25	23	21	26	23	27	29	21	15
Recurrent Departmental Charges	12	12	12	11	12	12	11	16	14	14	12	10
Grants, Transfers & Other Payments	4	7	7	7	7	6	7	9	10	10	7	7
Subsidies	10	8	9	6	11	16	8	10	6	6	7	7
Interest	5	8	10	12	11	10	9	10	14	15	31	41
Other Constitutional & Statutory	21	18	17	16	18	17	27	13	14	14	9	6
Capital Expenditures	30	23	21	23	18	18	12	19	15	12	13	14
Total	100	100	100	100	100	100	100	100	100	100	100	100

a/ Total compensation to Government employees. See Table A4, Note 1 for details.
b/ Materials and services required for routine operation and maintenance. See Table A4, Note 2 for details.
c/ Collected on behalf of local authorities and passed back to them through Ministry of Finance; in former budget classification the fund was included under MOF recurrent departmental charges (37/01.2.26)
d/ Includes expenditure for Zambia National Service and Rural Reconstruction Centers which from 1981 to 1985 were part of the Ministry of Youth and Sport (Heads 76/04 and 05). Excludes amortization payments on Government debt, which are included in the Government's definition.
e/ Includes management expenses and partial payment of IMF charges.
f/ Residual category, mostly for defense expenditures.
g/ Figures for 1976, 1980, and 1982 exclude certain book entries representing conversion of outstanding GRZ loans to various public enterprises into equity and/or assumption parastatal debt by the Government. See footnotes in Table A4.
h/ Includes K 52.1 million imputed expenditure for the Ministry of Foreign Affairs (Head 17/32) (see Table A4 footnote j for details).
i/ Includes K 103.8 million imputed expenditure for the Ministry of Foreign Affairs (Head 17/32) (see Table A4 footnote j for details).

Sources: Annual Financial Reports and IMF.

Table A3: ZAMBIA — CENTRAL GOVERNMENT EXPENDITURE BY FUNCTIONAL CLASSIFICATION, 1975-86
(K million)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985 Prelim.	1986 Budget
DIRECTLY PRODUCTIVE	67.9	48.8	57.2	76.2	100.9	114.8	77.6	153.8	127.7	128.2	205.5	409.3
Agriculture (Lands, MAWD, Coops.)	50.3	44.4	47.5	62.0	66.2	71.3	67.0	100.2	114.4	112.0	169.2	331.5
Mines	3.4	2.7	2.5	3.5	5.7	7.5	2.2	10.2	4.4	8.2	6.5	22.0
Commerce and Industry	14.2	1.7	7.2	10.7	20.5	31.7	6.1	39.2	6.9	4.6	25.1	50.6
Tourism	-	-	-	-	8.5	4.3	2.3	4.2	3.0	3.4	4.7	5.2
INFRASTRUCTURE SUPPORT	176.5	130.0	120.2	112.3	108.1	137.3	112.0	177.1	142.6	134.9	220.9	270.9
Power, Transport and Communications	112.5	67.5	54.5	44.3	22.9	41.3	10.1	45.6	46.0	30.1	44.4	65.8
Works and Supply	47.7	55.0	59.7	60.5	78.4	87.1	97.5	123.1	83.0	96.8	150.2	180.4
Water Supply/Housing a/	16.3	7.5	6.0	7.5	6.8	8.9	4.4	8.4	13.6	8.0	26.3	24.7
SOCIAL SERVICES	149.5	169.2	175.9	173.1	182.6	212.6	247.8	353.3	363.0	378.4	460.2	702.4
Education	100.4	113.0	110.2	107.6	114.8	126.7	150.1	214.8	224.8	249.2	295.8	465.8
Health	41.4	48.0	56.3	51.3	55.7	68.7	76.3	117.1	108.1	112.3	145.1	203.5
Information and Broadcasting	4.6	5.1	6.2	11.1	8.8	13.5	16.8	15.7	23.3	9.9	10.8	22.1
Labor and Social Services	3.1	3.1	3.2	3.1	3.3	3.7	4.6	5.7	6.8	7.0	8.5	11.0
ADMINISTRATIVE	130.0	107.0	115.2	107.8	122.6	207.5	251.5	289.3	268.5	283.8	405.9	653.1
All Other Ministries b/	110.5	89.0	96.0	86.3	108.5	183.3	224.4	257.7	241.3	255.3	379.1	622.5
Provinces	19.5	18.0	19.2	21.5	14.1	24.2	27.1	31.6	27.2	28.5	26.8	30.6
Sub-total, Expenditure by Ministries	523.9	455.0	468.5	469.4	514.2	672.2	688.9	973.5	903.2	925.3	1292.6	2035.7
NON-MINISTERIAL EXPENDITURE	297.7	271.7	288.2	279.2	398.4	570.4	621.6	532.1	522.4	545.5	1255.2	2539.7
Rural Beer Surtax Fund	-	8.4	6.8	7.6	7.3	6.9	7.3	10.4	8.4	8.9	12.5	11.0
Pensions	4.8	16.2	17.6	17.7	18.9	20.0	25.6	25.0	30.6	31.7	32.2	40.3
Subsidies	82.8	59.8	66.2	45.5	102.1	206.4	110.2	154.1	82.2	90.6	190.6	333.8
Constitutional and Statutory c/	210.1	187.3	197.6	208.4	270.1	337.1	478.5	342.6	401.2	414.3	1019.9	2154.0
Total Expenditure	821.6	726.7	756.7	748.6	912.6	1242.6	1310.5	1505.6	1425.6	1470.8	2547.8	4574.8
Percentage Distribution												
Directly Productive	8	7	8	10	11	9	6	10	9	9	8	9
Infrastructure Support	22	18	16	15	12	11	9	12	10	9	9	6
Social Services	18	23	23	23	20	17	19	24	25	26	18	15
Administrative	16	15	15	14	13	17	19	19	19	19	16	14
Non-Ministerial Expenditure	36	37	38	38	44	46	47	35	37	37	49	56
Total	100	100	100	100	100	100	100	100	100	100	100	100

