

Report No. 12985-ZA

Zambia Poverty Assessment

(In Five Volumes) Volume IV: Urban Sector Services:
An Assessment of Service Provision in the Context of Zambia's Urban Poverty

November 30, 1994

Human Resources Division
Southern Africa Department
Africa Regional Office



Urban Sector Services: An Assessment of Service Provision in the Context of Zambia's Urban Poverty

Report Authors:

**Hilary Cottam
Human Resources Division
Southern Africa Department**

and

**Caroline Moser
Urban Development Division
Transport, Water and Urban Development Department**

GLOSSARY OF ABBREVIATIONS

CSO	Central Statistics Office
DHS	Demographic and Health Survey
DOE	Department of Energy
DWA	Department of Water Affairs
GDP	Gross Domestic Product
GRZ	Government of the Republic of Zambia
HBS	Household Budget Survey
LWSC	Lusaka Water and Sewerage Company
NEC	National Energy Council
NGO	Non-Governmental Organization
PIC	Prices and Income Commission
PSLS	Priority Survey Low-income Sub-sample
PPA	Participatory Poverty Assessment
PS	Priority Survey
PUSH	Programme Urban Self Help
SEG	Socio Economic Group
UPA	Urban Poverty Assessment
ZCCM	Zambia Consolidated Copper Mines
UBZ	United Bus Company
UTTA	United Transport and Taxi Association

TABLE OF CONTENTS:

Chapter 1: Introduction	1
Chapter 2: Methods and Measurements	2
Chapter 3: The National Urban Context	4
Chapter 4: Land and Housing	18
Chapter 5: Sector Services	24
Chapter 6: The Response Towards a Future That Included the Urban Poor	45
Bibliography	51

LIST OF TABLES:

Table 2.1 Survey Data Sample Sizes	3
Table 3.1 Poverty Indices at the National Urban, City and Sub City Level	5
Table 3.2 Percentage of Children Malnourished: National, Urban and City Level	5
Table 3.3 Summary of Labor Force Indicators Based on Current Activity, 1991	7
Table 3.4 Average Monthly Urban Wages and Profits (kwacha) by Gender	8
Table 3.5 Urban Consumer Price Index 1980-86 (1975=100)	8
Table 3.6 Trends in Occupational Categories in the Total Chawama Workforce, 1978 and 1992	9
Table 3.7 Employment Status of the Currently employed Workforce	10
Table 3.8 Household Amenities at the National, Urban and City Level	12
Table 3.9 Trends in Access to Housing and Basic Services in Chawama, 1978-1992	14
Table 3.10 Mean Urban Household Size by Poverty Group	15
Table 3.11 Detailed Categorization of Household Types, Chawama 1992	16
Table 3.12 Percentage of Households Owning Assets at the National and Urban Levels	16
Table 3.13 Household Non-food Expenditure as a Share of Income, Chawama, 1992	17
Table 4.1 National Urban Tenancy Status by Poverty Line	20
Table 4.2 Housing Characteristics of Tenants by Poverty Group	21
Table 5.1 Ownership of Transport "vehicles".	25
Table 5.2 Trends in Transport Use in Chawama, 1978-1992.	25
Table 5.3 Fare Levels for 5 Km Bus Journey, 1987-1990.	27
Table 5.4 Fare Levels on UTTA Routes Within Lusaka, October 1993 (Kwacha)	27
Table 5.6 Type of Toilet Facility by Poverty Group, Chawama, 1992	34
Table 5.7 Mean Expenditure Shares on Water as Share of Non-food Expenditure, Chawama, 1992	34
Table 5.8 Overview of Actors and Institutions in the Urban and Sanitation Sector	36
Table 5.9 Source of Funds for Water Supply and Sanitation Projects.	37
Table 5.10 Shares of Household Expenditure on Energy by Poverty Group, Chawama, 1992	41
Table 5.11 Charcoal Prices (Kwacha) 1983-1992, Showing Price Increases and Retail Markup	41
Table 10.1 Short-run Action Plan	226
Table 6.5 Trends in occupational categories in Chawama 1978 and 1992	144

LIST OF TEXT BOXES:

Box 5.1 Private Sector Operators: The Case of Fiat Taxis	30
--	----

CHAPTER ONE: INTRODUCTION

1.1 One quarter of the entire Zambian population live in low income urban areas where the majority are below the poverty line and malnutrition rates (stunting) of 46 percent are recorded. The urban context is one of increasing poverty and the fragmentation of the formal economy and its institutions; declining employment and non-existent or deteriorating service provision. This paper will consider four areas of service provision; land and housing, transportation, water and sanitation and household energy. The challenge in confronting urban poverty is how to provide services that constitute a positive loop, reinforcing the new economic opportunities that are emerging, serving the dynamic sectors of the informal economy and urban spaces where the majority live, enabling the majority of Zambia's population to fulfill their potential as an important developmental resource.

1.2 The historical development of urban services in Zambia must be seen within the context of the formal economy. Optimism related to the copper boom resulted in the planning of sophisticated service systems designed to service the mining sector and the related government and parastatal enterprises. Physical location of these services emphasized the links between Lusaka and the Copperbelt, servicing the needs of the predominantly male formal sector workforce and the small administrative elite. Service sustainability was dependent from the outset on the surplus from the copper industry.

1.3 The decline of urban services and infrastructure, directly linked to the decline in productivity of the urban formal sector, in turn has a reinforcing negative impact on the potential growth of the urban economy and the productivity of urban residents. In the face of decreasing wages and employment, the poor must invest more resources in terms of time and money to compensate for the absent or deteriorating services. At the household level, the lack of services represents a negative loop which mirrors that at the level of the urban economy; lack of transport, for example, prevents the urban poor from seeking employment; the resulting declines in income preclude access to services such as water, education and health, in turn further lowering the chances of access to employment and income.

1.4 It is important to emphasize from the outset that since the majority of the urban poor currently do not have access to these services, focusing on service improvement can only worsen issues of equity. In the context of poverty reduction service provision is important in terms of deciding *what* services are provided, ensuring that productive linkages are facilitated at the level of the urban economy, that widespread access is facilitated at the household level, and, in terms of *how* services are provided, ensuring that mechanisms for service delivery are chosen that foster sustainable institutions, that ensure the poor have a role in the definition, delivery and maintenance of the services provided.

To summarize, urban services are conceptualised as (1) an asset to the urban poor, (2) the basis of urban productivity and (3) a means to establish sustainable institutions at both the municipal and community level.

CHAPTER TWO: METHODS AND MEASUREMENTS

2.1 An assessment of service provision from the perspective of the urban poor is complex. Data on service provision and expenditures is often not disaggregated either at the national urban or city level. Urban poverty frequently is misrepresented by current indicators or frameworks of analysis. This is a result of the particular characteristics of urban areas and, most importantly, of their heterogeneity. A number of the commonly accepted access indicators used to measure poverty and service access are of limited use in urban areas. Distance in particular is a misleading indicator. In Zambia the urban poor may be near a bus stop, a water pump or a clinic, but low incomes and population pressure reduces access and/or the quality of service. Given this complex nature of urban poverty, a number of data sources have been used in the assessment. Information has been triangulated both horizontally across sources, but most importantly, vertically, comparing central level and service site information with the perspective of the urban poor themselves. A summary of the data sources and sample sizes can be seen in Table 2.1

National Data Bases

2.2 Two national data bases have been used, the Priority Survey (PS), developed under the SDA initiative, and the Demographic and Health Survey (ZDHS). The ZDHS makes no attempt to stratify its urban sample by socio economic variables leading to misleading global averages.¹ The PS stratified the urban poor by two means, the use of socio economic groups (SEG's) based on housing categories and the use of a poverty line. Applications of both measurements have proved problematic.

2.3 *Intra Urban Heterogeneity* Urban areas are heterogeneous, not only between cities and "high" and "low" income urban areas, but within those areas broadly classified as low income. As a result, the SEG categorization did not prove useful in terms of isolating the urban poor, a factor further complicated by the use of dated housing plans used for the categorization. This Assessment uses a subsample of marginal areas in Lusaka, the PSLS (Priority Survey Low Income Subsample), chosen on the basis of visual identification undertaken during field visits.² The poverty line is similarly problematic; a comparison with other recognized poverty indicator, such as nutritional status suggests that the poverty line as currently drawn may significantly underestimate urban poverty. Thus, while the PSLS sample shows a the majority of households to own few assets and to have high malnutrition levels, 71 percent of the population are still recorded above the poverty line.

¹ Malnutrition rates can be used as an example, national urban anthropometric indicators show 33 percent of the national urban population to be stunted, among marginal groups, for example female headed urban households in low income areas this figure rises to 69 percent.

²Levels of poverty vary between "low income" areas. In general the more recently established low income compounds are smaller and are characterised by higher levels of poverty. Ten of these compounds form the basis for the PSLS. The sample is thus not statistically representative however data analysis yielded more consistent results than those resulting from the stratification of the PS by SEG or poverty line. The PSLS raises questions as to the validity of random sampling frames of the type used by the PS in urban areas.

Urban Research: Lusaka Urban Poverty and Social Policy in the Context of Adjustment (UPA)

2.4 The UPA research project, primarily concerned with the coping strategies of urban low income households during the past decade has a number of unique aspects, in which it differs from household surveys such as those undertaken by the SDA project. Firstly, it provides trend data which explores changes in the context of a low-income community over a 14 year period (1978-1992); secondly, it provides detailed data on intra-household processes and community structures from both qualitative and quantitative data sources. The use of a number of qualitative and quantitative household data sets which represent different levels of urban analysis (e.g. national urban, intra and inter urban) is important in terms of the assessment's ability to capture the diverse and heterogeneous nature of urban poverty and, in this context, the implications for urban service access and provision. The UPA research was carried out in Chawama, a low income compound in Lusaka.³

Table 2.1 Survey data sample sizes.

Households	PS	PSLS	ZDHS	Lusaka UPA
National	10,000		6,709	/
Urban	6,250	250	2,577	2:0

Field Work; Interviews at Central Government and Municipal Level and Site Visits

2.5 This assessment also draws on findings gathered during the Zambia Poverty Assessment Mission, November 1993, during which ten low income urban areas were visited and a broad cross section of government, non government, donor, the private sector, parastatal, trades union and community representatives were interviewed. Within mainline ministries, service delivery and expenditure data is not disaggregated for urban populations in Zambia, frequently leading to misunderstandings in the extent to which the poor are served. Informal interviews and participatory rapid urban appraisal exercises were conducted within the low income areas visited, in order to fill in information gaps where possible at the sub city level.

³ While this study was not designed to be statistically representative at the city level, a number of detailed comparisons show the findings can be readily compared with other low income compounds of a similar size and legal status, thus Chawama is referred to throughout this assessment, providing important empirical examples which serve to draw out otherwise invisible complexities important in this context to the understanding of urban services.

CHAPTER THREE: THE NATIONAL URBAN CONTEXT

3.1 This section will contextualise the urban services within an historical framework of urban demographic growth and socio economic change. Synergies between service provision and urban production explain the development of service provision and are fundamental to understanding changing service needs. New forms of economic activity, consolidation of low income communities and changing household structures are in part a result of deteriorating services. These economic and social changes have now resulted in new service needs which must be understood if the restructuring of urban services is to adequately support the urban poor and their productive activities.

The Urban Political Economy; A Contextual Framework

3.2 During the late 1960s and 1970s, Zambia's urban economy, historically based on the production and export of copper, was classified as one of the strongest in Sub-Saharan Africa. With the decline of world copper prices and deteriorating terms of trade however, GDP growth declined from 3.7 per cent per annum in the early 1970s to an average of only 1.0 per cent during the 1974-90 period. In 1990 Zambia was classified as a low income country with per capita income levels of approximately one third of the average level it had in the mid 1970's.

3.3 The historical development of Zambia's cities, based on copper has two central implications for the country's development. These continue to have important repercussions in the 1990s. Firstly, the underlying assumption that towns would not become the permanent home for "African" workers meant that, from the outset the provision of housing or amenities was not a priority. Even in 1960 one third of Zambia's urban population were "squatters" (Tranberg Hansen 1983). Conversely, it was assumed that copper export earnings could support sophisticated infrastructure for the small administrative elite who would be Zambia's permanent urban dwellers. Neither of these assumptions have proved correct. Most of Zambia's urban productive and infrastructure capacity still in use today was created during the boom years between 1965-74. The result is a number of spatially segregated cities with dilapidated, inappropriate infrastructure to which the majority of urban residents have no access.

Urban Demography

3.4 Zambia is today one of the most highly urbanized countries in Sub Saharan Africa. The 1990 census recorded 42 percent of the total population, 3.27 million, as living in urban areas. Of this urban population, more than 60 percent live along the line of rail which connects Livingstone in the South with Ndola in the Northern Copperbelt region. Lusaka, the capital and largest city has a population of 870,000. The key Copperbelt cities of Ndola and Kitwe have populations of over 400,000. A further one third (37 percent) of the "urban" population live in the non metropolitan areas, the provincial capitals.

3.5 During the 1970's, Zambia experienced rural-urban migration levels previously unrivaled on the continent as Zambians sought to benefit from urban based employment opportunities and infrastructure. Urban growth rates have slowed from a rate of 5.8 percent between 1969 to 1990 to 3.7 percent per annum for the period between 1980 and 1990. Urban growth in the 1990's is predominantly a function of natural growth. Outmigration has not occurred as the urban economy has declined; Zambia's urban populations are often the product of several generations of acculturation, they do not have either the skills or the contacts to return to rural areas.

Urban Poverty and Malnutrition

3.6 The national urban demographic consolidation must be seen within the context of increasing poverty and immiserisation. Using national poverty lines⁴, up to 40 percent of the urban population are below the poverty line and levels of urban malnutrition are severe; at the national urban level more than one third of children (35 percent) are affected, in low income areas these figures rise to as high as 46 percent. Using an income based poverty line and nutrition indicators, tables 3.1 and 3.2 illustrate the different poverty levels found within and between urban areas.

Table 3.1 Poverty Indices at the National Urban, City and Sub City Level

Percent	National Urban	Copperbelt	Lusaka	Chawama [UPA]	Provincial Centres
Non Poor	60	52	83	45	48
Poor	15	15	11	24	23
Very Poor	25	33	5	31	33

sources: Priority Survey 1991 and Lusaka UPA 1994

Table 3.2 Percentage of children malnourished: National, urban and city level.

