

# LIVING CONDITIONS MONITORING SURVEY REPORT 2002-2003

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P. O. Box 31908, Lusaka, Zambia.

Tel: 251377/251370/253468/256520 Fax: 253468/256520

E-mail: [info@zamstats.gov.zm](mailto:info@zamstats.gov.zm)

*Website: [www.zamstats.gov.zm](http://www.zamstats.gov.zm)*

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# ***Foreword***

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In recent years, a number of African countries including Zambia have undergone major structural changes both in the political and economic spheres. In many developing countries, the formulation and implementation of development policies and programmes has been made at record pace. However, some of the policies and programmes that these countries have been implementing have negatively affected the living conditions of their people.

In Zambia, the need to monitor the living conditions of the people became focused during the 1990s when the country vigorously started implementing the Structural adjustment programmes (SAP). The Government and its cooperating partners realized that a segment of the population was adversely affected by these policies and programmes meant to reform the economy. After the year 2000, the continued rising trends in poverty and deteriorating socio-economic conditions in the country prompted the Government and donor community to reassess various development and assistance strategies from the point of view of poverty alleviation. The reassessment culminated into the development of the Poverty Reduction Strategy Paper (PRSP) in 2001. However, the successful implementation of such policy-oriented strategies requires institutionalisation of monitoring framework both at household and community levels.

The Central Statistical Office (CSO) has been conducting the household based Living Conditions Monitoring Surveys (LCMS) since 1996 for monitoring various Government and donor policies and programmes. The LCMS surveys evolved from the Social Dimensions of Adjustment Priority Surveys conducted in 1991 (PSI) and 1993 (PSII). So far, three LCMS Surveys have been conducted.

These are: –

- (i) The Living Conditions Monitoring Survey I of 1996
- (ii) The Living Conditions Monitoring Survey II of 1998
- (iii) The Living Conditions Monitoring Survey III of 2002/2003

The Living Conditions Monitoring Survey conducted in 2002/2003 was a nation-wide survey. The sample design and sample size used in the survey allow for reliable estimates at province, location (Rural/Urban) and national levels.

The main objectives of the LCMSIII Survey are to:

- Monitor the impact of Government policies, programmes and donor support on the well being of the Zambian population
- Monitor and evaluate the implementation of some of the programmes envisaged in the Poverty Reduction Strategy Paper (PRSP)
- Monitor poverty and its distribution in Zambia
- Provide various users with a set of reliable indicators against which to monitor development
- Provide province specific poverty profiles using different poverty lines

- Identify vulnerable groups in society and enhance targeting in policy formulation and implementation
- Provide data required for developing new national and province specific weights for the Consumer Price Index (CPI)
- Provide data required for estimating Gross Domestic Products' (GDP) household final consumption

The Living Conditions Monitoring Survey 2002/2003 collected data on the living conditions of households and persons in the areas of education, health, economic activities and employment, child nutrition, death in the households, income sources, income levels, food production, household consumption expenditure, access to clean and safe water and sanitation, housing and access to various socio-economic facilities and infrastructure such as schools, health facilities, transport, banks, credit facilities, markets, etc.

The Living Conditions Monitoring survey Report 2002/2003 highlights some key aspects of the living conditions of the Zambian population. Therefore, the results presented in this report are by no means exhaustive on any topic covered but only attempt to highlight salient aspects of living standards among various population subgroups at national, provincial and location level. A separate report on poverty is been compiled alongside this main report. Additional tabulations and analyses not included in this report can be provided to users on request. Also obtainable on demand are the LCMSIII data sets for those who wish to do further analysis.

The LCMSIII survey was made possible with assistance from various people and institutions that made valuable contributions. The Central Statistical Office would like to express its gratitude to the following: –

- The Government of the Republic of Zambia for funding the survey
- The Zambia Social Investment Fund (ZAMSIF) for managing the survey funds through its Poverty Monitoring and Analysis (PMA) component
- The World Bank and Food Agriculture Organisation (FAO) for their support
- The Living Conditions Monitoring Branch staff at Central Statistical Office for having executed the survey successfully and for putting this report together
- Various CSO staff and users who contributed towards the finalisation of the LCMS survey instruments and report
- All field staff: Enumerators, Supervisors, Master Trainers, Provincial Heads and their Deputies, Drivers and other survey staff
- All data processing staff: Data Entry Clerks and their Supervisors, Computer Technicians and other data processing staff
- All households who provided their valuable time and information without which the survey would not have succeeded



Dr. Buleti G. Nsemukila  
**Director of Census and Statistics**

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# ***List of Abbreviations***

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AES	–	Adult Equivalent scale
BCG	–	Bacillus Calmete Guerin (Vaccination against Tuberculosis)
CSA	–	Census Supervisory Area
CSO	–	Central Statistical Office
CSPRO	–	Census and Survey Processing
DPT	–	Diphtheria, Pertussis and Tetanus
PHANIS	–	Food Security, Health, Agricultural and Nutrition Information System
FGT	–	Foster, Greer and Thorbecke
GDP	–	Gross Domestic Product
ILO	–	International Labour Office
LCMS	–	Living Conditions Monitoring Survey
LCMB	–	Living Conditions Monitoring Branch
NAR	–	Net Attendance Ratio
PRSP	–	Poverty Reduction Strategy Paper
NFNC	–	National Food and Nutrition Commission
PIC	–	Price and Income Commission
PS	–	Priority Survey
PPS	–	Probability Proportional to Size
SAP	–	Structural Adjustment Programme
SAS	–	Statistical Analysis System
SEA	–	Standard Enumeration Area
TB	–	Tuberculosis
ZAMSIF	–	Zambia Social Investment Fund

# EXECUTIVE SUMMARY

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## Demographic Characteristics of the Population

- The population estimate for the 2002/3 LCMS survey was 10.8 million. Of this, 65 percent resided in rural areas and 35 percent in urban areas. Further, 5.3 million were male and 5.5 million were female.
- The average household size for Zambia was 5.4. Average household size ranged from 4.9 in Western province to 6.1 in Lusaka province. The average household size was higher in urban areas (5.5) than in rural areas (5.3).

## Cause of Death

- The most common cause of death was fever/malaria (23 percent) followed by cough/cold/chest infections (11 percent) and TB (11 percent).

## Orphanhood

- In Zambia, 20 percent of all children below 19 years were orphans. Of these, 4 percent were maternal orphans, 11 percent were paternal orphans and 5 percent were double orphans.

## Disability

- About 2 percent of the population was disabled in Zambia; 3 percent in rural and 2 percent in urban areas. The most common type of disability reported was partial sightedness (0.7 percent) and crippled (0.6 percent) of the total population.

## Migration

- The LCMSIII survey reveals about 1.2 million migrants catering for about 11 percent of the total population.
- The proportion of migrants was highest in urban (16 percent) than rural areas (8 percent).
- The percentage of migrants varied from 6 percent in North western to 18 percent in Copperbelt provinces.
- The main reason given by most of the individuals who migrated was that their head of household had been transferred accounting for 22 percent.

## Education

- The proportion of the population attending school in the age groups 5–6, 7–13, 14–18 and 19–22 years were at 13, 75, 64 and 21 percent in 2002/2003, respectively.
- School attendance rate was highest among girls aged 5–13 than boys.
- Urban population is more likely to be attending school than rural population.
- At provincial level, Eastern province recorded the lowest school attendance rate for both the primary and secondary school age population.

- Poor households are less likely to send children to school than non poor households.
- Government remained a major provider of education at all levels. However, private sector had significant contribution to education particularly at college and university levels.
- The main reason cited for not currently attending school among persons with some education background was ‘lack of support’ 36 percent followed by ‘not selected/failed/couldn’t get a place (20 percent).

## **Health**

- Results from the LCMS III survey shows that 13 percent of population was ill in Zambia two weeks prior to the survey.
- The most commonly reported illness was Malaria with 37 percent of all the persons that reported illness.
- Slightly more than half of the population (52 percent) had consulted over their ailment.
- The results also show that over 80 percent of persons that consulted had visited either a Government owned hospital, health center or clinic.

## **Economic Activity of the Population**

- Out of the total population aged 12 years and above in the country, 70 percent constitute the labour force. Of these, slightly over half, 59 percent, were employed and 11 percent were unemployed.
- The labour force participation rate in Zambia was estimated at 70 percent for both males and females.
- Labour force participation rates were exceptionally high in Eastern Province at 78 percent.
- Copperbelt and Lusaka provinces recorded higher unemployment rates than the other provinces with 22 percent and 29 percent respectively.
- Very high unemployment rates were observed among young persons and reduced with an increase in age. Twenty-one percent of all persons in the labour force in the age group 12 to 19 years were recorded to be unemployed as was another 21 percent in the age group 20 to 24 years.
- The majority of employed persons were engaged in the Agricultural sector accounting for 72 percent of all employed persons.
- Eighty-three percent of all employed persons were engaged in the informal sector. Informal sector employment was more common among females (91 percent) than males (76 percent).
- Of all persons employed in the informal sector, 77 percent were in informal agricultural sector, while 23 percent were in informal non-agricultural sector. The results further show that they were more females engaged in the informal agricultural sector than males.

## **Household Non-farm Enterprises**

- Of the 2 million households in Zambia, almost a third operate a non-farm enterprise of one sort or another. Trading is the most prominent type of business activity in which the enterprises engage in, accounting for 54 percent of the households who reported operating a non-farm enterprise.
- Most of the households cited lack of credit or capital as the single most constraint in establishing the enterprise.

## Household food Production

- An estimated 1,492,665 households were reported to be engaged in agricultural production activities during the 2001/2002 agricultural season.
- About 95 percent of rural households and 33 percent of urban households were engaged in agricultural production activities.
- About 443,637 households were engaged in raising livestock. Of these 52 percent raised cattle, 56 percent raised goats, 25 percent raised pigs and only 4 percent raised sheep.
- A total of 2,645,204 cattle were raised during the 2002/2003 LCMS. Of these, rural households owned 2,459,263.
- An estimated number of 955,823 households reported to have owned poultry during the 2002/2003 LCMS survey. Of these, about 97.4 percent were reported to have owned chickens.
- A total of 9,874,975 chickens were raised during the 2002/2003 LCMS. Of these, rural households owned 8,349,471.

## Household Income and Assets

- The average monthly income for urban and rural households was K790,652 and K283,796, respectively.
- Small-scale agricultural households had the largest proportion of households falling in the low-income groups at 97 percent.
- Urban low-cost housing areas had the highest proportion of households falling in the lower income groups, at 75 percent.
- Northern, Luapula and North-Western provinces have the largest proportion (94 percent each) of households in lower income groups.
- The mean monthly income for male-headed households (K490,227) was higher than that for female-headed households (K333,275).
- The average per capita income was K101,495. Urban households (K177,283) had a higher mean per capita income than rural households (K63,252).
- Small-scale agricultural households had the lowest mean per capita income (K59,136), while large-scale agricultural households received the highest per capita incomes (K298,549).
- Lusaka province recorded the highest per capita income (K220,659), followed by the Copperbelt with K140,566. Northern province had the lowest of about K59,576.
- Generally, male-headed households had higher per capita incomes than female headed households in most provinces except Eastern, Luapula and North-Western provinces.
- The bottom 50 percent of the Zambian population claimed a mere 15 percent of total income, while the top 10 percent claimed 48 percent of the total income.
- In rural areas, the bottom 50 percent of the rural population claimed 22 percent of the total income, while the top 10 percent claimed 33 percent. In urban areas, the bottom 50 percent of urban population received only 12.0 percent of total income, with the top 10 percent received 50.7 percent.
- The Gini coefficient for Zambia was at 0.57. Income inequalities were more pronounced in the urban areas with a Gini coefficient of 0.61 than in rural areas with a coefficient of 0.42.

- Households in Zambia derive the largest proportion of household incomes from regular wages and salaries (42 percent) followed by own-produce (21 percent) and businesses (18 percent).
- The following assets are the most commonly owned in Zambia; A hoe (82 percent); Residential house (66 percent); a brazier (59 percent); a radio (43 percent); a bicycle (30 percent); and a non-electric iron (25 percent).

### **Household Expenditure**

- Average Monthly household expenditure for Zambia was K490,530 with an average per capita expenditure of K111,444.
- Most of the households' income went towards food, 64 percent, 26 percent on non food and 10 percent on rentals.
- The proportions on expenditure towards food are higher in rural areas (75 percent) than in urban areas (52 percent).
- The higher the expenditure on food, the more constrained or poorer household is, (Engels law).
- Households in rural areas depend to a large extent on own-produced food. This accounted for 55 percent of total expenditure (consumption), compared to only 4 percent for urban households.

### **Poverty Analysis**

- The cost of the monthly food basket for a family of six was K336, 847 at Lusaka province prices.
- The value of the basket varied from K336, 847 in Lusaka province to K279, 583 in Eastern province.
- The results show that 67 percent of the population fall below the poverty line, which was equal to K92,185.00 in per adult equivalent terms. The levels of poverty were higher in rural (74 percent) than in urban (52 percent) areas of Zambia.
- Most of this poverty was attributed to the inability to meet the cost of a minimum food basket.
- The incidence of poverty varied from 57 percent in Lusaka province to 81 percent in Northern provinces.
- Poverty levels were exceptionally high among the rural small-scale population (76 percent) and persons residing in urban low cost areas (62 percent).
- Head count poverty rates are more likely to be higher during the last 2 quarters of the year than during the beginning of the year.
- Overall, the poverty gap ratio was at 27.1 percent, implying that the incomes of the population, especially the poor, were on average 72.9 percent of the poverty line. The poverty gap ratio also shows that poverty was much intense in rural than in urban areas of Zambia. The depth of poverty varied from about 21.6 percent in Lusaka province to about 37.7 percent in Northern Province. Equally, poverty was quite severe in rural than in urban areas.
- There were about 47 percent of the households that perceived themselves to be very poor. Another 48 percent reported to be living in moderate poverty.

- The main reason cited for living in poverty was lack of agricultural inputs at 23 percent, followed by low salaries and wages (13 percent). A significant proportion of female headed households were living in poverty due to loss of a breadwinner (16 percent).
- Welfare comparisons to the previous year reveal that 34 percent of the households considered themselves to be worse off, while 39 percent indicated no change at all in their welfare. Only 28 percent of the households declared themselves to be better off compared to last year.
- The majority of the households (51 percent) could only afford to meals in a typical day. Only 38 percent of the households were able to have 3 meals and over in a day. The proportion of households that could not manage at least 3 meals in a day was higher in rural than in urban areas.
- The most popular coping strategy that household relied on in times of need was reducing number of meals consumed in a day. This was followed by reduction of other households' items such as soap, polish cooking oil, etc.

### **Household Amenities and Access to Facilities**

- Traditional housing is the most common type of dwelling in Zambia. Sixty six percent of households occupy traditional dwellings while 34 percent live in modern/conventional dwellings.
- Ninety one percent of households in rural areas occupy traditional housing compared with only 16 in urban areas.
- Lusaka and Copperbelt provinces were the only provinces with the majority of households occupying modern/conventional types of dwelling 86 percent and 72 percent of households, respectively.
- The most common building materials are Grass/Straw for roofs (60 percent households), Mud bricks for walls (33 percent households) and mud for floors (63 percent households).
- The majority (78 percent) of households occupied their own dwellings. Home ownership was higher in rural (91 percent) than urban areas (52 percent).
- Renting of houses was most common in urban areas especially in Lusaka and Copperbelt provinces.
- About half the households nationwide have access to sources of water considered clean and safe both in the wet and dry season.
- Only one in four households treat water in both the wet and dry seasons.
- Kerosene/paraffin was the major source of energy, with 51 percent of the households using this source. Only 18 percent of households overall used electricity.
- The majority of households in rural areas (63 percent) used kerosene/paraffin for lighting compared with only 27 percent of urban households.
- The highest proportion of households that used electricity was in urban areas (48 percent).
- Use of electricity for lighting was highest in Lusaka (47 percent) followed by Copperbelt with 43 percent of the households.

- The majority of households (62 percent) used firewood for cooking, followed by charcoal which was used by 22 percent. Electricity was only used by 15 percent of the households overall.
- About one in two households used a dug pit to dispose of garbage, 43 percent used dumping while 1 percent used burning as a way to dispose of garbage. Only 4 percent of the households in Zambia had their refuse collected regularly. Digging pits was most common among the urban households while dumping was most popular among the rural households.
- Over half the households countrywide used pit-latrines with more rural households (65 percent) than urban households at 57 percent.
- About one in 5 households did not have a toilet facility.
- Three quarters of households in Western Province, half of the households in Southern province and nearly half in Eastern Province do not have a toilet facility
- More than half of the households were within a 5kilometer radius of a food market, middle basic school and upper basic school, health facility, a hammer mill and public transport.
- Over 50 percent of households in rural areas were at a distance of over 16 kilo meters from the post office, high school, secondary school, in-put market, police station/post and a bank.



## Child Health and Nutrition

- Results indicate that 25 percent of the children aged 0–6 months were exclusively breastfed.
- Almost half, 49 percent, of children under the age of five who had started receiving food supplements were fed three times a day.
- Children in urban households were on average fed more times than those in rural households.
- Children with educated mothers were on average fed more times than those with less educated mothers.
- For those children who were aged 12–23 months, 98 percent had received the BCG vaccine for prevention of tuberculosis, 97 percent had received the DPT vaccine, 96 percent had received the Polio vaccine and about 88 percent had received the measles vaccine.
- Almost half (49 percent) of children aged 3–59 months were stunted (too short for their height), 23 percent were underweight (low weight for their age) and 5 percent were wasted (low weight for their height).
- The LCMS III survey results further show that the higher the educational level of the mother of the child, the lower the incidence of stunting, underweight and wasting.
- High levels of stunting, wasting and underweight were associated with extremely and moderately poor households.

# CHAPTER 1

## OVERVIEW ON ZAMBIA

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### 1.0. Introduction

Zambia is a landlocked sub-saharan country sharing boundaries with Malawi, Mozambique, Zimbabwe, Botswana, Namibia, Angola, Democratic Republic of Congo and Tanzania. The country covers a land area of 752,612 square kilometers. It lies between 8 and 18 degrees South latitudes and longitudes 22 and 34 degrees East. About 58 percent of Zambia's total land area of 39 million hectares is classified as having medium to high potential for agricultural production, but less than half of potential arable land is cultivated. The country is prone to drought due to erratic rainfall, as its abundant water resources remain largely untapped. Zambia has some of the largest copper and cobalt deposits in the world.

### 1.1. Land and the People

Zambia's population was first comprehensively recorded at 5.7 million in 1980. It increased to 7.8 million and 9.9 million in 1990 and 2000, respectively. The population has over the years remained young, with about 67 percent of the population below 15 years (CSO, 2000). The country's average population density is 13 persons per square kilometer, while Lusaka Province (hosting the capital city of Lusaka) has the highest average of 64 persons per sq km.

Although Zambia is endowed with many languages, derived from 73 ethnic groups, there are seven major languages that are used besides English for official purposes (such as broadcasting and dissemination of information). These are Bemba, Kaonde, Lozi, Lunda, Luvale, Nyanja and Tonga.

### 1.2. Politics and Administration

Politically, Zambia has undergone phases of both multi-partism and one party rule. The country which is a former British colony, gained its independence in 1964. Administratively, the country is divided into nine provinces namely Central, Copperbelt, Eastern, Luapula, Lusaka, Northern, North-Western, Southern and Western. These provinces are further divided into 72 districts.

### 1.3. Developments in the Zambian Economy

Zambia's economic policy regimes can be divided into four main periods.

**Free market policies (1964–1972):** During this period, the Government pursued liberal economic and political policies, with little or no state controls, while placing focus on provision of infrastructure and services. High and rising copper export earnings boosted the economy's capital stock.

**State Control** defined the second period (1973–1984): By the mid-1970s Zambia was largely a public sector-led economy with excessive controls, parastatal monopolies, and a pro-urban, anti-agricultural bias. A large number of parastatals were established in mining, telecommunications, energy, finance, and agro-business. The Government actively supported industrialization by maintaining an overvalued exchange rate to promote imports of capital equipment and intermediate goods and by protecting local producers with high tariffs on finished goods. In 1974–1975 the Government began subsidizing maize, a practice that continued until the early 1990's, with increasingly negative effects on the fiscal balance. The Government dramatically increased its foreign borrowing to compensate for the steep decline in the international purchasing power of copper in 1975.

**Economic transition (1985–1990):** This period was characterized by the introduction of unsustainable stabilization and structural adjustment policies. Significant socio-economic changes were undertaken during the period 1985–1988. In May 1987, the Government abandoned earlier agreements with the International Monetary Fund (IMF) and the World Bank and reimposed numerous controls, after political discontent resulted in food riots on the copperbelt province. In June 1989 the Government decontrolled all consumer goods prices except the price of Maize.

**Stabilization and structural adjustment (1991–2002):** During this period the Government actively pursued policies that facilitate private sector growth, including price, trade, exchange and interest rate policies; financial sector liberalization; and more responsible fiscal and monetary policies. Agricultural output and input markets were liberalized, and significant privatization and other institutional reforms were undertaken.

Despite substantial aid flows, Zambia's economic performance has continued to decline, as indicated by various economic indicators. The average annual growth rate of GDP in the period 1970 to 1975 was 2.6 percent. It reduced to -0.9 percent in the period 1975 to 1990 and reduced further to -0.3 percent between 1990 and 1999. GNP per capita has not shown any improvement. Between the periods 1970 to 1975, 1975 to 1990 and 1991 to 1999, per capita GDP declined by -0.8, -3.1 and -7.2 per cent respectively (Economic report 2000).

**Table 1.1: Selected Macro-economic Indicators**

	1994	1995	1996	1997	1998	1999	2000	2001	2002
GDP at current prices (K' Billion)	2,240.1	3,005.1	3,950.2	5,140.2	6,027.9	7,477.7	10,071.9	13,132.7	16,260.4
GDP at constant 1994 prices (K' Billion)	2,240.1	2,176.9	2,404.9	2,360.2	2,412.7	2,499.0	2,499.0	2,621.3	2,707.9
Per capita GDP at current prices (K'000)	256	330	418	526	597	733	978	1,245	1,505
Per capita GDP at constant 1994 prices (K'000)	256	239	246	246	233	236	242	248	251
GDP growth rate (1994=100)		-2.8	6.9	3.3	-1.9	2.2	3.6	4.9	3.3
Percentage contribution to GDP (1994=100)									
Agriculture	13.5	18.5	17.2	15.8	16.3	17.5	17.2	16.0	15.2
Mining	16.5	12.4	12.0	11.8	9.0	6.6	6.4	7.0	7.9
Manufacturing	9.8	10.0	9.9	10.1	10.5	10.5	10.5	10.4	10.7
Electricity	3.2	3.3	2.9	2.9	3.0	3.0	2.9	3.1	2.9
Construction	5.0	4.9	4.1	5.1	4.8	4.8	4.9	5.3	6.0
Wholesale and Retail Trade	14.8	13.6	17.0	17.2	18.1	18.5	18.3	18.4	18.7
Hotels, Bars and Restaurants	1.6	1.7	1.8	1.8	1.9	1.8	1.9	2.3	2.3
Transport and Communication	6.0	5.7	5.8	5.6	6.2	6.4	6.3	6.2	6.1
Financial Institutions and Insurance	8.2	10.0	8.6	8.3	8.5	8.6	8.2	7.8	7.9
Real Estate and Business Services	5.0	5.3	6.1	6.6	7.6	8.4	9.5	9.4	9.5

Community Social and Personal services	8.0	8.1	7.8	7.6	7.6	8.0	7.7	7.8	7.7
Less FISIM	-4.7	-5.8	-4.9	-4.8	-4.9	-4.9	-4.9	-4.8	-4.7
Gross Value Added	87.1	88.0	88.1	88.1	88.5	89.3	89.1	88.9	90.0
Taxes on Products	12.9	12.0	11.9	11.9	11.5	10.7	10.9	11.1	10.0
GDP at Market prices	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Exchange rate (Kwacha / \$US)	687.2	878.3	1,213.1	1,321.3	1,765.9	2,417.3	3,170.8	3,581.1	4,384.8
Inflation (%)	38.3	46.0	35.2	18.6	30.6	20.6	30.1	18.7	26.7
Exports of Goods and services (K' Billion) 1994=100	806.5	673.5	718.5	856.4	905.2	1,146.5	1,546.8	2,033.6	2,488.0
Imports of Goods and services (K' Billion) 1994=100	824.9	1,149.0	1,462.5	1,603.7	1,860.5	2,498.6	3,264.9	4,127.2	4,398.7

Source: Central Statistical Office

## 1.4 Developments in the Social Sectors

The poor performance of the Zambian economy adversely affected the key social sectors namely the health and education sectors. These sectors have for sometime now heavily depended on Government funding. However, Government has been finding it difficult to provide adequate social services due to limited resources available. As a result, the provision of both the health and education services has not been sufficient to reach all the population sub-groups particularly the poor.