Note: Expenditure by sector includes recurrent and capital expenditure as detailed in Table A4. Figures for 1976, 1980 and 1982 exclude certain book entries representing conversion of outstanding GRZ loans to various public enterprises into equity and/or assumption of parastatal debt by the Government (see footnotes to Table A4 for details). Subsidies, which until the budget reforms of 1984 were included in the budgets of various ministries, are shown in this table under "Non-Ministerial Expenditure" since they represent transfer payments to economic entities mainly for the purpose of subsidizing various consumer and producer groups and do not directly support Government activities in a given sector.

a/ Loans to Provincial and Local Governments (320/01) for water supply and site and service schemes; all recurrent expenditure by the Provincial and Local Government Administration Division (now Ministry of Decentralization) is included under "Administration".

b/ Includes general salary and wage increases paid under MDF (Heat 37/01) for various years (footnote b, pg. 2, Table A4). Excludes payments for Zambia National Service and Rural Reconstruction Centers (ZNS and RRC payments are accounted for under Constitutional and Statutory).

c/ Includes Zambia National Service and Rural Reconstruction Centers (see footnote b). Excludes amortization.

Sources: Annual Financial Reports and IMF.

Table A4: ZAMBIA — DETAIL OF EXPENDITURE BY MINISTRY, 1975-86
(K million)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985 Prelim.	1986 Budget
DIRECTLY PRODUCTIVE	67.9	48.8	57.2	76.2	100.9	114.8	77.6	153.8	128.7	128.2	205.5	409.3
Agriculture (Lands, MWD, Crops.)	50.3	44.4	47.5	62.0	66.2	71.3	67.0	100.2	114.4	112.0	169.2	331.5
Personal Emoluments	15.6	18.0	17.7	17.8	18.4	18.5	22.4	35.1	42.9	44.4	53.8	71.4
Recurrent Departmental Charges	4.9	6.0	5.3	5.2	6.8	10.2	9.2	12.3	12.4	12.5	20.1	31.6
Grants and Other Payments	1.4	1.6	0.4	0.5	0.4	0.4	0.7	0.8	1.5	1.1	1.1	3.7
Capital	28.4	18.8	24.1	38.5	40.6	42.2	34.7	51.0	57.6	54.0	94.2	224.8
— direct outlays	(13.1)	(12.5)	(13.8)	(18.9)	(16.0)	(22.3)	(19.2)	(27.7)	(35.6)	(32.5)	(74.4)	(174.0)
— loans and investments	(15.3)	(6.3)	(10.3)	(19.6)	(24.6)	(19.9)	(15.5)	(23.3)	(21.9)	(21.5)	(19.8)	(50.8)c/
Mines	3.4	2.7	2.5	3.5	5.7	7.5	2.2	10.2	4.4	8.2	6.5	22.0
Personal Emoluments	0.7	0.8	0.7	0.7	0.7	1.0	0.9	1.1	1.3	1.4	1.8	2.9
Recurrent Departmental Charges	0.2	0.3	0.3	0.3	0.4	0.3	0.5	0.6	0.7	0.7	1.1	2.8
Grants and Other Payments	0.1	1.4	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.7	0.7	1.0