	Height for age		Weight for height		Weight for age	
	PS	ZDHS	PS	ZDHS	PS	ZDHS
National	39	40	6	5	22	25
Urban	35	33	7	5	20	20
Lusaka	35	31	9	9	19	22
Copperbelt	37	34	6	5	21	23
PSLS	46	n/a	8	n/a	25	n/a

Source: Priority Survey 1991 (PS), Zambia Demographic and Health Survey 1992 (ZDHS).

Inter Urban Heterogeneity

3.7 Urban poverty has an important spatial dimension and understanding the role of locality is central to understanding urban poverty. Heterogeneity within and between urban areas frequently makes the urban poor "invisible" with national urban or city level indicators masking the extremes of urban poverty found in lower income areas. In Table 3.2 for example the levels of malnutrition found in Lusaka as a whole (35 percent) can be compared to the considerably higher levels found in the PSLs low income subsample (46 percent).

3.8 Intra urban differences and distributional issues have become more acute; in 1985 the poorest 25 percent in urban areas earned only 3.1 percent of all income, compared to 7.1 percent

⁴ The poor are defined as those with an income equal of less than K1,380 per adult male equivalent unit per month. The very poor are those with an income equal or less than K961. K961 represents the monthly income that would be needed to buy food alone, based on the cost of a food basket for an adult male equivalent.

in 1974/75. It should also be noted that inequality between urban and rural areas has diminished, with similar Gini coefficients for rural and urban expenditure distributions in 1991. It is noticeable from Table 3.1, that at the city level, the levels of poverty in the Copperbelt are above those found in a low income area in Lusaka (33 percent compared to 31 percent).

3.9 Within this national context of increasing and deepening poverty the repercussions and outcomes of poverty have been different. Urban areas and households have responded to urban poverty on the basis of existing skill bases. It is hypothesized that Lusaka's economy which is based on more senior government services has provided the resources (human and financial) to generate some new economic activity. By contrast, such resources are lacking in the Copperbelt where a lower paid, less skilled parastatal workforce continues to predominate (see table 3.7). Intra urban poverty analysis has not been carried out in the Copperbelt and, given the results of the UPA data and more detailed Priority Survey analysis carried out in Lusaka, it might be expected that further extremes of poverty would be revealed by such an analysis. The UPA data from Chawama shows the higher levels of poverty that are found within a "low income area", while simultaneously underlining the level of heterogeneity; 45 percent of Chawama's inhabitants are still found to be above the poverty line.

3.10 Table 3.1 illustrates the high levels of poverty in what can be termed the non metropolitan areas i.e. the provincial centres, where 33 percent of the population are very poor. Levels of poverty vary markedly by province, with the highest levels of poverty found in urban Luapula (45 percent), Southern (40 percent) and Eastern (36 percent). It is interesting to note that levels of urban and rural poverty do not necessarily correlate within the provinces, thus 80 percent of N. Western rural province are very poor, but some of the lowest levels of urban poverty are found in this province (25 percent). There is a need for further analysis of non metropolitan poverty, in order to understand the economic linkages, in this case with the urban/rural economy.

Urban Vulnerability

3.11 The concept of vulnerability captures some of the multidimensional, dynamic and structural aspects of poverty (Moser 1993b). For the urban poor, vulnerability is directly related to employment, the potential for a sustainable livelihood, and to assets at the community and household level. At the community level, assets include access to urban services and related institutions, which in turn are closely related to employment and urban productivity. At the household level vulnerability is related to external factors such as amenities and internal factors such as household structure, for example, dependency ratios. The changing context of employment, community and household factors has important implications both for service provision and service needs in urban Zambia and, given the complexity of urban poverty it is helpful to complement poverty lines and indicators with measurements of urban vulnerability.

Urban Employment

3.12 Declining terms of trade, in particular the decline of world copper prices, coupled with economic mismanagement and recession have had a devastating effect on Zambia's urban economy. Since 1980 there has been a decline in formal sector employment, declining real wages and a directly related increase in informal sector activity, where for the successful few, the highest incomes are to be found, but where the majority are trying to survive at the margin. A summary of current labour force indicators can be seen in Table 3.3.

Table 3.3 Summary of labor force indicators based on current activity, 1991.

	National	Urban		
	Both Sexes	Both Sexes	Male	Female
Total Population (000)	7,896	4,266	2,086	2,180
Labor Force (000)	3,215	1,165	731	434
Employment Rate	78	66	75	50
Unemployment Rate	22	34	25	50
% Population >7 years	78	67	69	66
Economically Active Populatio ¹ . (EAP)	52	41	51	30
Economic Dependency Ratio ⁵	147	266	185	402

Source: Priority Survey 1991.

3.13 Formal Sector Employment An immediate result of the economic decline in Zambia has been the contraction in the predominantly male, formal sector workforce. Between 1980 and 1990, formal sector employment declined from 23.9 percent of the workforce to 9.8 percent. The share of people reporting to be unemployed has also increased. This group is rather heterogenous including formal sector unemployed, as well as some of the self-employed or employed in the informal sector, given that there is a tendency for people to equate the term "employed" with salaried employment, not with self employment.

3.14 Declining Real Earnings For those still in work there has been a significant decline in earnings. While real earnings have declined across sectors by an average of 80 percent since 1975, some sectors have been harder hit than others, with the greatest declines seen in the traditional sectors of mining, manufacturing and services. There are marked gender differences in earnings from both wages and profits as illustrated in Table 3.4. Average incomes for women are markedly lower in the professional, sales and production/transport categories. When average monthly profits are considered in the case of employers and the self employed, a similar picture emerges; male profits shown in Table 3.4 average 125 percent more than those earned by women.

⁵ EDR defined as the number of persons not in the labor force/100 of the labor force.

Table 3.4 Average monthly urban wages and profits (kwacha) by gender.

Occupation	Earnings/month				Profit/month			
	Male		Female		Male		Female	
	Mean	Med.	Mean	Med.	Mean	Med.	Mean	Med.
Prof./Tech.	14,371	6,000	7,569	6,000	14,203	6,720	16,831	3,250
Sales	10,900	4,500	10,715	3,750	27,285	9,600	13,815	5,000
Production/Transport	6,592	4,000	4,901	4,000	17,829	7,500	5,428	3,010
Total Average	8,248	4,500	8,157	4,700	20,883	7,000	11,541	4,000

Source: Priority Survey 1991.

3.15 During the 1980's, the effects of the decline in real earnings in urban areas were compounded by the removal of price controls and devaluation, causing the price of a basic staple such as mealie meal to rise by 472 percent during the decade (PIC Prices and Incomes Commission, 1991). Using a fixed basket of commodities, Table 3.5 illustrates the disproportionately severe impact of rising prices on low income urban groups between 1980 and 1987. The most recent information collected by PIC does not disaggregate urban and rural households, but shows sustained increases in prices at the end of the decade. In 1991 nearly 60 percent of households had incomes which precluded the purchase of a nutritionally adequate food basket (ibid.).

Table 3.5 Urban Consumer Price Index 1980-86 (1975=100).

	1980	1981	1982	1983	1984	1985	1986	1987
Low income	203	231	260	311	373	513	733	938
High income	189	209	236	279	336	446	644	-

Source: PIC Incomes and Expenditure Survey 1991

3.16 It is possible that, given macro economic policies on trade liberalisation, that the effect of declining real earnings have been mitigated by the availability of food substitutes and increasingly stable prices. Reliable information is not available however, on the basis of evidence gathered during the poverty assessment mission, it is hypothesised that the effects on the poor remain severe. Visits to low income compounds showed that the cost of the most common staple, mealie meal, is now beyond the reach of many families who are forced to forego meals or purchase the staple in small quantities (1 kg bags) at greatly inflated prices. This picture is consistent with information on household expenditure patterns considered below.

3.17 **Changing Role of the Informal Sector** In the context of declining formal sector employment opportunities, the informal sector has been growing rapidly, at an estimated rate of 6 percent per annum since 1985, accounting for 43 percent of the total urban workforce. The sector is characterized by its heterogeneity; including both the most dynamic and least productive elements of the economy. Median incomes in the informal sector are 63 percent higher than in the formal sector. However, it is important to emphasize that success is only for a few; significant differences in income distribution are found even within sectors such as trading

(incomes range from K1,091/day to K30/day - Source: UPA). Growth in response to overall socio-economic and labor market conditions has been mainly horizontal and in trading.

Table 3.6 Trends in occupational categories in the total Chawama workforce, 1978 and 1992

	1978			1992		
	Male	Female	Total	Male	Female	TOTAL
Prof/Tech	5.0	0	4.5	2.5	2.0	2.0
Management./Admin	0.5	0	0.5	4.0	0.0	2.5
Sales	13.5	58.0	18.0	28.0	79.0	45.0
Clerical	8.0	6.0	7.5	10.0	8.5	9.5
Service	19.5	18.0	19.5	9.5	6.5	8.5
Agric.	0.5	0	0.5	0	0	0
Production/Transport	51.5	8.0	47.0	46.5	4	32.5
Not Stated	1.5	10.0	2.5	0.0	0.0	0.0
Informal	15.0	54.0	19.0	37.0	81.0	52.0
Formal	85.0	46.0	81.0	63.0	19.0	48.0

Source: Lusaka, UPA 1994.

3.18 Shift in the gender balance of the workforce There has been an important shift in the gender balance of the workforce; e.g., in Chawama women's participation rates have increased from 19 percent of the total informal sector workforce in 1978 to 52 percent in 1992 (Table 3.6). Within the informal sector, women are concentrated in services and trading and, within those sectors, in the lowest earning categories. One study concluded that over 50 percent of female headed households in the informal sector were earning a monthly income of less than one sixth of the average (Urban Informal sector Survey). The clear trend, supported by the occupational breakdowns shown in Table 3.6 is of a growing concentration of men in the previously female dominated sales sector. Women are increasingly found in the low return area of petty sales, while 67 percent of men work in the more profitable area of market trading. In addition, women spend almost twice as long in home based sales activity than men (43 hours a week compared to the 25 hours a week by men) for a comparable daily income [UPA]. This reflects both the relative importance and the relatively poor remuneration of this type of economic activity to women.

3.19 Suppression of Small Scale Economic Activity; the Regulatory Framework Growth in informal sector activity has taken place in a context of restrictive regulatory and licensing policies, limiting access to credit, inputs and markets, factors which explain in part the sector's heterogeneity. A 1990 survey of operators indicated that 50 percent or more of them found legal restrictions to have an adverse impact on their business⁶. In spite of economic liberalization

⁶ Sources: Maipose 1990, Nordic 1992, Saasa 1993

informal small enterprise sector operators still face a plethora of laws and regulations that inhibit the efficiency and development of the sector.

3.20 Present Status The current status of the urban workforce is shown in Table 3.7. The inter and intra urban variations are marked and interesting, confirming the picture of urban heterogeneity in terms of employment base and skills described earlier. In Lusaka, 29 percent of employees are in the private sector while 27 percent are government employees. Within the lower income subsamples of Lusaka (UPA and PSLs) the vast majority of the workforce are either self employed or in the private sector. In the Copperbelt the predominant category is that of parastatal employees, presumably associated with the mining sector.

Table 3.7 Employment status of the currently employed workforce.

Status	National Urban	Lusaka	Copperbelt	Lusaka UPA	PSLS
Self employed	24.8	20.5	25.6	46.8	23.4
Government employed	25.3	26.5	13.1	10.3	17.5
Parastatal employed	24.8	21.9	36.4	7.4	15.6
Private sector employed	20.9	28.6	22.8	35.2	39.8
Employer	0.3	0.2	0.7	-	0.0
Unpaid farm worker	3.1	1.3	0.9	-	2.1
Other	0.6	0.7	0.5	0.3	1.5
Total	100	100	100	100	100

Source: Priority Survey 1991.

The Urban Community; Assets and Networks

3.21 The distribution of urban poverty has both a social and a spatial aspect. It is the spatial nature of urban poverty that defines both the environmental hazards and social fragmentation particular to urban poverty and makes a community level analysis necessary. The disintegration of community structures potentially increases the vulnerability of the urban poor. Urban areas in Zambia suffer from vandalism, violence, alcohol and drug abuse (Beneficiary Assessment 1993). These factors reinforce the levels of urban poverty, both raising the cost of service provision and maintenance and restricting the participation and productivity of urban residents, in particular women, the young and the elderly. Service provision at the community level, and the potential for service improvements are in turn determined by community characteristics, in particular the existence and strength of institutions, either formal government organizations or informal community organizations. These issues will be considered in more depth as they relate to the four services in the following chapters however they will be mentioned briefly here to provide the context and illustrate the links between macro employment issues and household issues, services and poverty.

3.22 Community Institutions and Organizations A combination of historical, political and economic factors have resulted in weak institutional networks at the community level. The declining resource base in urban areas has resulted in weak municipal governments; city councils are constrained by the lack of both financial and human resources. In Lusaka City Council for example, a Community Development Section with personnel responsible for projects in low income areas was found to have most positions empty in November 1993.⁷ While communities theoretically might expect the council to deliver services, they are institutionally and administratively isolated, lacking the mechanisms to effectively communicate service demands. The local political networks fostered by UNIP appear to have fragmented under the new government and the emergence of more genuinely participatory, democratic structures is likely to be a slow process. Where some level of indigenous organization exists, such as the PTA, a significant number of the poor are excluded.

3.23 The church is one of the few outside organizations involved at the community level. In Chawama, 70 percent of those participating in organizations belonged to church groups. Clear gender divisions were found to exist in the participation in community based activities. Fifty percent of the organizations have 100 percent female participation while 10 percent indicate that women constitute the majority of their membership [Lusaka UPA]. A number of interesting NGO initiatives do exist and represent an important body of experience which should be taken into consideration in future service design. (see Chapter Six).

3.24 Fragmented Social Networks Fear of violence is a prominent concern of low income community residents who also complain bitterly of community level corruption and extortion. Vandalism of public property, for example schools, is widespread, negatively reinforcing the effects of limited resources within urban communities and poor service provision and limiting the potential of community development projects, both social and economic. In the Lusaka UPA research, 93 percent of the individuals questioned confessed to feeling unsafe, particularly at night. At the community level, the response in all urban areas has been to protect public property with the employment of private guards and through building "wall fences". These methods are largely ineffectual and represent a significant investment of limited resources.

⁷ See Chapter Six for a more detailed discussion on the status of municipal government and its role within the wider institutional framework of service provision.