By 1998, net primary school attendance rate was below 70 percent. By 2001, Net school enrolment ratios for primary and secondary schools were at about 76 and 11 percent, respectively.

The incidence of malaria per 1000 population remained high at 394 by 2001. By 2000, under-five mortality rate was still high at 162 deaths per 1000 children. Infant mortality rates remained equally high at 110 per 1000 infants by 2000.

The HIV/AIDS pandemic continued to ravage the Zambian society. HIV/AIDs prevalence rate was at 16 percent for the population aged 15 to 49 years old by 2000.

Generally socio-economic conditions of the majority of the people had deteriorated so much that the Government and its cooperating partners decided to put together a Poverty Reduction Strategy Paper in 2001.

# CHAPTER 2

## SURVEY BACKGROUND AND DESIGN METHODOLOGY

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### 2.1. Survey Background

The previous chapter clearly shows that the Structural Adjustment Programme (SAP) that the Government of Zambia has been implementing since 1991 has had some successes and shortcomings. Some components of the programme such as privatisation have been implemented at record pace. Others such as liberalization of agricultural marketing have not completely taken root. Whichever way we look at it, a substantial segment of the population is still adversely affected by the cost of reforming the Zambian economy. It is from this realisation that the Zambian Government and its cooperating partners decided to put in place a monitoring and evaluation mechanism in 1991, which was implemented through the conduct of the Social Dimensions of Adjustment Surveys (SDAs).

The Living Conditions Monitoring Surveys (LCMS) evolved from the Social Dimensions of Adjustment Priority surveys conducted in 1991 (PSI) and 1993 (PSII), by the Central Statistical Office. So far, three Living Conditions Monitoring Surveys have been conducted. These are: –

- (i) The Living Conditions Monitoring Survey I of 1996
- (ii) The Living Conditions Monitoring Survey II of 1998, and
- (iii) The Living Conditions Monitoring Survey III of 2002/2003

### 2.2. Poverty Monitoring Framework

The existing poverty monitoring framework is currently based on 2 distinct survey types namely the Indicators Monitoring Surveys (IMS) and the Integrated Surveys (IS). The IMS surveys are under the current framework supposed to be undertaken every after 2 years while the IS surveys are planned to be carried out every after 5 years. The biannual surveys are designed to provide district estimates and utilize cross-sectional sample data. Alternatively, the IS surveys, which have a carry-alone household budget module, employ a rolling sample meant to capture changes in living conditions due to seasonal effects.

### 2.3. Justification and Objectives of the LCMSIII (IS) Survey

Since 1991, the country has been utilizing cross-sectional sample data to monitor the well-being of the Zambian population, as was the case with the 1996 and 1998 LCMS surveys. However, these surveys have had limitations in that the survey design does not capture changes in welfare due to seasonal variations. The LCMS surveys were conducted during the last 2 months of the fourth quarter of the year when the majority of households become food insecure. Furthermore, the previous LCMS surveys captured household expenditure data using the recall method, which is prone to omissions resulting from memory lapses. The integrated surveys overcome all these limitations identified with the previous surveys by covering the sample of households over a period of 12 months and by collecting the expenditure data using the household diary method.

Apart from the core data collected on living conditions, there has been a long felt need to collect data necessary for updating the weights for calculating the Consumer Price Indices (CPI) at national and regional level. Therefore, the LCMSIII survey was designed to provide data required for computing region specific CPI indices. Further, the survey was also designed to provide expenditure data required for estimating household final consumption, a key component of Gross Domestic Product (GDP). Currently, these important indicators are based on data from the Household Budget Survey of 1993/94, which is outdated.

The primary aim of the Living Conditions Monitoring Survey III (LCMSIII) is to highlight and monitor the living conditions of the Zambian society. In addition, the survey provides a basis on which to: –

- Monitor the impact of Government policies, programmes and donor support on the well being of the Zambian population.
- Monitor and evaluate the implementation of some programmes envisaged in the Poverty Reduction Strategy Paper (PRSP) programmes
- Monitor poverty and its distribution in Zambia.
- Provide various users with a set of reliable indicators against which to monitor development.
- Provide relevant data required for computing province specific poverty lines
- Identify vulnerable groups in society and enhance targeting in policy implementation.
- Develop new national and province specific weights for the Consumer Price Indices (CPI)
- Provide estimating data for household final consumption required for the generation of gross Domestic Product (GDP)

#### **2.4. Scope of the LCMSIII Survey**

The scope of the LCMSIII survey in terms of topics covered was to a large extent guided by the ZAMSIF supported User–Producer committee recommendations. As such, the survey only included extended components of agreed upon topics of policy relevance. In broad terms, the survey included: –

- (i) A set of core living conditions indicators to be monitored over a period of twelve months and
- (ii) The household budget component to be implemented over a period of twelve months.

To achieve the above stated tasks, the LCMSIII main questionnaire was made of two distinct parts. Part I of the main questionnaire covered the following topics: –

- Demography and migration
- Orphan hood
- Health
- Education
- Current economic activities and labour force
- Child Health Care and Nutrition
- Household amenities and housing conditions
- Household access to facilities

- Household assets
- Self-assessed poverty and household coping strategies, and
- Household food production

Part II of the main questionnaire covered the following topics: –

- Household expenditure
- Household Income
- Household Non-Farm Enterprises, and
- Deaths in the Household

The information on household expenditure and consumption was collected using a diary and then transferred to the main questionnaire part II. In addition to the household questionnaire, the LCMSIII survey also collected community price information using a community price questionnaire. The price data is relevant for adjusting household expenditure data for differences in cost of living both in time and space.

## 2.5. Sample Design and Coverage

The Living Conditions Monitoring Survey III (LCMSIII) was designed to cover 520 Standard Enumeration Areas (SEAs) or approximately 10,000 non-institutionalised private households residing in both the rural and urban areas of all the nine provinces in Zambia. The survey was carried out for a period of 12 months using a rolling sample. For the purposes of this survey, a survey reference month had 36 days instead of 30 or 31 days, as is the case with calendar months. This implies that the 360 days in a year were divided into 10 cycles of 36 days each. As a result 52 SEAs, which is one-tenth of the 520 SEAs, were covered every cycle countrywide.

### 2.5.1. Sample Stratification and Allocation

The sampling frame used for LCMSIII survey was developed from the 2000 census of population and housing. The frame is administratively demarcated into 9 provinces, which are further divided into 72 districts. The districts are further subdivided into 155 constituencies, which are also divided into wards. Wards consists of Census Supervisory Areas (CSA), which in turn embrace Standard Enumeration areas (SEAs). For the purposes of this survey, SEAs constituted the ultimate Primary Sampling Units (PSUs).

In order to have equal precision in the estimates in all the provinces and at the same time take into account variation in the sizes of the provinces, the survey adopted the Square Root sample allocation method, (Lesli Kish, 1987). This approach offers a better compromise between equal and proportional allocation methods in terms of reliability of both combined and separate estimates. The allocation of the sample points (PSUs) to rural and urban strata was almost proportional. The allocated provincial samples were multiples of 10 so as to facilitate the rolling of equal samples during the 10 cycles of data collection.

**Sample Allocation Table**

Province	Standard enumeration Areas (PSUs)
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	<b>Total</b>	<b>Rural</b>	<b>Urban</b>
Zambia	520	326	194
Central	50	34	16
Copperbelt	70	20	50
Eastern	60	50	10
Luapula	50	38	12
Lusaka	70	18	52
Northern	60	44	16
North-western	50	40	10
Southern	60	41	19
Western	50	41	9

### 2.5.2. Sample Selection

The LCMSIII survey employed a two-stage stratified cluster sample design whereby during the first stage, 520 SEAs were selected with Probability Proportional to Estimated Size (PPES). The size measure was taken from the frame developed from the 2000 census of population and housing. During the second stage, households were systematically selected from an enumeration area listing. The survey was designed to provide reliable estimates at provincial, residential and national levels.

### 2.5.3. Selection of Standard Enumeration Areas (SEAs)

The SEAs in each stratum were selected as follows:

- (i) Calculating the sampling interval (I) of the stratum.

$$I = \frac{\sum_i M_i}{a}$$

Where:

$\sum_i M_i$  = is the total stratum size

$a$  = is the number of SEAs allocated to the stratum

- (ii) Calculate the cumulated size of the cluster (SEA)
- (iii) Calculate the sampling numbers  $R, R+I, R+2I, \dots, R+(A-1)I$ , where  $R$  is the random start number between 1 and  $I$ .
- (iv) Comparing each sampling number with the cumulated sizes

The first SEA with a cumulated size that was greater or equal to the random number was selected. The subsequent selection of SEAs was achieved by comparing the sampling numbers to the cumulated sizes of SEAs.

### 2.5.4. Selection of Households

The LCMSIII survey commenced by listing all the households in the selected SEAs. In the case of rural SEAs, households were stratified and listed according to their agricultural activity status. Therefore, there were four explicit strata created in each rural SEA namely, the Small Scale Stratum (SSS), the Medium Scale Stratum (MSS), the Large Scale Stratum (LSS) and the Non-agricultural Stratum (NAS). For the purposes of the LCMSIII survey, about 7, 5 and 3 households were supposed to be selected from the SSS, MSS and NAS, respectively. The large scale households were selected on a 100 percent basis. The urban SEAs were implicitly stratified into low cost, medium cost and high cost areas according to CSO's and local authority classification of residential areas.

About 15 and 25 households were sampled from rural and urban SEAs, respectively. However, the number of rural households selected in some cases exceeded the desired sample size of 15 households depending on the availability of large scale farming households.

The selection of households from various strata was preceded by assigning fully responding households sampling serial numbers. The circular systematic sampling method was used to select households. The method assumes that households are arranged in a circle (G. Kalton, 1983) and the following relationship applies:

Let  $N = nk$ ,

Where:

$N$  = Total number of households assigned sampling serial numbers in a stratum

$n$  = Total desired sample size to be drawn from a stratum in an SEA

$k$  = The sampling interval in a given SEA calculated as  $k=N/n$ .

## 2.6. Data Collection

Data collection was done by way of personal interviews using two structured questionnaires. These questionnaires are Main Household Questionnaire and the Price Questionnaire. The Main Household questionnaire was divided into two parts, namely:-

1. Main Questionnaire Part I – used for collecting information on the various aspects of the living conditions of the households.
2. Main Questionnaire Part II – all the information collected using the household expenditure diary was later on transcribed to this questionnaire in aggregates so as to make computer data capturing easy. This part of the questionnaire was also used to collect information on household Income, Non-Farm enterprises and deaths in the households.

### 2.6.1. Administration of the Household Expenditure Diaries

The reference period for all the household consumption data was 31 days. The choice of 31 days as reference period is in order since the longest month in a normal calendar year has 31 days. The diary method was employed to collect household consumption expenditure data. Each diary was designed to accommodate diary entries for a period of 5 days after which another diary was dropped with the household during the next visit. However, households were requested to make diary entries pertaining to 6 days during the sixth visit so that we have 31 days of total diary entries for all the households.

In order to effectively spread the Interviewers workload of checking and filling in diaries and also enhance the quality of diary entries, households were grouped in 5 batches of 3 and 5 in rural and urban areas, respectively.

Each household with a literate person was visited 7 times by the Interviewer. However, households that could not fill in the diaries by themselves were assisted by the Interviewer on a daily basis; hence the need to batch up households in manageable groups.

The table below shows how the Interviewer grouped the households into manageable batches and the actual administration of diaries by visitation intervals. The visitation matrix below clearly shows that each household had a reference month of 31 days. For instance the last date of diary entries for households visited on the first day of the survey month is the 31. The last date for households visited on the 2 day of the survey month is 32, etc. The advantage of this approach of rolling the date is that each and every household experiences each and every day in a typical calendar month.

#### Administration of Household Diaries

Batches	Batch Size	1 <sup>st</sup> VISIT	2 <sup>nd</sup> VISIT	3 <sup>rd</sup> VISIT	4 <sup>th</sup> VISIT	5 <sup>th</sup> VISIT	6 <sup>th</sup> VISIT	LAST DAY	7 <sup>th</sup> VISIT
	Batch Size	Survey Dates							
Batch 1	Rural = 3	1	6	11	16	21	26	31 Last	32
	Urban = 5								

Batch 2	Rural = 3 Urban= 5	2	7	12	17	22	27	32 Last	33
Batch 3	Rural = 3 Urban= 5	3	8	13	18	23	28	33 Last	34
Batch 4	Rural = 3 Urban= 5	4	9	14	19	24	29	34 Last	35
Batch 5	Rural = 3 Urban= 5	5	10	15	20	25	30	35 Last	36

## 2.7. Estimation Procedure

### 2.7.1. Sample weights

Due to the disproportionate allocation of the sample points to various strata, sampling weights are required to correct for differential representation of the sample at national and sub-national levels. The weights of the sample are in this case equal to the inverse of the product of the two selection probabilities employed above.

Therefore, the probability of selecting an SEA was calculated as follows:

$$P_{hi}^1 = \frac{a_h M_{hi}}{\sum_i M_{hi}}$$

Where:

$P_{hi}^1$  = the first selection probability of SEAs

$a_h$  = The number of SEAs selected in stratum h

$M_{hi}$  = The size (in terms of the population count) of the  $i$ th SEA in stratum h

$\sum_i M_{hi}$  = The total size of the stratum h

The selection probability of the household was calculated as follows:

$$P_{hi}^2 = \frac{n_{hi}}{N_{hi}}$$

Where:

$P_{hi}^2$  = the second selection probability of households

$n_{hi}$  = the number of households selected from the  $i$ th SEA of h stratum

$N_{hi}$  = Total number of households listed in a SEA

Therefore, the SEA specific sample weight was calculated as follows:

$$W_i = \frac{1}{P_{hi}^1 \times P_{hi}^2}$$

$W_i$  is called the PPS sample weight. In the case of rural SEAs which have more than one stratum, the first selection probability is multiplied with separate stratum specific second selection probabilities. Therefore, the number of weights in each rural SEA depends on the number of strata available.

### 2.7.2. Estimation Process

In order to correct for differential representation, all estimates generated from the LCMSIII survey data are weighted expressions. Therefore, if  $y_{hij}$  is an observation on variable  $Y$  for the  $j^{\text{th}}$  household in the  $i^{\text{th}}$  SEA of the  $h^{\text{th}}$  stratum, then the estimated total for the  $h^{\text{th}}$  stratum is expressed as follows:

$$Y_{hT} = \sum_{i=1}^{a_h} w_{hi} \sum_{j=1}^{n_h} y_{hij}$$

Where:

$Y_{hT}$  = the estimated total for the  $h^{\text{th}}$  stratum

$i = 1$  to  $a_h$ : the number of selected clusters in the stratum

$j = 1$  to  $n_h$ : the number of sample households in the stratum

The national estimate is obtained using the following estimator:

$$Y_T = \sum_{k=1}^{18} Y_{hT}$$

Where:

$Y_T$  = the national total estimate

$k = 1$  to  $18$ : the total number of strata (i.e. rural and urban strata in 9 provinces).

## 2.8. Data Processing and Analysis

The data from the LCMSIII survey was processed and analysed using the CSPRO and the Statistical Analysis System (SAS) softwares respectively. Data entry was done from all the provincial offices with 100 percent verification, whilst data cleaning and analysis was undertaken at CSO's headquarters.



# CHAPTER 3

## GENERAL CONCEPTS AND DEFINITIONS

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Generally, the concepts and definitions used in this report conform to the standard usage in household based survey in Zambia.

- **Building** – A building was defined as any independent structure comprising one or more rooms or other spaces, covered by a roof and usually enclosed with external walls or dividing walls, which extend from the foundation to the roof.

For the purpose of the survey partially completed structures were considered as buildings if they were used for living purposes. Also, in rural areas, huts belonging to one household and grouped on the same premises were considered as one building.

- **Housing unit** – In this survey any structure, which was occupied by one or more households at the time of the survey, was treated as a housing unit. A housing unit was defined as an independent place of abode intended for habitation by one or more households.
- **Household** – A household was defined as a group of persons who normally eat and live together. These people may or may not be related by blood, but make common provision for food and other essentials for living. A household may comprise several members and in some cases may have only one member.
- **Usual member of the household** – In the LCMS 2002–2003 the de jure approach was adopted for collecting data on household composition as opposed to the de facto approach which only considers those household members present at the time of enumeration. The de jure definition relies on the concept of usual residences.

A usual member of a household was considered to be one who had been living with a household for at least six months prior to the survey. Newly married couples were regarded as usual members of the household even if one or both of them had been in the household for less than six months. Newly born babies of usual members were also considered as usual members of the household.

Members of the household who were at boarding schools or temporarily away from the household, e.g. away on seasonal work, in hospital, away to give birth, visiting relatives or friends, but who normally live and eat together, were included in the list of usual members of the household.

**Head of household** – This is the person all members of the household regard as the head and who normally makes day-to-day decisions concerning the running of the household. The head of the household could be male or female.

In cases of shared accommodation and the persons or families sharing were identified as separate households, the enumerator had to find out who the head of the separate household were. If they

were identified as one household, the oldest person had to be taken as the head if the household members themselves could not identify or did not consider one person as being the head. In polygamous households, the husband was assigned to the most senior wives' household if the wives were identified as separate households. This was done to avoid double counting. In this case the second spouse automatically became the lead of her households.

Background variables – The analysis in this report uses 6 main background variables, namely:

- Province
- Location (rural and urban)
- Sex of head of household
- Stratum
- Socio economic group
- Poverty status
- Age group

**Location** – Urban area: Central Statistical Office defines an urban area mainly by two criteria which are:

- (i) Population size
- (ii) Economic activity

An urban area is one with minimum population size of 5, 000 people. The main economic activity of the population must be non-agricultural such as wage employment. In addition, the area must have basic modern facilities such as piped water, tarred roads, post office, police post, health centre, etc.

**Stratum** Survey households were classified into strata, based on type of the residential area in urban areas and based on agricultural activities in the rural areas. The urban areas were pre-classified while the rural strata were established during the listing stage. These same strata were used as explicit stratifies during the sampling process.

The presentation of results in this report uses 7 strata as follows:

▪ **Rural areas:**

Small-scale agricultural households  
Medium scale agricultural households  
Large-scale agricultural households  
Non-agricultural households

▪ **Urban areas:**

Low cost housing residential areas  
Medium cost housing residential areas  
High cost housing residential areas

These 7 groups are mutually exclusive, and hence any given household belongs to one and only one stratum.

**Socio economic group:** All persons 12 years and above were assigned a socio economic status. The socio economic grouping was based on main current economic activity, occupation, employment status and sector of employment.

Altogether 12 socio economic groups were specified as follows:

- Subsistence farmers i.e. those whose main current economic activity was farming and whose occupational code indicated subsistence agricultural and fishery workers, ISCO code 6210, forestry workers ISCO code 6141, fishery workers, hunters and trappers, ISCO codes 6151, 6152, 6154, respectively.
- Commercial farmers i.e. those whose main current economic activity was farming and whose occupational code indicated market oriented agricultural and fishery workers, ISCO codes 6111–4, market oriented animal producers, ISCO codes 6121–29, market oriented crop and animal producers, ISCO code 6130.

- Government employees, comprising both central and local Government employees
- Parastatal employees
- Formal sector private employees, i.e. those whose employment status was private employee, and whose employment was in the formal sector, meaning that they were entitled to paid leave or pension or other social security or more than 5 people were employed at their work place.
- Informal sector employees, i.e. those whose employment status was private employee, and whose employment was in the informal sector, meaning that they were not entitled to paid leave and pension and that less than 5 people were employed at their work place.
- Self employed outside agriculture, i.e. their employment status was self-employed and their main current economic activity was running a non-farming business
- Unpaid family worker, based on employment status
- Workers not elsewhere classified, based on employment status
- Unemployed, those whose main current activity was not working or running a business, but were looking for work or means to do business or not working or running a business and not looking for work or means to do business, but available or wishing to do so.
- Inactive, those whose main current activity was full time student, full time home maker, retired or too old to work

There is no one to one relationship between the classification of agricultural activities in the variable 'stratum' and the variable 'socio economic group'. In the case of 'stratum' the households were classified during the listing stage into three agricultural strata according to certain criteria. In the case of 'socio economic group' the person was classified according to the main current economic activity and occupational code, based on information from each individual.

Even though most subsistence farming households were classified as belonging to the small scale-farming stratum, individuals from the small scale-farming stratum do not necessarily engage in subsistence farming only. They can even do some market oriented farming. Likewise, commercial farmers may be drawn from all the three farming strata formed during the listing. It cannot be deduced that being classified as a commercial farmer in the socio economic groupings is the same as belonging to the medium scale and large scale farming strata.

**Poverty status:** All households and household members were assigned a poverty status based on the household expenditure and /or consumption. Each member of a household had the same poverty status and that constituted the household poverty status.

The households and individuals were classified as non-poor, moderately poor and extremely poor. The construction of the different poverty lines is described in detail in Chapter 13.

**Conventions:** The following conventions are adopted for this publication.

- Most percentages and proportions are expressed as whole numbers. The general rounding rules have been applied, that is, everything below 0.5 is rounded down and everything above 0.4 is rounded up. Thus, when summing up percentages, the total will not always be 100 percent.
- Also, when obtaining total population and household figures, the numbers are rounded to the nearest 1000, again following the general rounding rules.

- Not stated and missing values are as a general rule not included in the tables, thus the total number of persons and households may vary in different tables, depending on the total number of not stated and missing cases. Most often, the missing and not stated cases are a result of mismatches when merging different files from the two questionnaires.
- 0 (zero) means less than 0.5 percent
- – Means no observation

# CHAPTER 4

## DEMOGRAPHIC CHARACTERISTICS OF THE POPULATION

### 4.0. Introduction

Demographic information is important in every survey undertaking as it provides a basis for the analysis of other population characteristics and their relationship with other determinants of population change. Poverty analysis can be more useful if analysed by age, sex, marital status and geographic residence.

This chapter shows information on Population Size, Age, Sex, and Relationship to Household Head, Marital Status, Residence, Deaths in the Households, Orphan-hood and Disability

### 4.1. Population Size and Distribution

Table 4.1 and Figure 4.1 show the distribution of population by location and Province. The total population of Zambia was estimated at 10,757,192, with 5,280,267 males and 5,476,925 females. Of the total population, 65 percent resided in rural areas, while the remaining 35 percent in urban areas.

Lusaka province, with 81 percent of its population residing in urban areas was the most urbanized province, followed by Copperbelt province with 80 percent, Central province with 24 percent and Southern province with 22 percent of their population residing in urban areas, respectively.

The least urbanized was Eastern province with only 9 percent of its population residing in urban areas.

**Table 4.1: Population Distribution by Province, Rural and Urban, Zambia, 2002–2003**

Province	Total Population	Percent Distribution		
		Rural	Urban	Total
<b>Zambia</b>	<b>10,757,192</b>	<b>65</b>	<b>35</b>	<b>100</b>
Central	1,097,632	76	24	100
Copperbelt	1,707,843	20	80	100
Eastern	1,440,604	91	9	100
Luapula	852,351	85	15	100
Lusaka	1,496,428	19	81	100
Northern	1,371,234	87	13	100
North Western	637,112	87	13	100
Southern	1,335,538	78	22	100
Western	818,450	89	11	100

Figure 4.1 shows that the provinces with the largest share of the national population were Copperbelt with 16 percent followed by Lusaka at 14 percent, Eastern and Northern at 13 percent

respectively and Southern at 12 percent. The province with the least percentage share of the national population was North Western with 6 percent of the national population.

**Figure 4.1: Percent Share of National Population by Provinces, 2002-2003**

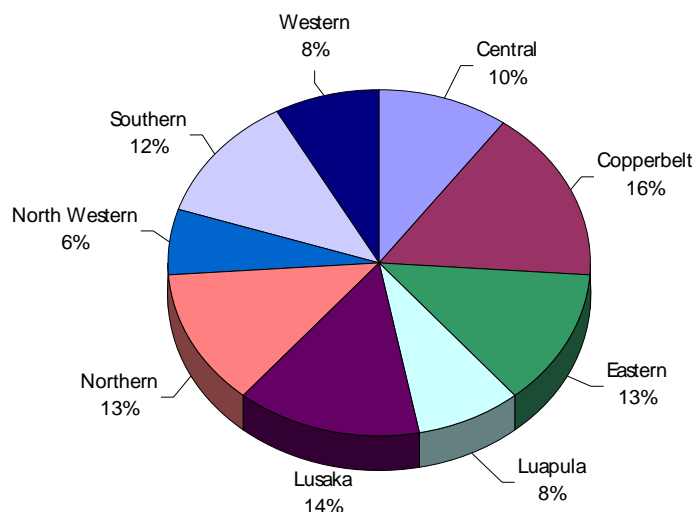


Table 4.2 shows the percentage distribution of the population by sex, province and residence. The country's percentage sex distribution shows that 51 percent of the population is female while 49 percent is male. There were more females than males in both rural and urban areas of Zambia. Western Province had the highest percentage of females in both rural and urban areas at 52 percent and 54 percent, respectively.