Capital	2.4	(1.4)	1.3	2.3	4.4	5.9	0.5	8.2	2.0	5.4	2.9	15.3
— direct	(1.0)	(1.4)	(0.4)	(0.4)	(0.3)	(0.4)	(0.5)	(2.1)	(1.9)	(2.8)	(2.9)	(3.6)
— loans and investments	(1.4)	(-)	(0.9)	(1.9)	(4.1)	(5.5)c/	(-)	(6.1)	(0.1)	(2.5)	(-)	(11.7)
Commerce and Industry	14.2	1.7	7.2	10.7	20.5	31.7	6.1	39.2	6.9	4.6	25.1	50.6
Personal Emoluments	0.6	0.7	0.8	0.8	0.9	0.9	1.1	1.4	1.5	1.7	2.0	2.6
Recurrent Departmental Charges	0.3	0.4	0.4	0.4	0.6	0.7	0.7	0.7	0.7	0.8	2.8	1.7
Grants and Other Payments	0.7	0.3	0.1	0.1	0.1	0.1	0.1	0.6	2.0	2.0	3.0	2.3
Capital	12.6	0.3	5.9	9.4	18.9	30.0	4.2	36.5	2.7	0.1	17.3	44.0
— direct	(3.3)	(-)	(0.4)	(0.2)	(0.1)	(-)	(0.2)	(0.2)	(0.3)	(0.1)	(0.1)	(0.7)
— loans and investments	(9.3)	(0.3)	(5.5)	(9.2)	(18.8)	(30.0)d/	(4.0)	(36.3)	(2.5)	(0)	(17.2)	(43.3)
Tourism	-	-	-	-	8.5	4.3	2.3	4.2	3.0	3.4	4.7	5.2
Personal Emoluments					0.6	0.4	0.5	0.5	0.5	0.5	0.5	0.8
Recurrent Departmental Charges					0.1	0.4	0.3	0.6	0.3	0.7	0.6	0.8
Grants and Other Payments					1.2	1.5	0.4	2.0	2.0	2.0	3.4	3.3
Capital					6.6	2.0	0.9	1.1	0.3	0.2	0.2	0.3
— direct					(0.1)	(0.2)	(0.3)	(0.3)	(0.3)	(0.2)	(0.2)	(0.3)
— loans and investments					(6.5)	(1.8)	(0.6)	(0.8)	(-)	(-)	(-)	(-)
INFRASTRUCTURE SUPPORT	176.5	130.0	120.2	112.3	108.1	137.3	112.0	177.1	142.8	135.0	220.9	270.9
Power, Transport and Comm.	112.5	67.5	54.5	44.3	22.9	41.3	10.1	45.6	46.0	30.2	44.4	65.8
Personal Emoluments	2.7	1.8	2.2	2.2	2.2	2.2	2.6	3.6	4.4	4.9	5.7	8.9
Recurrent Departmental Charges	3.8	3.0	2.1	2.2	2.4	3.2	4.0	11.4e/	4.1	3.6	18.9	6.7
Grants and Other Payments	-	-	-	-	0.1	0.5	0.1	0.7f/	1.3	1.5	0.5	4.4
Capital	106.0	62.7	50.2	39.9	18.2	35.4	3.4	29.9	36.2	20.5	19.3	45.8
— direct	(37.8)	(38.6)	(29.0)	(3.9)	(3.5)	(3.5)	(1.4)	(4.7)	(6.7)	(2.2)	(13.9)	(22.8)
— loans and investment	(68.2)	(24.1)b/	(21.2)	(36.0)	(14.9)	(31.9)	(2.0)	(25.2)	(29.5)	(18.0)	(5.4)	(23.0)
Works and Supply	47.7	55.0	59.7	60.5	78.4	87.1	97.5	123.1	83.2	96.8	150.2	180.4
Personal Emoluments	15.4	16.8	16.8	17.4	17.7	18.5	22.0	29.9	36.6	39.5	42.1	52.0
Recurrent Departmental Charges	12.7	14.4	14.2	11.1	14.5	22.1	15.1	19.0	19.1	18.0	42.6	33.7
Grants and Other Payments	-	-	-	-	0.1	0.1	0.1	0.2	0.3	0.4	0.4	0.4
Capital	19.6	23.8	28.7	32.0	46.1	46.4	60.3	74.0	27.2	38.9	65.1	94.3
— direct	(19.6)	(23.8)	(28.3)	(31.7)	(46.0)	(46.4)	(-)	(74.0)	(27.2)	(38.9)	(65.1)	(94.3)
— loans and investments	(-)	(-)	(0.4)	(0.3)	(0.1)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Loans to Provincial and Local Governments for Water Supply and Housing Schemes a/	16.3	7.5	6.0	7.5	6.3	8.9	4.4	8.4	13.6	8.0	26.3	24.7