Table 3.8 Household amenities at the national urban and city level.

	Urban (ZDHS)	Urban (PS)	Urban Low (QSS)	PSLS	Urban Poor*	Copperbelt
Source of drinking water						
Piped	56	43	24	8	no figs	50
Public tap	37	40	52	81		30
Other	13	17	24	1		20
Type of Sanitation facility						
Flush toilet	43	47	26	3	37	54
Latrine	48	49	69	95	58	41
Bush	32	n/a	n/a	1	1	1
Other		2	2	n/a	14	4
Type of lighting						
Electric.		39	20	5	28	37
Paraffin		58	77	90	70	61
Other		13	3	5 (candle)	2	2
Type of cooking fuel						
Electric.		26	9	1	no figs	21
Charcoal		56	72	84		70
Firewood		17	18	12		8
Other		1	1	3		1
Garbage disposal						
Collected		15	12	4	15	24
Pit		48	47	34	47	48
Dump		37	41	62	38	28

* Includes totals for poor and non-poor i.e. all those below K1,030 line.

Source: ZDHS 1992 and Priority Survey 1991.

3.25 Financial Assets: community credit Constrained access to credit at the community level illustrates the current isolation of the urban meso economy, acting as a significant constraint on the development of the informal sector. The main source of credit in a low income community such as Chawama is relatives and neighbors. While rural kin sometimes send food, they were not reported as sending cash to urban areas. More than one third (38 percent) of households said that they borrowed money, with loan sources varying. Neighbors (23 percent) and relatives (22

percent) were the most common source of loans; only 3 percent borrowed from the bank, with money lenders (13 percent) the second least popular source, both because of strict repayment requirements and high interest rates. With a down payment of K50,000 currently needed to open a bank account, few low income residents have access to formal credit networks in the wider urban economy.

3.26 Amenities within low income communities As noted above, poverty has a spatial aspect thus, to some extent, access to household amenities is dependent not only on income but also on community level factors. Physical infrastructure is discussed in detail in the following chapter. Nevertheless it is useful to compare national urban and intra-urban differences in household amenities.⁸ Table 3.8 reveals important intra-urban differences. For example, while 47 percent of the population have access to a flushing toilet at the national urban level, in the PSLs subsample, an analysis of the same variable shows only 3 percent of the households to have access to a flushing toilet. Similar comparisons can be made for access to electricity and water. Again, the lack of sensitivity of the poverty line in urban areas is revealed in a comparison of access to amenities within different urban communities.

3.27 It is important to note the differences between the Copperbelt and national urban averages. Although the Copperbelt has higher levels of poverty, this does not correlate with service provision as expressed by household amenities. In the Copperbelt, 50 percent of households have piped water (compared to an urban average of 43 percent), 54 percent have a flushing toilet (compared to an urban average of 47 percent) and a higher percentage have refuse disposal services. In a further stage of analysis, it would be important to break down these results within the region, by poverty group and by compounds run by the council, in comparison with those run by ZCCM.

3.28 At the sub-city level trend data from Chawama (Table 3.9) introduces an interesting complexity; showing a low income urban community that has relatively low access to amenities but that has been able to consolidate over time. This is to be expected over time in a consolidating community and serves to illustrate the potential of "new" urban areas. Despite the overall improvement in the quality of housing and basic services in Chawama, nevertheless the basic infrastructure needs of the majority of the households are unmet.

⁸ Housing and the quality of homes is not considered here since housing is considered in depth in chapter 4 of this report.

Table 3.9 Trends in access to housing and basic services in Chawama, 1978-1992.

Indicator	1978	1992
<i>Water</i>		
Mains in house	0	14
Public tap	99	84
Well	1	-
Other	-	2
Total	100	100
<i>Toilet facility</i>		
Own facility	41	71
Shared facility	52	28
None/other	7	2
Total	100	100
<i>Rubbish disposal</i>		
Collected	11	5
Other	89	95
Total	100	100

Source: Lusaka UPA, 1994.

Household Structures and Strategies

3.29 Changing economic opportunities and the productive/reproductive impact of declining service provision have had the effect of altering both the roles and activities of household members. Changes have occurred in both household size and composition and in terms of intra household roles.

3.30 **Increasing Household Size** Poorer households are larger in size (Table 3.10) and appear to be changing in structure; lack of access to housing and increasingly diminishing incomes have led to households and generations "doubling up".⁹ Trend data from Chawama shows that mean household size has increased from 4.3 in 1978 to 5.3 in 1992 [Lusaka UPA]. In urban areas, 54 percent of households consist of three or more related adults and one quarter of households have one or more children under the age of 15 years who have neither their natural mother or father living with them [ZDHS]. A striking 81 percent of single female *extended* households are poor. Of the 98 extended households, about 10 percent have one or more "single" mothers (Lusaka UPA 1994; 27). Complex intra household structures, for example the existence of young single mothers within extended families and changing patterns of dependency, are further complicated by the burden of disease and AIDs in particular [ZDHS].

⁹ Dependency ratios are decreasing nationally however they remain higher in urban areas. Almost one quarter (24 percent) of the non working individuals form part of an extended household network ie. they are not a household head, spouse, or child of the household head and/or spouse. When the economic dependency ratios are divided by gender of the individual working in urban areas, it is striking that the dependency burden is almost three times higher on working women, a ratio of 402 compared to ratio of 185 for men. Dependency ratios increase with poverty; in Chawama from a mean of 1.8 for the non poor to 4.3 for the poor [Lusaka UPA].

Table 3.10 Mean urban household size by poverty group

	National Urban	Lusaka	Copperbelt	Sub Sample	Chawama
Non Poor	5.42	5.65	5.20	4.71	4.50
Poor	6.69	7.21	6.57	7.37	4.90
Very Poor	6.96	8.28	6.93	8.38	6.50

Source: Priority Survey 1991/UPA Lusaka, 1994.

3.31 Household Headship Often the most vulnerable within households are not revealed by an analysis that focuses on headship. In urban areas the majority of female headed households are not poor and it is hypothesised that in urban areas women make considerable efforts to avoid being left as the sole head of the household.¹⁰ There is an important, small sub group of female headed households who are living in extreme poverty. Anthropometric indicators show 69 percent of households in this group, living in low income areas, have stunted children. This analysis does not hold for the Copperbelt, where 40 percent of female headed households are poor. Table 3.11 shows a more complex categorisation of household types, that includes variables relating to both headship and size. It is the multi couple extended households in the Chawama sample that have the highest levels of poverty, correlating positively with the analysis of household size (above).

3.32 Changing Roles within the Household Increasing numbers of women in particular are engaged in income generating activities, as described above. The gender distribution of reproductive tasks does not appear to have changed, increasing the women's role burden. This is within a context of declining service provision. Data from Chawama shows that although more women are working than in 1978, the cultural norm that reproductive work is women's work has not changed [Lusaka UPA]. Decision making within the household similarly shows a clear gender division, with women responsible for decisions over food and to a lesser extent clothing, but male spouses maintaining their control over larger expenditure decisions [Lusaka UPA].

¹⁰ It is important to note in this context that while national urban estimates for female headed households are as high as 23 percent, not all female headed households are poor and, furthermore diversity exists between urban areas. In Lusaka, it is clear that most poor women cannot afford to live with their offspring alone. Only 4 percent of female headed households are very poor.

Table 3.11 Detailed categorization of household types, Chawama 1992.

Household type	Percentage	Categories included
Nuclear	47.6	Couple only Couple nuclear
Couple extended	36.2	Couple extended Multi-couple extended
Woman headed	10.4	Single female only Single female nuclear Single female extended
Male headed (Not nuclear)	3.8	Single male only Single male extended
Other	1.8	Polygamous
Total	99.8 (210)	

Source: Lusaka UPA, 1994.

The Household Economy

3.33 Assets The urban poor own few consumer durables (see Table 3.12). Less than half the low income urban population owns a radio and other assets are even more limited (television 1 percent, bicycle 1 percent). This low asset ownership has important implications for vulnerability; the poor cannot protect themselves by "dissaving". The comparison of asset ownership across and within urban areas shown in the table below reinforces the picture of inter and intra urban heterogeneity discussed earlier. At the subcity level an important difference in asset ownership was found to relate to headship; female headed households were not found to own most of the assets listed, for example only 19 percent owned a radio [Lusaka UPA].

Table 3.12 Percentage of households owning assets at the national and urban levels

	National		All Urban		C'Belt	Lusaka low cost SEG	PSLS	Lusaka <K1,380
	PS	ZDHS	PS	ZDHS	PS	PS	PS	PS
Radio	39	39	61	59	54	52	46	56
Television	7	8	16	18	11	6	1	7
Fridge	16	7	16	15	12	7	2	7
Bicycle	18	19	12	16	8	12	11	1
Car	5	4	5	8	3	3	2	2

Source: Priority Survey 1991 (PS), Zambia Demographic and Health Survey 1992 (ZDHS).

3.34 Household Expenditure Decreases in real household income have led to economies at the household level. The poorest income decile spend 79 percent of their income on food compared to 60 percent for the upper income decile (PIC). Low income households have had to reduce the numbers of meals eaten, decreasing expenditure on celebratory activities and protein for example [Lusaka UPA]. When non food expenditure is considered within Chawama, the pattern that emerges indicates that households prioritise the essentials; energy for cooking and lighting, transport to work, housing and water and sanitation. The relatively low priority given to education is interesting and may suggest that households are concerned by the relatively low returns to education. Table 3.13 shows clearly the economic impact at the household level of declining and increasingly expensive service provision, within the context of the wider urban economic recession.

Table 3.13 Household non food expenditure as a share of income, Chawama, 1992

Expenditure	Non Poor	Poor	Very Poor	Total
Education	0.86%	2.74%	6.64%	3.26%
Housing	6.07%	10.21%	15.91%	10.40%
Water/sanitation	0.67%	0.81%	1.50%	0.98%
Transport	9.32%	9.49%	12.14%	10.29%
Energy:	5.67%	14.37%	27.85%	15.31%
Lighting	1.98%	4.85%	8.71%	4.96%
Cooking Fuel	3.69%	9.52%	19.14%	10.35%

Source: Lusaka UPA, 1994.

CHAPTER FOUR: LAND AND HOUSING

4.1 In urban Zambia land is the pivotal issue, determining both service provision and the productive potential of cities in terms of the location of enterprises and labor. At the household level, the inability of the majority of the urban poor to achieve secure tenure and, therefore, a firm basis from which to invest in housing and create an asset which appreciates in value over time, is a critical obstacle to breaking the cycle of poverty. Currently there is an acute under supply of land available for legal tenure and a large number of urban residents occupying land either illegally or with short term licenses. Unlike many developing countries, Zambia has no shortage of developable urban land and the issue of land and housing is one area where dramatic poverty reduction can be affected without additional resource allocation.

4.2 *Current Policy* The official policy is still that illegal areas should be bulldozed. In practice the government appears to be currently tacitly accepting illegal settlements; the last bulldozing took place in 1991, with an estimated 5,000 people made homeless. Ignoring the issue however is not an adequate response and the legal constraints affect both the social welfare of individuals and the growth of economic enterprises.

4.3 *Historical Context* The current regulatory environment in Zambia is one of the most complex land ownership systems in Africa (World Bank 1993a; 112). It reflects two erroneous concepts pioneered by the previous government. In 1975, in keeping with the "humanist" philosophy of his UNIP party, Kaunda decreed that land, as a national asset, had no value and thus could not be bought or sold on the open market, but rather could be acquired through elaborate "allocation" procedures. Secondly, the belief or hope that the urban poor might return to rural areas has continued to color both government and donor responses to land and housing issues in particular ways. The assumption is not born out in reality; while urban migration has slowed, the urban population is continuing to grow, augmented by those born in urban areas. The decision of redundant public sector workers to invest their redundancy payments in constructing homes in Chawama is just one example of the determination urban dwellers have to remain in urban areas.

4.4 *Present Status* The categorization of land and settlements is today unclear. At the city level, confused and complicated regulations have contributed to the highly inefficient pattern of land use that particularly disadvantage the poor. Large tracts of land are vacant in central locations, while new high density residential areas are far from the city center. The exact status of different areas and the numbers living in each area is a matter for dispute. Broadly, a distinction can be made between illegal, legal and undeclared areas. The latter are areas where residents legally own their homes but not the land they are built on. There is a further blurring of categories where illegal areas have been added onto legal compounds, the extent of which is unknown. Illegal allocation of land by unauthorized persons is an additional complication (Times of Zambia October 25, 1993).

4.5 Access to Land Conservative estimates for Lusaka¹¹ suggest 10 percent of the population live in illegal settlements, with the resulting insecurity of tenure, limited access to housing, employment and credit. They are "invisible" to service providers. Constraints on access and use of urban land appear to be legal and political rather than spatial. There are however differences between de jure and de facto access to land; legal changes per se may not be sufficient. The gendered access to urban land is illustrative; allocations of legalized land are made on the basis of conventional practice, with the documented marginalization of women.¹²

4.6 Inheritance laws are a further illustration of gendered access to land and the gap between law and practice. The Interstate Succession Act no. 5 of 1989 and the Wills and Administration of Testate Act no. 6 of 1989 make provision for the surviving widow in terms of the land and property. "Property grabbing" however remains a common practice and while legal protection does exist for the widow, it is a protracted process and beyond the reach of the poor (World Bank 1993b; 36).

Housing

4.7 In low income areas, where 25 percent of the entire Zambian population live, housing can be divided into three categories: (1) previously "planned and upgraded" housing; no longer "upgraded", but street planning means that improvements and basic services could be delivered at relatively low cost; (2) "planned but not upgraded" areas where housing quality and services could be improved with minor planning although at greater cost; and (3) "unplanned" housing, settlements where land is either unsuitable; eg. construction on swampland in the case of Gabon, or, because current planning does not allow for service provision due to previous zoning eg. the case of Missisi, a compound which has developed on land originally designated for industrial use.¹³

4.8 Access to Housing Stock Distortions in the land market have an obvious and direct effect on the supply of and access to housing. There is an acute shortage of housing stock and dwellings which are available are largely of poor quality and expensive in comparison to incomes. Increases in housing occupation densities from 2.2 persons/room in 1978 to 2.7 persons/room in 1992 (Lusaka UPA) and the changing balance between renters and owners

¹¹ Lusaka City Council estimate. The Ministry of Lands estimate that 57 percent of the total urban housing stock in Lusaka is located in 25 "squatter" settlements, which would correlate with a much higher percentage of residence in "illegal" areas. There are no national official statistics.