**Table 4.2: Percentage Distribution of the Population by Sex, Province, Rural and Urban, Zambia, 2002-2003**

Province/Residence	Male	Female	Total	Total Population
<b>Zambia</b>	<b>49.0</b>	<b>51.0</b>	<b>100</b>	<b>10,757,192</b>
Rural	49.1	50.9	100	7,002,932
Urban	49.1	50.9	100	3,754,260
Central	50.1	49.9	100	1,097,632
Rural	50.0	50.0	100	838,423
Urban	50.5	49.5	100	259,209
Copperbelt	48.4	51.6	100	1,707,843
Rural	49.4	50.6	100	337,247
Urban	48.1	51.9	100	1,370,596
Eastern	49.2	50.8	100	1,440,604
Rural	49.1	50.9	100	1,314,859
Urban	50.1	49.9	100	125,745
Luapula	48.4	51.6	100	852,351
Rural	48.2	51.8	100	721,179
Urban	49.2	50.8	100	131,172
Lusaka	50.4	49.6	100	1,496,428
Rural	50.8	49.2	100	280,120



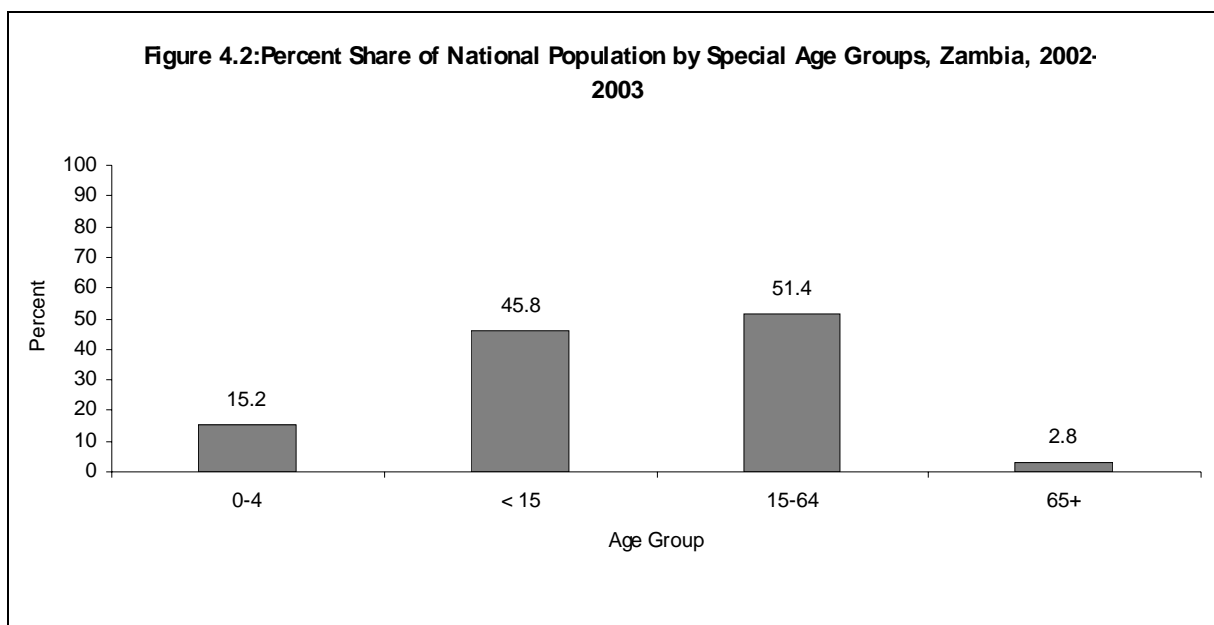
Urban	50.2	49.8	100	1,216,298
Northern	49.2	50.8	100	1,371,234
Rural	49.2	50.8	100	1,187,254
Urban	49.0	51.0	100	183,980
North Western	49.2	50.8	100	637,112
Rural	49.1	50.9	100	553,083
Urban	49.4	50.6	100	84,029
Southern	48.9	51.1	100	1,335,538
Rural	48.7	51.3	100	1,047,418
Urban	49.6	50.4	100	288,120
Western	47.5	52.5	100	818,450
Rural	47.7	52.3	100	727,043
Urban	46.0	54.0	100	91,407

Table 4.3 shows the population distribution by age and sex. Results from the table show that almost 46 percent of the population was below the age of 15 years, while only about 3 percent was above the age of 65 years. The youth population aged 15–24, constituted 21 percent of the population. Females of reproductive age 15–49 made up about 47 percent of the total female population.

**Table 4.3: Population Distribution by Age and Sex, Zambia, 2002–2003**

Age group	Male	Female	Total	Population
0–4	15.2	15.2	15.2	1,636,545
5–9	16.2	15.7	16.0	1,716,303
10–14	14.9	14.3	14.6	1,567,625
15–19	11.8	12.0	11.9	1,279,827
20–24	9.2	9.8	9.5	1,022,463
25–29	7.2	7.7	7.5	804,830
30–34	6.3	6.0	6.1	661,114
35–39	5.0	4.5	4.7	509,183
40–44	3.6	3.5	3.5	379,479
45–49	2.7	3.1	2.9	309,416
50–54	2.1	2.2	2.2	233,609
55–59	1.4	2.0	1.7	181,987
60–64	1.4	1.5	1.4	155,681
65+	3.0	2.6	2.8	299,130
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>10,757,192</b>

The population distribution by age and sex shows that there are more females than males from among the 15–29 year olds. However, the population of females starts declining resulting in more males than females between the ages of 30 and 44. The population of males in the ages 45–64 is however lower than that of females in the same age groups. Results from the 2001/2002 Zambia Demographic and Health Surveys (ZDHS) show high HIV/AIDS prevalence among females in the age group 30–39, the prevalence rates are highest among males aged 35–44, resulting in higher mortality levels in these age groups.



The LCMSIII survey collected information from households classified into different strata. Rural households were classified into Rural-Small scale farmers, Rural-Medium scale farmers, Rural-Large scale farmers and Rural-Non-Agricultural households. Urban households were classified into Urban-Low cost, Urban-Medium cost and Urban-High cost.

Table 4.4 shows the percent distribution of the population by stratum. Information collected by stratum shows that of the 65 percent rural population, the majority (61 percent) were small-scale farmers, while 3.2 percent were non-agricultural households. Among the 35 percent urban population, 27 percent were in the low cost category, while 3.6 percent and 4.0 percent were in the medium and high cost categories, respectively.

**Table 4.4: Percent Distribution by Strata, Zambia, 2002–2003**

Residence	Stratum	Percent Distribution	Total Population
Rural	Rural Small Scale	60.7	6,533,086
	Rural Medium Scale	1.1	118,906
	Rural Large Scale	Ng*	5,053
	Rural Non Agriculture	3.2	349,563
Urban	Urban Low Cost	27.2	2,928,775
	Urban Medium Cost	3.6	392,373
	Urban High Cost	4.0	429,436
<b>Total</b>		<b>100</b>	<b>10,757,192</b>

\* Percentage is negligible

#### 4.2. Marital Status

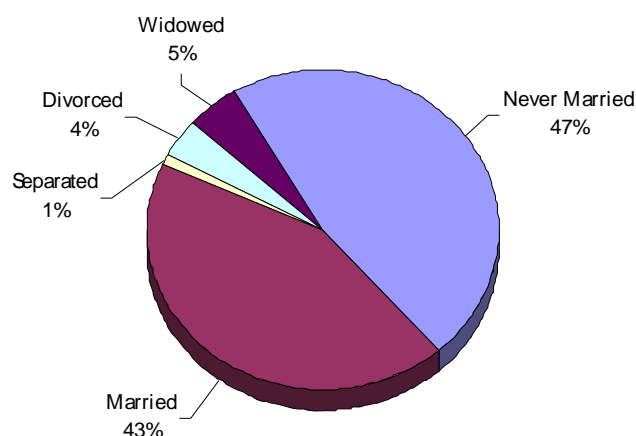
Information on marital status is important in the analysis of fertility levels and trends in a population. Marital dissolution through separation, divorce or widowhood has a negative impact on fertility and population growth in general.

Results from the LCMS III show that 43 percent of the population aged 12 years and above was married, five percent widowed, while four percent of the population of the same age were divorced. Results disaggregated by sex shows that a higher proportion of females than males were widowed, at 9 and 2 percent, divorced at 6 and 2 percent and Separated at 2 and 1 percent, respectively.

Analysis by Age and Sex show that early marriages were still common in Zambia especially among females with 13 percent of females aged 15–19 years being married compared to 2 percent of males of the same age.

Widowhood was also high among females, with 12 percent of females aged 30–49 years being widowed compared to 2 percent of males of the same age. The lower rate of widowhood among males could be as a result of the tendency by males to quickly remarry upon divorce or death of a spouse.

**Figure 4.3: Percent Distribution of Population aged 12 years and above by Marital Status, Zambia, 2002-2003**



**Table 4.5: Percentage Distribution of the Population Aged 12 years and Above by Rural/Urban and Marital Status, Zambia, 2002-2003**

Sex	Marital Status					Total
	Never Married	Married	Separated	Divorced	Widowed	
<b>Zambia</b>	<b>46.9</b>	<b>43.1</b>	<b>1.1</b>	<b>3.8</b>	<b>5.1</b>	<b>100</b>
Male	52.9	43.1	0.6	1.8	1.6	100
Female	41.2	43.0	1.5	5.7	8.5	100
<b>Total</b>						
Age Group	Never Married	Married	Separated	Divorced	Widowed	Total
12-14	98.6	1.3	0.1	0.0	0.0	100
15-19	91.6	7.7	0.2	0.4	0.1	100
20-24	62.3	33.1	1.3	2.7	0.5	100
25-29	30.5	60.4	1.9	5.3	1.8	100
30-49	7.4	77.3	1.7	6.5	7.1	100
50+	1.3	66.0	1.1	7.5	24.2	100
<b>Male</b>						
Age Group	Never Married	Married	Separated	Divorced	Widowed	Total
12-14	98.8	1.0	0.1	0.0	0.0	100
15-19	98.1	1.7	0.0	0.1	0.0	100
20-24	81.1	17.9	0.2	0.6	0.1	100
25-29	41.9	54.2	1.2	2.2	0.5	100
30-49	9.9	83.0	1.1	3.8	2.3	100
50+	1.6	87.4	0.9	3.4	6.7	100
<b>Female</b>						
Age Group	Never Married	Married	Separated	Divorced	Widowed	Total
12-14	98.3	1.6	0.0	0.0	0.0	100
15-19	85.3	13.4	0.4	0.7	0.1	100
20-24	45.1	47.1	2.3	4.7	0.9	100
25-29	20.2	66.0	2.6	8.1	3.0	100
30-49	5.0	71.8	2.3	9.2	11.7	100
50+	1.0	44.2	1.3	11.6	41.9	100

### 4.3. Distribution of Households and Average Household Size

The LCMSIII survey estimated a total of 2,005,677 households of which 66 percent were rural households and 34 percent urban households. The Average Household size was higher in urban areas at 5.5 household members compared to an average household size of 5.3 members in rural areas.

Female-headed households had a smaller average household size (4.6) than male-headed households (5.6).

The province with the largest Average household size was Southern province with 5.9 members per household while the provinces with the least Average household size were Western and Luapula with five members per household, respectively.

**Table 4.6: Percentage Distribution of Households and Average Household Size by Sex of Head, Rural/Urban and Province, Zambia, 2002–2003**

Province	Percent Distribution			Average Household Size by sex of Head		Average Household Size by Residence			Total Households
	Total	Rural	Urban	Male	Female	Total	Rural	Urban	
<b>Zambia</b>	<b>100</b>	<b>66.3</b>	<b>33.7</b>	<b>5.6</b>	<b>4.6</b>	<b>5.4</b>	<b>5.3</b>	<b>5.5</b>	<b>2,005,677</b>
Central	100	76.3	23.7	5.9	5.0	5.6	5.7	5.6	194,444
Copperbelt	100	22.7	77.3	5.6	4.7	5.4	4.7	5.6	315,078
Eastern	100	91.3	8.7	5.4	4.6	5.2	5.2	5.3	276,600
Luapula	100	85.5	14.5	5.3	4.0	5.0	5.0	5.3	169,592
Lusaka	100	16.9	83.1	5.6	5.1	5.5	6.1	5.4	271,421
Northern	100	87.8	12.2	5.3	4.3	5.4	5.0	5.6	271,237
North Western	100	88.1	11.9	5.8	4.3	5.4	5.3	6.0	117,563
Southern	100	77.9	22.1	6.2	4.9	5.9	6.0	5.8	224,783
Western	100	90.4	9.6	5.3	4.3	5.0	4.9	5.7	164,959

Table 4.7 shows the distribution of households by stratum. The table shows that the majority of households in Zambia as at the time of the survey were rural small-scale farmers at 61 percent of all the households. Only 3.8 percent of households were residing in urban high cost areas. For both male and female-headed households, the majority of households were rural small-scale farmers at 60 percent and 66 percent, respectively.

Results also show that rural large-scale farmers were almost non-existent among male and female-headed households. Urban low cost households accounted for the second largest proportion of household among the male and female-headed households.

**Table 4.7: Household Distribution by Strata, Zambia, 2002–2003**

Residence and Sex of Head	Stratum	Percentage Distribution	Total Households
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Both sexes			
Rural	Rural Small Scale	61.3	1,229,244
	Rural Medium Scale	0.7	13,890
	Rural Large Scale	0.0	688
	Rural Non Agriculture	4.3	85,880
Urban	Urban Low Cost	26.7	534,538
	Urban Medium Cost	3.2	64,247
	Urban High Cost	3.8	77,190
<b>Total</b>		<b>100</b>	<b>2,005,677</b>
<b>Male</b>			
Rural	Rural Small Scale	59.9	923,003
	Rural Medium Scale	0.8	13,099
	Rural Large Scale	0.0	650
	Rural Non Agriculture	4.7	72,653
Urban	Urban Low Cost	27.3	420,611
	Urban Medium Cost	3.1	48,061
	Urban High Cost	4.1	63,189
<b>Total</b>		<b>100</b>	<b>1,541,266</b>
<b>Female</b>			
Rural	Rural Small Scale	65.9	306,241
	Rural Medium Scale	0.2	791
	Rural Large Scale	0.0	38
	Rural Non Agriculture	2.8	13,227
Urban	Urban Low Cost	24.5	113,927
	Urban Medium Cost	<b>3.5</b>	<b>16,186</b>
	Urban High Cost	3.0	14,001
<b>Total</b>		<b>100</b>	<b>464,411</b>

#### 4.3.1. Age of Household Head

Information on households by age of household head show that child headed households were not common in Zambia with less than 1 percent (0.4 percent) of households being headed by individuals aged below 20 years. However it is important to note that 10 percent of households were headed by the aged i.e. headed by individuals over the age of 65 years.

**Table 4.8: Percentage Distribution of Households by Age of Household Head, Zambia, 2002–2003**

Age group	Percentage Share of Households	Total Number of Households
15–19	0.4	7,760
20–24	5.9	118,259
25–29	13.9	278,822
30–34	15.8	317,685
35–39	14.5	291,641
40–44	11.1	221,757
45–49	9.3	187,414
50–54	7.7	153,476
55–59	5.8	115,626
60–64	5.4	108,438
65+	10.2	203,982
<b>Total</b>	<b>100</b>	<b>2,005,677</b>

#### 4.3.2. Female Headed Households

Table 4.9 shows the percentage distribution of female-headed households by province and residence. The table shows that 23 percent of Households in Zambia at the time of the survey were female-headed households. Western province had the highest percentage of female-headed households with almost 33 percent of households in the province being headed by females. The lowest percentage of female-headed households was found in Luapula and Lusaka provinces at 20 percent, respectively.

**Table 4.9: Percent Distribution of Female Headed Households by Province, Rural and Urban, Zambia, 2002–2003**

Province	Percentage Share			Total Households
	Total	Rural	Urban	
<b>Zambia</b>	<b>23.2</b>	<b>24.1</b>	<b>21.3</b>	<b>2,005,677</b>
Central	23.8	23.5	24.7	194,444
Copperbelt	21.7	21.2	21.9	315,078
Eastern	26.6	26.9	23.3	276,600
Luapula	19.8	18.7	26.3	169,592
Lusaka	19.8	20.0	19.7	271,421
Northern	20.9	21.3	18.1	271,237
North Western	27.3	28.2	20.1	117,563
Southern	20.6	21.4	17.9	224,783
Western	32.6	32.5	33.4	164,959

#### 4.3.3. Poverty and Household Size

Table 4.10 shows the percent distribution of persons by household size and poverty status. The table shows that about 90 percent of persons in one-member households were not poor, 6 percent were moderately poor and 5 percent were extremely poor. Of the persons in two-member households, about 75 percent were not poor, 15 percent were moderately poor and 10 percent were extremely poor. In the case of persons in nine-member households, 21 percent were not poor, 22 percent were moderately poor and 56 percent were extremely poor. Overall, the proportion of persons in extremely poor households increases with increasing household size while that of persons in non-poor households decreases with increasing household size. This pattern is similar in both rural and urban areas. However, in urban areas, the proportion of persons in one-member households who were non-poor was higher (98 percent) than that of rural areas (86 percent).

**Table 4.10: Percent Distribution Persons by Household Size and Poverty Status, Zambia, 2002–2003**

Household Size	Poverty Status			Percent Total	Total Persons
	Extremely Poor	Moderately Poor	Not Poor		
Total Zambia					
1	4.7	5.8	89.5	100.0	90,078
2	10.4	15.1	74.5	100.0	350,364
3	18.5	21.9	59.6	100.0	826,518
4	33.8	24.7	41.5	100.0	1,220,896
5	40.2	25.8	34.0	100.0	1,492,145
6	48.2	22.1	29.7	100.0	1,539,762
7	52.8	20.0	27.2	100.0	1,478,127
8	57.2	20.7	22.0	100.0	1,323,128
9	56.4	22.2	21.4	100.0	788,400
10+	59.6	15.9	24.5	100.0	1,627,911



Rural	1	6.7	7.6	85.7	100.0	61,341
	2	12.5	17.9	69.6	100.0	240,324
	3	22.0	23.7	54.3	100.0	578,844
	4	40.5	25.5	34.0	100.0	825,012
	5	45.6	27.9	26.5	100.0	1,004,430
	6	57.1	22.5	20.4	100.0	984,198
	7	65.0	20.2	14.7	100.0	981,673
	8	16.1	51.5	32.4	100.0	351,488
	9	64.4	25.0	10.7	100.0	468,576
	10+	66.3	13.9	19.8	100.0	988,271
Urban	1	0.4	2.0	97.6	100.0	28,737
	2	5.9	8.9	85.2	100.0	110,040
	3	10.4	17.7	71.9	100.0	247,674
	4	19.8	23.1	57.0	100.0	395,884
	5	29.0	21.5	49.5	100.0	487,715
	6	32.3	21.4	46.3	100.0	555,564
	7	28.6	19.4	51.9	100.0	496,454
	8	41.6	20.1	38.3	100.0	463,640
	9	44.7	18.1	37.1	100.0	319,824
	10+	49.3	18.9	31.8	100.0	639,640

#### 4.4. Relationship to Household Head

Table 4.11 shows the percentage distribution of the population by relationship to the head of the household. Information on the relationship to the head was collected for all usual members of the household. The most common relationships to the head of the household were own-child at 48 percent, followed by household-head at 19 percent and spouse at 14 percent. Grandchild was quite a common relationship at 8 percent surpassing Niece/Nephew and Brother/Sister at 4 and 2 percent, respectively.

The least common relationships were maid/nanny/household servant at 0.1 percent and 0.3 percent for parent-in law and non-relative, respectively.

**Table 4.11: Percentage Distribution by Relationship to Household Head, Zambia, 2002–2003**

Relation to Household Head	Percentage of Household Members	Total Population
Head	18.7	2,005,677
Spouse	13.6	1,465,660
Own Child	47.6	5,115,071
Step Child	1.4	145,832
Grand Child	8.3	892,300
Brother/Sister	2.3	251,696
Niece/Nephew	4.1	436,868
Brother/Sister in-law	1.4	145,255
Parent	0.5	57,020
Parent in-law	0.3	29,050
Other Relative	1.6	168,046
Maid/Nanny/House Servant	0.1	11,317
Not Related	0.3	33,398
<b>Total</b>	<b>100</b>	<b>10,757,192</b>

#### 4.5. Prevalence of Deaths in the Household

Table 4.12 shows the percentage distribution of households that reported a death 12 months prior to the survey by residence and stratum. Overall, about 9 percent of the households in Zambia reported having had a death in the period under review. This proportion was higher in rural (10 percent) than urban (6 percent) areas. A comparison of the provinces shows that the

highest proportion was recorded in Luapula province (15 percent) and the least in Lusaka province (5 percent).

There was no marked variation in the proportion of such households between urban low cost (6.5 percent) and urban medium cost (6.3 percent). In urban high cost households, however, 3 percent of the households reported having had a death in the 12 months prior to the survey. Rural non-agricultural households had the least proportion (8 percent) of households reporting a death compared to other socio-economic strata in rural areas.

**Table 4.12: Percentage Distribution of Households Reporting a Death by Residence and Socio-economic Strata, Zambia, 2002–2003**

Residence/stratum/Province	Total Households	Percentage of Households experiencing deaths
<b>Zambia</b>	<b>2,005,677</b>	<b>8.9</b>
Rural	1,329,702	10.3
Urban	675,975	6.1
Rural Small Scale	1,229,244	10.4
Rural Medium Scale	13,890	13.3
Rural Large Scale	688	10.6
Rural Non Agriculture	85,880	8.1
Urban Low Cost	534,538	6.5
Urban Medium Cost	64,247	6.3
Urban High Cost	77,190	3.1
Central	194,444	8.0
Copperbelt	315,078	7.2
Eastern	276,600	7.6
Luapula	169,592	14.6
Lusaka	271,421	5.0
Northern	271,237	11.5
North Western	117,563	7.5
Southern	224,783	11.2
Western	164,959	9.1

The percentage distribution of deaths by age, residence and socio-economic stratum is shown in Table 4.13. In Zambia, about 16 percent of infants were reported to have died in the 12-month period prior to the survey. This proportion was higher in rural (18 percent) than urban (9 percent) areas. Among the provinces, Northern province recorded the highest proportion (26 percent) of infants who died in the period under review while Southern province recorded the least (5 percent).

In urban areas, the urban high cost households recorded the largest proportion of deaths (20 percent) while the urban medium cost households recorded the least (5 percent). There were no major variations between rural and urban areas in the proportion of deaths that occurred in the age groups 5–14 and 15–24. Variations were more pronounced in the age group 30–34 and above. About 34 percent of persons in the age group in urban areas were reported to have died compared to 19 percent in rural areas.

**Table 4.13: Percentage Distribution of Households Reporting Death in the Household by Age of Deceased Person, Residence and Socio-economic Strata, Zambia, 2002–2003**

Residence/Stratum/Province	Age Group								Total
	Below 1	0–4	5–9	15–24	25–29	30–34	45–64	65+	
<b>Zambia</b>	15.8	17.6	7.7	11.1	8.1	22	10	7.8	100

Rural	17.8	20.3	7.6	11.3	7.2	18.5	8.7	8.6	100
Urban	9.2	8.7	7.7	10.2	11	33.6	14.5	5	100
Male	13.1	21.3	7.6	8.5	4.4	23.1	13.5	8.5	100
Female	18.2	14.3	7.7	13.3	11.3	21.1	7	7.1	100
Rural Small Scale	17.4	19.9	7.9	11.6	7.3	18.4	8.8	8.7	100
Rural Medium Scale	27.5	18.4	5.8	7.6	9	16.2	6.3	9.4	100
Rural Large Scale	0	0	21.4	0	21.4	26.2	31	0	100
Rural Non Agriculture	22.4	28.4	3.6	6.6	4.9	21.1	6.9	6.1	100
Urban Low Cost	8.9	9.4	8.4	10.7	11.5	31.7	13.9	5.4	100
Urban Medium Cost	4.6	5.8	6.1	9.8	11.2	40.9	18.6	3.1	100
Urban High Cost	20.3	3.4	0	4.2	3.5	49.4	16.7	2.5	100
Central	19.7	14.8	7.1	11.2	4.1	26.1	14.5	2.5	100
Copperbelt	7.6	15.3	4.5	14.1	8.2	29.5	16.4	4.3	100
Eastern	23.1	27.1	4.8	12.8	11.4	14.6	1.5	4.8	100
Luapula	20.4	20.4	20.7	14.5	2.1	8.7	4.5	8.6	100
Lusaka	5.6	13.2	0.9	12.3	16.1	36.8	10.8	4.4	100
Northern	25.8	17.3	4.5	7.3	1.3	19.9	11.8	12.1	100
North Western	9.7	11.8	5.6	8.2	7.8	23	13.1	20.8	100
Southern	5.1	15.8	6.5	6.5	13.9	32.9	12.4	6.9	100
Western	13.2	17.2	13.2	16.1	16.1	10.6	5.6	8	100

#### 4.6. Causes of Death

Table 4.14 shows the percent distribution of deaths by cause, residence and sex. The largest proportion of deaths (23 percent) in Zambia were reported to have been caused by fever/malaria. There were also large proportions of deaths caused by cough/cold/chest infections (11 percent) and tuberculosis (11 percent). In both rural and urban areas, the most common cause of death was fever/malaria followed by tuberculosis in rural areas and cough/cold/chest infections in urban areas. A comparison of males and females shows that fever/malaria was the most common cause of death for both sexes. The second most common cause was cough/cold/chest infections for males and tuberculosis for females. In the case of females, abdominal pains were also a common cause of death (8 percent) compared to males (1 percent).