Sources: Annual Financial Reports and IMF.

Notes: (1) Personal Emoluments include salaries for established staff, wages for established staff, wages for Classified Daily Employees (CDEs), which until 1984 were included under "recurrent departmental charges (RDCs) in the Government's former budget classification, and other employee benefits (i.e., travelling on leave, compensations and awards, revolving loans funds for cars, motorcycles, furniture, etc.) plus wage adjustments (resulting from general salary increases) which were included under "RDCs-Other" in the Ministry of Finance Headquarter's budget (37/01.2). Also includes "ZNPF contributions" which until 1984 were included under RDCs. Excludes Pensions, which are considered "Non-Ministerial Expenditures" (see Table A3).

(2) Recurrent Departmental Charges include materials and services required for routine operation and maintenance; excludes wages for CDEs, other employee benefits (see 1) and "Rural Beer Surtax Fund" (see Table A2, footnote c); includes Special Expenditures, which prior to 1984 had a separate heading, and movable assets, which after 1984 were included as capital expenditures.

(3) Grants & Other Payments exclude subsidies, since subsidies represent transfer payments to economic entities mainly for the purpose of subsidizing consumers. In contrast, grants and other payments are made to non-profit organizations which compliment Government activities in a sector (e.g., University of Zambia, mission hospitals, etc.) and thus are included in sector expenditures.

a/Recurrent expenditure by Provincial and Local Government Administration Division (Head 29) (now Ministry of Decentralization) is included under ADMINISTRATION.
b/Includes K 164.9 million book entry for transfer of TAZARA assets from GRZ to Zambia Railways.
c/Includes K 163.2 million book entry for assumption of NCDC/NCI debt by Government.
d/Includes K 192.4 million book entry for capitalization of various DHBED firms.
e/Includes K 7.0 million overdue telephone bill.
f/Includes K 12 million probable subsidy to Provincial Cooperative Unions.