¹² See Siamwiza, R., Sikwibele, A., and Makonnen R., 1993, *Zambia in the 1980's: A Historical Review of Social Policy and Urban Level Interventions*, TWURD Working Paper #9, Washington D.C.: The World Bank

¹³ Many of these restriction are embedded in plans now several decades old, which bear little resemblance to the development which has since overtaken urban areas.

discussed below are a consequence of the poor's constrained access to housing.¹⁴ Under the Building Society Acts, Cap 708, which provides loans for the purchase of houses, women require written consent from their husbands before a mortgage can be authorized. Joint mortgages for married women can only be authorized by the woman's husband, not another family member (World Bank 1993b; 38). The act has implications both for women who want to secure property in terms of home ownership, and for those who might wish to develop a business.

4.9 Home Ownership Home ownership is higher among the poor; 40 percent compared to an average of 19 percent for medium and high income areas (see Table 4.1). Those with access to land and home ownership have a relative advantage compared to those who do not. They do not only have a secure shelter which makes them less vulnerable under crisis situations, such as in the case of unemployment, but can also use it in a range of strategies to prevent further poverty, such as an investment against inflation, for example, as an inter-generational transfer of assets.

4.10 Housing as an asset As an asset, housing is used primarily for rental purposes. In Chawama almost half of homeowners rent rooms in their dwellings. Women headed households seeking income generating strategies that do not impose additional constraints on their time are more likely to rent rooms than are male-headed households. Housing can also be used to generate income through home-based enterprises. In Chawama 23 percent of households operate homebased enterprises, engaged mainly in retail activities (67%), and workshops (31%). Households with home-based operations have a higher household income than those who do not. These are family run operations, primarily managed by women (76%) with some contribution from girls (18%). Woman-headed households are more likely to run home-based enterprises, than are male-headed households. Although less remunerative, this strategy is well-suited to female heads since they are relatively time-efficient compared to other productive opportunities, such as employment outside the house, as women face severe time constraints given their responsibility to take care of all the household's reproductive tasks.

Table 4.1. National urban tenancy status by poverty line.

(%)	Non Poor	Poor	Very Poor	Total	
Owned	25	41	45	37	100
Rented	62	45	42	50	100
Free	10	12	12	11	100
Other	3	2	1	2	100

Source: Priority Survey 1991.

4.11 The Rental Sector The growth of the rental sector reflects the housing crisis. Rapid population growth within low income urban areas like Chawama has resulted in tenant households increasing by over 50 percent between 1978 and 1992. Tenants tend to be the newcomers with

¹⁴ Two types of housing programs have been designed to assist the urban poor; the sites and services schemes of the 1970's and more recent squatter upgrading projects. The former projects reached few of the urban poor, the latter, administered by NGO's (for example the Irish Aid project in Kamanga), have been more successful in reaching their target group but operate on a relatively small scale.

an average stay of less than three years. They also tend to be more educated and with a larger *per capita* income. This growing rental market is another example of failure of the government's regulatory approach towards housing. In spite of official policy to discourage it, rental housing has become the predominant housing alternative in Chawama since 1978. Rent generates additional income that accounts for almost 30 percent of their overall household income. Absentee landlords, who account for almost 40 percent of the market, also profit from the rental market. Governmental policy restricting rental markets has been most detrimental to tenants who, given the insufficient supply of rental accommodations, are now paying more as a proportion of their incomes than in 1978.

4.12 Rising demand in the rental sector has been one of several factors leading to the current inflation in rent levels. In 1987 a rented house cost K4,000 per month. This increased to K20,000 per month in 1989, and to an all-time high of K30,00 per month in 1990 (Kalinda et al 1992; 33). In George, a low income compound rents of K1,700 per month per room were found during field visits in October 1993. The private rental sector is increasingly the site of tension, as landlords raise their rents beyond the reach of many and reportedly demand payment of rent six to twelve months in advance (*ibid.*). Tenants have demonstrated both at the extent of rent increases (up to 500 percent) and at the reluctance of landlords to maintain properties (Zambia Daily Mail; October 21, 1993). Table 4.2 illustrates the impact of current rent levels on the poor; in Chawama, the very poor spend 18 percent of their income renting rooms which an average of 4 people share.

4.13 While, as noted above, home ownership is higher among the poor there is a small but significant group of very poor tenants, in urban areas, this group constitutes the poorest of the poor. Data from Chawama show this group are forced to rent very small spaces (3.7 persons per room) which absorb 18 percent of their income, almost three times that of the non poor. Among the tenant groups it is the couple extended households who have the highest densities and pay the highest rents in terms of rent as a share of income (UPA Lusaka 1994). This finding correlates with that of Chapter Three where the poorest were found to be extended households. Finally, it should be noted that very poor tenants had been in their homes for an average of 4 years in Chawama.

Table 4.2. Housing characteristics of tenants by poverty group.

	Non Poor	Poor	Very Poor	Average
Cost of rent/room (K)	928	878	733	875
Persons/room	2.3	3.2	3.7	2.9
Rent/room as % share of income (K)	6	13	18	11
Length of stay in the house (years)	2.2	2.2	4.0	2.7
Number	66 100%	30 100%	35 100%	131 100%

Source: Lusaka UPA 1994.

4.14 *Housing Quality; construction and repair* In contexts where building regulations do not actively prohibit informal extensions on the household plot - either extensions to the existing house or the building of new structures within the plot - a common housing strategy is to provide additional space for adult members of the next generation on the same plot. In Zambia, large

price increases in building materials make it difficult for the urban poor to construct their own homes and impossible to satisfy conventional building codes. Prices for essential building materials increased by more than 350 percent between 1987 and 1990, with the highest increase of 488 percent in the price of common bricks. In George, attempts are constantly made to upgrade property, but financial constraints mean that less than 10 percent of work is completed leading to the frequent collapse of homes (Schlyter 1991).

4.15 Comparisons of trends over time in Chawama and George, two legal low income compounds in Lusaka, are interesting. In George, Schlyter notes the growing disparity between the rich and poor within the area, reflected in the increasing gap in quality between homes. Trends towards small capitalist development in building that started in George in the early 1980's are seen to have deteriorated due to lack of access to credit, security (workshops were robbed of their tools) and increasing poverty among the majority of residents. In Chawama, extensive building by retired formal sector employees has been observed. The UPA research documents a trend towards the increase in the use of more permanent building materials, in spite of the increased costs.¹⁵ Poor households however remain constrained; 88 percent of owner occupiers reported that their homes were in need of urgent repairs, of these only 5 percent were reportedly able to afford the cost of repair. The picture is one of a potentially dynamic local housing and construction market from which the poor are currently excluded.

4.16 *Institutional Framework* Several government departments and ministries are responsible for housing, with remits which cover low income compounds, including the Ministry of Local Government and Housing, the Ministry of Works and Supply and the City Council. The latter has a senior official whose department's sole responsibility is to coordinate low income housing. Despite several reorganizations, the lack of resources and poor information systems mean that even within this department, the numbers and status of those living in areas designated as low income compounds are unknown. Furthermore, it must be emphasized that up to 60 percent of the urban poor currently live outside the legal remit of these departments.

4.17 Many of the parastatals, for example ZCCM, and private companies provide housing or an allowance for housing to their employees. Employer provided housing in Zambia has become increasingly prevalent with the private sector becoming the largest supplier of housing (ibid.: 16) however, provision is for formal sector employees, which by definition virtually excludes the urban poor and in practice appears to exclude women who are not represented in the formal labor force to the same extent as men.

4.18 Married women in formal sector employment are currently denied their housing rights (ibid.). The Housing and Housing Allowance Section 41 of the Employment Act which requires that employers shall either provide housing or pay an allowance where housing is not available, refers to all employees. No distinction is made between male and female, married or unmarried thus the current practice discriminates against married women. In the case of wives who are separated from their husbands many employers will demand letters from the husbands indicating their willingness that the wives be granted accommodation. (ibid.).

¹⁵ For example the use of concrete blocks has increased from 56 percent to 71 percent while that of mud brick has declined drastically from 35.7 percent in 1978 to 1.4 percent in 1992. In terms of roofing materials there has been an increase in the use of asbestos materials from 43 percent to 49 percent.

Land and Housing Policy Recommendations

4.19 The Zambian urban poor need access to land, security of tenure and affordable, safe housing. A significant proportion of the low income urban population are currently excluded from all three. Bulldozing is not the solution and any donor intervention in urban areas should be conditional on a removal of this policy and agreements to retain existing housing stock in all urban areas.

4.20 *Legalize Land Trading* Current confusion over the legal status and procedures with regard to urban land mean that some urban residents are de facto trading in land. The most urgent recommendation is the necessity to legitimize existing procedures. This will legalize the trading of land, reduce rent seeking and ensure that the process is as equitable as possible. An institutional body which has both the trust and institutional capacity for the task needs to be identified. Guidelines should include flexibility for different procedures that legitimize land at different levels. Use rights that expire within a given period will be important to ensure a level of equitable distribution. Recognition of the sociocultural systems governing land access, for example customs which constrain women's access, and, the value of social space within urban areas should be weighted within the institutions procedures. An important and integral part of these legitimization process would be the simplification of record keeping procedures, in order both to minimize costs and ensure that the necessary limited records are indeed kept.

4.21 The conversion of more land for residential use in low income areas will in turn ease the housing constraint. Home building is currently constrained not only by available financial resources but also by a lack of security. With security of tenure the urban poor will have the impetus to both build and improve homes and the collateral to borrow.

4.22 *Minimize Housing Regulations* A precondition for donor activity in the housing sector should be the limitation and, in some cases, abolition of expensive building regulations. Consensus needs to be reached on realistic hazards such as fire and flood, which should then be classified and enforced. The resources currently absorbed in building relatively sophisticated model home in low income compounds should be redirected towards these local schemes. The potential exists for a labor intensive strategy, with paid community labor. Potential multiplier effects in terms of construction material demand and economic activity at the compound level are demonstrated by previous experiences in George. Given the gender differentials in access to housing and land, the importance of directing such a program and housing solutions in general towards women should be emphasised.

CHAPTER FIVE: SECTOR SERVICES

Transportation

5.1 Many low income urban areas are without urban transport services, others are served irregularly by overcrowded routes. The current exclusion of the urban poor from transportation services is the result of both inadequate service provision and high costs in terms of fares, time and personal safety. Poor planning and misguided regulations result in routes which do not operate at the times or to the destinations that the urban poor need.

5.2 The constraints on productivity cannot be overemphasized; the difficulties the urban poor face in terms of access to employment and other urban services are compounded by the lack of transportation. It is also important to note that the transportation sector plays a direct role in the provision of employment; 37 percent of the low income workforce are employed in transportation or related services. The opportunity exists to consider transportation as a productive sector, rethinking transport needs and provision from the perspective of the urban poor.

5.3 The historical development of the Zambian city and the distorted spatial distribution of the urban population (see Chapter Four) have resulted in heavily subsidized transportation services in the public sector. A recent review estimates that the sector as a whole imposes a financial burden of K4.9 billion (nearly US\$100 million) on the government, a sum equivalent to 12 percent of all current revenues [World Bank 1993a; 86]. The proportion of this sum spent on subsidies is unknown however Zambia Airways alone receives a subsidy of 2.5 billion, supporting a service to which the vast majority of Zambians have no access.

5.4 *Current policy.* Transport policies are under review. Key emphases for the future are expected to be the increased supply and standardization of equipment and improvement of roads. No particular emphasis on transport provision to low income areas is contemplated. There is a common (mis)conception that low income areas are by definition those who use and are serviced by public transport.

5.5 **Access to Transportation Services**¹⁶ At the national urban level ownership of transport "vehicles" is low (see Table 5.1). In Chawama, only 6.7 percent of the sample own a bicycle with a further 2.4 percent owning bicycles which are no longer working. Bicycle ownership in urban areas is lower than in rural areas (22 percent ZDHS) and appears to be decreasing. Trend data shows the use of bicycles has declined dramatically from 8.8 percent in 1978 to 2.8 percent in 1992, primarily due to the increasing cost of this mode of transportation relative to income over the years. The urban poor cannot afford their own transportation and are thus dependent on public transport provision.

¹⁶ Most existing information on urban transportation comes from studies of Lusaka, supported by small study in Livingstone. While there is a lack of documentation, it is important to emphasize the different issues that exist in the ZCCM compounds of the Copperbelt and in the non metropolitan provincial capitals. Transportation services in the latter suffer from a system of planning which emphasized transport routes from Lusaka to the provincial capitals, preventing potentially important links to both surrounding rural areas and neighboring provincial capitals.

5.6 Service provision to the legal low income areas is predicated upon the needs of the predominantly male formal employment sector with routes running between the city center and compounds, at times that start and end with the working day ie. 6.00 to 19.00 hours. For the poor who have access to transportation services, bus services are the most accessible mode, but levels of service provision remain poor; 4.5 seats /1000 population in Livingstone and 7/1000 in Lusaka, figures which can be compared to the 50/1000 which are considered to be an appropriate level (Heggie; 1994). Taxis are relatively plentiful in urban areas however they are beyond the economic reach of the urban poor. A commuter railway is popular due to its low cost, but serves only 2 percent of the urban population.

Table 5.1 Ownership of transport “vehicles”.

% of ownership	DHS national urban	PS national urban	UPA Chawama
Bicycle	15.8	12	6.7
Motorcycle	1.3	10	-
Car/van/truck	8.1	5	0.3

5.7 Trend data for public transport use in Chawama shows not only the limited provision of transport in low income areas, but the changing nature of transport provision, illustrated in Table 5.2. The entrance of the minibus, non existent in 1978 but accounting for nearly one third of users in 1992, have absorbed passengers from both the more expensive taxis and the less expensive buses.

Table 5.2 Trends in transport use in Chawama, 1978-1992.

Transport mode (work only)	1978	1992
	%	%
Work at home	1.3	9.0
Foot	43.9	36.7
Bike	8.8	2.8
Own car	1.4	0.3
Employers transport	16.5	11.6
Taxi/paid lifts	12.7	2.8
Minibus/collective	-	29.5
Bus	11.6	3.2
More than one mode used	2.7	
Other	-	1.7
Total	100.0	100.0
(Total #)	(510)	(346)

Source: Lusaka UPA, 1994.