**Table 4.14: Percentage Distribution of Deaths by Cause, Residence and Sex, Zambia, 2002–2003**

Cause of Death	Zambia	Rural	Urban	Male	Female	Total Deaths
Fever/Malaria	23.2	23.8	21.3	22.2	24.2	49,076
Cough/Cold/Chest Infection	11.3	12.5	7.4	15.6	7.5	23,925

Tuberculosis	10.9	8.5	18.9	8.7	12.8	23,048
Asthma	1.1	1.3	0.6	1.0	1.3	2,416
Bronchitis	0.3	0.3	0.1	0.4	0.2	591
Pneumonia/Chest Pain	4.7	4.3	6.0	5.8	3.7	9,924
Diarrhoea without blood	4.0	4.6	1.9	3.9	4.0	8,394
Diarrhoea with blood	1.1	1.2	0.7	1.8	0.4	2,244
Diarrhoea and Vomitting	3.7	3.8	3.3	5.1	2.5	7,830
Vomitting	0.5	0.3	0.8	0.8	0.2	955
Abdominal Pain	4.9	5.1	4.5	1.1	8.3	10,391
Constipation/Stomach upset	1.1	0.9	1.7	2.1	0.2	2,332
Liver Infection/Side Pain	0.6	0.5	0.9	–	1.0	1,204
Lack of Blood/Anaemia	4.5	5.3	1.9	3.3	5.5	9,462
Boils	0.8	1.0	0.1	0.1	1.3	1,587
Skin Rash/Skin Infection	0.4	0.5	–	0.3	0.4	806
Piles/Haemorrhoids	0.5	0.6	0.1	0.1	0.8	970
Shingles/Herpes Zoster	0.4	0.6	–	0.2	0.6	909
Paralysis of any Kind	1.5	1.6	1.1	2.3	0.7	3,087
Stroke	0.9	0.5	2.4	1.1	0.8	1,962
Hypertension	1.4	1.3	1.5	1.3	1.4	2,889
Diabetes/Sugar Disease	0.1	–	0.3	0.2	–	150
Eye Infection	0.2	0.2	–	–	0.3	327
Ear Infection	0.2	0.3	–	0.5	–	448
Headache	2.8	2.5	3.7	2.5	3.1	5,884
Measles	0.8	0.6	1.5	0.6	1.1	1,724
Jaundice/Yellowness	0.6	0.6	0.6	1.3	–	1,299
Other	17.7	17.5	18.6	17.8	17.7	37,422
Total	100.0	100.0	100.0	100.0	100.0	212,256

Causes of death vary by age. The percentage distribution of deaths by cause of death and age is shown in Table 4.15. Among those aged 0–24, fever/malaria was the most common cause of death. In the age groups 15 to 59, tuberculosis was the most common cause. In the oldest age group, the largest proportion of death was caused by cough/cold/chest infections. Abdominal pains caused a larger proportion of deaths among persons aged 5–14 compared to other age groups.

**Table 4.15: Percent Distribution of Deaths by Cause and Age, Zambia, 2002–2003**

Cause of Death	Zambia Total						Total Deaths
	0–4	5–14	15–24	25–39	40–59	60+	
Fever/Malaria	36.1	31.0	20.2	16.3	16.0	5.2	49,076
Cough/Cold/Chest Infection	11.6	3.3	4.0	11.3	15.3	19.4	23,925
Tuberculosis	1.2	–	14.4	21.2	23.2	6.2	23,048
Asthma	–	–	–	–	5.3	4.3	2,416
Bronchitis	0.8	–	–	–	0.1	–	591
Pneumonia/Chest Pain	3.6	4.2	4.0	3.9	6.3	9.3	9,924
Diarrhoea without blood	5.5	–	5.8	2.8	3.0	4.2	8,394
Diarrhoea with blood	1.3	6.3	–	0.6	–	–	2,244
Diarrhoea and Vomitting	4.8	3.8	1.8	4.6	2.7	1.5	7,830
Vomitting	0.4	1.7	–	0.8	–	–	955
Abdominal Pain	4.4	13.9	5.3	4.5	2.8	3.1	10,391
Constipation/Stomach upset	1.5	3.3	1.1	–	1.6	0.2	2,332
Liver Infection/Side Pain	–	0.2	1.1	0.2	–	3.7	1,204
Lack of Blood/Anaemia	5.1	3.6	8.3	4.2	3.6	0.8	9,462
Boils	0.5	1.5	2.6	0.8	–	–	1,587
Skin Rash/Skin	0.1	1.7	–	0.5	–	1.0	806

Infection							
Piles/Haemorrhoids	-	-	-	1.8	-	-	970
Shingles/Herpes Zoster	-	1.5	-	1.3	-	-	909
Paralysis of any Kind	0.3	-	1.1	1.1	4.0	4.3	3,087
Stroke	0.4	1.6	0.7	0.6	0.5	3.7	1,962
Hypertension	-	-	0.4	0.7	3.6	6.6	2,889
Diabetes/Sugar Disease	-	-	-	-	0.5	-	150
Eye Infection	0.5	-	-	-	-	-	327
Ear Infection	-	-	-	-	-	2.1	448
Headache	0.8	1.2	4.8	5.4	2.0	2.8	5,884
Measles	2.1	-	-	-	-	1.3	1,724
Jaundice/Yellowness	0.9	-	2.3	0.3	-	-	1,299
Other	18.4	21.1	22.0	17.2	9.3	20.3	37,422
Total	100.0	100.0	100.0	100.0	100.0	100.0	212,256

The provincial comparison of causes of death is shown in Table 4.16. In Lusaka province, the largest proportion of deaths (24 percent) was caused by tuberculosis. In Western province, the most common cause was fever/malaria (15 percent) and tuberculosis (15 percent). North Western province had a similar pattern to that of western in that fever/malaria (12 percent) and tuberculosis (12 percent) were the most common causes of death. In the rest of the provinces, fever/malaria was the most common cause. Southern and Western provinces recorded a relatively high proportion of deaths caused by pneumonia compared to the rest of the provinces.

**Table 4.16: Percentage Distribution of Deaths during the Survey Period by Cause and Province, Zambia, 2002–2003**

Cause of Death	Zambia	Central	Copperbelt	Eastern	Luapula	Lusaka	Northern	North Western	Southern	Western	Total Deaths
Fever/Malaria	23.2	25.5	23.5	28.1	21.8	18.3	25.9	12.1	26.1	15.2	49,076
Cough/Cold/Chest Infection	11.3	10.1	11.1	16.7	11.6	7.9	15.3	6.6	8.8	5.5	23,925
Tuberculosis	10.9	11.4	19.7	6.7	6.1	24.0	5.9	12.0	8.7	15.2	23,048
Asthma	1.1	2.8	-	-	2.0	-	-	5.3	2.5	-	2,416
Bronchitis	0.3	-	-	1.5	0.7	-	-	-	-	0.1	591
Pneumonia/Chest Pain	4.7	2.5	2.3	3.1	3.0	5.0	3.0	2.7	10.2	10.8	9,924
Diarrhoea without blood	4.0	4.0	2.2	3.8	8.1	2.3	3.8	6.3	3.7	1.4	8,394
Diarrhoea with blood	1.1	1.9	-	1.7	2.3	2.1	1.0	1.0	-	-	2,244
Diarrhoea and Vomiting	3.7	3.4	2.1	0.3	1.9	8.1	2.3	6.6	2.5	14.3	7,830
Vomiting	0.5	-	1.1	0.2	-	0.9	0.6	-	-	1.5	955
Abdominal Pain	4.9	-	3.9	7.7	5.3	4.7	7.0	5.3	2.1	7.1	10,391
Constipation/Stomach upset	1.1	1.1	0.5	1.2	2.7	0.6	0.9	-	0.4	2.0	2,332
Liver Infection/Side Pain	0.6	-	1.0	1.0	-	-	1.5	-	-	0.5	1,204
Lack of Blood/Anaemia	4.5	7.8	0.3	6.4	6.3	1.8	2.8	3.5	4.1	8.6	9,462
Boils	0.8	-	-	-	1.8	-	2.4	-	0.3	-	1,587
Skin Rash/Skin Infection	0.4	-	-	-	0.8	-	0.1	2.5	-	1.6	806
Piles/Haemorrhoids	0.5	-	-	-	-	-	-	-	3.1	0.1	970
Shingles/Herpes Zoster	0.4	1.7	1.3	-	-	-	-	-	0.8	-	909
Paralysis of any Kind	1.5	-	2.0	-	-	-	2.3	4.9	2.6	2.0	3,087
Stroke	0.9	-	4.4	-	-	-	0.9	1.7	0.1	1.5	1,962
Hypertension	1.4	-	0.4	0.7	-	1.2	3.6	1.7	2.5	-	2,889
Diabetes/Sugar	0.1	-	-	-	-	1.0	-	-	-	-	150

Disease											
Eye Infection	0.2	-	-	-	-	-	0.8	-	-	-	327
Ear Infection	0.2	-	-	-	-	-	1.1	-	-	-	448
Headache	2.8	7.1	4.5	-	0.2	0.9	1.3	7.8	6.0	-	5,884
Measles	0.8	-	2.3	-	-	5.7	0.1	2.5	-	-	1,724
Jaundice/Yellowness	0.6	-	-	2.2	1.6	2.2	-	-	-	-	1,299
Other	17.7	20.6	17.5	18.8	23.9	13.3	17.2	17.4	15.5	12.7	37,422
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	212,256

#### 4.7 Prevalence of Orphan-hood

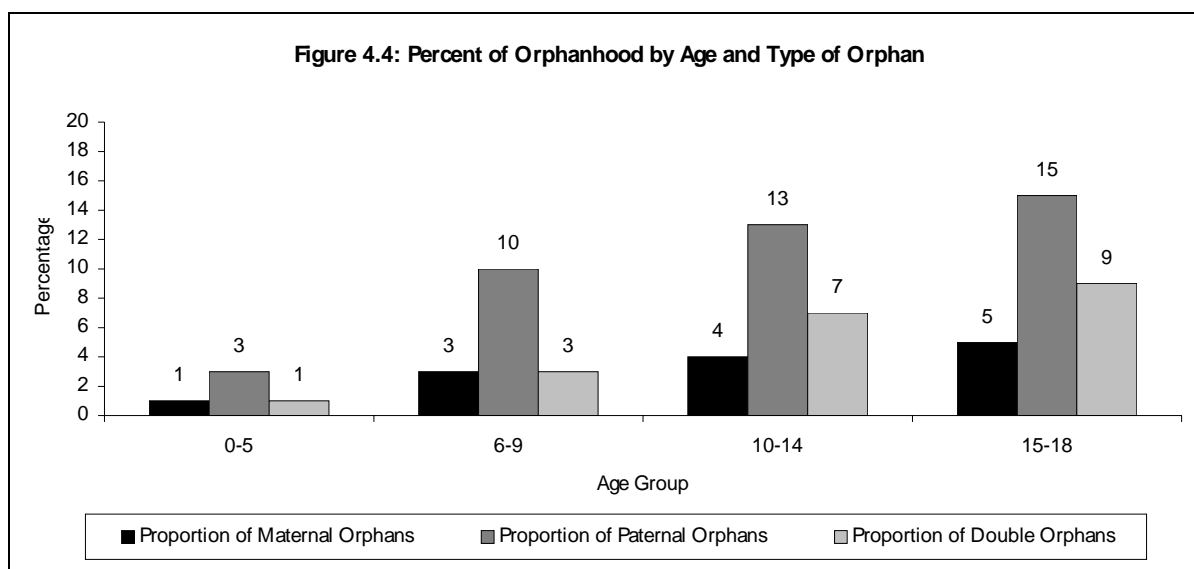
Adult survivorship has been deteriorating in the past two decades and one of the consequences has been an increase in the number of orphaned children. Orphans have special needs in society; hence, data on orphan-hood is important for planning purposes. The 2003 LCMS defined the orphaned children as persons below age 19, whose either or both parents had died.

Table 4.17 shows the percentage distribution of orphans, by type of orphan-hood, residence and age. In Zambia, 20 percent of all children aged below 19 were orphans. Of all orphaned children, 4 percent were maternal orphans, 11 percent were paternal orphans and 5 percent were double orphans. In all the provinces, the largest proportion of orphans was that of paternal orphans.

**Table 4.17: Percent Distribution of Orphans by Type of Orphan-hood, Residence and Age, Zambia, 2002–2003**

Percentage Prevalence of Orphan-hood Among population Aged 0–18					
Residence	Percentage of Maternal Orphans	Percentage of Paternal Orphans	Percentage of Double Orphans	Percentage Total Orphans	Population of Orphans aged 0–18 years
<b>Zambia</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>20</b>	<b>991,644</b>
Rural	4	11	5	20	641,969
Urban	4	12	6	22	349,675
<b>Province</b>					
Central	3	11	6	20	102,617
Copperbelt	3	11	6	20	155,889
Eastern	4	10	5	19	125,463
Luapula	4	9	5	18	65,644
Lusaka	4	12	6	22	147,896
Northern	4	12	4	20	136,503
North Western	2	11	3	16	51,022
Southern	5	10	5	20	125,512
Western	5	13	4	22	81,098
<b>Age Group</b>					
0–5	1	3	1	5	52,157
6–9	3	10	3	16	238,685
10–14	4	13	7	24	388,523
15–18	5	15	9	29	312,280

Figure 4.3 shows that in all the age groups, the largest proportion of orphans is that of paternal orphans. The figure also shows that the proportion of orphans increases with increasing age of was orphan.



The percent distribution of orphans by type of orphanhood and stratum is shown in Table 4.18. In the rural stratum, larger proportions of maternal orphans were among the rural small scale and rural large-scale households (4 percent each) than the rural medium scale and rural non-

agricultural households (2 percent each). The urban low cost stratum (4 percent) had a higher proportion of maternal orphans compared to the urban medium cost (3 percent) and urban high cost (3 percent).

In all the strata, the largest proportion of orphans was that of paternal orphans, ranging from 6 percent in the rural large-scale strata to 11 percent in the rural small-scale strata and from 12 percent in the urban low and high cost to 14 percent in the urban medium cost areas.

**Table 4.18: Percent Distribution of Orphans by Type of Orphan and Socio-economic Strata, Zambia, 2002–2003**

Strata	Proportion of Maternal Orphans	Proportion of Paternal Orphans	Proportion of Double Orphans	Population of Orphans aged 0–18 years
Rural Small Scale	4	11	5	612,186
Rural Medium Scale	2	8	7	8,639
Rural Large Scale	4	6	4	426
Rural Non-Agricultural	2	7	5	20,717
Urban Low Cost	4	12	5	270,834
Urban Medium Cost	3	14	7	42,820
Urban High Cost	3	12	6	36,021

#### 4.7.1. Poverty and Orphan-hood

Table 4.19 shows the orphan-hood status by level of poverty. Out of the total orphans, 50 percent were from extremely poor households, 20.6 percent from moderately poor households and 29.4 percent from non-poor households. Maternal and paternal orphans are more likely to be from extremely poor households than from the moderately and non-poor households. Over half of maternal and paternal orphans were from extremely poor households. There was not much variation between the orphans and non-orphans in terms of poverty status.

**Table 4.19: Percent Distribution of Orphans by Type of Orphan and Poverty Status, 2002–2003**

Poverty Status	Orphan-hood status				
	Total orphans	Maternal Orphans	Paternal Orphans	Double Orphans	Non orphans
Extremely poor	50.0	54.0	52.0	44.0	49.3
Moderately poor	20.6	20.0	20.0	22.0	21.3
Not Poor	29.4	26.0	28.0	34.0	29.4
Total Percent	100.0	100.0	100.0	100.0	100.0
Total persons 0–18 yrs					

#### 4.8. School Attendance of Orphans

Table 4.20 shows that across all age groups, paternal orphans are more likely to be in school than either maternal or double orphans. Among the paternal orphans aged 7–13, for instance, 74 percent were in school compared to 63 percent of the maternal orphans and 70 percent of the double orphans. This pattern was generally similar in both rural and urban areas, all provinces and



across all strata. The only exception was that of the maternal orphans aged 5–6 in Southern and Copperbelt Provinces, rural non agricultural stratum and urban medium cost stratum, whose proportions were higher than that of either the paternal and double orphans.

**Table 4.20: Percent Distribution of Orphan by Age and School attendance, Zambia, 2002–2003**

Residence/Stratum/Province	School Attendance for Orphans by Age								
	Proportion of Maternal Orphans			Proportion of Paternal Orphans			Proportion of Double Orphans		
	5–6	7–13	14–18	5–6	7–13	14–18	5–6	7–13	14–18
<b>Zambia</b>	<b>20</b>	<b>63</b>	<b>25</b>	<b>25</b>	<b>74</b>	<b>61</b>	<b>18</b>	<b>70</b>	<b>60</b>
Rural	15	57	21	21	69	57	11	65	56
Urban	33	76	34	34	83	67	31	78	65
<b>Province</b>									
Central	2	56	66	28	77	56	17	74	44
Copperbelt	39	78	61	32	85	68	36	74	62
Eastern	1	59	58	22	50	30	0	59	54
Luapula	18	60	76	37	70	59	13	72	83
Lusaka	31	70	65	35	80	68	38	69	66
Northern	9	60	53	24	82	69	3	60	51
North Western	4	62	84	9	78	79	16	66	61
Southern	52	57	44	19	79	70	14	83	65
Western	12	63	46	20	49	47	0	64	57
<b>Stratum</b>									
Rural Small Scale	13	58	56	21	69	58	10	65	57
Rural Medium Scale	0	79	55	56	88	59	53	76	63
Rural Large Scale	0	100	0	100	100	59	71	100	0
Rural Non-Agricultural	78	20	13	16	56	27	24	57	44
Urban Low Cost	27	73	64	29	79	62	25	75	61
Urban Medium Cost	89	92	75	63	94	76	53	80	77
Urban High Cost	0	88	70	65	92	87	59	96	70

During the LCMSIII survey, information regarding reasons for discontinuing school was collected for the orphans aged between 7 to 18 years. Table 4.21 shows that for all types of orphans, lack of financial support was cited as the main reason for discontinuing school. However, maternal orphans were less likely to discontinue school for financial reasons compared to paternal and double orphans. Other common reasons for discontinuing school were that they were not selected or failed to get a school place especially among those aged 14–18 years and that there was no need to continue schooling or that school was not important. The least common reasons reported included pregnancies and the need to help out at home.

**Table 4.21: Percentage Distribution of Orphan-hood by Type of Orphan, Age Group and Main Reason for Discontinuing School, Zambia, 2002–2003**

Main Reason for Discontinuing School	Proportion of Maternal Orphans		Proportion of Paternal Orphans		Proportion of Double Orphans	
	7–13	14–18	7–13	14–18	7–13	14–18
Not Selected/Failed to get School place	4	20	7	13	10	18
Pregnant	0	3	0	5	3	3
No Need to Continue School	15	9	6	11	5	6
School Not Important	13	10	9	5	6	5
Lack of Financial Support	54	45	61	53	65	58
Need to Help out at Home	0	1	6	4	0	3
Illness/ Injury/ Disability	6	1	0	2	6	0
Other	8	11	7	5	6	7
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

#### 4.9. Disability

The LCMSIII survey also collected information on disability. Table 4.22 shows the proportion of the disabled by type of disability, residence and socio-economic stratum. The table shows that 2.4 percent of the population was disabled in Zambia, with 2.6 percent in rural areas and 2.1 percent in urban areas.

The most common type of disability reported was “Partial Sight (0.7 percent of population)” and “Crippled (0.6 percent)”.

A provincial comparison shows that Lusaka had the largest proportion of the disabled (3.2 percent) while Southern had the least with 1.6 percent.

**Table 4.22: Proportion of the Disabled by Type of Disability, Residence and Socio-economic Strata, Zambia, 2002–2003**

Residence/Stratum/ Province	Population	Total Disabled	Type of Disability							
			Blind	Partially Sighted	Deaf	Dumb	Crippled	Mentally Retarded	Mentally Ill	Ex Mental
<b>Zambia</b>	10,757,192	2.4	0.2	0.7	0.2	0.1	0.6	0.2	0.2	0.0
Rural	7,006,608	2.6	0.2	0.7	0.2	0.1	0.7	0.2	0.2	0.0
Urban	3,750,584	2.1	0.2	0.6	0.1	0.1	0.4	0.1	0.1	0.0
<b>Strata</b>										
Rural Small Scale	6,533,086	2.6	0.2	0.8	0.2	0.1	0.7	0.2	0.2	0.0
Rural Medium Scale	118,906	2.1	0.0	0.6	0.2	0.1	0.4	0.1	0.3	0.0
Rural Large Scale	5,053	1.0	0.0	0.2	0.0	0.4	0.0	0.0	0.5	0.0
Rural Non- Agriculture	349,563	2.0	0.2	0.3	0.1	0.1	0.5	0.5	0.3	0.0
Urban Low Cost	2,928,775	2.2	0.2	0.7	0.1	0.1	0.4	0.1	0.1	0.0
Urban Medium Cost	392,373	2.2	0.1	0.4	0.1	0.2	0.4	0.1	0.2	0.0
Urban High Cost	429,436	1.3	0.1	0.4	0.1	0.0	0.2	0.1	0.1	0.1
<b>Province</b>										
Central	1,097,632	2.0	0.2	0.6	0.2	0.1	0.6	0.2	0.1	0.0
Copperbelt	1,707,843	1.9	0.1	0.9	0.2	0.1	0.6	0.1	0.1	0.0
Eastern	1,440,604	3.0	0.1	0.9	0.3	0.1	0.9	0.3	0.1	0.0
Luapula	852,351	2.2	0.1	0.8	0.1	0.2	0.5	0.3	0.3	0.1
Lusaka	1,496,428	3.2	0.4	0.4	0.0	0.2	0.4	0.1	0.2	0.0
Northern	1,371,234	2.6	0.3	0.5	0.3	0.1	0.7	0.3	0.3	0.0
North Western	637,112	2.6	0.0	0.9	0.1	0.1	0.6	0.2	0.2	0.1
Southern	1,335,538	1.6	0.2	0.5	0.1	0.2	0.5	0.0	0.1	0.0
Western	818,450	2.5	0.0	1.0	0.3	0.1	0.6	0.2	0.2	0.0

Table 4.23 shows that there was a higher proportion of disabled persons among the males (2.7 percent) than females (2.1 percent). The most common type of disability among both males and females is “Partial Sight” and “Crippled”.

**Table 4.23: Proportion of the Disabled by Type of disability, Age and Sex, Zambia, 2002–2003**

Age and Sex	Total Disabled	Type of Disability							
		Blind	Partially Sighted	Deaf	Dumb	Crippled	Mentally Retarded	Mentally Ill	Ex Mental
<b>Sex</b>									
Male	2.7	0.2	0.7	0.2	0.2	0.7	0.3	0.2	0.1
Female	2.1	0.2	0.7	0.2	0.1	0.5	0.1	0.1	0.0
<b>Age Group</b>									
0–4	0.7	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
5–14	1.5	0.1	0.3	0.3	0.1	0.3	0.1	0.1	0.0
15–24	1.7	0.1	0.5	0.1	0.1	0.4	0.2	0.1	0.0
25–29	2.1	0.1	0.4	0.1	0.1	0.6	0.4	0.3	0.0
30–44	2.5	0.2	0.5	0.1	0.1	0.6	0.2	0.3	0.1
45–64	4.5	0.6	1.5	0.1	0.1	1.4	0.2	0.3	0.1
65+	12.5	1.6	7.2	0.8	0.6	2.7	0.2	0.3	0.2

Results also show that the proportion of the disabled increased with increasing age. Of those aged 0–4, 0.7 percent were disabled compared to 12.5 percent of those age over 65 years.