Table A4: ZAMBIA — DETAIL OF EXPENDITURE BY MINISTRY, 1975-86
(K million)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985 Prelim.	1986 Budget
SOCIAL SERVICES	149.5	169.2	175.9	173.1	182.6	212.6	247.8	353.3	363.0	378.3	460.2	702.4
Education (Including Primary)	100.4	113.0	110.2	107.6	114.8	126.7	150.1	214.8	224.8	249.2	295.8	465.8
Personal Emoluments	54.2	65.4	68.2	71.1	75.8	81.6	94.0	126.5	138.1	147.6	173.3	223.2
Recurrent Departmental Charges	21.4	19.9	18.1	18.8	22.1	23.0	28.9	39.1	38.8	44.8	63.0	91.8
Grants and Other Payments	6.2	8.8	9.2	9.8	11.6	15.8	23.1	31.6	32.3	37.7	37.6	65.7
Capital (all direct)	18.6	18.9	14.7	7.9	5.3	6.3	4.1	17.6 g/	15.7	19.1	21.9	85.1
Health	41.4	48.0	56.3	51.3	55.7	68.7	76.3	117.1	108.1	112.3	145.1	203.5
Personal Emoluments	18.1	21.0	24.3	25.5	27.3	29.9	37.2	50.0	55.0	62.0	66.8	88.2
Recurrent Departmental Charges	14.2	17.0	21.7	17.6	21.0	27.6	26.5	45.8	32.3	33.5	53.2	51.5
Grants and Other Payments	4.6	4.9	5.8	6.1	6.5	7.9	8.9	10.2	12.7	13.9	16.1	53.9
Capital (all direct)	4.5	5.1	4.5	2.1	0.9	3.3	3.7	11.1	8.1	2.9	9.0	29.9
Information and Broadcasting	4.6	5.1	6.2	11.1	8.8	13.5	16.8	15.7	23.3	9.9	10.8	22.1
Personal Emoluments	2.0	2.4	2.6	2.6	2.8	2.5	3.0	4.1	4.4	4.6	4.9	7.0
Recurrent Departmental Charges	2.0	2.1	1.8	1.7	2.1	2.4	2.3	4.0	4.4	4.2	5.3	7.4
Grants and Other Payments	-	-	1.2	1.1	-	-	-	-	-	-	-	0.1
Capital (all direct)	0.6	0.6	0.6	5.7	3.9	8.6	11.5	7.6	14.5	1.1	0.6	7.6
Labor and Social Services	3.1	3.1	3.2	3.1	3.3	3.7	4.6	5.7	6.8	6.9	8.5	11.0
Personal Emoluments	1.8	2.1	2.1	2.1	2.1	2.1	2.5	3.4	3.7	3.8	4.3	5.3
Recurrent Departmental Charges	0.6	0.4	0.4	0.3	0.5	0.7	0.6	0.9	0.9	0.9	0.9	1.0
Grants and Other Payments	0.4	0.5	0.5	0.5	0.6	0.8	1.3	1.2	2.0	2.2	2.5	3.3
Capital (all direct)	0.3	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	-	0.8	1.4
ADMINISTRATION	130.0	107.0	115.2	107.8	122.6	207.5	285.8	289.3	268.6	283.8	405.9	653.1
All Other Ministries a/	110.5	89.0	96.0	86.3	108.5	183.3	224.4	257.7	241.3	255.3	379.1	622.5 j/
Personal Emoluments	38.2	43.8	44.8	44.5	51.0	94.1	142.8	83.3	89.2	115.6	168.2	214.8
Recurrent Departmental Charges	35.9 c/	20.8	26.7	23.0	36.8	49.4	46.0	21.1	77.1	83.8	78.8	197.8 k/
Grants and Other Payments	14.2	12.8	13.3	9.6	14.5	24.2	24.4	53.2	43.0	33.8	60.4	136.9 l/
Capital	22.2	11.6	11.2	9.2	6.2	15.6	11.2	25.1	32.0	22.1	71.7	73.0
— direct	(18.2)	(10.1)	(9.7)	(7.1)	(5.2)	(14.9)	(10.0)	(24.1)	(24.9)	(11.2)	(28.7)	(55.1)
— loans and investments	(4.0)	(1.5)	(1.5)	(2.1)	(1.0)	(0.7)	(1.2)	(1.0)	(7.1)	(10.8)	(43.0)	(17.9)
Provinces d/	19.5	18.0	19.2	21.5	14.1	24.2	27.1	31.6	27.3	28.5	26.8	30.6
Personal Emoluments	3.5	4.1	4.3	4.3	4.3	4.9	6.3	8.3	2.8	3.6	3.7	4.8
Recurrent Departmental Charges	1.9	2.1	2.0	3.6	2.4	4.0	3.6	11.3 h/	6.6	6.1	3.5	4.4
Grants and Other Payments	-	-	-	-	-	-	-	-	8.8	12.1	12.6	13.1
Capital (all direct)	14.1	11.8	12.9	13.6	7.4	15.3	17.2	12.0	9.1	6.7	7.0	8.3
TOTAL EXPENDITURE BY MINISTRIES	523.9	455.0 e/	468.5	469.4	514.2	672.2 f/	688.9	973.5 i/	903.2	925.3	1292.6	2035.7
Personal Emoluments	152.8	176.9	184.5	189.0	203.8	256.6	335.3	353.2	380.4	429.6	527.1	661.9
Recurrent Departmental Charges	97.9	86.4	93.0	84.2	109.7	144.0	137.9	236.8	197.4	209.3	290.8	431.2
Grants and Other Payments	27.6	29.1	30.7	27.9	35.3	51.6	59.4	100.8	106.2	107.4	138.3	288.1
Capital Expenditure	245.6	162.6 g/	160.3	168.3	165.4	220.0 f/	156.3	282.7 i/	219.2	179.0	336.4	654.5
— direct	(131.1)	(122.9)	(114.5)	(91.7)	(88.6)	(121.3)	(128.6)	(178.6)	(144.5)	(118.2)	(224.6)	(483.1)
— loans and investments	(114.5)	(39.7) g/	(45.8)	(76.6)	(76.8)	(98.7) f/	(27.7)	(104.1) i/	(74.7)	(60.8)	(111.8)	(171.4)