5.8 It is important to emphasize that the most common mode of transportation to work is still by foot and average walking distances are 3 kilometers/65 minutes.¹⁷ Field visits to low income

¹⁷ These distances represent very high figures for the region and can be compared with average distances of 1.7km in Dar es Salaam and 1.6km in Harare.

compounds in Lusaka and the Copperbelt revealed that a number of compounds have no transport services and in most compounds, buses will only go to the periphery due to the quality of the roads and the resulting wear and tear on buses.

5.9 Financial Costs Direct financial costs to low income consumers vary. Fare levels for formally provided transportation services (public and private) have risen out of all proportion to incomes. Bus fares rose by 1,268 percent between 1987 and 1990 (Kalinda et al 1992; 33). The fare system does not allow crossing over between routes, making journey's expensive for those who need to travel to the city center to connect to another route destined for another area of the city. Table 5.3 shows increases in fare levels in recent years. Table 5.4 illustrates average fares in and around Lusaka at the time of the poverty assessment; the comparative expense is stark when fares of K120 are compared to the poverty line of K961 per month.

Table 5.3 Fare levels for 5 km bus journey, 1987-1990.

Year	Fare level	% Increase
May 1987	0.50	-
August 1988	0.70	40
December 1989	2.94	340
November 1990	6.84	133

Source: Adapted from Kalinda et al. 1992.

Table 5.4 Fare levels on UTTA routes within Lusaka, October 1993, (K).

Town to civic center	90
M'tendere to civic center	145
Town to Chelston	175
Town to Chawama	120

Source: Road traffic commission 1993.

5.10 For low income households fare levels are the most severe constraint on transport use, a significant 71 percent of the very poor cannot afford public transport and walk to work (Lusaka UPA 1994). In Lusaka, transport expenditure as a proportion of income is one of the highest in Africa; monthly household expenditures on public transport range from over 42 percent for low income households to 10 percent for high income groups [Heggie; 1994]. Trend analysis in Chawama revealed that 63 percent of the subsample had either made cuts in transport expenditure or changed their mode of transportation, reflecting that low income households have not been able to sustain previous levels of expenditure.

5.11 *Time* Inadequate transport services represent high costs to potential users in terms of the time which must be spent either walking to destinations or queuing. The poor regularity of bus services mean that long bus queues are the norm during peak hours (60 minutes average) and at other times of the day urban residents were observed standing by the road side for extended periods. Those who cannot reach the start of a route have little chance of getting onto a bus, a problem for marketeers, the elderly and women with small children.

5.12 It is a condition of license provision that the designated route must be operated throughout the day i.e. 6.00 to 19.00 hours. In practice there is little control over which routes are operated and the poorest urban residents are those least likely to be serviced by public transport. Drivers prefer to operate the routes near where they live and avoid the poorer areas where the roads are the roughest. Routes with the least stops are also the most popular since the greater the number of stops the greater the wear on the vehicle. The least reliable routes appear to be those which run early in the mornings used predominantly by marketeers many of whom are women. Restrictions in women's mobility caused by transport inadequacies are compounded by domestic roles and the need to transport food, water and fuel which impose direct costs on labor time and raise the opportunity costs of travelling to distant markets, employment or even community meetings (World Bank 1993b; 42,43).

5.13 Health and Personal Safety Irregular bus services result in overcrowding. Women complain that they are the first to be pushed off crowded buses. There is also the issue of safety. Overcrowded vehicles tend to put the passengers' lives at risk. Safety issues are particularly important in restricting women's access to public transport; women frequently cannot travel in the evenings given the citing of bus stops and routes which end in parts of compounds which are unsafe. In Chawama, a headmaster of one of the primary schools told of the difficulties female teachers face, in his school, when they have to commute to work. On several occasions the teachers were frightened by male youths who roamed about the community, and did not report for work. A headmaster in another school related how his daughter had been raped by a gang of boys as she returned home from school (Lusaka UPA 1994; 125).

5.14 Institutional Framework The overall responsibility for the provision of transportation infrastructure and services belongs primarily to three ministries in the central government, with parastatals and the private sector also having important roles. The Ministry of Transport and Communications has responsibility for policy formulation, coordination and implementation. The District Councils, coordinated by the Ministry of Local Government and Housing are responsible for roads and local land-use. The Road Traffic Commission is responsible for the control, regulation and licensing of the private sector.

Transport Providers

5.15 In urban areas transport is supplied by a mix of state/municipal companies and private providers. Among the parastatals, UBZ, the United Bus Company, is the most prominent operator responsible for passenger services. 1980 - 90 bus operations declined from 0.11 trips/1000 population to 0.2, no longer operating in urban Lusaka. In the Copperbelt, UBZ is assisted by Mulungushi Travellers, a Zambia Consolidated Copper Mines (ZCCM) transport company. In the private sector, United Transport and Taxi Association, UTTA, coordinate the activities of private transporters. The market share for private passengers is estimated to be 90 percent (Siamwiza et al 1993; 26). UTTA has circa 2,500 operators affiliated.

5.16 Private operators. The Road Commission estimate there are 2,050 registered operators in Lusaka (taxis, minibuses and buses). Of these the vast majority own only 2 or 3 vehicles. 40 percent of these vehicles are off the road for repairs at any one time. Private operators must apply to the road transport commission for licenses. Private formal sector employers organize transport to and from work for their employees, given the cost and irregularity of services.

5.17 Pirate operators. There are two distinct groups of pirate operators. The first, are owners of pick up trucks or other vehicles who stop to give lifts to those waiting by the side of the road and charge a fee which averages twice that of the formal private providers. The second group are those who operate as a full time business illegally, often with their vehicles painted regulation colors with apparently "official" numbers. Judging by the chaos on the roads on a day when the Road Commission organized spot checks at strategic junctions, pirate operators are a considerable force of transport operators.¹⁸

¹⁸ During the course of formal enquiries at the Road Commission, no figures could be obtained as to the relative size of the "pirate" sector.

5.18 *Regulatory framework.* Regulation is currently haphazard. Obtaining vehicle licenses is a costly and lengthy process and the criteria for selection are not entirely clear. An initial short term license is issued for 13 weeks. The issuing of a full license depends on public sittings which can last from one to five years. Applicants for full licenses must be Zambian nationals, with bank accounts who hold proof that they are “capable of running a transport operation”. It was not possible to obtain a legal or official definition of this capability and informal interviews suggest that personal contacts are paramount. The Deputy Road Traffic Commissioner reports that 60 percent of those who obtain an initial short term license never return for further applications apparently because they find it “too difficult”. Regulations preclude the provision of differentiated services, limiting operators’ ability to cross subsidize routes and offer cheaper services in low income areas. Regulations controlling the operation of licensed transport include detailed guidelines on bus colors and drivers uniforms. The Commission is under pressure from private operators to relax the procedures for regulation.

5.19 Maintenance and operational costs. UBZ claimed that at any one time 45 percent of their buses were on the road, UTТА estimated that 60 percent of their operators' vehicles were on the road at any one time. Neither UBZ nor UTТА could provide reliable estimates as to what proportion of their fleet could potentially be repaired. No information could be obtained on vehicle down times. For UTТА operators, the cost of vehicle maintenance is a constant problem. Sixty percent of UTТА buses are over 10 years old. Poor roads lead to rapid wear and tear on vehicles and given current weak enforcement of the routes, operators try to concentrate on areas with better roads. There is widespread agreement that spare parts are now available, costs are however prohibitive, due to current exchange rate policies and the markup of suppliers. Smaller operators are particularly vulnerable to the latter. The larger operators currently either import spare parts or send vehicles across the border for repairs (see Box 1). Operators claim that, despite charging fares which are prohibitive for low income groups, they face financial difficulties. In the case of UBZ, the largest financial cost is that of personnel. UBZ have 20 operators/vehicle, compared to the UTТА average of 3.

5.20 Vehicle purchase. Real interest rates of over 100 percent virtually preclude the purchase of vehicles for transportation purposes. Vehicle imports are controlled by franchise; import markups and duties double costs. Bodies are manufactured by LENCO, a parastatal. Operators complain that the bodies are expensive and unsuitable. They are too heavy increasing wear and tear and corrosion. Financing vehicle purchase is both a complicated and tightly regulated procedure. Vehicle leasing companies provide credit for vehicle purchase however, interest rates are high and credit access is limited by requirements for comprehensive insurance. Ownership of property other than the purchased or other vehicle is needed to obtain insurance. Once these complicated and expensive prerequisites have been met and the vehicle is leased, it can theoretically only be sold to a third person. To overcome this, expensive middlemen must be used or a third person, who is not in reality an independent actor, persuaded to step in.

One of the largest private operators, owned by the current chairman of UTТА, Fiat Taxis started operating in 1980 with 2 vehicles. The company currently has 24 licensed vehicles of which an average of 16 are running on any one day. The oldest vehicle in the fleet was purchased in 1982, the newest 1993. The company has 30 employees, including mechanics with an average salary of 25.00K/month. Operating 3 routes outside the city and 4 routes inside the city, with an average of 5 stops per route and 12 trips/route/day. Recently with vehicle breakdowns is concentrating on the routes near his home; easier to pick up breakdowns.

The most severe operating constraint is the cost of vehicle maintenance. The position of Fiat Taxis is eased to some extent by the size of the company. Mechanics and a garage are on site and, the company turnover allows for the import of spare parts, a considerable financial saving. 50 fan belts acquired locally would cost K74,500. Imported from Holland, the cost is K20,00, including freight; thus, even when duties are added, the saving is substantial. The company has recently sent a bus needing major repairs to Mali, representing another substantial saving to the company and a loss to Zambian industry.

Transportation Policy Recommendations

5.21 The urban poor need cheap, reliable and safe public transport services to carry them to where they need to go as required. Public transport is particularly important to the urban poor in terms of potential access to employment. Transport policy recommendations must be considered within the framework of the multiplier effects of both potential urban productivity at the macro level and the wider access to services that could accrue to the urban poor.¹⁹

5.22 *Lowering interest rates, facilitating vehicle purchase* Urban transportation is constrained primarily by an acute shortage of bus capacity. Investment in the sector is currently precluded by real interest rates of over 100 percent. The ability to invest in vehicle purchase in Zambia would directly promote competition, ensuring bus routes are operated to currently unserved areas at lower prices. Vehicle investment would directly stimulate additional employment within the sector such as bus assembly plants. As noted earlier, low income populations have widespread experience in this sector and thus the potential skills to meet labor demand.

5.23 *Regulatory framework.* While the ability to increase capital investment is paramount, an altered regulatory framework is concurrently needed. Financial regulations imposed on transport operators, in particular vehicle insurance and credit provision must be addressed. Operators must be allowed to differentiate their market, introducing higher fares on more luxurious services for higher income groups which would enable operation of lower income routes which are more expensive to the operator at cross subsidized rates. Route allocation should be packaged to include potentially lucrative routes with those to more outlying compounds which involve poorer roads, more stops and greater distances. The bidding procedures must be publicized and opened up. Minimum standards should be drawn up to make sure that buses used on the "poorer" routes are not so low in standard that they are dangerous. Community groups, including women's groups should be involved in the setting of stops and terminals within low income areas to ensure that women can safely use transport services.

5.24 Regulations regarding uniforms and bus colors should be simplified. For example, bus drivers and conductors could be provided with badges as opposed to uniforms for identification. Enforcement of regulations would in turn be simplified and resources should be targeted at checking low income routes, unpopular times i.e. those areas of transport services that are likely to be foregone. Fines for operators who transgress these regulations should be prohibitive.

5.25 *Road Maintenance* The road sector suffers from a number of systemic weaknesses which hamper the effective performance of the transport sector as a whole. Central problems include uncertain lines of responsibility, weak institutional structures and under funding (World Bank, 1992;1). Effective road maintenance is a prerequisite for the provision of transport to low income areas. Potholes in roads cost an extra \$US 14,000 per annum in spare parts and welding alone on an average truck or bus. Calculated another way, each \$1 spent on road maintenance is equivalent to an average \$2.5 saving in vehicle operating costs. Periodic maintenance in turn

¹⁹Non motorized transport such as bicycles are not considered in these recommendations, given that bicycle purchase is currently beyond the reach of the urban poor (see discussion of assets in Chapter Three) and, given the current condition of roads, which make cycling very dangerous.

reduces costs.²⁰ Selective road maintenance ie. prioritising those roads used by public transportation will facilitate the provision of transport services. Finally, it is important to note that it is not the gradual deterioration of roads that deters transportation vehicles but the emergence of potholes which increases transportation costs by 17 percent. In Zambia the PUSH program (see Chapter Six) presents an opportunity to rehabilitate those roads with potholes for public transport use.

²⁰ Maintaining a paved road over 15 years costs about \$60,000 per km. If the road is not maintained and allowed to deteriorate over the 15 year period, it will then cost about \$200,000 per km to rehabilitate (Heggie, 1994).

Water and Sanitation

5.26 The urban poor face severe problems with access to water and sanitation services. Existing supplies are directed to upper and high income consumers who extract rents from the system, as lower income residents faced with either irregular or no water supplies are forced to pay substantially higher prices for informal access. Additional costs incurred include those of time spent in water collection and risks to health and personal safety, costs which are predominantly born by women. Public facilities which have been provided have high breakdown rates and are frequently vandalized; they are not based on what the poor want or are willing to pay for.

5.27 Water and sanitation infrastructure within urban Zambia as a whole is severely dilapidated. Access to water in urban areas has decreased from 70 percent of households in 1985 to 66 percent of households in 1996 (World Bank 1993a; 128). At the household level, one of the most glaring outcomes of the decay in urban infrastructure is the steady increase in water borne diseases (Seshamani et al 1993; 43). At the level of the firm, 29 percent of industries claimed in a survey that water was a severe constraint, with obvious deleterious consequences for urban productivity (World Bank 1993a; 18).

5.28 *Current Policy.* At the national level the government objective is to decentralize and commercialize water provision, in order to facilitate the extension of services to all households in Zambia (Siamwiza et al. 1993; 19). In urban areas there are broadly two competing policy initiatives; privatization and cross subsidization. It is not clear how current or future water policy can be enforced in cities administrated by private suppliers and there is a real danger that the service needs of the urban poor will fall through the gaps.

5.29 Existing legislation for water resource management is considered inadequate by donors working in the sector. At the national level policy formulation is limited by the absence of a defined "water sector". In urban areas there is no legislation placing groundwater abstraction under regulatory controls; a problem both in terms of water table levels and water quality. No policy or procedures exist for either the enforcement of or penalty for the contamination of water resources (NORAD).