#### 4.10. Summary

The population estimate for the 2002/3 LCMS was 10.8 million. Of this population, 65 percent resided in rural areas and 35 percent in urban areas. Further, 5.3 million were male and 5.5 million were female. The most urbanized province was Lusaka with 81 percent of its population residing in urban areas closely followed by Copperbelt with 80 percent. Eastern province was the least urbanized with 9 percent. The largest share of Zambia's population was in Copperbelt province with 16 percent while the least was in North western province (6 percent). Zambia's population is regarded as young with 46 percent being under 15 years. Of the population 12 years and older, 47 percent had never been married, 43 percent were married, 5 percent widowed, 4 percent divorced and 1 percent separated.

The average household size for Zambia was 5.4. Among the provinces, average household size ranged from 4.9 in Western to 6.1 in Lusaka province. The average household size in urban areas (5.5) was higher than that of the rural areas (5.3). Large proportions of household heads fall in the age groups 25–29 to 40–44. Of the total households, 23 percent are headed by females. Female headed households were more common in rural (24 percent) than in urban (21 percent) areas.

The most common cause of death was fever/malaria (23 percent) followed by cough/cold/chest infections (11 percent) and TB (11 percent). These causes were the most commonly reported for both male and female decease of persons.

In Zambia, 20 percent of all children below 19 were orphans. Of all the orphaned children, 4 percent were maternal orphans, 11 percent were paternal orphans and 5 percent were double orphans. The proportions of orphans increased with increasing age.

About 2 percent of the population is disabled was Zambia; 3 percent in rural and 2 percent in urban areas. The most common type of disability reported was partial sight (0.7 percent) and crippled (0.6 percent) of the total population.

# CHAPTER 5

## MIGRATION

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### 5.1 Introduction

Migration is one of the three components of population change in an area, the others being fertility and mortality. Migration can be a major component of population change at every administrative level such as districts and provinces and may affect age specific, gender and social economic groups. By definition migration is “a form of geographic or spatial movement involving a change of residence between clearly defined geographic units” (Shryock, H.S., et al 1976). Migration may thus be defined as the movement of people from place to place and across some administrative boundaries for the purpose of changing their previous place of residence.

There are two types of migration: Internal and International migration. *Internal Migration* refers to changes of residence within a nation and is defined in terms of residential movements across boundaries that are often taken as the boundary or minor divisions of the province or district of a country (Kpedekpo, 1982). Movements that do not result in crossing boundaries are termed mobility. *International Migration* refers to changes of residence involving crossing a national boundary. Migration arise primarily for economic reasons although other factors such as social unrest in a particular country may lead to people moving out of that country. A *migrant* is a person who changes his/her usual place of residence by crossing an administrative boundary and residing in a new area for a period of not less than six months or intends to stay in the new area for a period not less than six months.

Data on migration is obtained from the following information that members of the household were asked to state; Place of residence 12 months before the survey, Place of residence at the time of the survey, and the duration of residence in the current place of residence. The concept of residence referred above means the actual place at which an individual is interviewed and the place one was 12 months before enumeration.

This chapter gives the 2002/3 Living Conditions and Monitoring Survey (LCMS) III findings regarding the migration of people. The analysis of migration in this report includes proportions of persons who moved by age and reason for migrating. The analysis also looks at the direction of flow of movement, i.e. rural-rural, rural-urban, urban-rural or urban-urban migration. During the LCMS III, other than the individual persons who migrated, households which moved from one clearly defined geographical area to another were considered to have migrated. The geographical units used in this report are rural, urban, district, and province.

In this report, only internal migration has been discussed. The terms *migrants or persons who moved* and *non-migrants or persons who did not migrate* have been used interchangeably.

For easy presentation of survey results, the findings have been divided into three sections. The first section looks at levels of migration, the second section looks at the direction or flows of migration and the third section looks at the reasons for migrating.

## 5.2 Levels of Migration

### 5.2.1 Individual Migration

The levels of migration have been discussed in relation to the residence of individuals (Rural or Urban), Province, level of involvement in agriculture (Small, Medium, or Large Scale or Non-Agriculture) type of cost of an urban area (Low, Medium, or High Cost), sex, and age of migrants.

Table 5.1 shows the migrants and non-migrants in Zambia by residence, level of involvement in agriculture (Rural Stratum), type of cost of an area (Urban Stratum), sex, and province. During the 2002/3 LCMS III, a total of 10,757,192 persons were recorded. Of these, a total of 1,157,848 persons or 11 percent of the population were involved in migration. Of the migrants, 10 percent were males and 11 percent were females. Results from Table 5.1 show that there were 8 percent migrants in rural areas and 16 percent migrants in urban areas. Results further show that there were 19 percent of migrants from large-scale farming households, 19 percent in the non-agricultural activities while 6 percent were involved in the medium scale farming. Seventeen percent of the migrants were living in low cost areas, 17 percent in medium cost areas, and 10 percent were in the high cost areas. Refer to Table 5.1 for details.

**Table 5.1: Migrants and Non-Migrants by Residence, Strata and Province, Zambia, 2002–2003**

Characteristics	Migration Status				Total	
	Non-Migrants		Migrants			
	Number	Percent	Number	Percent	Number	Percent
All Zambia	9,599,344	89	1,157,848	11	10,757,192	100
Sex						
Male	4,733,554	90	546,713	10	5,280,267	100
Female	4,865,790	89	611,135	11	5,476,925	100
Residence						
Rural	6,443,255	92	563,353	8	7,006,608	100
Urban	3,156,089	84	594,495	16	3,750,584	100
Rural Stratum						
Small Scale	6,042,793	92	490,293	8	6,533,086	100
Medium Scale	112,084	94	6,822	6	118,906	100
Large Scale	4,115	81	938	19	5,053	100
Non-Agriculture	284,263	81	65,300	19	349,563	100
Urban Stratum						
Low Cost	2,441,759	83	487,016	17	2,928,775	100
Medium Cost	327,352	83	65,021	17	392,373	100
High Cost	386,978	90	42,458	10	429,436	100
Province						
Central	961,620	88	136,012	12	1,097,632	100
Copperbelt	1,408,381	82	299,462	18	1,707,843	100
Eastern	1,341,442	93	99,162	7	1,440,604	100
Luapula	767,367	90	84,984	10	852,351	100
Lusaka	1,310,055	88	186,373	12	1,496,428	100
Northern	1,242,109	91	129,125	9	1,371,234	100
North-Western	596,862	94	40,250	6	637,112	100
Southern	1,229,086	92	106,452	8	1,335,538	100
Western	742,422	91	76,028	9	818,450	100

Figure 5.1 shows the proportions of persons who were involved in migration by province in descending order. The proportion of persons involved in migration ranges from 6 percent to 18 percent. Copperbelt Province, at 18 percent, had more persons involved in migration than any other province. Results from Figure 5.1 further shows that Copperbelt, Central, and Lusaka



provinces had proportions of persons involved in migration above the National Level (11 percent). North-Western Province had the least proportion of persons involved in migration at 6 percent (See Figure 5.1 for details).

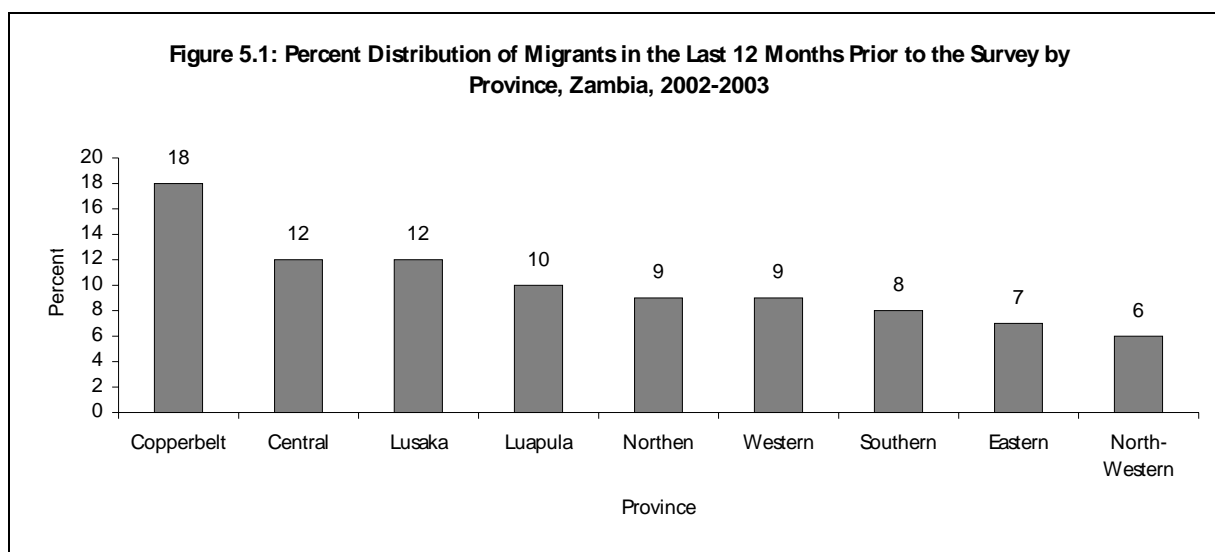


Table 5.2 shows the proportion of migrants and non-migrants during the 12 months prior to the survey by sex and age in broad groups in Zambia. Results from Table 5.2 show that of the total 1,157,848 migrants, 546,713 migrants or 10 percent were males and 611,135 or 11 percent were females. There was no difference in the proportion of males and females that were involved in migration for those in age groups 0-11 (11 percent), 25-29 (15 percent), and 60-64 (5 percent). As expected, there were more male than female migrants in the age range 30-59, although the difference is not much. Males are more likely to migrate in search for employment in this age range than females. But as the education attainment improves for females as well, a 50/50 situation of migration in this age range is possible. Results show that there were 12 percent of males and 11 percent of females in the age group 30-39, 10 percent of males and 8 percent of females in the age group 40-49, and 7 percent of males and 6 percent of females in the age group 50-59. The proportion of persons who migrated by age is also presented in Figure 5.2.

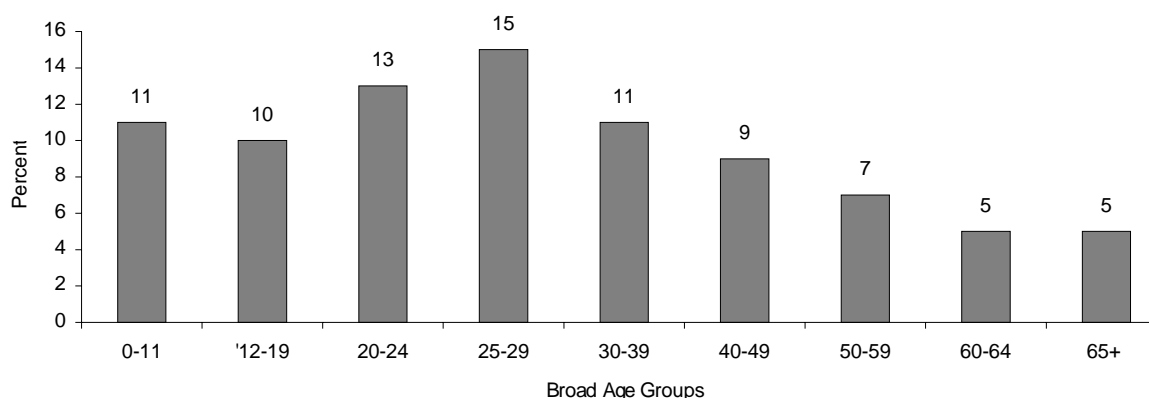
Figure 5.2 shows the percentage distribution of migrants in Zambia during the 12 months prior to the survey by broad age groups. Results show that the proportion of persons involved in migration is highest at age group 25-29 (15 percent) followed by those in the age range 20-24 years, at 13 percent. Results show that old people were less involved in migration. There was no difference in the proportion of persons involved in migration for the two broad age groups, 0-11 and 30-39 which were at 11 percent. This could probably imply that the adult population migrated with their children.

**Table 5.2: Migrants and Non-Migrants During the 12 Months Prior to the Survey by Sex and Age, Zambia, 2002-2003**

Age (in Broad Groups) and Sex	Migration Status		Total
	Non-Migrants	Migrants	

		Number	Percent	Number	Percent	Number	Percent
All Zambia	Both Sexes	9,599,344	89	1,157,848	11	10,757,192	100
	Male	4,733,554	90	546,713	10	5,280,267	100
	Female	4,865,790	89	611,135	11	5,476,925	100
0-11	Both Sexes	3,579,060	89	431,279	11	4,010,339	100
	Male	1,778,518	89	214,049	11	1,992,567	100
	Female	1,800,542	89	217,230	11	2,017,772	100
12-19	Both Sexes	1,962,573	90	227,388	10	2,189,961	100
	Male	986,321	92	90,710	8	1,077,031	100
	Female	976,252	88	136,678	12	1,112,930	100
20-24	Both Sexes	890,316	87	132,147	13	1,022,463	100
	Male	429,831	88	57,689	12	487,520	100
	Female	460,485	86	74,458	14	534,943	100
25-29	Both Sexes	683,815	85	121,015	15	804,830	100
	Male	326,235	85	56,175	15	382,410	100
	Female	357,580	85	64,840	15	422,420	100
30-39	Both Sexes	1,039,276	89	131,021	11	1,170,297	100
	Male	525,310	88	70,532	12	595,842	100
	Female	513,966	89	60,489	11	574,455	100
40-49	Both Sexes	626,736	91	62,159	9	688,895	100
	Male	295,921	90	33,219	10	329,140	100
	Female	330,815	92	28,940	8	359,755	100
50-59	Both Sexes	387,310	93	28,286	7	415,596	100
	Male	173,354	93	13,438	7	186,792	100
	Female	213,956	94	14,848	6	228,804	100
60-64	Both Sexes	147,447	95	8,234	5	155,681	100
	Male	68,360	95	3,823	5	72,183	100
	Female	79,087	95	4,411	5	83,498	100
65+	Both Sexes	282,811	95	16,319	5	299,130	100
	Male	149,704	95	7,078	5	156,782	100
	Female	133,107	94	9,241	6	142,348	100

**Figure 5.2: Percent Distribution of Migrants During the Last 12 Months Prior to the Survey by Broad Age Groups, Zambia, 2002-2003**



### 5.2.2. Household Migration

Information about the households that were involved in migration is presented in Table 5.3. Results show that a total of 2,005,677 households were recorded during the LCMS III. Of these, a total of 220,877 households or 11 percent were involved in migration. Eleven (11) percent of the

households involved in migration were male-headed while 10 percent were female-headed. Results from Table 5.3 show that 17 percent of the households in urban areas were involved in migration compared with 8 percent of the households in rural areas. Results further show that 20 percent of the households in rural areas not involved in agriculture and 20 percent of the households involved in large scale farming were involved in migration compared with 7 percent of the households involved in the small scale farming and 4 percent of the households involved in the medium scale farming. Results further show that households in low cost at 18 percent were involved in migration compared with 15 percent of the households in the medium cost areas and 11 percent in the high cost areas. Copperbelt Province had 18 percent of the households involved in migration compared with 6 percent of households involved in migration in North-Western Province.

**Table 5.3: Households which and which did not move by Residence, Stratum and Province, Zambia, 2002– 2003**

Sex/Residence/ Stratum/Province	Household Migration Status				Total	
	Households which Did Not Migrate		Households which Migrated			
	Number	Percent	Number	Percent	Number	Percent
All Zambia	1,784,800	89	220,877	11	2,005,677	100
Male	1,365,103	89	176,163	11	1,541,266	100
Female	419,697	90	44,714	10	464,411	100
Rural	1,225,536	92	104,166	8	1,329,702	100
Urban	559,264	83	116,711	17	675,975	100
Small Scale	1,142,597	93	86,647	7	1,229,244	100
Medium Scale	13,333	96	557	4	13,890	100
Large Scale	552	80	136	20	688	100
Non Agric	69,054	80	16,826	20	85,880	100
Low Cost	436,359	82	98,179	18	534,538	100
Medium Cost	54,437	85	9,810	15	64,247	100
High Cost	68,468	89	8,722	11	77,190	100
Central	168,647	87	25,797	13	194,444	100
Copperbelt	258,485	82	56,593	18	315,078	100
Eastern	255,380	92	21,220	8	276,600	100
Luapula	153,248	90	16,344	10	169,592	100
Lusaka	229,596	85	41,825	15	271,421	100
Northern	246,043	91	25,194	9	271,237	100
North-Western	110,777	94	6,786	6	117,563	100
Southern	208,783	93	16,000	7	224,783	100
Western	153,841	93	11,118	7	164,959	100

### 5.3 Direction of Migration

Knowing the direction or flows of migration helps planners and policy makers to come up with good planning strategies and policies. By looking at migration flows, we are able to understand the pull and push factors affecting migration as well as assessing the available resources in a receiving residence and how sufficient they are to support the in-migrants.

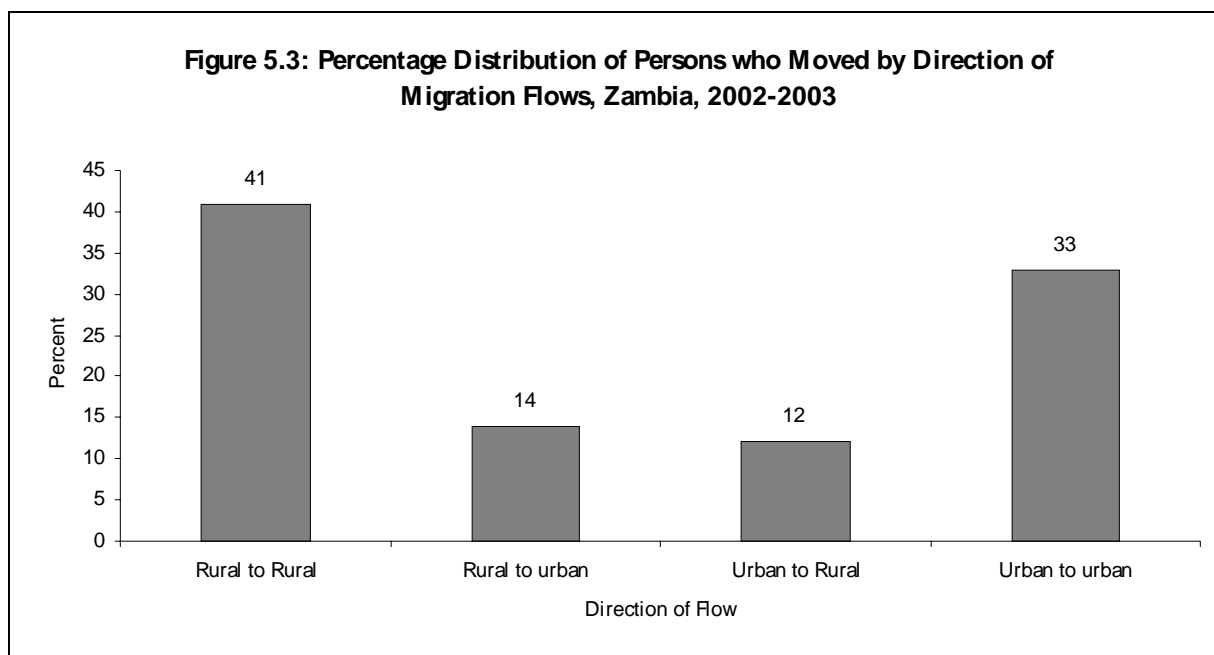
Table 5.4 shows the percentage distribution proportions of persons who moved by province and the direction of migration flow i.e. where they moved from and where they went. Of the total migrants in Central Province (136,012 – Table 5.1), the majority, 47 percent moved from rural to rural followed by those who migrated from urban to urban. The least proportion was for those

involved in the urban to rural at 9 percent. Lusaka Province had the highest proportion of the migrants who moved from urban to urban at 81 percent. The highest proportion of the migrants in Northern Province migrated from rural to rural at 60 percent the least proportion was for those who migrated from rural to urban at 10 percent. Results further show that Central, Eastern, Northern, North-Western, Southern, and Western provinces had high proportions of persons involved in the rural – to – rural migration while Copperbelt, Luapula, and Lusaka provinces had high proportions of persons involved in the urban-to-urban migration

**Table 5.4: Percent Distribution of Migrants by Province and Direction of Migration Flow, 2002–2003**

Direction of Migration (Moved From)	Province									Total Migration	
	Central	C/Belt	Eastern	Luapula	Lusaka	Northern	N/Western	Southern	Western	%	Number
Rural to Rural	47	8	76	32	2	60	38	58	56	41	154,644
Rural to urban	21	20	13	18	2	10	21	3	25	14	52,436
Urban to Rural	9	16	5	14	15	17	9	11	10	12	44,681
Urban to urban	23	56	6	36	81	13	32	28	9	33	122,254
All	100	100	100	100	100	100	100	100	100	100	374,015

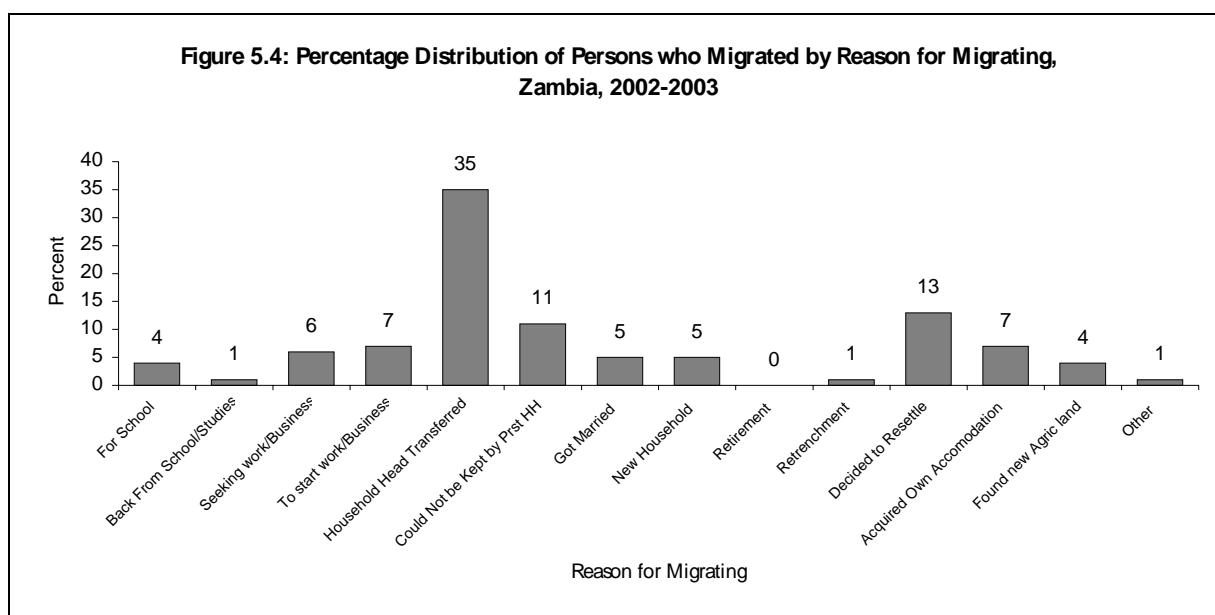
Figure 5.3 shows the percentage distribution of persons who moved by the direction of flow. Results from the figure show that during the period 2002/2003, 41 percent of persons were involved in the Rural–Rural migration, 14 percent in the Rural–Urban Migration, 12 percent in the Urban–Rural Migration, while 33 percent were involved in the Urban–Urban Migration. This shows that the direction of flow of migration is largely Rural–Rural.



## 5.4 Reasons for Migrating

Members of the household who had migrated 12 months prior to the survey were asked to state the reason why they migrated. Findings to this question are presented in Figure 5.4.

Figure 5.4 shows the percent distribution of persons who migrated by reason for migrating. The main reason given for migrating was that the head of the household was transferred at 35 percent followed by 13 percent who stated that they decided to resettle. Those who migrated because the previous household could no longer keep them accounted for 1 percent. Those who migrated because they got married accounted for 5 percent. Retirement (0 percent) and retrenchment (1 percent) were not so much the reasons reported for migrating.



## 5.5. Summary

There were 1,157,848 migrants or 11 percent of the total population (10,757,192). Copperbelt Province with 18 percent, Central Province with 12 percent and Lusaka Province with 12 percent had proportions of persons involved in migration above the national average of 11 percent.