a/Includes recurrent expenditure of Provincial and Local Government Administration. Division (Head 29). Excludes payments for Zambia National Service and Rural Reconstruction Centers which from 1981 to 1985 were included in the Ministry of Youth and Sport (Head 76/04 and 76/05). ZNS and RRC expenditures are now accounted for under non-ministerial "Constitutional and Statutory" expenditure (see Table A2, footnote d).

b/Includes other employee benefits and wage adjustments which are accounted under Ministry of Finance (37/01.01 and .02). General salary and wage adjustments amounted to K 32.2 million in 1980, K 82.0 million in 1981, K 34.0 million in 1984, K 71.6 million in 1985 and K 51.4 million in 1986, part of which is attributable to the productive infrastructure and service ministries.

c/Includes "Emergency", "Contingency", and "Extraordinary" expenditures under MDF (37/01) in various years, in particular K 15.0 million in 1975 and K 12.0 million in 1981.

d/Excludes primary education. Capital expenditure by Provinces contains elements for agriculture, roads, health and education.

e/Excludes K 164.9 million book entry transfer of TAZARA assets from GRZ to Zambia Railways.

f/Excludes K 335.6 million book entry for capitalization of outstanding debt of various mining and industrial companies.

g/Includes K 3.0 million loans and investments.

h/Includes K 4.2 million for drought relief in Southern and Western Provinces.

i/Excludes K 33.2 million in book entries.

j/Includes K 52.1 million expenditure for FEs under the Ministry of Foreign Affairs (Head 17/32). Although this figure and the figure for RDC expenditure were not explicitly specified in the 1986 budget, the residuals from the specified aggregate figures for personal emoluments and recurrent departmental charges implied a distribution of the specified 'block provision' (K 155.9 million total) of K 52.1 for FEs and K 103.8 million for RDCs.

k/Includes K103.8 million for RDCs under the Ministry of Foreign Affairs (Head 17/32) (see j). Excludes K 377 million for one time payment of foreign exchange guarantees due to devaluation, K 106 million payment of arrears, and K 69.9 million "contingency" expenditures, all under MDF (37/01). Also excludes K 16.5 "loss on currency conversion" under Ministry of Foreign Affairs (17/01)

l/Includes K 69.9 million in contingency expenditures (see k).

ANNEX B: SECTOR AND PROGRAM DEFINITIONS IN THE ANNUAL PLAN
(Based on 1985 Budget)

Sectors and Programs	Budget Heads	Agency
ECONOMIC SERVICES		
AGRICULTURE, FORESTRY AND FISHERIES		
Administration 1/	86/01 except 86/01.5.02 89/01 except 89/01.5.02	Min. of Coops - HQ M.A.W.D. - HQ
Area Development	86/01.5.02.001,002 89/01.5.02.001,004,006, 007,012,015	Coops - East & South Area proj. MAWD - IRDP & Area proj.
Crop, Livestock Production	89/01.5.02. all other 321/89 Rural Dev Corp 321/89 Mpongwe Dev Co.	MAWD - production proj. Loans & Investments Loans & Investments
Agricultural Extension & Information Services	89/02 (partial) 89/08	Dept. of Agriculture Nat'l Farming Info. Serv.
Land Use Services	89/02 (partial)	Dept. of Agriculture
Agricultural Research	89/05	Agricultural Research
Veterinary Services	89/03	Dept. of Vet. & Tsetse Control
Agricultural Education	86/03 89/04 89/07	Cooperative College Training Institutions Natural Resources Dev. College
Input Supply and Marketing	86/02 321/86 Prov Coop Unions 321/89 Namboard 321/89 Dairy Produce Bd. 321/89 Lintco 321/89 Tobacco Board 321/89 Cold Storage Bd.	Dept. of Coops & Mktg. Loans & Investments " " " " " " " " " "
Agricultural Credit	321/89 Zam Ag Dev Bank 321/89 Ag Finance Co	Loans & Investments " "
Forestry Development	85/02 321/85 Ind Plant Div.	Forestry Dept. Loans & Investments
Fisheries Development	89/09	Fisheries Dept.