5.30 *Access to Water and Sanitation Infrastructure* Legal low income areas are officially provided with standpipes (1/25 households). The real levels of water provision to the urban poor are unknown. In "illegal" compounds such as Missis in Lusaka, there is no official water and sanitation service provision. In all cities, population growth has far outstripped the initial standpipe provision thus in Kitwe for example one third of the residents are dependent on council supplied standpipes and it is estimated that 12 percent of the "legal" population have no water services. Field visits to Kitwe and other municipalities show that many standpipes are no longer in operation and where they do still function water is frequently available for only a few hours a day.

5.31 Residents in low income communities have responded to the limited access in water supplies in a number of ways, including the sinking of shallow wells within the confines of the household plot, and the purchasing of water from nearby farms (eg. Jack, Lusaka) or higher income compounds (eg. Garden, Lusaka). Given erratic supplies, most residents while officially supplied by a public tap, are dependent on a number of sources.

5.32 For the urban poor the main type of toilet facility is the latrine/buckets or a hole in the ground (see Table 5.6). In Chawama latrines are predominant. As mentioned earlier there is no connected sewerage system in the area. In terms of toilet facilities, there has been a substantial increase in the proportion of households with their own facility and a corresponding decline in shared facilities. However, in terms of toilet type there has been virtually no change. Chawama is typical of low income areas in that it does not have a piped sewerage system and residents use pit latrines. In both 1978 and 1992 over 90 percent of the toilets were pit latrines.

Table 5.6 Type of toilet facility by poverty group, Chawama, 1992.

Toilet facility	Non-poor (%)	Poor (%)	Very poor (%)	Total	(%)
Toilet connected	45.4	27.3	27.3	11	100
Latrine/bucket/hole in Ground	45.7	23.6	30.7	199	100

5.33 *Costs to Low Income Consumers* Costs to low income consumers of these multiple and informal water and sanitation systems are high. They fall predominantly on women, responsible for the provision of water at the household level and should be measured in terms of financial expenditure, time, health and personal safety.

5.34 *Financial Costs* The cost of water to low income consumers varies. Women pay prices for access to water in other compounds, from gardeners or wealthy neighbors, for a better position in a standpipe queue or to landlords who appear to charge different prices apparently at will. In Chawama for instance there are a high level of illegal connections, which is not economically viable for the water company to disconnect (Zambia UPA 1994; 100). Unlike in other countries, informal sales of water through tankers and similar systems has not been a feature in Zambian cities either at the national or sub city level.

5.35 In terms of percentage share of income expenditure, Chawama residents spend an average of 19 percent of their non-food expenditure on water services (Lusaka UPA 1994; 105) and as illustrated in Table 5.7 is considerably higher for poorer groups. What is noteworthy is that, according to officials, it is largely poorer consumers who are currently paying their bills. Non payment is a feature of high cost residential areas and parastatals.

5.36 *Time* Inadequate water services represent high opportunity and personal costs for women in terms of the time spent queuing. Increasing population pressures and the numbers of broken or vandalized water points have resulted in women walking longer distances and growing queues. In the case of Chawama data from the subsample revealed that household members spend in excess of one hour per trip fetching water. Further analysis of the subsample data showed that households collected water at least twice per day, reflecting availability rather than immediate need.

Table 5.7 Mean expenditure shares on water as a share of non-food expenditure, Chawama, 1992.

Basic service	Non-poor	Poor	Very poor	Total
Water (%)	14.16	21.29	24.66	19.33

Source: Lusaka UPA, 1994.

5.37 Health and Personal Safety Serious outbreaks of cholera have been recorded in recent years in all of Zambia's metropolitan areas, a direct result of the lack of water and sanitation infrastructure. The situation in Chawama is characteristic of densely populated compounds in urban Zambia (Zambia UPA 1994; 101). In the past three years there have been periodic outbreaks of cholera and water borne diseases. Diarrhoea was one of the most common diseases afflicting children in the area; 15 percent of children who were reported ill in the last year had diarrhoea. Moreover, 32 percent of children and 40 percent of adults reported that they had an infectious and parasitic disease over the past year.

5.38 During field visits women complained of the physical dangers involved in collecting water. Women are frequently forced to collect water at night when water pressure is higher however compounds are not lit and violence is a problem. In Chawama, over 90 percent of the respondents (women) collected water in the morning rather than the evening time when the water pressure is equally as good, possibly due to the increasing violent attacks against women during the evening.

5.39 Water Quality Unreliable chlorination in urban areas is of general concern, as witnessed by the media debate (Times of Zambia October 28, 1993). Previously a lack of foreign exchange prevented the purchase of chemicals which are imported from South Africa. The current monetary squeeze has again limited the amount of currency available and at the time of the mission to Zambia water was reportedly untreated in urban areas.

5.40 The sources of urban water contamination include sewage spillage from poorly functioning sewage works, back siphoning of blocked sewers into the water supply, and industrial pollution. In the case of Lusaka, half the city's water supply comes from Kafue where water is polluted from mining effluent. A tannery belonging to Bata and a fertilizer company further add to the pollutants 2/3 km. upstream from Lusaka. In low income areas contamination of shallow wells from pit latrines is a significant problem.

5.41 A visit to George compound showed women both to be aware and concerned over the quality of water. Drinking water is collected from a military compound several kilometers away from most homes because water that does come out of community standpipes is considered to be suitable only for washing. Given the resource constraints on water provision and the numbers currently not served by safe water, this differentiation of water use at the household level represents an important strategy which can be built upon in the short term for cost effective widespread safe provision of drinking water²¹.

5.42 Institutional Framework. The sector is characterized by an enormous number of suppliers and donors. A lack of coordination between the seven ministries responsible is a key constraint on service delivery. Established responsibilities are unclear and are further confused by de facto and de jure systems. With respect to low income areas it is important to note that there is no central record of standpipe numbers or status kept within any of the institutions.

²¹ It is important to note that subsequent field visits to other compounds in both Lusaka and other metropolitan areas have shown this to be a fairly widespread strategy.

5.43 In 1991, a reorganization of the water sector resulted in the creation of the Program Coordination Unit (PCU) under the Ministry of Water and Energy. An important first step in coordination has been the enumeration of key actors in the sector. Table 5.8 summarizes the findings. The role of the PCU will be to recommend policy reform and define the responsibilities of ministries and agencies. Key areas for the urban poor are the decisions that will be taken with regard to the feasibility/acceptability of cross subsidization and the extent to which recommendations on coordination are implemented and enforced.

Table 5.8 Overview of actors and institutions in the urban water and sanitation sector.

Central Govt.	Donors	Parastatals	Private Sector	NGOs
Ministry of Energy and Water	GTZ (lead donor)	ZCCM	LWSC	Irish Aid
Ministry of Local Govt. and Housing	NORAD	ZESCO	Consulting Firms (numerous)	Oxfam
Ministry of Works and Supplies	JICA		Contractors	World Vision
Ministry of Health	EEC		Industry	CARE
Ministry of Agriculture Food and Fisheries	Irish Aid			Africare
Ministry of Community Development and Welfare	WFP			Churches
National Commission for Development Planning (NCDP)	FAO			
Ministry of Environment and Natural Resources	World Bank			
Program Coordination Unit (PCU)	ADB			
Task Force- Water Supply and Sanitation Sector	WHO			
Ministry of Education	UNICEF			
	FINNIDA			
	CIDA			
	ODA			
	SIDA			
	DANIDA			
	USAID			
	UNDP			

Source: NORAD Planning Document for the Water and Sanitation Sector 1993.

5.44 Sectoral Financial Constraints The low, and to date decreasing, proportion of the national water budget contributed by the two mainline ministries down to 2 percent in 1993 is shown in Table 5.9. There is agreement among donors that financial constraints are however unnecessarily exacerbated by the lack of flexibility in the use of donor funds. Inefficiencies in the budgeting and disbursement process are acknowledged. Budgeting is currently a lengthy process and it is not clear what criteria are used to determine allocations. Cost recovery guidelines have been issued by the Ministry of Finance and it is current government policy to phase out funding for operations and maintenance. Revolving funds were set up in July 1993 for all water systems. Collected revenues are expected to cover operation and maintenance costs, an improvement on previous financial systems where collected revenues were "lost" in central government funds. To date funds have been collected but no monies disbursed.

Table 5.9 Source of funds for water supply and sanitation projects.*

Year	National Budget K Million	Share of Budget through MLGH and MEWD					
		MEWD (DWA)			MLGH		
		Total K million	% of national budget	% external contrib.	Total K million	% of national budget	% external contrib.
1990	6,099	159	2.6	90			
1991	10,049	269	2.7	91			
1992	157,741	773	0.5	84	1,522	1.0	
1993	231,935	1,365	0.5	90	3,579	1.5	88
1994	360,000	8,890	2.5	47	22,714	6.3	85

Source: GTZ *(national figures only available). MEWD: Ministry of Energy and Water (lead ministry). MLGH: Ministry of Local Government and Housing.

5.45 Regulatory constraints The lack of a regulatory framework is closely linked to problems of departmental and ministerial coordination. Various recommendations to unite water supply and sanitation within one ministry or agency have to date not been implemented. Planned decentralization of water services requires that the regulatory function remain within a central unit and the executive function be delegated to local government.

5.46 Managerial/administrative constraints. Institutional bottlenecks are as important as financial constraints in terms of the problems historically experienced by the water sector (Siamwiza et al. 1993; 23). There is a serious shortage of qualified and experienced personnel, particularly in technical positions (Siamwiza et al 1993; 23). In addition lack of planning and organizational procedures within the bodies responsible for water at both the national and urban level, has in turn been compounded by the reorganization necessitated by decentralization. It is important to note, that decentralization does not ipso facto mean the devolvement of authority.

5.47 Water Providers There are broadly three institutional frameworks for the provision of water. The smaller urban townships (47 water schemes) are under the Department of Water Affairs (DWA), whose emphasis is the development of a policy of cross subsidization which will

ensure water provision for low income areas. DWA are theoretically responsible for setting the national policy agenda as discussed above.

5.48 In the larger metropolitan areas provision has been the responsibility of the City Councils in Lusaka and in council compounds in the Copperbelt. ZCCM has been responsible for the provision of water services in the mining compounds and it is important to note that these compounds have traditionally been better served, reflected in the higher averages for service access in this region seen in Chapter Three.²² In larger metropolitan areas, including Lusaka and the Copperbelt cities, the target is privatization of the water providers. The policy is most advanced in Lusaka, where water provision has been passed from the city council to a private company Lusaka Water and Sewerage Company (LWSC).

5.49 *Privatization and the Urban Poor; Lessons from LWSC* A private company that must obtain a commercial profit, LWSC have no plans for upgrading services to low income areas. The Managing Director of Lusaka Water Co. has prioritized the recovery of fees and a metering system which he maintains will increase revenues allowing for new/upgraded infrastructure. The current emphasis is a K3,500,000,000 (US\$ 10 million) project with the Zambian Survey Department to computerize users in higher income areas to track which households are paying their bill. In the context of urban poverty, it is important to note that *this sum is equivalent to providing basic community water and sanitation services to more than 2.6 million people ie a number exceeding those that are currently unserved in urban Zambia.*²³

Water and Sanitation Policy Recommendations

5.50 The urban poor need safe access to clean, regular and affordable water supplies. The water and sanitation sector in urban areas is however in crisis. Current deficiencies in all areas have a negative impact on the poor, particularly women. This has a direct impact on health and related care costs, and indirect costs in terms of reduced productivity, a result of illness and the opportunity cost of time spent collecting water. Mechanisms that allow for diverse solutions and that involve the community in the choice of arrangement and technology will be important.

5.51 There are two central issues that need to be addressed. Firstly, the policy gap through which the needs of the urban poor currently fall between a *de jure* cross subsidization policy and the *de facto* profit motives of private water companies. Secondly, the severe lack, and in some cases absence, of potable water in low income urban areas. A suggested precondition for further work in the sector is the negotiated agreement of the lines of responsibility between the two main line ministries, to facilitate in turn the coordination of the other 200 actors. Failure to clarify these issues is likely to lead to greater complications in the long term. There is an immediate

²² Subsidized provision and maintenance of water services and infrastructure is continuing at the time of this report's preparation however it is important to note that a combination of the declining copper prices and the government's declared intention to privatize the mining sector and the greater poverty levels of these populations makes planning for future infrastructure maintenance a key area for consideration.

²³ A recent World Bank mission estimated that in unserved urban areas, basic community water facilities (boreholes and standpipes) could be provided for US\$13 per person served and basic sanitation facilities for US\$25 per person served. [Zambia Urban Water Supply and Sanitation Project Identification, Mission Aide Memoir, February 1994].

need to define the extent to which the cross subsidization policy generated by the DWA applies to low income areas under the control of the private water companies.

5.52 Provision of water in low income communities Prioritising the provision of water in low income communities is essential on the grounds of productivity and health. As in the case of housing discussed above, the provision of water services to the urban poor constitutes the provision of a direct asset to the poor; Schlyter's research in George notes how water connections affect the value of property to a greater extent than the size and location of the property itself (1991; 36).²⁴ Given the scale of need and the problems of theft and vandalism, involvement of the community will be critical in the provision and maintenance of water systems. Project design must include the participation of communities, involving residents in the choice of technology and the method for maintenance payments. Participatory exercises have established that communities have different and definite ideas about the type of systems they want and can produce plans and justifications. Building on these initiatives will be critical but will take time given the low levels of existing community organization discussed in Chapter Three. Finally, it should be restated that poor communities currently pay high costs for water; the opportunity thus exists to work with these resources for more efficient water provision.

5.53 Rehabilitation of infrastructure Clearly some rehabilitation of central infrastructure is required on pumping stations, pipeline arteries etc. The challenge however will be to rehabilitate parts of the system in such a way as not to entrench the inequitable distribution currently an inherent part of the infrastructure network. Given the scale of the problem and the limited resources rehabilitation which will have a direct impact on the low income communities must be prioritized for example, rehabilitating those pipelines that run through middle income areas towards low income areas, ensuring that water pressure will increase for poorer residents, reducing queuing times and personal safety hazards. In Zambia there is a unique opportunity to ensure that equitable rehabilitation takes place, building on the impartial technical knowledge of the PUSH engineers (see Chapter Six).