Central, Eastern, Northern, North-Western, Southern, and Western provinces had high proportions of persons involved in the rural to rural migration while Lusaka, Copperbelt, and Luapula provinces had high proportions of persons involved in the urban to urban migration.

People in rural areas, particularly those not involved in agricultural activities and those involved in large scale farming were more involved in migration. In urban areas, the rate of migration was highest among the low cost and medium cost dwellers. A higher proportion of the population in the age range 25–29 years (15 percent) were involved in migration.

The main direction of flow according to the LCMSIII was Rural-to-Rural migration and accounted for 41 percent.

The main reason given by most of the individuals who migrated was that their head of household was transferred and this accounted for 35 percent.

# CHAPTER 6

## EDUCATION

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### 6.1. Introduction

This section presents and describes statistical information on education characteristics of the population aged 5 years and above. Education attainments of individuals have a bearing on their well being in terms of health, poverty and other characteristics such as employment and earnings, and nutrition status.

Information on education was collected from those persons aged 5 years and above and emphasis was placed on formal education. Included also was data on school attendance in pre- schools.

The survey collected data for each member of the household on the following:

- Whether one currently attended school or not
- The current grade that an individual was attending
- Ever attended school
- Type of school
- If not attending, main reason for leaving school or never attending
- Highest grade attained

### 6.2. School attendance

The school attendance rate was based on the number of persons attending school at the time of the survey. The school attendance rate is computed as the proportion of individuals attending school at the time of the survey in specified age group.

The official entry age into grade one in Zambia is seven years. The age groups for which the attendance rate was computed were selected to correspond with levels of school (lower basic, middle basic, upper basic, high school, post high school). Although the official entry age into grade one is 7, some children start school earlier (5 or 6 years). The following is the age-grade match that has been adopted for the analysis of school attendance;

- Lower basic grades 1, 2, 3 and 4 correspond to pupils of ages 7 to 10 years
- Middle basic grades 5, 6 and 7 correspond to pupils of ages 11 to 13 years
- Upper basic grades 8 and 9 correspond to pupils of ages 14 to 15 years
- High school grades 10 and 12 correspond to pupils of ages 16 to 18 years
- Higher institutions of learning corresponds to persons of ages 19 to 22 years

Table 6.1 presents information on school attendance rate by age group. It should be noted that though the age groups used (7– 10, 11– 13, 14– 15, 16– 18, 19– 22) may correspond with respective education levels (lower basic, middle basic, upper basic, high school and higher),

because of age– grade mismatches the attendance may not have necessarily represented the right grades.

Table 6.1 shows the percentage of individuals who were attending school at the time of the survey. Thirteen percent of individuals aged 5 to 6 years were reported to be attending school. The results also show that 68 percent, 85 percent, 75 percent, 56 percent, and 21 percent of lower basic, middle basic, upper basic, high school and post high school age respectively, were attending school. More females than males started school earlier as suggested by the attendance rates for age group 5 to 6 years.

For children whose age corresponded to lower basic and middle basic school the attendance rates for females were higher than those of males. Conversely, there were more males than females aged 14 years and above attending school. Apparently, this age range corresponds to higher levels of education.

School attendance was consistently lower in rural than urban areas for all school ages. Sixty two percent, and 83 percent of children of lower basic and middle basic school age were attending school in rural areas respectively, as compared to 81 percent and 90 percent for those in urban areas.

**Table 6.1: School Attendance Rates by Age, Sex, Rural/Urban and Strata, Zambia, 2002–2003**

Residence and Stratum	Sex	Age-Group								Persons 5–22 Years Attending
		5–6	7–10	11–13	7–13	14–15	16–18	14–18	19–22	
Zambia	Total	13	68	85	75	75	56	64	21	2,863,858
	Male	13	67	85	75	79	66	71	31	1,502,594
	Female	14	69	86	76	72	46	56	14	1,361,264
Rural	Total	9	62	83	70	71	49	58	18	1,692,580
	Male	9	61	82	70	75	62	68	29	912,448
	Female	10	62	84	71	66	37	49	9	780,132
Urban	Total	21	81	90	85	83	66	73	27	1,171,278
	Male	21	82	91	85	87	73	78	34	590,146
	Female	21	81	90	84	80	60	68	21	581,132
Small Scale Farmers	Total	9	61	83	70	70	49	58	18	1,574,389
	Male	9	60	82	69	74	61	67	29	846,319
	Female	10	62	84	70	66	37	49	8	728,070
Medium Scale Farmers	Total	14	71	92	79	86	58	70	25	39,195
	Male	17	69	91	78	91	63	77	29	21,763
	Female	11	73	93	81	78	54	62	20	17,432
Large Scale Farmers	Total	40	92	100	96	72	57	63	55	1,915
	Male	24	100	100	100	60	64	63	46	993
	Female	51	86	100	90	81	50	64	75	922
Non Agricultural	Total	10	72	79	74	82	49	61	13	77,081
	Male	7	72	82	75	97	77	84	13	43,373
	Female	13	72	76	73	72	23	42	13	33,708
Low Cost Areas	Total	18	78	89	83	81	62	70	23	865,560
	Male	18	79	90	83	86	69	76	30	433,219
	Female	18	78	89	82	77	56	64	18	432,341
Medium Cost Areas	Total	30	91	95	92	91	75	81	36	149,629
	Male	27	92	94	93	89	82	85	41	76,247
	Female	34	89	96	92	92	69	78	30	73,382
High cost Areas	Total	42	93	95	93	80	76	82	41	156,089
	Male	44	93	96	94	92	81	85	45	80,680
	Female	40	92	94	93	88	72	78	35	75,409



Figure 6.1 is an extract from table 6.1 and it shows the school attendance rates by age group and place of residence. The attendance rate is consistently higher in urban areas in all the age groups.

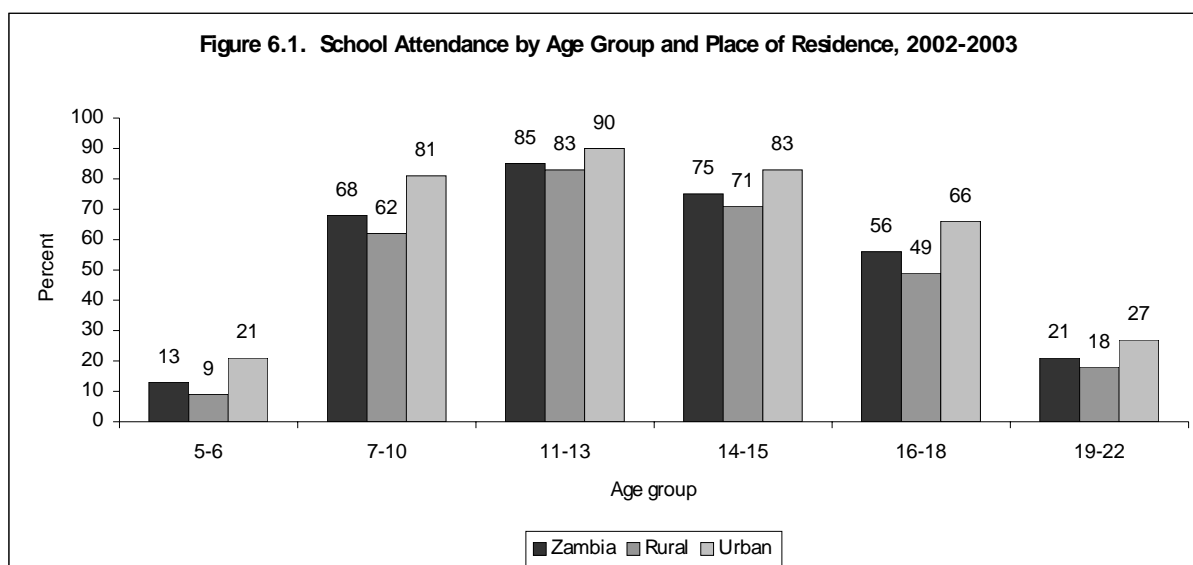


Table 6.2 shows the attendance rates by province. Lusaka and Copperbelt provinces reported the highest school attendance rates at 80 percent for the 7–10 years age group, followed by Southern, North–Western and Central. Eastern and Western provinces had the lowest attendance rates of 50 percent and 55 percent respectively for the 7 to 10 years age group. School attendance rate for the primary school age population (7–13 years) ranged from 85 percent in Copperbelt province to 59 percent in Eastern province.

**Table 6.2: School Attendance Rates by Age Group, Sex, Zambia, 2002–2003**

Province		Age-Group								Persons 5–22 Years Attending
		5–6	7–10	11–13	7–13	14–15	16–18	14–18	19–22	
Zambia	Total	13	68	85	75	75	56	64	21	2,863,858
	Male	13	67	85	75	79	66	71	31	1,502,594
	Female	14	69	86	76	72	46	56	14	1,361,264
Central	Total	11	69	86	75	67	52	59	20	293,167
	Male	12	66	82	73	73	60	66	30	159,440
	Female	11	71	91	78	60	44	51	10	133,727
Copperbelt	Total	18	80	91	85	83	64	71	28	528,853
	Male	16	81	91	85	87	71	77	34	260,501
	Female	20	79	92	85	79	59	66	23	268,352
Eastern	Total	6	50	74	59	59	40	48	17	285,916
	Male	8	46	73	57	61	48	53	26	150,920
	Female	5	53	75	62	57	31	41	9	134,996
Luapula	Total	7	59	83	70	80	53	63	15	197,470
	Male	6	63	83	72	88	63	72	24	101,829
	Female	8	55	83	68	73	42	54	8	95,641
Lusaka	Total	23	80	88	83	83	62	71	24	446,035
	Male	22	80	92	85	87	75	80	29	233,379

	Female	24	79	84	81	79	51	63	19	212,656
Northern	Total	11	63	87	73	80	56	66	20	345,977
	Male	12	63	92	74	86	79	82	36	201,642
	Female	10	62	83	71	73	34	49	9	144,335
North Western	Total	11	70	88	77	82	67	72	30	180,126
	Male	11	73	90	80	85	79	81	42	99,905
	Female	12	66	86	73	78	53	62	20	80,221
Southern	Total	14	77	90	82	79	58	67	20	406,874
	Male	13	73	88	79	81	63	71	29	202,853
	Female	16	81	92	85	78	53	64	11	204,021
Western	Total	9	55	76	64	64	44	52	16	179,440
	Male	7	55	70	62	66	54	59	25	92,125
	Female	11	55	84	66	63	34	46	8	87,315

Table 6.3 shows the school attendance rates by poverty status of the households. Poverty has an influence on the school attendance. The results show that non- poor households had higher school attendance rates than the poorer ones at all levels. The school attendance rate among the primary school age population was 84 percent for those from the non- poor households, 78 percent for those from the moderately poor households and 69 percent for those from the extremely poor households. Results show the same trend among the other age groups.

**Table 6.3: School Attendance Rates by Age Group, sex and Poverty Status, Zambia, 2002–2003**

		Age-Group				Persons 5–22 Years Attending
		5–6	7–13	14–18	19–22	
Zambia	Total	13	75	64	21	2,863,858
	Male	13	75	71	31	1,502,594
	Female	14	76	56	14	1,361,264
Extremely Poor	Total	9	69	61	21	1,292,709
	Male	9	68	68	31	677,679
	Female	10	70	54	11	615,030
Moderately Poor	Total	11	78	62	19	601,322
	Male	11	77	70	30	316,289
	Female	11	79	53	11	285,033
Not Poor	Total	22	84	69	23	969,827
	Male	22	84	78	31	508,626
	Female	23	83	61	17	461,201

### 6.3. Gross attendance rates

The gross attendance rate is a proportion of school attendance at a given education level or grade over the population whose ages correspond to that level.

Because data collection includes all pupils, regardless of age, it is possible to have gross attendance rates which are greater than 100. The gross attendance rates of more than 100 percent indicate the existence of under- age or over- age school attendance.

Table 6.4 shows the gross school attendance rates by grades. Overall, the gross school attendance rates were at 94 percent and 30 percent for primary and secondary school levels, respectively. The gross attendance rates for primary schools were 93 percent for rural and 96 percent for urban areas. Gross attendance rates for males were relatively higher than females nearly at all grades. The gross attendance rates for primary schools were higher than those for secondary schools.

In rural areas the gross school attendance rates at secondary level were very low, at 16 percent compared to 55 percent in urban areas. In urban areas, the lowest gross attendance rate for secondary school was for persons in the low cost areas with 48 percent. The highest rate was for persons in the high cost stratum with 81 percent.

**Table 6.4: Gross School Attendance Rates by Grades, Sex, Rural/Urban and strata, Zambia, 2002-2003**

Residence/Stratum	Gross School attendance (grade) Rate							Persons 5-22 Years Attending
		1-4	5-7	8-9	10-12	1-7	8-12	
Zambia	Total	105	77	51	16	94	30	2,863,858
	Male	108	81	52	15	97	31	1,502,594
	Female	102	73	50	17	90	30	1,361,264
Rural	Total	110	68	30	5	93	16	1,692,580
	Male	113	73	31	6	97	16	912,448
	Female	106	63	29	5	89	15	780,132
Urban	Total	97	94	88	33	96	55	1,171,278
	Male	99	97	94	32	98	56	590,146
	Female	95	91	83	35	93	54	581,132
Small Scale Farmers	Total	111	66	29	5	93	15	1,574,389
	Male	115	71	29	5	96	15	846,319
	Female	106	62	28	5	89	15	728,070
Medium Scale Farmers	Total	109	124	39	8	115	21	39,195
	Male	108	133	34	5	118	19	21,763
	Female	110	115	48	10	112	23	17,432
Large Scale Farmers	Total	104	157	61	0	128	26	1,915
	Male	120	137	65	0	129	24	993
	Female	91	202	58	0	125	27	922
Non Agricultural	Total	94	84	61	14	91	31	77,081
	Male	90	100	97	19	93	44	43,373
	Female	98	69	37	9	88	20	33,708
Low Cost Areas	Total	98	91	81	26	95	48	865,560
	Male	100	94	89	24	98	49	433,219
	Female	96	88	74	28	93	46	432,341
Medium Cost Areas	Total	94	104	109	49	98	73	149,629
	Male	98	108	107	47	102	71	76,247
	Female	90	100	112	52	94	75	73,382
High cost Areas	Total	87	104	108	62	94	81	156,089
	Male	88	109	112	62	96	81	80,680
	Female	85	99	105	62	91	81	75,409

Table 6.5 shows the gross attendance rate by province. The results show that gross attendance rates for primary schools were higher in Southern and Northwestern provinces with 103 percent and 101 percent respectively, followed by Lusaka and Northern provinces at 97 percent and 98 percent, respectively. Eastern province recorded the lowest gross attendance rate for primary schools with 76 percent. Copperbelt province recorded the highest gross attendance rate for secondary schools at 52 percent, while Eastern and Western provinces recorded the lowest both at 15 percent.

**Table 6.5: Gross School Attendance Rates by Grades, Sex and Province, Zambia, 2002–2003**

Province	Gross School attendance (grade) Rate							Persons 5–22 Years
		1–4	5–7	8–9	10–12	1–7	8–12	
Zambia	Total	105	77	51	16	94	30	2,863,858
	Male	108	81	52	15	97	31	1,502,594
	Female	102	73	50	17	90	30	1,361,264
Central	Total	102	80	42	14	94	26	293,167
	Male	104	78	42	14	94	27	159,440
	Female	100	82	41	13	94	26	133,727
Copperbelt	Total	104	85	90	29	96	52	528,853
	Male	106	88	92	28	98	53	260,501
	Female	102	82	88	30	93	51	268,352
Eastern	Total	91	54	30	5	76	15	285,916
	Male	86	66	29	5	78	15	150,920
	Female	95	42	32	6	74	16	134,996
Luapula	Total	118	64	34	8	94	18	197,470
	Male	121	71	42	9	100	21	101,829
	Female	116	58	28	7	89	15	95,641
Lusaka	Total	94	101	72	31	97	48	446,035
	Male	98	105	86	26	101	52	233,379
	Female	89	97	61	34	92	46	212,656
Northern	Total	116	71	32	10	98	19	345,977
	Male	125	81	29	13	108	20	201,642
	Female	107	60	37	7	88	18	144,335
North-western	Total	115	79	51	12	101	26	180,126
	Male	129	86	50	11	111	26	99,905
	Female	103	71	51	12	92	26	80,221
Southern	Total	112	89	53	13	103	30	406,874
	Male	112	88	51	11	102	28	202,853
	Female	112	91	54	15	104	32	204,021
Western	Total	109	58	25	8	87	15	179,440
	Male	117	53	29	7	86	16	92,125
	Female	102	65	21	9	87	14	87,315

#### 6.4. Net attendance rates

Net attendance rate is computed as the percentage of persons who attend grades corresponding to their ages.

The difference between the gross and net attendance rates might indicate the extent to which over and under– age pupils are in the school system at different levels.

Table 7.6 shows results of the net attendance rates by grade, sex and stratum. The results show that the net attendance rates for primary schools was 74 percent. This implies that only 74 percent of children aged 7–13 years attended the appropriate primary school grades. The net attendance rate for secondary school was 28 percent.

The net attendance rates for males and females at primary and secondary schools are not different. The net attendance rates for both males and females were 74 percent at primary schools, and 28 percent each for males and females at secondary schools.

In general, the net school attendance rates for urban areas were higher than the rural attendance rates at all levels of education. The net attendance rates were higher at lower levels (grades) for both rural and urban areas.

**Table 6.6: Net School attendance rates by Grade, Sex, Rural/Urban and Strata, Zambia, 2002–2003**

Residence/Stratum	Net School attendance (grade) rates							Persons 7–18 Years Attending
		1–4	5–7	1–7	8–9	10–12	8–12	
Zambia	Total	64	35	74	18	14	28	2,580,284
	Male	64	35	74	16	13	28	1,330,722
	Female	64	35	74	19	15	28	1,249,562
Rural	Total	59	24	70	8	5	15	267,461
	Male	59	24	69	7	5	16	142,099
	Female	60	25	70	8	5	14	125,362
Urban	Total	74	55	82	35	29	50	467,424
	Male	75	56	83	33	28	52	229,428
	Female	72	53	81	37	30	49	237,996
Small Scale Farmers	Total	59	24	69	7	5	14	259,525
	Male	58	23	69	7	4	14	132,179
	Female	60	24	70	8	5	14	127,346
Medium Scale Farmers	Total	66	42	79	13	6	20	184,256
	Male	62	42	77	11	3	18	93,676
	Female	71	42	81	15	9	22	90,580
Large Scale Farmers	Total	85	76	96	14	0	26	394,221
	Male	83	71	100	32	0	24	203,860
	Female	86	87	90	0	0	27	190,361
Non Agricultural	Total	67	28	72	8	13	27	314,294
	Male	64	31	75	9	19	43	179,778
	Female	71	25	70	8	8	15	134,516
Low Cost Areas	Total	73	52	81	31	23	44	158,522
	Male	74	53	81	30	21	46	86,397
	Female	71	51	80	32	25	43	72,125
Medium Cost Areas	Total	78	63	86	47	41	65	369,991
	Male	82	64	87	39	41	63	180,311
	Female	75	61	85	54	42	66	189,680
High cost Areas	Total	77	63	86	50	49	71	164,590
	Male	77	66	89	49	51	74	82,994
	Female	76	61	83	50	48	69	81,596

Figure 6.2 shows the net attendance rates by rural and urban. The graph indicates that net attendance rates are higher in lower grades for both urban and rural areas. Urban has higher attendance rates for all grades.

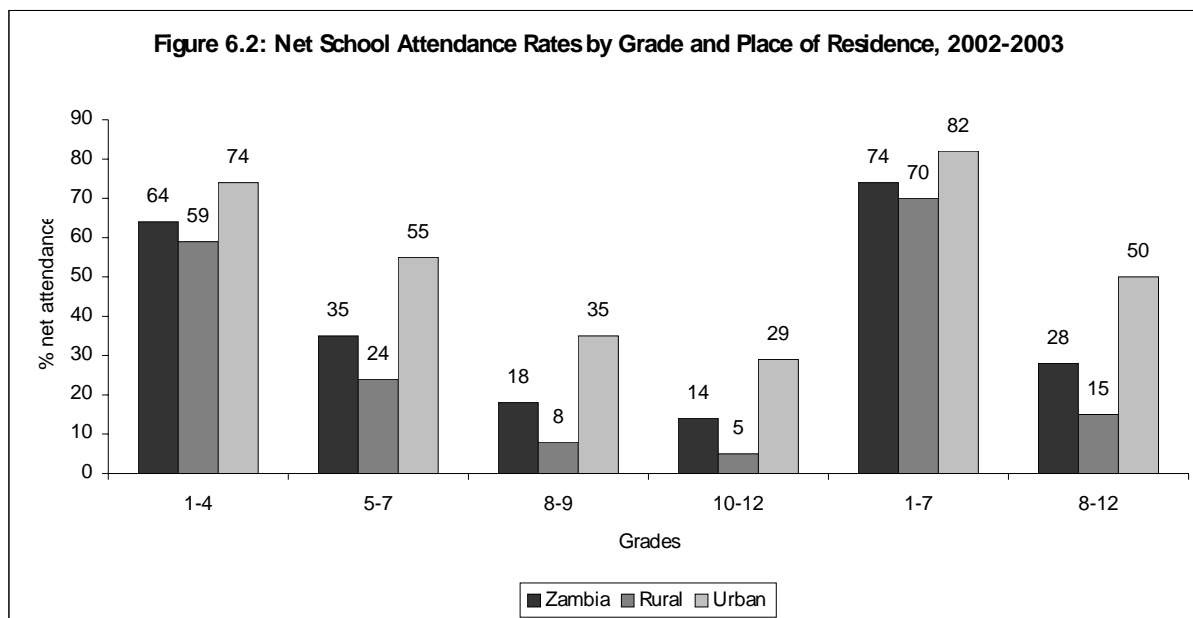


Table 6.7 shows net attendance rates by grade, sex and province. Copperbelt province reported the highest net attendance rate at primary school with 82 percent, followed by Southern and Lusaka provinces at 81 percent and 80 percent respectively. Eastern province recorded the lowest net attendance rate at primary school with 59 percent.

**Table 6.7: Net School Attendance Rates by Grade, Sex and Province, Zambia, 2002-2003**

		Net School attendance (grade) Rate						Persons 7-18 Years
		1-4	5-7	8-9	10-12	1-7	8-12	
Zambia	Total	64	35	18	14	74	28	2,580,284
	Male	64	35	16	13	74	28	1,330,722
	Female	64	35	19	15	74	28	1,249,562
Central	Total	65	36	15	13	75	25	267,461
	Male	63	33	17	14	72	25	142,099
	Female	67	39	14	12	78	24	125,362
Copperbelt	Total	74	51	33	25	82	47	467,424
	Male	76	50	32	26	83	48	229,428
	Female	72	52	33	25	82	47	237,996
Eastern	Total	49	24	9	5	59	15	259,525
	Male	45	28	8	4	56	14	132,179
	Female	52	20	10	6	62	15	127,346
Luapula	Total	57	21	10	7	69	17	184,256
	Male	61	23	11	9	71	20	93,676
	Female	52	20	8	6	67	14	90,580
Lusaka	Total	72	51	28	25	80	43	394,221
	Male	74	54	27	21	82	47	203,860
	Female	70	47	29	29	77	40	190,361
Northern	Total	60	22	10	9	72	18	314,294
	Male	61	19	6	11	74	19	179,778
	Female	60	25	14	7	71	18	134,516
N-western	Total	66	29	16	11	76	25	158,522
	Male	71	27	14	11	80	26	86,397
	Female	63	30	15	12	72	24	72,125
Southern	Total	74	39	17	12	81	28	369,991



	Male	70	39	12	11	79	26	180,311
	Female	77	39	21	13	83	29	189,680
Western	Total	53	21	7	7	63	14	164,590
	Male	53	19	7	5	61	15	82,994
	Female	53	24	7	8	66	14	81,596

### 6.5. Type of school attending

The provision of education in Zambia has been liberalised and as such there are a number of other providers who have come on board to work with the government in providing education at various levels in the country.

Table 6.8 shows the percentage distribution of persons attending school by type of school they were attending. Type of school refers to who owns and runs the school. The following are the type of schools: Government, local Government, mission/religious, industrial, private and other.

Table 6.8 indicates that Government was the major provider of education, with about 87 percent of school going population attending Government schools. This is true for all education levels. The private sector had a significant contribution of about 26 and 21 percent at college and University or higher levels of education respectively.