1/ "Administration" includes the functions of planning, policy formulation, regulation, coordination and the setting of standards.

LANDS, NATURAL RESOURCES AND WATER DEVELOPMENT

Administration	85/01	Min. of Lands - HQ
Land Registration and Surveys	85/03, except 85/03.2.03.003	Lands Dept., except Rental charges - Build. (see Admin. Services) Surveys Dept.
Natural Resources, Parks and Wildlife	85/05 85/06	Nat'l Parks & Wildlife Serv. Natural Resources Dept.
Water Resources Development	89/06 (partial)	MAWD - Dept. of Water Aff.
Water Supply Systems	89/06 (partial) 320/01.5.02.002-008	MAWD - Dept. of Water Aff. Loans & Invest (PLGAD)

MINING

Administration	14/01 14/03	Min. of Mines - HQ Mines Safety Dept.
Geological Surveys	14/02	Geological Survey Dept.
Dev. of New Mining Activity	14/04	Mines Dev. Dept.
Mineral Production	321/14 Maamba, ZCCM	Loans & Investments

MANUFACTURING AND TRADE

Administration	33/01 33/02 33/07	Min. of Com. & Ind.- HQ Assize Dept. Patents, etc. Dept.
Price Control	33/03	Price Control Dept.
Import Licensing	33/04	Domestic Trade Dept.
Export Promotion	33/08	Foreign Trade Dept.
Industrial Development	33/06 321/33 Zaffico, etc.	Industry Dept. Loans & Investments

TOURISM

Administration	67/01, except 67/01.3.01, 67/02 67/03	Min. of Tourism - HQ grants, capitalprojects Mulungushi Hall Hotels Board

Tourism Promotion	67/01.3.01.001	Grant to Zam Nat. Tourist Bd
Maintenance & Upgrading of Tourist Attractions	67/01.3.01 other 67/01.5	Grants to museums Capital projects

ENERGY

Planning & Policy Formulation	51/04 51/01.3.01.001	Dept. of Energy Grant to Nat. Energy Coun.
Electrification and Electricity Supply	51/04.5.02 321/51 ZESCO	Dept. of Energy - capital proj. Loans & Investments

TRANSPORT AND COMMUNICATIONS

Administration	51/01, except 51/01.02.03.005 51/01.5.02	Min. of Transp. and Comm. - HQ, postal charges and capital projects
	51/05	Roads & Road Traffic Board
	51/06	Road Traffic Commissioner
	64/01, except 64/01.5.02	Min. of Works & Supply, except capital project
	64/06	Prov. Commissioner of Works
Road Construction and Maintenance	64/01.5.02.011	W & S - HQ, road projects
	64/03	Roads Dept.
Road, Rail and Water Transportation	51/01.5.02	Cap proj (rail & harbors)
	321/51 (UBZ, Z-T Road Service, Zam Railways, etc.)	Loans & Investments
Purchase & Maintenance of Govt. Transportation Equipment	64/07	Mechanical Services Dept.
Operation & Maintenance of Airports	51/02	Civil Aviation Dept.
	51/03	Meteoroligical Dept.
Telecommunications	321/51 (PTC).	Loans & Investments

HOUSING AND URBAN DEVELOPMENT

Development of Urban Housing Areas	321/01.5.02.001	Loans & Investment (PLGA)

SOCIAL SERVICES

EDUCATION

Administration	65/01 except 65/01.5.02.002	Min. of High. Educ.- UNZA - Lusaka Campus
	80/01 except 80/01.5.01.009	Min. of Gen. Educ. & Culture- materials and equipment
	80/02	Regional Headquarters
	80/03	Examinations Dept.
Primary Education	80/01.5.01.009	Gen. Educ. - materials & equipment
	90/02 - 98/02	Provincial Prim. Schools
Junior Secondary Education	80/04 (partial)	Dept. of Sec. Schools
Senior Secondary Education	80/04 (partial)	Dept. of Sec. Schools
Technical Education & Vocational Training	65/04	Dept. of Tech. Ed. & Voc. Training
Teacher Training	65/02	Dept. of Teacher Training
University Education	65/01.5.02.002	UNZA - Lusaka Campus
	65/03.2.04	Sundry Services - Training Expenses
	65/03.3.01.001	UNZA - Lusaka Grant-in-aid
	65/03.3.01.003	UNZA - Ndola Grant-in-aid
Other Services	65/03 except above	Sundry Services
	80/05	Continuing Education
	80/06	Sundry Services
	80/07	Educ. Broadcast & Spec. Educ.
	80/09	Cultural Services