²⁴ This point emphasizes the interconnections between water services and the urgent need to amend land and housing policy. *Given the size of the rental sector in low income urban areas and that 40 percent of renters have absentee landlords, the provision of water within the current framework will only further distort equity issues within urban Zambia.* It must be emphasized again that addressing the land issue must be a precondition of intervention in the water sector.

Household Energy

5.54 For the urban poor household energy costs represent a significant drain on household income. Low income areas largely do not have access to cheaper fuel sources such as electricity, a factor which is compounded by the need to buy cheaper foods which need longer cooking. Additional costs include the environmental impact of the current reliance on woodfuels and household level costs such as the time spent on fuel collection and health hazards associated with cooking and lighting methods, costs that are predominantly born by women.

5.55 *Current policy.* Electrification is currently being considered since Zambia has a potential abundance of hydro electric power which could be used not only to extend coverage to low income urban areas, but also to increase foreign exchange earnings. Given that this is not feasible for all households in the immediate future, the second policy is the management of woodfuels and, where possible, a search for alternative fuels. Problems of shrinking local supply and the resulting environmental degradation are heavily concentrated in the central "spine" of Zambia, where urban populations predominate. As sources of woodfuel become progressively more distant from the centers of demand, prices increase with negative impacts on the income and food security of the urban poor (World Bank 1993a; 123).

5.56 *Access to Energy Supplies* Charcoal is the principal cooking fuel for the urban poor (94 percent, about 1.6 million users in total) and is predominantly brought in from rural areas. Access is to some extent seasonal; in the rainy season, when there is a need to boil water, fuel prices quadruple. The positive correlations between fuel access and affordability and health and nutritional status are important to note (Chiwele et al 1993; 5). *Electricity;* ZESCO have 130,000 homes on their grid of which 50 percent are in low income areas but *not* in low income homes. Electrification is a symbol of success and currently only the wealthy have access due to the cost of initial connections (US\$ 800). At the national urban level 39 percent of homes are connected to the grid. Taking a low income sub sample, it can be seen that only 4 percent of homes are connected. The case of Missis is a graphic example of the exclusion of the urban poor from affordable services; residents currently are threatened with bulldozing; their houses are unsafe, built under low slung power lines to which they have no access.

5.57 *Costs to Low Income Consumers* Energy costs represent an important proportion of non food expenditure, an average of 25 percent of total household expenditure ie. a sum equivalent to rent. As indicated in the Table 5.10 expenditure on cooking fuel is twice the expenditure on lighting. The proportionally higher expenditure on cooking fuel is due to the high price of charcoal (the main energy source used). As indicated in the table below, there is a gradual increase in the proportion of expenditure on cooking fuel vis-a-vis lighting from non-poor to very poor households. The cost of charcoal for cooking is a proportion of household income which falls disproportionately on poor households. It represents 3.3 percent of non-poor non-food expenditure as against 20 percent of the very poor.

Table 5.10 Shares of household expenditure on energy by poverty group, Chawama, 1992.

Use of energy	Non-poor (%)	Poor (%)	Very poor (%)	Total	(%)
Lighting	36.35	35.48	31.74	207	34.58
Cooking Fuel	63.65	64.52	68.26	207	65.42

Source: Lusaka UPA 1994.

5.58 Trend data from the UPA survey show that households surveyed are facing increasing difficulties in meeting fuel costs. Eleven out of thirty households had cut back on fuel expenditure (UPA 1993; 108). Given that fuel expenditure is relatively inelastic, these cuts can be interpreted to represent households struggling to make ends meet. As in the case of mealie meal, many households are now forced to buy charcoal in small 1 kg bags which last only one day and are expensive.²⁵

5.59 *Seasonal variations* in supply, attributed to transport costs (43 percent of retail price) and difficulties result in significant price rises during the wet season. As noted earlier this is when charcoal is most needed for heating and, most importantly, boiling water. During the dry season, (May to November) there is a standard price for charcoal, but during the rainy season (December to April) the amount of charcoal available on the market is reduced, resulting in price hikes. During the rainy season of 1992/93, the price of charcoal was adjusted from 350 kwacha to 1200-1500 kwacha per bag, roughly quadrupling the charcoal price (UPA 1993; 67).

Table 5.11 Charcoal prices (Kwacha) 1983-1992, showing price increases and retail markup*.

	October 1983	February 1988	February 1989	August 1992
Price at source	2.50 (56)	15.00 (50)	50.00 (50)	150.00 (43)
Transport cost	1.00 (22)	9.50 (32)	30.00 (30)	150.00 (43)
Other	0.60 (13)	2.00 (7)	2.00 (2)	20.00 (6)
Retail price	4.50	30.00	100.00	350.00
Retail markup	10%	13%	22%	9%

* Figures in brackets indicate the percentage of the cost element to the retail price

Source: Hibajene 1993.

²⁵ Studies of charcoal use and production show conflicting results. A study carried out by SIDA in Chipata and Chainda (low income) compounds concludes that fuel is not perceived to be an important issue at the household level and that prices have remained stable in real terms over the last five years. The study concludes that household energy expenditure for these low income groups is only 6.4 percent, much less than other studies have found, for instance the World Bank/DOE study in 1988/1989 where it was stated that as much as 19 percent of the household budget was spent on energy. The SIDA study attributes the discrepancy of accurate figures for fuel expenditure but inaccurate estimates of total expenditure, which do not take account of inflation (Chiwela and Ellergard 1993).

5.60 Electricity Costs Those households who are connected to the electricity grid are not metered and pay a flat rate of 11K/month. It is important to note however that charcoal remains the main source of cooking fuel due to the cost of appliances. In Chawama four out of ten electrified households use it for cooking because the price of electric stoves is unaffordable (UPA 1993; 64).

5.61 Indirect Costs For low income households costs in terms of the time spent in fuel collection are substantial. The National Household Budget Survey (CSO 1993) shows that the average metropolitan household collects fuel monthly to a value of KL1,099. This figure represents a considerable investment in time and illustrates the extent to which "urban" households are currently engaged in small scale gathering and production activities for survival. Health hazards have been mentioned above and include the risk of fire and respiratory tract infections.

5.62 Institutional Framework Both government and parastatal institutions have responsibility for energy policy planning and implementation. The government institutions include the National Energy Council (NEC) and the Department of Energy (DOE) in the Ministry of Energy and Water Development. The NEC was formulated to provide policy advice on energy issues to the Government. The DOE also has the mandate to make policy as well as responsibilities for program implementation. There appears to be little coordination between these two agencies.

5.63 ZESCO The most prominent parastatal in terms of household provision of energy, ZESCO estimate that a further 70-80,000 units could be immediately connected to the grid i.e. those structures in low income areas where connections could be safely made. The objective of the company's new managing director is to expand the customer base and plans have been drawn up to connect a further 50,000 houses in the next two years. With the introduction of appropriate technology, a "ready board system", even houses made with traditional materials can potentially be connected. The director's vision is of electricity "kick starting" the economy; electricity inside homes will improve educational levels and electrification of the market places will be a boost to micro enterprise activity. The company is currently undergoing profound organizational change under a new directorship. Future plans include privatization and retrenchment.

5.64 Charcoal Producers Woodfuels and other biomass sources of energy are controlled by private entrepreneurs, often operating on a very small scale. Charcoal production, transportation and distribution take place in the informal sector and represent a substantial trade. Annual business in Lusaka is estimated at 6.5 billion kwacha, a turn over of 5 million bags (Hibajene and Chidumayo 1993; 37). In terms of income and employment generation, the charcoal industry is one of the most important industries in Zambia. It is estimated that a total of 45,500 people are engaged in the charcoal industry (ibid). At the urban household level, 3,500 households are involved in the small scale sale and distribution of charcoal (ibid; 38).

Household Energy Policy Recommendations

5.65 The urban poor need safe, reliable sources of energy. A policy framework for the energy sector is however complicated by the conflicting needs to provide low cost fuels, predominantly electricity, and a recognition of the important source of employment that the current organization of the sector represents to low income urban families.

5.66 *Electrification* Given the potential multiplier effects on urban productivity, environmental protection and reduction of household costs, that would result from electrification, such a program would appear to merit support, although more detailed cost benefit analysis would be needed prior to proceeding. Current connection costs of US\$ 800 are calculated as an inverse function of expected charges. Electrification for the urban poor is dependent upon bringing bill to market levels thus reducing the capital costs of connection. To this end prices have been increased by 400 percent over the last two years, contributing to a heated tariff debate (Times of Zambia October 1993, various issues). This debate serves to accentuate how the current discussions over service charges and the culture of non payment are generated from the interests of the middle and upper classes and parastatals. From the perspective of the urban poor, a price increase of 1000 percent/unit would result in costs of K110/month, much under the current monthly expenditures on charcoal, thus making electricity attractive for low income households.

5.67 *Low Cost Appliances* Access to energy is determined to a large extent by the ownership of (affordable) appliances. It has been noted above that low income urban households own few possessions, reducing potential access to electricity in those areas where there is supply. A vastly increased number of households connected to the grid, and the deregulation of informal sector enterprises (see Volume One) would have the effect of drawing producers into the appliance market, bringing costs down.

5.68 *Improving the Efficient Use of Charcoal* In the short run the price of charcoal, particularly the increased prices during the rainy season can be brought under control by reducing the supply bottlenecks. SIDA is currently funding an "Improved Supply and Marketing of Charcoal Project" which aims to construct a network of charcoal depots in strategic areas. In addition to increasing supply, interventions should also try to promote the more efficient use of charcoal²⁶

Sector Services; Conclusions and Priorities

5.69 This chapter has considered the case of three sector services; transportation, water and sanitation and energy. Reviewing the policy recommendations, what is clear is the extent to which improvement in any one of the sectors is dependent on a review of land policy and, the linkages between the sector services. In some cases, these linkages take the form of a positive multiplier effect; changes in land policy for instance would both facilitate the improvements suggested in the water sector and ensure that benefits do indeed accrue to the urban poor. The lowering of interest rates is another example of a policy that would facilitate investment in all sector services. In other areas the trade offs appear more complicated; in the short run for example, real increases in the price of electricity that are accepted to be necessary, will have a negative effect on the water sector increasing the cost of pumping for example. The most

²⁶ Attempts to introduce improved, appropriate technology have not to date been successful. A previous NORAD funded project attempted to introduce improved charcoal stoves by training tin smiths in the market place to produce the newly designed stove. A small grant was given to the tin smiths for materials and assistance was given with marketing. Representatives of the Department of Energy gave several reasons for project failure, which included the timing of the project and the perceived complication of both fabricating and using the stoves. Most important however was that the stoves took longer to heat up, an additional burden on women, which they were not prepared to bear.

significant conflict however is that of resources. Given the extent of crisis in urban service provision and the constraints on human and financial resources there is a need to carefully prioritise actions, ensuring that, to the extent possible interventions chosen are mutually reinforcing and have the greatest returns in terms of urban productivity, generating the resource base for further improvements in the near future.

CHAPTER SIX: THE RESPONSE TOWARDS A FUTURE THAT INCLUDES THE URBAN POOR

6.1 The Zambian urban reality is one of a fractured economy, declining services and increasing poverty. There are however emerging signs of creativity; economic initiatives and alternative service mechanisms. Those living in the low income areas have started to evolve systems relevant to their lives. The challenge for the future is to support and foster these local initiatives, building linkages and services which meet the needs of low income residents as opposed to passing over their heads as in the past, literally in the case of Missis.

6.2 A successful response relies on a careful mix of immediate actions that address the priority areas of today, with the initiation of a series of longer term measures, the implementation of which are similarly urgent, since while their benefits may not be felt in the short run, a failure to address the issues today will delay medium to long run recovery. In the short term the emphasis should be on horizontal linkages, *within* urban areas, fostering the new economic activities that are evident. In the medium term, the emphasis must be on vertical linkages *between* urban areas and these nodules of growth, ensuring their reinforcement and further expansion.

6.3 Central to this urban vision is a reconceptualisation of urban services; an integral part of a productive economic strategy. Services provide direct employment to the urban poor (see the cases of transport and energy), and have the potential to support the new informal sector. Services should thus be prioritized as both a direct economic investment in addition to the potential welfare benefits provided. This chapter draws on and draws together the recommendations of previous chapters focusing on *how* services might be provided and in turn how service provision might facilitate urban production and appropriate institutions within the new Zambian economy.

Horizontal Linkages; Promoting Intra Urban Growth

6.4 Within metropolitan urban areas (ie. Lusaka and the Copperbelt) the seeds of economic dynamism in the informal sector are evident. The developments have been spatial, as opposed to sectoral, with certain communities apparently showing increasing economic activity across a range of enterprises or sectors. In Lusaka, Chawama, the site of the UPA research is one such community, a site of growing small scale production and petty trading activity (accounting for 78 percent of the workforce in 1992 as opposed to 65 percent in 1978). Field visits and participatory research would suggest that George is another dynamic, consolidating community, drawing in labor from nearby poorer communities.²⁷ Developments have been gendered, with the growth of economic activity, if not always success, concentrated amongst women, making their explicit inclusion in linkage strategies important. The challenge is thus how to support and

²⁷ In the Copperbelt the relationship between mining and council compounds is more complicated and further research will be needed to identify the potential of particular communities and the appropriate supporting strategies.

broaden this economic growth within compounds in the short run, while putting in place mechanisms that might replicate the experience in other compounds in the medium run.

6.5 Legal Access to Land The importance of recognizing "illegal" areas and, in the medium run, simplifying access to urban land cannot be overemphasized. Recognition of "illegal" compounds should be made a precondition of any donor activity within Zambian urban areas and a unique opportunity currently exists for concerted action with a number of donors such as the World Bank, ODA and UNICEF poised for urban investment. Legal areas of Lusaka such as Chawama and George are currently consolidating communities; the sites of construction and small scale investment. Similarly, if poorer areas such as Missis and Gabon are to grow in the future, security of tenure must be provided today.

6.6 Deregulation *The Case of Housing Construction* Legal and financial constraints on small scale economic activity are significant. To date, deregulation in the financial and business sector has been limited at the macro level and almost non-existent at the meso level. Removing restrictions will facilitate not only the growth of small scale enterprise but the private provision of urban services, multiplying the potential that will result from changes in the legality of land status and security of tenure. Deregulation of building codes and the location of businesses would boost the construction industry, generating the further provision of housing and economic activity.