**Table 6.8: Percentage Distribution of the Population Currently Attending School by Type of School Attending and Level of Education, Zambia, 2002–2003**

Education Level	Type of School						Total
	Government	Local Government	Mission/ Religious	Industrial	Private	Other	
All Zambia	87.4	2.2	2.7	0.1	4.5	3.1	100.0
Primary	87.3	2.2	2.2	0.1	4.3	3.9	100.0
Secondary	89.8	2.4	4.2	0.1	3.5	0.0	100.0
College	62.2	0.8	6.6	3.2	26.3	0.9	100.0
University and above	69.7	0.6	5.4	1.6	21.3	1.4	100.0

### 6.6. Level of Education of the Population

The level of education of the population has influence on the well being of individuals. Table 6.9 shows the percentage distribution of the population aged 5 years and above by highest level of education attained, sex, residence and age – group. The results show that about 27.2 percent of the population aged 5 years and above had never attended any formal education. About 25 percent of those with no formal education are males and 30 percent females.

The results also show a decline in the proportions of the population with every increase in the level of education attained, indicative of how restrictive higher and tertiary education is in Zambia.

**Table 6.9: Percentage of the Population Aged 5 Years and Above, by Highest Level of Education Attained by Sex, Rural/Urban and Age Group, Zambia, 2002–2003**

Highest level of education attained								
	None	1–4	5–7	8–9	10–12	Grade 12 GCE	Bachelors degree	Total

Residence, Sex and age group						(A)/College/ Undergraduate	and above	
<b>Zambia</b>	27.2	25.9	24.5	10.7	9.0	1.2	1.5	100
Male	24.6	25.1	24.3	11.3	11.5	1.3	1.9	100
Female	29.7	26.7	24.8	10.1	6.5	1.0	1.2	100
Rural total	33.0	29.6	25.0	7.6	3.8	0.5	0.5	100
Male	29.4	29.0	26.1	8.8	5.4	0.6	0.7	100
Female	36.4	30.1	24.0	6.3	2.5	0.4	0.3	100
Urban	16.9	19.5	23.7	16.2	18.0	2.4	3.3	100
Total								
Male	16.1	18.1	21.0	15.6	22.4	2.6	4.2	100
Female	17.7	20.8	26.3	16.7	13.7	2.2	2.6	100
<b>Age- Group</b>								
5-9	74.1	25.3	0.6	0.0	0.0	0.0	.	100
10-14	15.6	61.2	20.9	2.3	0.0	0.0	0.0	100
15-19	10.3	20.3	39.4	19.8	9.8	0.4	0.0	100
20-24	12.3	12.2	32.3	19.9	20.2	2.1	1.0	100
25-29	13.5	12.6	33.7	19.1	15.5	2.9	2.7	100
30-39	13.6	11.7	35.1	18.2	14.9	2.5	4.0	100
40-49	16.5	13.7	33.1	10.1	19.3	2.1	5.2	100
50-59	29.1	26.5	20.6	7.5	10.3	1.6	4.4	100
60 & above	45.9	32.1	15.1	2.6	2.1	0.8	1.4	100

### 6.7. Reasons for leaving/never attending school

During the survey, persons who were not attending school were asked to give reasons for leaving school or why they never attended school at all.

Table 6.10 indicates the reasons for leaving school by education level when one left school. Lack of support was the main reason for those who left school between grades 1 and 4 with about 47 percent, followed by no need to continue school at about 14 percent. About 20 percent of those who fail to complete school were either not selected or failed or could not get a place, and about 36 percent attributed their leaving school to lack of financial support at national level or at all the levels of education.

**Table 6.10: Percentage Distribution of Persons aged 5 years and Above Who Ever Attended School, not Currently Attending School by Highest Level Attended and Reasons for Leaving School**

Reasons for leaving school	Highest level of education attained (Grades)						
	1-4	5-7	8-9	10-12	Grade 12 GCE (A)/ College/Undergraduate	Bachelors degree and above	Total Zambia
<b>Zambia</b>	100	100	100	100	100	100	100
1. Working	0.5	0.6	1.1	3.7	13.3	8.6	1.7
2. Too Expensive	0.9	0.4	0.6	0.1	0.1	.	0.5
3. School Too Far	7.4	1.3	0.4	0.0	0.3	0.1	2.4
4. Not Selected/ Failed/ Couldn't get a place	1.2	30.7	36.5	9.6	0.7	0.7	19.8
5. Pregnancy	1.4	4.1	9.7	3.6	0.3	0.1	4.2
6. Made girl pregnant	0.4	0.4	0.9	0.7	.	.	0.5
7. Completed studies	0.1	0.6	0.5	61.2	82.7	88.8	14.1
8. Got Married	3.8	3.8	2.9	1.4	0.7	0.3	3.2
9. No need to continue school	13.7	6.6	2.6	0.9	0.3	0.2	6.3
10. School Not Important	9.0	3.7	1.2	0.5	0.3	0.2	3.8

11. Unsafe to travel to school	1.0	0.4	0.0	0.0	.	.	0.4
12. Expelled	0.3	0.3	0.4	0.9	.	0.0	0.4
13. Lack of support	46.9	40.9	39.6	15.9	1.1	0.6	36.3
14. Need to help out at home	6.0	1.7	0.6	0.3	.	0.3	2.2
15. Illness/Injury/Disability	4.7	2.9	1.9	0.8	.	0.1	2.6
16. Other reasons	2.7	1.6	1.1	0.4	0.2	0.0	1.6

Table 6.11 shows the reasons for those who never attended by various age groups. Thirty three percent of all age groups who never went to school gave the reason of never being enrolled. The second major reason given for never attending school was being under age. The third and fourth reasons given for never attending school were lack of financial support and school not important.

**Table 6.11: Percentage Distribution Of Persons Aged 5 Years And Above Who Never Attended School By Age Group And Reasons For Never Attending**

Age Group										
Reason for never attending School	5-9	10-14	15-19	20-24	25-29	30-39	40-49	50-59	60+	Zambia
Zambia	100	100	100	100	100	100	100	100	100	100
1. under age	63.2	5.1	0.7	1.5	0.9	2.9	1.8	0.3	0.4	31.3
2. was never enrolled	24.1	52.7	42.9	38.6	39.6	45.5	42.1	38.1	41.2	33.9
3. Couldn't get a place	2.3	1.6	1.9	1.2	3.7	1.1	0.6	0.8	0.2	1.7
4. Expensive	0.3	0.9	2.1	1.2	0.4	1.1	0.6	0.0	0.3	0.6
5. No support	4.2	20.7	25.4	26.2	25.2	21.9	26.2	21.0	12.2	12.9
6. School too far	2.9	5.8	7.4	11.7	9.4	7.1	7.7	14.2	15.4	6.7
7. Illness/injury/disabled	0.9	4.1	4.9	4.0	2.1	5.4	3.0	2.6	1.3	2.1
8. School not important	0.4	5.9	9.8	12.7	13.9	11.5	12.9	19.1	22.2	7.4
9. Unsafe to travel to school	0.5	1.3	1.1	0.5	1.2	0.6	2.1	2.3	3.0	1.1
10. Other reasons	1.2	1.9	3.8	2.4	3.6	2.9	3.0	1.6	3.8	2.3

## 6.8. Summary

In the age group 5-6 years, 13 percent were attending school in 2002/2003. In the age group 7-13 years, 75 percent were attending school. In the age group 14-18 years, 64 percent were attending school. In the age group 19-22 years, 21 percent were attending school. In the lower age groups (5-6, 7-10, 11-13 and 14-18) the proportions of girls attending school were higher than those of boys. The opposite is true for higher ages.

Urban areas have a much higher school attendance rate than rural areas at all levels or age groups. At provincial level, Eastern province recorded the lowest school attendance rate at both primary (age group 7-13) and secondary (age group 14-18) school. The poverty status of households has influence on school attendance. The school attendance rate for those households who are not poor are higher than those for the moderately and extremely poor households at all levels.

Government is still a major provider of education at all levels. Private sector has significant contribution at college and university levels. The single most important reason for not currently attending school for those who ever attended school is 'lack of support' 36 percent followed by 'not selected/failed/couldn't get a place'.

# CHAPTER 7

## HEALTH

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### 7.0. Introduction

The Government of the Republic of Zambia has committed itself to improving the quality of health for all Zambians through its efforts to improve health care delivery by reforming the health sector. An important component of the health policy reform is the restructured Primary Health Care (PHC) programme, which aims to, among other things, deal with the main health problems in the community. Particular attention has been paid to health because it is one of the major factors with significant impact on the living conditions of the population.

The Living Conditions Monitoring Survey (LCMS III) therefore, collected information on the health status of individuals in the households and the accessibility to and use of health facilities.

In order to come up with some health indicators, the following data items were included in the survey: –

- The prevalence of illness
- The most common illnesses
- Health consultations
- Cost on consultation, medication, etc
- Type of institution visited for health consultations
- Type of health care provider consulted/accessible to
- Type of services received at institution visited
- Admissions
- Method used to pay for health care
- Whether or not consulted further on illness

Information on health was obtained from all persons in the survey. The reference period for the health questions was the two-week period prior to the survey.

The findings in this section are presented in the following order; prevalence of illness, most common symptoms, health consultation, institutions visited, personnel consulted, mode of payments for consultation and average amounts people paid for consultation/medication.

### 7.1. Prevalence of Illness

Table 7.1 below shows the proportion of the population reporting illness in the two weeks period preceding the survey. Overall, 13 percent of the total population in Zambia reported an illness or

injury in the two weeks period preceding the survey. A higher proportion of the rural population, 16 percent, reported illness compared to the urban with 9 percent.

The distribution of illness by strata shows that, the small scale-farming households had the highest proportion of persons reporting illness/injury with 16 percent. The rural large-scale households and the rural medium agricultural households had, 15 percent and 14 percent respectively of persons reporting an illness/injury. At provincial level, Luapula Province had the highest prevalence of illness/injury with 19 percent, followed by Western Province at 17 percent. Eastern and Northern provinces also had quite high prevalence rates at 16 percent each. Also refer to Figure 7.1.

**Table 7.1: Proportion Of Persons Reporting Illness/Injury in the Two Weeks Period Preceding the Survey By Rural/Urban, Stratum, And Province, Zambia, 2002–2003**

Residence/Stratum/ Province	Proportion Sick/Injured	Total Population
<b>All Zambia</b>	<b>13</b>	<b>10, 757, 000</b>
Rural	16	7, 007, 000
Urban	9	3, 750, 000
<b>Stratum</b>		
Rural small scale farmers	16	6,533, 000
Rural medium scale farmers	14	119, 000
Rural large scale farmers	15	5, 000
Rural non-agricultural households	14	350, 000
Urban low cost areas	9	2, 929, 000
Urban medium cost areas	9	392,000
Urban high cost areas	9	429, 000
<b>Province</b>		
Central	13	1, 098, 000
Copperbelt	9	1, 708, 000
Eastern	16	1, 441, 000
Luapula	19	852, 000
Lusaka	7	1, 496, 000
Northern	16	1, 371, 000
North Western	14	637, 000
Southern	15	1, 336, 000
Western	17	818, 000

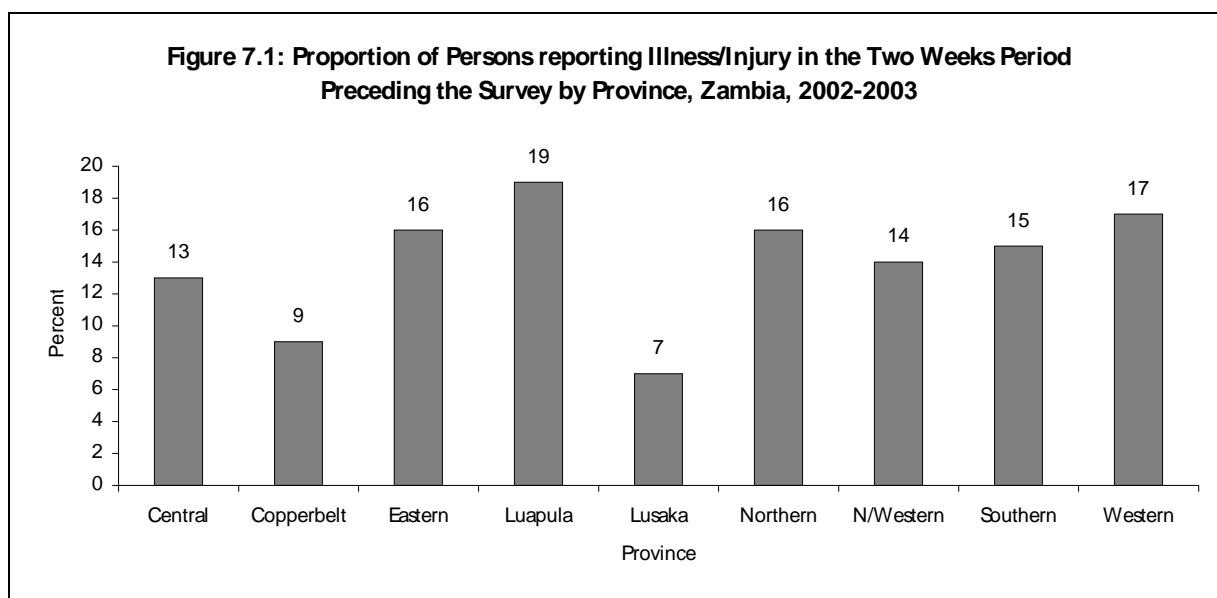


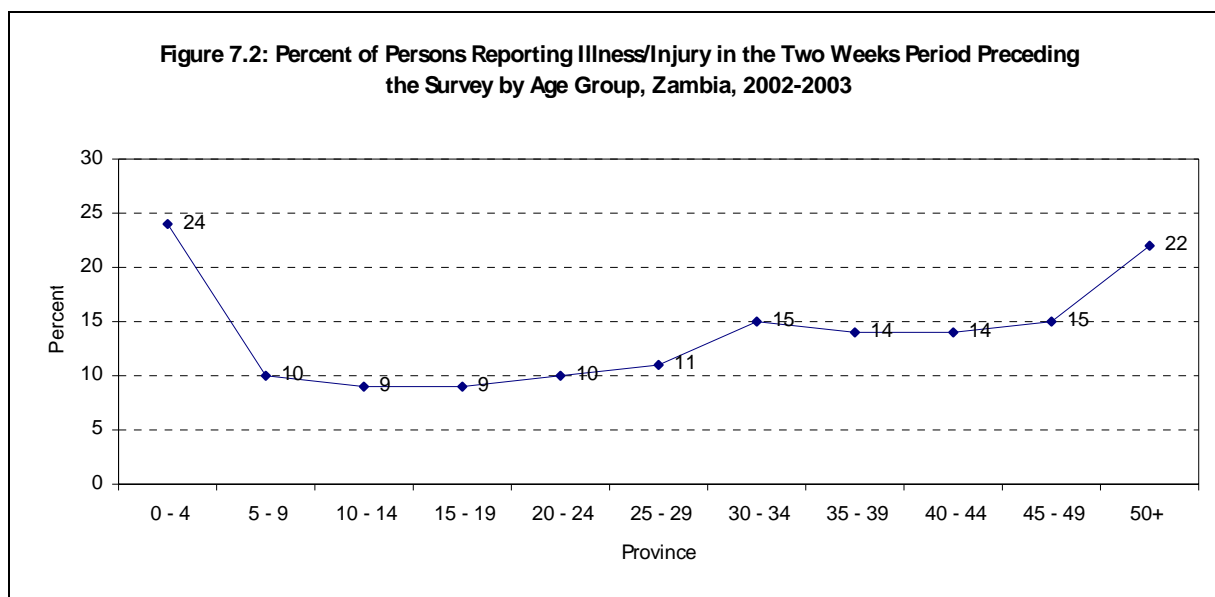
Table 7.2 and Figure 7.2 shows the distribution of persons reporting illness/injury in the two-week period preceding the survey by sex and age group. More of the female population, 15 percent, reported an illness/injury in the two-weeks period preceding the survey compared to the male population, at 12 percent.

The under five (0–4 year age group), and the aged (50+ years) reported the highest prevalence of illness, with 24 and 22 percent respectively, followed by persons in the age group 30–34, and 45–

49 at 15 percent each. The age groups 10–14 and 15–19 had the lowest proportion with 9 percent each.

**Table 7.2: Percentage of Persons Reporting Illness/Injury in the Two Weeks Period Preceding the Survey by Sex and Age, 2002–2003**

Sex/Age Group	Proportion reporting illness/injury	Total Population
All Zambia	13	10,757,000
Male	12	5,280,000
Female	15	5,477,000
<b>Age Group</b>		
0–4	24	1,637,000
5–9	10	1,716,000
10–14	9	1,568,000
15–19	9	1,280,000
20–24	10	1,022,000
25–29	11	805,000
30–34	15	661,000
35–39	14	509,000
40–44	14	379,000
45–49	15	309,000
50+	22	871,000



## 7.2. Most Common Symptoms/Illness

During the survey, the people that reported illness/injury were asked to give the various symptoms of illness or illnesses that they had suffered from two weeks prior to the survey. Table 7.3 below shows the percentage distribution of persons reporting various illnesses by rural/urban and type of illness. The table shows that 37 percent of persons in the country reported having been suffering from fever and/or malaria. This was followed by the prevalence of cough/cold/chest infections, at 21 percent.

The table also shows that in both rural and urban areas the most commonly reported illness was fever/malaria. The prevalence was higher in urban areas, 43 percent, compared with 35 percent in



rural areas. Similar to the national situation, after fever / malaria, the most prevalent illness in both rural and urban areas was Cough/cold chest infection.

The other commonly reported illnesses were ordinary headaches, diarrhoea without blood, abdominal pains, eye infections, and a high proportion reported other type of injuries/illnesses.

**Table 7.3: Proportion of Persons Reporting Illnesses by Rural/Urban and Type of Illness Reported, Zambia, 2002–2003**

Type of illness reported	All Zambia	Rural/urban	
		Rural	Urban
Fever/malaria	36.9	35.0	42.9
Cough/cold chest infection	21.1	21.3	20.5
Tuberculosis	1.3	0.8	2.7
Asthma	1.0	1.0	1.1
Bronchitis	0.4	0.3	0.6
Pneumonia	1.4	1.6	0.8
Diarrhoea without blood	4.9	5.2	3.9
Diarrhoea with blood	0.9	1.0	0.4
Diarrhoea and vomiting	1.1	1.2	0.9
Vomiting	0.5	0.5	0.3
Abdominal pains	4.8	5.3	3.4
Constipation	0.6	0.7	0.5
Liver infection	0.2	0.3	0.1
Lack of blood	0.4	0.4	0.3
Boils	0.6	0.6	0.4
Skin rash	1.5	1.4	1.8
Piles haemorrhoids	0.2	0.3	0.0
Shingles	0.1	0.0	0.2
Paralysis	0.3	0.3	0.2
Stroke	0.2	0.2	0.2
Hypertension	0.7	0.4	1.7
Diabetes	0.1	0.1	0.2
Eye infection	3.3	3.9	1.3
Ear infection	0.7	1.8	0.4
Toothache/mouth infection	1.9	1.9	1.8
Headache	6.3	6.7	5.2
Measles	0.4	0.4	0.4
Jaundice	0.2	0.2	0.2
Other	8.2	8.5	7.3
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 7.4 below shows the proportion of persons reporting illnesses by age group and type of illness. For all the age groups malaria was the most prevalent illness. This was followed by cough, cold or chest infection. The prevalence of Diarrhoea without blood was also high especially in the age groups 0–4. The table also shows that a significant number of people in the age groups 20–24, 25–29 and 30–34 were reported to be suffering from abdominal pains. Headache was also a common illness especially in the age range of 15–19, 20–24 and 25–29.

**Table 7.4: Proportion of Persons Reporting Illness/Injury by Age Group and Type of Illness Reported, Zambia, 2002–2003**

Type of illness reported	All Zambia	Age-group (Years)										
		0–4	5–9	10–14	15–19	20–24	25–29	30–34	35–39	40–44	45–49	50+
Fever/malaria	36.9	44.4	44.0	42.8	37.6	36.8	34.8	30.9	31.8	30.0	25.7	21.3
Cough/cold /chest infection	21.1	19.7	26.5	21.6	22.2	19.3	20.2	20.2	19.4	24.0	22.5	18.7
Tuberculosis	1.3	0.3	0.8	0.3	0.7	0.6	1.5	3.2	2.8	4.0	3.0	2.0
Asthma	1.0	0.4	0.5	1.2	0.2	0.6	0.4	2.0	.	0.0	1.8	3.5
Bronchitis	0.4	0.5	0.4	1.4	0.0	.	.	0.6	.	1.0	0.4	0.0
Pneumonia	1.4	0.2	0.4	0.5	1.0	1.3	3.0	1.9	3.3	1.0	2.2	3.7
Diarrhoea without blood	4.9	10.9	2.0	2.0	2.8	3.9	2.4	3.3	1.5	4.0	2.6	3.0
Diarrhoea with blood	0.9	1.8	1.3	0.7	.	0.2	0.9	0.3	0.7	1.0	.	0.4
Diarrhoea and vomiting	1.1	2.7	0.2	0.1	0.9	1.4	0.3	0.3	0.6	.	.	1.0
Vomiting	0.5	0.6	0.7	0.4	0.3	0.4	0.5	0.3	.	.	.	0.5
Abdominal pains	4.8	2.5	3.2	3.0	5.7	6.7	6.8	10.5	5.0	5	7.5	5.9
Constipation	0.6	0.8	0.5	0.5	0.8	0.7	0.6	0.4	0.7	.	0.3	0.7
Liver Infection	0.2	0.1	0.1	.	.	.	0.2	.	0.3	.	1.4	1.0
Lack of Blood	0.4	0.5	0.1	0.1	0.2	0.1	.	0.9	0.5	.	.	0.8
Boils	0.6	0.3	0.5	0.4	0.2	1.5	0.8	0.9	1.1	.	1.5	0.4
Skin Rash	1.5	2.1	2.2	2.3	1.2	0.7	1.1	0.7	1.9	.	1.3	1.1
Piles Haemorrhoids	0.2	0.3	0.3	.	.	0.2	.	.	.	1.0	0.1	0.3
Shingles	0.1	0.1	0.2	.	0.1	0.1	.	.	.	0.0	.	.
Paralysis	0.3	.	0.1	.	0.0	.	0.9	0.2	0.3	0.0	.	1.3
Stroke	0.2	.	0.2	.	0.6	.	.	.	0.2	.	0.2	0.7
Hypertension	0.7	.	0.0	.	0.3	0.6	1.3	1.2	1.2	1.0	1.8	2.5
Diabetes	0.1	.	.	.	.	0.6	.	0.1	0.4	0.0	0.2	0.1
Eye infection	3.3	5.4	3.3	2.2	2.5	3.1	2.4	0.5	1.9	2.0	2.8	3.6
Ear infection	0.7	0.5	1.2	1.3	0.0	1.0	0.2	0.9	0.4	0.0	0.5	0.4
Toothache/mouth infection	1.9	0.2	0.4	1.2	1.2	3.3	2.6	2.9	7.4	3.0	4.4	2.5
Headache	6.3	1.7	5.0	9.2	10.6	9.5	10.5	8.1	8.5	7.0	4.7	6.9
Measles	0.4	0.6	0.5	1.3	0.0	.	0.0	0.8	.	0.0	.	.
Jaundice	0.2	0.3	.	0.4	0.3	.	0.2	.	.	0.0	0.1	0.1
Other	8.2	3.2	5.4	7.1	10.5	7.3	8.5	8.4	10.1	9.0	15.1	17.6
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 7.5 below shows the proportion of persons reporting various illnesses by province. Malaria was the most prevalent disease in all the provinces with Southern province recording the highest, 48 percent. This was followed by Copperbelt province, 45 percent, Lusaka, 39 percent, Eastern, 36 percent, Central and Northern provinces with 35 percent each. Luapula province recorded the lowest, with 28 percent. All in all, all the provinces had more than a quarter of their population reporting illness having suffered from fever/malaria.

The second most prevalent illness was cough, cold or chest infection. Luapula province had the highest proportion with 29 percent, followed by Central with 27 percent and Copperbelt, 22 percent. The other illnesses that were common in all the provinces were Diarrhoea without blood, abdominal pains and headaches.