HEALTH

Administration	46/01, except below	Min. of Health, HQ
Centralised Procurement	46/01.2.02.006,009, 012,019	Drugs, special hospital equipment, x-ray, vaccines
Transfers to Local Institutions & Mission Hospitals	46/01.3.01 except .010	All grants except Tropical Disease Research
Major Referral & Specialised Hospitals	46/03,04,05,18,19,20	Major hospitals
	46/01.5.02.009	Maternity Clinic-UTH

Other Training, Research & Testing Institutions	46/01.3.01.010	Tropical Disease Res. Center
	46/02	Chainama
	46/06	Demonstration Zone
	46/07	Public Health Labs.
	46/08	Pneumo. Med & Research
	46/21	Dental Training Schools
Provincial Health Services	46/09 through 46/17	Provinces
	46/01.5.02.001,005,012, 013,014	Provincial capital proj.

INFORMATION & BROADCASTINGN

Administration	26/01	Min. of Info. & Broad.
Information and Broadcasting Services	26/02	Zambia Info. Service
	26/03	Zambia Broad. Service
	26/05	Zambia News Agency
Training	26/04	Institute of Mass Comm.

EMPLOYMENT AND SOCIAL DEVELOPMENT

Administration	44/01 except 44/01.3 and .5	Labour & Soc. Ser - HQ
	76/01	Min. of Youth & Sport - HQ
Labour and Industrial Relations	44/02	Labour & Factories Dept.
	44/03	Educ. & Occ. Assess. Dept.
	44/05	Industrial Relations
Social Development	44/01.3 and .5	Zam Council for Handicapped
	44/04	Social Dev. Dept.
	76/02	Youth Affairs Dept.
	76/03	Sports Dept.
	76/06	Child Affairs Dept.
Zambia National Service	76/04	Zambia National Service
	76/05	Rural Reconstruction Centers

ADMINISTRATIVE SERVICES

POLICY MAKING & LEGISLATION	01	President & State House
	03	National Assembly
	04	House of Chiefs
	05	Elections Office
	08	Cabinet Office
	16	National Guidance

CENTRAL ADMINISTRATION

Planning	38	NCDP
Financial Administration	07	Auditor General
	37/01 except 37/01.2.03.025	Finance - HQ, except Rural Council Beer Surtax
	37/02,04,06	Finance, Other
	321/37	L & I - Finance
Revenue Collection	37/03	Depart. of Taxes
	37/05	Customs & Excise
Personnel Administration	06	Public Serv. Commission
	09	Teaching Serv. Commission
	10	Police & Prisons Com.
	27	Personnel Division
Administrative Overheads (rental, construction & maintenance of Gov't buildings & office equipment; postal charges and printing expenses)	85/03.2.03.003	Lands - rental of buildings
	64/01.5.02.001-010	Works - Govt. buildings
	64/02	Works - Building Dept.
	64/05	Works - Office Equipment
	51/01.2.03.005	MTC - Postal charges
	64/04	Works - Printing Dept.

LAW AND ORDER

Police Services	11	Zambia Police
Prison and Detention	15/02	Home Affairs - Prisons
Citizenship, Registration, Immigration and Investigations	15/01, and 03-08	Home Affairs - all other
	12	Comm. for Investigations
	24	Anti-Corruption Comm.
Judiciary & Legal Affairs	31	Legal Affairs

FOREIGN AFFAIRS

Administration	17/01	Foreign Affairs - HQ
Overseas Missions	17/02 - 31	Foreign Affairs - Other

REGIONAL ADMINISTRATION AND DEVELOPMENT

Administration	29 37/01.2.03.025 90/01 through 98/01, except capital proj.	Prov. & Local Govt. Admin. Rural Council Beer Surtax Provinces
Regional Development	90/01.5 through 98/01.5	Provinces - capital proj.

NON-MINISTERIAL EXPENDITURE

PENSIONS	22/06
SUBSIDIES	323
DEBT SERVICE	99
OTHER CONSTITIONAL & STAT.	99