6.7 Promoting Urban Rural Linkages A parallel strategy is needed to promote and reinforce growth in the non-metropolitan centres i.e. the provincial capitals. Here the urban-rural distinction is not helpful since the dynamic space is that of the provincial capital and surrounding rural area. Responding to poverty entails support to the potential of agro-industry and in particular food processing, targeting those areas with the highest levels of poverty such as Mansa and Chipata. Detailed recommendations are not possible on the basis of current studies and evidence; the urban poverty findings point to the need to do more work in the area of urban-rural linkages in order to develop the strategy suggested here.

6.8 Deregulation As above, legal and financial constraints appear to be a significant restriction on agro-processing activities. Pressure for deregulation should emphasize the current constraints on maize marketing, thus reinforcing the rural response, moving to areas of more exotic produce, whose processing would increase the value added of products and income within rural and non-metropolitan areas. Deregulation of local financial markets and legislation concerning business location will be important. Success will entail understanding the local nature of constraints and more research is needed here at the regional level. In the medium term, based on greater regional knowledge, proactive support to "winning" products should be considered. What is advocated here is not subsidies to successful agro-business, but technical assistance in marketing, and the choice of certain inputs such as technology.

Vertical Linkages; Linking Centres of Urban Growth

6.9 As described above, promoting urban productivity implies, in the first instance, decentralized initiatives to support the signs of intra-urban growth that are emerging. The second priority is the facilitation of linkages between centres of growth i.e. within cities and between regions. The provision of roads and transportation is thus advocated in the short run as a labor response strategy to the urban problems of unemployment, while simultaneously building the networks for the second stage of urban growth and poverty reduction.

6.10 Provision of Roads Roads are prioritized in the urban poverty response for two central reasons. Firstly, if the vertical linkages which will be needed to support growth in the medium term are to be provided, it is necessary to begin basic construction and facilitate provision in the short term ie. avoiding future bottlenecks. Secondly, as noted above, the provision of roads is advocated as a supply response to the problem of unemployment, in the short run, as alternative informal sector initiatives expand.

6.11 Zambia has seen large scale infrastructure provision during earlier decades, it is thus important to emphasize the different nature of what is proposed here. The vision is one of small feeder roads, that link compounds within urban areas and provincial urban centres both with each other and surrounding rural areas. A judicious mix of central level planning, to ensure a public works program that can respond in the very short term to employment needs, will be complemented with important elements of community information that will ensure that works meet the need of urban communities as opposed to powerful monopoly interests in the private sector or political interests in the public sector. The institutional knowledge of PUSH will play a vital role and it is recommended that the strengths of this organization are used, not as a safety net but rather to ensure the equitable provision of infrastructure. Municipal engineers in each municipality know the needs of both road and water infrastructure. This localized and objective knowledge should be included in project planning.

6.12 Transportation Facilitating the private provision of public transportation is linked directly to the provision of roads and should be seen in a similar context. Addressing transport provision must be seen as a direct input to urban productivity; facilitating labor access to employment and, markets for suppliers and producers. Transport should also be seen as a potentially productive sector in its own right and one which importantly, is labor intensive (37 percent of those who live in the Priority Survey low income subsample are engaged in activities related to transport).

6.13 Deregulation and Reorganization The transport sector is currently tightly controlled by vested interests and there are clear areas that can be immediately addressed.

- i. lowering of interest rates
- ii. deregulation of credit and insurance markets
- iii. deregulation of transport policy; the central allocation of routes and fares
- iv. reorganization of the ministry of transport; technical support should be provided to the ministry of transport to enable them to play a new coordinating role as opposed to that of transport provider. The financial burden imposed on the government by the transport sector is equivalent to 12 percent of all current revenues (World Bank 1993). Resource constraints are thus not the issue, what is needed is concerted effort on the part of the World Bank and other donors to phase out public transport provision, using the resources for skilling an effective regulatory body which can both supervise and ensure effective transport provision..

6.14 Community Linkages/Involvement Simple steps such as the consultation of community women in the siting of bus stops would have potentially large benefits in terms of access to transport and thus, education, employment and markets. Building on the PUSH linkages that will be used under the roads component described above, it should be possible to include this component in a cost effective and rapid manner.

Institutional Linkages : the urban framework

6.15 The institutional framework for both enterprise activity and service delivery in urban areas share a number of commonalities, rooted in the historical context of the formal economy, institutional structures are centralized hierarchical and rigid, unsuited to the demands of service delivery and economic activity of the current urban environment. It was stated at the outset that how services are delivered is as important as what is delivered. Rethinking and relinking the role of institutions is a precondition for service delivery that meets the needs and can be afforded by the urban poor. Service delivery provision in turn provides the means to develop institutional mechanisms and delivery systems. This section will thus summarize the history and current status of both formal and informal urban institutions at the national, city and sub city level and draw on service recommendations to illustrate a way forward.

6.16 *National Government* At the national level, several government departments and ministries are responsible for urban service provision. The case of housing is typical, the Ministry of Local Government, the National Housing Authority and the Ministry of Works and Supply all have remits that cover low income compounds, in addition to the respective city councils. Horizontal linkages between ministries and vertical linkages between for example the Ministry of Local Government and City Councils remain unclear. The use of outdated maps produced in 1968 within one ministry while another is producing current documentation illustrates both the confusion and the resulting invisibility of the urban poor, the majority of whom do not appear on the 1968 maps. The lack of a clear policy framework for all urban services is closely linked to problems of departmental and ministerial coordination. From the perspective of the urban poor this lack of clarity is an effective policy that preserves the inequitable distribution of services and mitigates against their interests.

6.17 *Municipal Government* The declining resource base in urban areas has led to weak municipal governments, constrained by the lack of both financial and human resources. In 1990 35 percent of local sales tax went to local authorities for services, in 1992 4 percent. These very real resource constraints are compounded in turn by historical and political constraints, a lack of will to deliver services to "illegal" settlements, training in "blue-print" planning inappropriate to the current urban reality and services whose original design, as noted earlier was inappropriate.

6.18 The organization of both local government and city councils is shortly to be altered under the Public Sector Reform Program. Within the broad objective of decentralization, the program has three components: the restructuring of public services, support to human resources and the strengthening of local authorities. The restructuring of public services entails in turn, the decentralization of service provision and an emphasized role of the private sector. The role of municipal councils in the decentralized provision of water and sanitation services provides an interesting example of the altered structures that have resulted from the restructuring of the urban economy and thus urban services, and some of the potential pitfalls for the urban poor. In the short term there is a need to link council personnel to low income communities, incorporating them in the initiatives emerging at compound level and building links to municipal government.

6.19 *Community Institutions and Organizations* Community organization in urban Zambia, as noted in Chapter Three is relatively weak. Significantly, community organizations and non governmental organizations (NGO's) do not have strong links/communication channels with either municipal or central government. Supporting and extending community leadership and genuine

participation on a wider basis is likely to remain a slow process however, there are a number of important organizational experiences and groups, which can be built upon. Within the Zambian urban environment of theft and vandalism community organization and ownership must be emphasized as fundamental to project sustainability and arguably to project implementation.

6.20 NGO's Initiatives such as OXFAM's program in Mufulira, World Vision's activities in Chainda and Irish Aid in Kamanga. These activities and CARE's planned interventions under PUSH II represent an important body of experience on which to build. World Vision, Oxfam and the Church, under the Training for Transformation project have developed institutional expertise in methods to facilitate community participation and organization which will be central to giving communities a voice in the future design of services. World Vision, Irish Aid and PUSH II have developed mechanisms to incorporate council personnel in alternative community based structures, providing a training for personnel in alternative delivery mechanisms. PUSH networks provide an important model for potential consultation in the citing of physical infrastructure. PUSH coordinators in each municipality are municipal engineers and, given their combination of technical and community experience could potentially play a unique role, providing technical expertise to community partners and collaborating in planning processes with municipal governments, ensuring that structural service plans incorporate and where possible prioritise the needs of the urban poor.

6.21 Water and Sanitation; linking the Municipality with the Community

The example of water services; using a need prioritized at the community level to meet service demands while providing a means to build sustainable institutions, is illustrative of an innovative approach as to how to address the issues. The World Bank's Urban Water and Sanitation Project will attempt to facilitate participatory structures at the community level, reorientate the bureaucracy at the municipal level and establish the links between the two. It provides a potential model for promoting institutional linkages which will underpin the urban response.

The envisaged process will build on concrete empirical experiences and methods that already exist in Zambia (Oxfam, Irish Aid, World Vision, PUSH, CARE, Catholic Church, NORAD, UNICEF etc.), drawing them together in a coherent framework. The objective is to improve the chain by which community needs can be made known at government level and communities can in turn access services within the currently constrained environment. Central to the project process is the idea of matching social with physical infrastructure, supporting the central links which are seen to underpin the urban response.

6.22 Participating communities will be expected to form some sort of representative organization, with the support of a community partner, such as an NGO. A process of needs identification, project design, water maintenance and monitoring plan will be produced and an application will be made to the council for funding. The municipal council will provide technical assistance to community water systems, in the initial provision and for major maintenance, responding to needs expressed at the community level.

6.23 Significant changes within the municipal government are implied, which are both philosophical and administrative and can be termed as bureaucratic reorientation, BRO. The process of project design in which key figures spend a week in the community observing the project design process will be the first step. A central component of the technical assistance planned in the project will be training in participatory processes and facilitation. The emphasis will be on ways of supporting flexible processes as opposed to imposing blueprint planning. The

technical assistance component will also provide central skills to the municipal councils to ensure that they can meet the demands of the community organizations, building skills within the municipal government.

Conclusions: the prioritized response

6.24 The above example of a planned response to the urban water crisis, emphasizes the components that will be central to an urban poverty reduction strategy; community participation, a stress on the locality, appropriate and affordable levels of service provision that provide the opportunity to reorient institutions towards the emerging economy and needs of the urban poor. Resources, both human and financial are limited and a realistic response must set priorities, in the Zambian urban context, the legalization of land and provision of water and transportation services are paramount. Human capital, the urban residents, provide the supporting base; adequate education and localized skill training must be the foundation of the above response.

BIBLIOGRAPHY

- Addison, T., and Demery, L. 1990 *Making Adjustment Work for the Poor.* Washington, D.C.: The World Bank.
- Beneficiary Assessment. 1993. "Beneficiary Assessment Study Phase II." UNZA, Zambia.
- Chambers, Robert. 1989. "Editorial Introduction: Vulnerability, Coping and Policy." *IDS Bulletin* 20 (2). April (pp. 1-7).
- Cornia, G., Jolly, R., and Stewart, F. 1987. *Adjustment with a Human Face*, Volume I. Oxford: Clarendon Press.
- Elson, D. (ed.) 1991. *Male Bias in the Development Process*. Manchester: Manchester United Press.
- Harpham, Trudy. 1985. *Health and the Urbanization Process in Developing Countries, EPC 5*. London. London School of Hygiene and Tropical Medicine.
- Heggie, Ian. 1994. *Management and Financing of Roads; An Agenda for Reform*. SSATP Working Paper No. 8. Washington, D.C. World Bank
- Jamal, V., and Weeks, J. 1988. "The Vanishing Rural Urban Gap." *International Labor Review*, Volume 127 (3).
- Kalinda and Floro. 1992. "Zambia in the 1980's: A Review of National and Urban Level Economic Reforms." INURD Working Paper #18. Washington, D.C.: The World Bank.
- Moser, C., Herbert, A., Makonnen, R. 1994. "Zambia Urban Poverty in the Context of Adjustment Research Report." Urban Development Division Working Paper (draft). Washington, D.C.: The World Bank.
- Moser, C., Herbert, A. and Makonnen, R. 1993a. 1993. "Urban Poverty in the Context of Structural Adjustment. Recent Evidence and Policy Responses." TWU DP #4. Washington, D.C.: The World Bank.
- Moser, C. 1993b. "Manual of Urban Poverty Research Methods." Draft mimeo. Washington, D.C.: The World Bank.
- Moser, C. 1993c. "Urban Social Policy and Poverty Reduction." TWURD Working Paper #10. Washington. D.C.: The World Bank.
- Priority Survey (PS). 1991. "Social Dimensions of Adjustment, Priority Survey I Report." CSO, Zambia.
- Rakodi, C. 1986. "Housing in Lusaka: Policies and Progress" in G. Williams (ed.). *Lusaka and its Environs*. ZGA, Lusaka. 189-209.

- Rakodi, C. 1983. "The World Bank experience: Mass community participation in the Lusaka squatter upgrading project," in C. Moser (ed.). *Evaluating Community Participation in Urban Development Projects*, Development Planning Unit Working paper #14. London.
- Rakodi, C. 1978. "Community Level Survey." Mimeo.
- Rakodi, C. and Schlyter, A. 1981. "Upgrading in Lusaka: Participation and Physical Change," National Swedish Institute for Building Research. Gavle.
- Rosenhouse, S. 1989. "Identifying the Poor: Is 'Headship' a Useful Concept?" Living Standards and Measurement Study Working Paper #58. Washington, D.C.: The World Bank.
- Sen, A. 1983. "Poor, Relatively Speaking." *Oxford Economic Papers*, Volume 35, number 2.
- Seshamani, V., Saasa, O. et al. 1993. "Zambia: Constraints to Social Service Delivery." Washington, D.C.: The World Bank.
- Schlyter, Ann, 1991, *Twenty Years of Development in George, Zambia*, Swedish Council for Building Research, Stockholm
- Siamwiza, R., Sikwibele, A. and Makonnen, R. 1993. "Zambia in the 1980's: A Historical Review of Social Policy and Urban Level Interventions." TWURD Working Paper #9. Washington, D.C.: The World Bank.
- Tranberg Hansen, K. 1983. "Urbanization Policy in Zambia; Uncertain Priorities." Northwestern University. (mimeo)
- World Bank. 1993a *Zambia: Prospects for Sustainable and Equitable Growth*. Washington, D.C.
- World Bank. 1993b. *Engendering Sustainable Growth in Zambia; A Gender Strategy for Promoting Economic Effectiveness*. Washington, D.C.
- World Bank. 1992. *Poverty Reduction Handbook*. Washington, D.C.
- World Bank. 1991. *Urban Policy and Economic Development; An Agenda for the 1990s*. Washington, D.C.
- World Bank. 1990. *World Development Report (WDR)*. Washington, D.C.
- Zambia Demographic and Health Survey (ZDHS). 1992. CSO/UNZA, Zambia.