**Table 7.5: Proportion of Persons Reporting Illness/Injury by Province and Type of Illnesses Reported, Zambia, 2002–2003**

Type of illness reported	All Zambia	Central	Copperbelt	Eastern	Luapula	Lusaka	Northern	North western	Southern	Western
Fever/malaria	36.9	34.8	44.6	35.6	27.6	38.9	35.3	32.4	48.3	30.6
Cough/cold chest infection	21.1	26.9	22.2	21.4	28.5	17.9	23.1	21.8	12.8	14.5
Tuberculosis	1.3	0.6	2.7	0.3	0.8	3.3	0.4	1.8	1.0	2.1
Asthma	1.0	0.7	1.4	0.3	1.7	0.9	1.2	0.8	1.5	0.9
Bronchitis	0.4	0.4	0.6	0.6	.	1.1	0.2	0.1	0.3	.
Pneumonia	1.4	1.0	0.6	1.5	0.8	0.7	2.1	0.6	1.0	3.9
Diarrhoea without blood	4.9	4.5	3.3	5.1	5.6	3.6	6.0	3.1	7.0	1.9
Diarrhoea with blood	0.9	0.4	0.3	1.4	1.4	1.8	0.9	1.2	0.6	0.4
Diarrhoea and vomiting	1.1	1.7	.9	1.1	0.9	1.2	2.2	0.5	0.1	1.0
Vomiting	0.5	0.7	0.2	0.6	0.0	0.3	0.3	0.5	0.3	1.2
Abdominal pains	4.8	5.2	2.8	4.0	6.2	3.6	6.3	5.1	4.6	5.1
Constipation	0.6	1.0	0.6	0.2	0.3	0.9	0.2	1.1	0.4	1.9
Liver infection	0.2	.	.	0.6	.	0.5	0.3	0.8	.	0.2
Lack of Blood	0.4	0.2	0.5	0.2	0.9	.	0.2	0.3	0.7	0.1
Boils	0.6	0.3	0.1	0.7	0.5	0.3	0.4	0.8	0.6	1.4
Skin rash	1.5	1.1	1.7	0.5	2.6	2.2	1.2	2.7	0.4	3.1
Piles Haemorrhoids	0.2	0.3	.	0.8	.	.	.	.	0.4	.
Shingles	0.1	.	0.1	.	0.2	.	0.2	0.0	0.1	.
Paralysis	0.3	0.2	.	0.1	0.3	0.6	0.5	0.6	0.1	0.4
Stroke	0.2	0.5	0.1	0.4	0.1	0.3	0.1	.	.	0.2
Hypertension	0.7	0.4	1.0	0.6	0.3	3.1	0.5	0.5	0.2	0.8
Diabetes	0.1	0.1	0.2	.	.	.	0.1	.	0.4	.
Eye infection	3.3	4.1	1.6	2.5	3.5	2.5	2.7	4.2	4.5	4.7
Ear infection	0.7	0.5	0.7	0.4	.	0.5	1.2	0.2	0.5	1.9
Toothache/mouth infection	1.9	0.5	1.5	2.6	2.3	1.2	2.0	1	2	3
Headache	6.3	5.7	3.2	9.7	4.6	6.8	5.0	4	4	13
Measles	0.4	0.5	0.1	0.1	0.9	0.7	0.4	1	0	1
Jaundice	0.2	0.0	.	0.3	0.2	0.5	0.3	0.4	.	0.1
Other	8.2	7.9	9.1	8.5	9.7	6.5	6.5	14.6	7.2	6.5
Total	100	100	100	100	100	100	100	100	100	100

### 7.3. Health Consultation

Health consultation in the survey meant, seeking medical advice from any medical institution or personnel. Institutions consulted included medical, traditional, church and spiritual institutions. If a person initially consulted and later used self-administered medicine, this person was regarded as having consulted.

Table 7.6 shows proportion of persons reporting illness in the two weeks prior to the survey by sex, age group and consultation status. The table shows that, at national level, 52 percent of the persons who reported illness in the two weeks prior to the survey had consulted over their illness. The persons that used self-administered medicine were about 21 percent of the persons reporting

illness. The table also shows a significantly high proportion of person who reported illness but neither consulted nor used self-administered medicine.

The distribution by sex did not show much difference with the pattern at national level. The distribution by age group showed that consultation for illness was highest for the younger age groups with the children below the age of five years having the highest proportion, 69 percent, followed by 54 percent for the children between 5 and 9 years. Generally proportions of the persons consulting were higher for all age groups than the proportions of those that used self-administered medicines and those that did nothing about the illness.

The age group reporting the highest proportion of persons who used self-administered medicine was 15 to 24 years. The age group 50+ had the highest proportion of persons reporting not to have done anything about their health, over one third of the persons who reported illness. Also refer to Figure 7.3.

**Table 7.6: Proportion of Persons Reporting Illness in the Two Weeks Prior to the Survey by Sex, Age Group and Consultation Status, Zambia 2002–2003**

Sex/Age Group	Consultation Status			Percent Total	Total Number of ill persons
	Consulted	Self Administered medicine	None		
Zambia total	52	21	27	100	1,465,000
Male	53	21	26	100	
Female	52	21	27	100	804,000
<b>Age Group</b>					
0–4	69	15	16	100	383,000
5–9	54	21	25	100	171,000
10–14	45	27	28	100	137,000
15–19	40	29	31	100	114,000
20–24	38	29	33	100	100,000
25–29	45	23	32	100	92,000
30–34	52	18	30	100	100,000
35–39	47	23	30	100	72,000
40–44	44	28	28	100	55,000
45–49	47	21	32	100	47,000
50+	48	17	35	100	192,000
Not stated	36	16	48	100	2,000

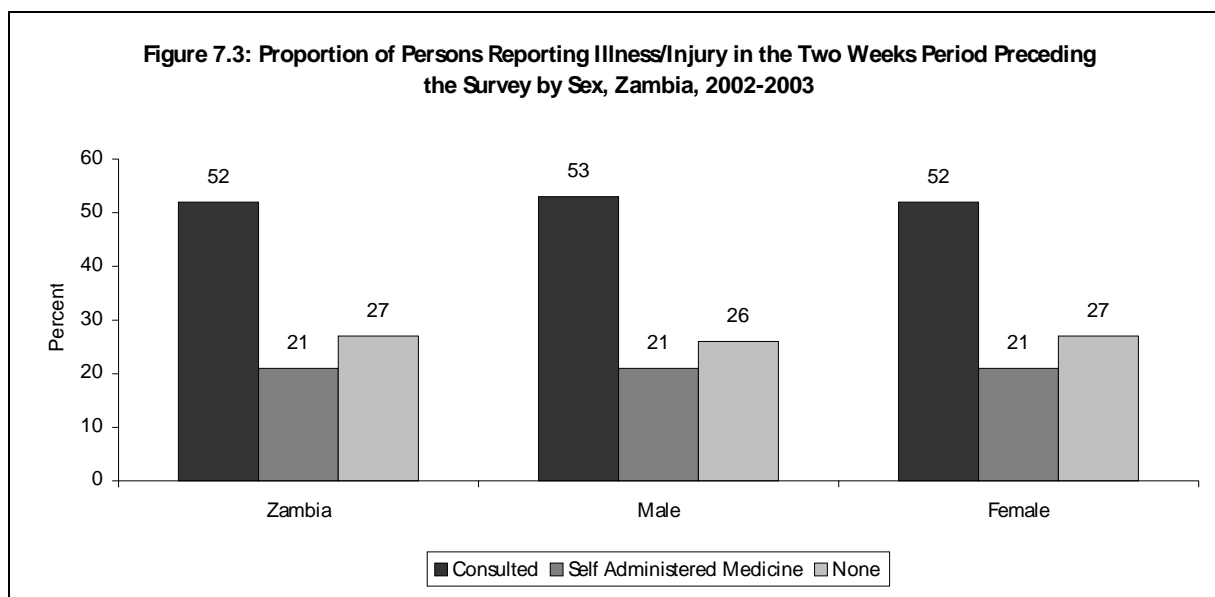


Table 7.7 shows the proportion of persons reporting illness in the two weeks prior to the survey by province, Rural/Urban and consultation status. Consultation by place of residence indicates over half the number of persons reporting illness in both rural and urban areas consulted over their illness. The urban areas had higher proportions of persons using self-administered medicines than the rural areas with 28 and 19 percent respectively.

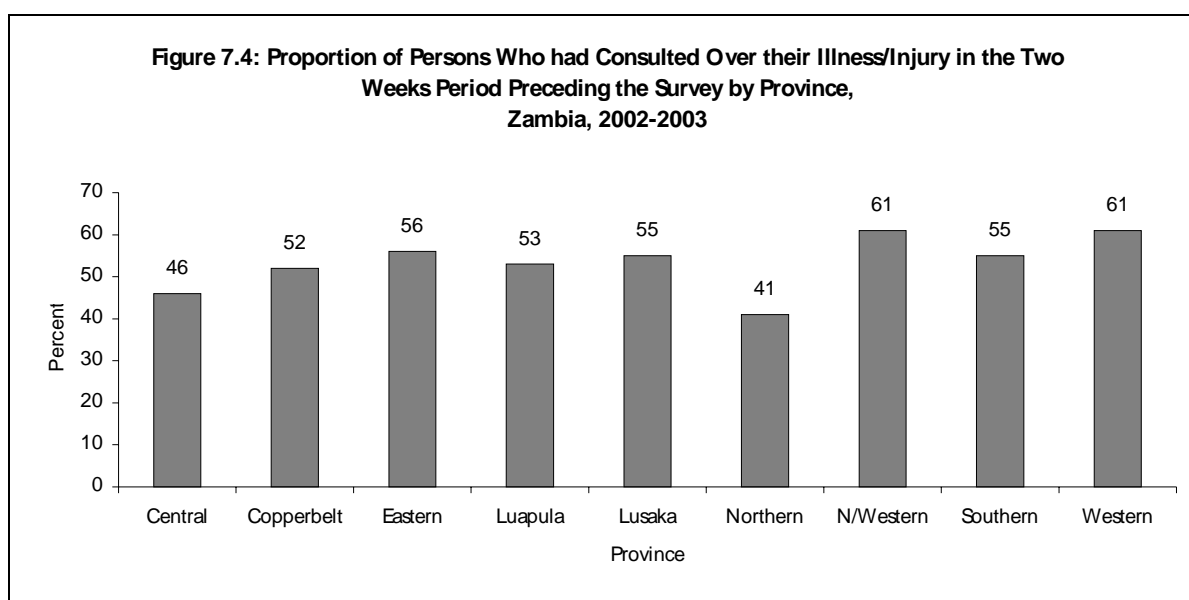
Distribution by province shows that North western and Western provinces had the highest proportion of persons reporting to have consulted over their illness with 61 percent each. Northern Province had the lowest proportion reporting to have consulted with 41 percent. Northern Province also had the highest proportion of persons that reported not to have done anything over the illness, 42 percent and this was higher than the proportion that consulted.

Copperbelt province had the highest proportion reporting to have used self administered medicines, 31 percent and the lowest proportion reporting not to have done anything about the illness, 17 percent.

**Table 7.7: Proportion of Persons Reporting Illness in the Two Weeks Prior to the Survey by Province, Rural/Urban and Consultation Status, Zambia 2002-2003**

Residence/Province	Consultation Status			Percent Total	Total Number of ill persons
	Consulted	Self Administered Medicine	None		
<b>Zambia total</b>	<b>52</b>	<b>21</b>	<b>27</b>	<b>100</b>	<b>1,465,000</b>
Rural	52	19	29	100	1,117,000
Urban	54	28	18	100	348,000
<b>Province:</b>					

Central	46	23	31	100	153,000
Copperbelt	52	31	17	100	163,000
Eastern	56	24	20	100	235,000
Luapula	53	20	27	100	162,000
Lusaka	55	26	19	100	105,000
Northern	41	17	42	100	223,000
North Western	61	18	21	100	89,000
Southern	55	17	28	100	198,000
Western	61	13	26	100	137,000



### 7.3.1. Institution Visited

Persons that reported to have consulted over the illness in the two weeks period prior to the survey were asked which type of institution they visited. Table 7.8 below shows the percentage distribution of persons who visited a health institution by type of institution visited and province.

The table shows that the Government offered the most service to the persons reporting illness in the two weeks prior to the survey with 48 percent visiting Government clinic, 26 percent visiting Government hospitals and 7 percent visiting Government health centres. This was also true in both rural and urban areas although the urban areas indicated a much higher proportion of persons visiting Government hospitals. The urban areas also indicated a significantly high proportion of persons visiting private clinics, 11 percent. The mission hospitals also played a major role in health provision in rural areas with 12 percent reporting to have visited them.

Distribution by province indicated that all the provinces exhibited a similar pattern with the national level with the Government playing the major role in the health service provision. Mission institutions also contributed significantly towards health provision of health service in North Western, Southern and Western provinces with 22, 14 and 16 percent, respectively.

In Lusaka province about 17 percent of the persons reporting illness visited private health institutions. Copperbelt province also had significantly high proportion of persons visiting private health institution at 9 percent.

**Table 7.8: Percentage Distribution of Persons Who Visited a Health Institution by Type of Institution Visited and Province, 2002–2003**

Residence/ Stratum/Province	Medical Institution												
	Govt Hospital	Govt Clinic	Govt Health centre	Mission	Industry	Private	Outside Zambia	Med personnel	Trad personnel	Spiritual personnel	Church	Other	Total
<b>All Zambia</b>	<b>26.2</b>	<b>48.2</b>	<b>6.8</b>	<b>9.1</b>	<b>1.2</b>	<b>3.7</b>	<b>0.1</b>	<b>0.8</b>	<b>1.0</b>	<b>0.3</b>	<b>0.0</b>	<b>2.6</b>	<b>100</b>
Rural	23.0	49.7	8.8	11.5	0.3	1.2	0.1	1.0	1.4	0.3	0.1	2.7	100
Urban	35.9	43.6	0.7	1.9	3.8	11.2	0.0	0.3	.	0.3	.	2.3	100
<b>Stratum</b>													
Small scale farmers	23.0	50.1	9.3	11.2	0.3	0.9	0.1	0.8	1.4	0.3	.	2.4	100
Medium scale farmers	13.3	54.1	3.2	13.6	1.4	4.8	.	.	.	.	0	9.7	100
Large scale farmers	27.4	43.6	.	.	.	29.1	.	.	.	.	0	.	100
Non-agricultural households	24.8	40.3	1.4	17.1	.	5.2	0.1	3.7	0.1	0.3	1.2	5.8	100
Low cost areas	34.6	47.4	0.6	2.4	2.3	9.5	.	0.3	.	0.2	.	2.6	100
Medium cost areas	36.8	40.2	0.3	0.4	6.0	14.1	0.2	0.3	.	0.2	.	1.5	100
High cost areas	43.1	23.0	2.0	0.2	10.7	18.8	.	.	.	1.0	.	1.2	100
<b>Province</b>													
Central	18.5	59.4	2.3	4.7	1.2	3.5	.	0.4	2.3	0.1	.	7.7	100
Copperbelt	35.2	43.1	1.8	4.5	5.2	8.7	.	0.1	0.2	0.4	.	0.9	100
Eastern	24.5	62.3	2.3	5.3	.	1.2	0.0	.	2.3	0.4	.	1.7	100
Luapula	29.0	44.7	13.1	8.1	1.8	1.2	0.6	.	0.5	0.1	.	0.9	100
Lusaka	26.5	51.2	1.3	0.9	0.4	16.8	.	1.8	.	.	.	1.1	100
Northern	37.2	39.1	8.5	8.0	2.0	0.8	.	2.9	0.7	0.1	.	0.1	100
North Western	23.6	38.1	3.5	21.7	.	1.4	.	1.0	0.4	0.2	.	10.0	100
Southern	21.6	46.0	9.3	14.2	.	3.8	.	1.5	1.1	0.8	0.3	1.4	100
Western	18.9	42.6	18.0	16.5	.	0.1	0.0	.	0.9	.	.	3.0	100

### 7.3.2. Personnel Consulted

Table 7.9 below shows the proportion of persons showing symptoms of illness in the two weeks period prior to the survey and type of personnel consulted during the first visit. The table shows that 51 percent of the persons, who consulted, consulted a clinical officer. Only 16 percent country wide consulted a medical doctor. The proportions that consulted the Traditional healer, Spiritual healer and Church healer were very insignificant.

The rural areas showed very similar patterns as the national level. In urban areas, 36 percent of persons who were ill consulted a medical doctor.

Distribution by province shows that Lusaka and Copperbelt provinces had the highest proportions of persons who reported to have consulted a Medical doctor, 49 and 40 percent respectively.



Luapula and Western provinces had the lowest proportions reporting to have consulted a Doctor, 5 and 4 percent respectively. For all the provinces apart from Lusaka and Copperbelt, the majority of the persons consulted a Clinical officer.

**Table 7.9: Proportion of Persons Showing Symptoms in the Two Weeks Prior to the Survey by Province and Type of Personnel Consulted During the First Visit, Zambia, 2002–2003**

Residence/Stratum/Province									Total
	Doctor	Clinical officer	Nurse/Midwife	Comm health worker	Trad. healer	Spiritual healer	Church healer	Other	
<b>Zambia Total</b>	<b>16</b>	<b>51</b>	<b>19</b>	<b>10</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>100</b>
Rural	9	54	20	13	1	0	.	3	100
Urban	36	43	18	1	.	0	0	2	100
<b>Stratum</b>									
Small scale farmers	9	55	18	14	1	0	.	3	100
Medium scale farmers	11	43	30	7	.	.	.	9	100
Large scale farmers	56	44	.	.	.	.	.	.	100
Non-agricultural households	10	37	48	2	0	.	.	3	100
Low cost areas	34	44	19	1	.	0	0	2	100
Medium cost areas	33	50	15	1	.	.	.	1	100
High cost areas	55	29	16	0	.	.	.	.	100
<b>Province</b>									
Central	17	41	22	10	2	0	.	8	100
Copperbelt	40	38	22	0	0	.	0	0	100
Eastern	10	64	17	5	2	1	.	1	100
Luapula	5	66	13	16	0	.	.	0	100
Lusaka	49	35	14	1	.	.	.	1	100
Northern	8	50	24	14	1	.	.	3	100
North Western	11	54	14	9	0	0	.	12	100
Southern	13	45	30	9	1	.	.	2	100
Western	4	56	12	26	1	.	.	1	100

### 7.3.3. Mode of Payment for Consultation

The survey collected information on the mode of payment persons reporting to have consulted used to pay for their consultation. Table 7.10 shows the proportion of persons who consulted over illness by province and mode of payment used to pay for consultation. The table shows that about half the number that consulted paid directly for their consultation. A very significant proportion indicated that they did not pay for their consultation, 40 percent. The results show that the proportion of persons that use pre payment schemes are very low, a total of 4 percent for both high and low cost schemes. Only one percent reported that the consultation was paid by employers.

The proportion of persons that paid directly was more in urban areas, 57 percent than in rural areas, 49 percent. The rural areas had a higher proportion of persons that did not pay for consultation, 44 percent, than urban areas, 27 percent. The proportion that used pre payment schemes were higher in urban than in rural areas.

The distribution by province showed that Southern province had the highest proportion of persons reporting to have paid directly for consultation. Western province had the lowest proportion of persons paying directly for consultation but it also had the highest proportion reporting not to

have paid for their consultation. The table shows that Lusaka province has a very significant proportion of persons that use prepayment schemes especially the low cost schemes, 19 percent.

**Table 7.10: Proportion of Persons who Consulted Over the Illness by Province and Mode of Payment Used to Pay for Consultation, 2002–2003**

Residence/Province	Mode of payment								Total
	Pre Pay low cost	Pre Pay high cost	Paid by Employer	Paid by Insurance	Paid part and Other s	Paid Directly	Did not pay	Paid by others	
<b>Zambia Total</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>51</b>	<b>40</b>	<b>4</b>	<b>100</b>
Rural	2	1	0	0	.	49	44	4	100
Urban	7	1	3	0	1	57	27	3	100
<b>Province</b>									
Central	3	1	0	1	.	62	27	6	100
Copperbelt	1	2	5	.	2	57	30	3	100
Eastern	3	1	.	.	.	46	47	3	100
Luapula	.	1	0	0	.	48	48	3	100
Lusaka	19	1	1	0	1	51	22	5	100
Northern	2	0	1	.	0	44	52	1	100
N/Western	.	0	0	1	.	47	43	9	100
Southern	1	1	1	.	0	65	31	1	100
Western	5	0	.	.	.	42	49	4	100

#### 7.3.4. Average Amount Paid for Consultation/Medication

During the survey information on the amount the persons reporting illness had paid for either consultation or medication was collected. Table 7.11 shows the amount that people spent on medication and consultation. Overall the average amount people spent was K5,416. The average amount spent in rural areas was less than a quarter of that spent in urban areas.

Results by person consulted show that the highest amount spent was the amount paid to Traditional healer. This was followed by the amount paid to Medical doctors which is less than half what was paid to Traditional healers. The least payment was paid to Community health workers.

**Table 7.11: Average Amount Spent on Medication and Consultation (Kwacha), by Person Consulted, 2002–2003**

Residence/Person Consulted	Amount Spent Mean
<b>Zambia Total</b>	<b>5,416</b>
Rural	2,832
Urban	13,497
<b>Person consulted</b>	
Doctor	20,770
Clinical Officer	2,352
Nurse or Midwife	1,530
Community health worker	1,181
Traditional healer	52,583
Spiritual healer	4,828
Other	833

#### 7.4. Summary

The findings from the survey indicated that about 13 percent of persons in Zambia reported an illness in the two weeks period prior to the survey. In rural areas, 16 percent of the people reported illness while in urban areas the proportion was 9 percent.

The most common illness reported in Zambia was Malaria with 37 percent of all the persons that reported illness reporting to have suffered from malaria. This pattern for both rural and urban areas was similar with 35 percent in rural and 43 percent in urban. For all the age group and provinces, the majority of the people reported to have suffered from malaria.

The proportion that reported to have consulted over the illness was about 52 percent of all the persons that reported to have had an illness. Twenty-one percent of the persons reporting illness used self administered medicine while 27 percent did not do anything to cure the illness.

The results also show that over 80 percent of persons that consulted visited either, a hospital, health center or clinic that is owned by the Government. The results show that the majority of persons who consulted over the illness were attended to by a Clinical officer, 51 percent, while only 16 percent were attended to by a Doctor. The proportion of persons who were attended to by a Doctor were higher in urban areas, 36 percent compared to rural areas, 9 percent.

Results by persons consulted show that the highest amount spent was paid to Traditional healers followed by amount paid to the Medical Doctors.

# CHAPTER 8

## ECONOMIC ACTIVITIES OF THE POPULATION

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### 8.1. Introduction

The well being of both individuals and households in society largely depends on their participation in gainful economic activities. The desire to attain and sustain a certain acceptable level of consumption of goods and services has led individuals to engage in various economic activities. Engagement in these activities not only ensures a person's livelihood but also equips an individual with means of acquiring and sustaining the basic needs of life such as food, clothing and shelter.

Most studies have revealed that the employment levels to a large extent determine the economy's production and consumption levels. In a developing country like Zambia, it becomes imperative to constantly measure and monitor changes in levels of economic activities overtime as fluctuations in employment levels have serious poverty implications.

The LCMS 2002–2003 survey collected data for measuring the state of economic activities in the country. In order to capture child labour, the population aged five years and above was deliberately targeted and used to provide information on labour force and income generating activities.

The following topics have been covered to determine the 2002–2003 levels of economic activities in the country: –

- Main economic activity
- Labour force participation
- Employment and unemployment
- Employment status
- Occupation and Industry of employment
- Sector of employment, formal versus informal
- The prevalence of secondary jobs
- Previous jobs held and
- Income generating activities for those not currently working

### 8.2. Concepts and Definitions

The following concepts and definitions constituted the guiding principles for collecting, processing and analyzing economic activities and labour force data. Most of the concepts used in this chapter conform to the ILO definitions of economic activity and labour force.

#### 8.2.1. The Economically Active Population (or Labour Force)

In the LCMS 2002–2003, the economically active population relates to all persons aged 12 years and above of either sex whose main economic activity status was to supply their labour for the

production of economic goods and services during the time of the survey. This comprised the employed and unemployed persons.

#### **8.2.2. Labour Force Participation Rate**

This refers to the proportion of the population aged 12 years and above who were in the labour force or were economically active at the time of the survey.

#### **8.2.3. The Employed Population**

This comprises persons who performed some work or conducted business, for pay, profit or family gain.

#### **8.2.4. Employment Status**

Employment status of the working population was classified into the following categories:-

- **Employer:** A person who operated his or her own economic enterprise(s) and used hired labour.
- **Employee:** A person who worked for a public or private employer and received remuneration in wages, salaries either in cash or in-kind.
- **Self-employed:** Refers to a person who operated his or her own economic enterprise(s) and hired no employees.
- **Unpaid Family Worker:** Refers to a person who normally assisted in the family business or farm but did not receive any pay or profit for work so performed.

#### **8.2.5. Unemployed Population**

This constituted persons who, at the time of the survey, were either looking for work/means to do business or were not looking for work/means to do business but were available for work/business.

#### **8.2.6. Unemployment Rate**

This refers to the number of the unemployed persons expressed as a percentage of the labour force or economically active population.

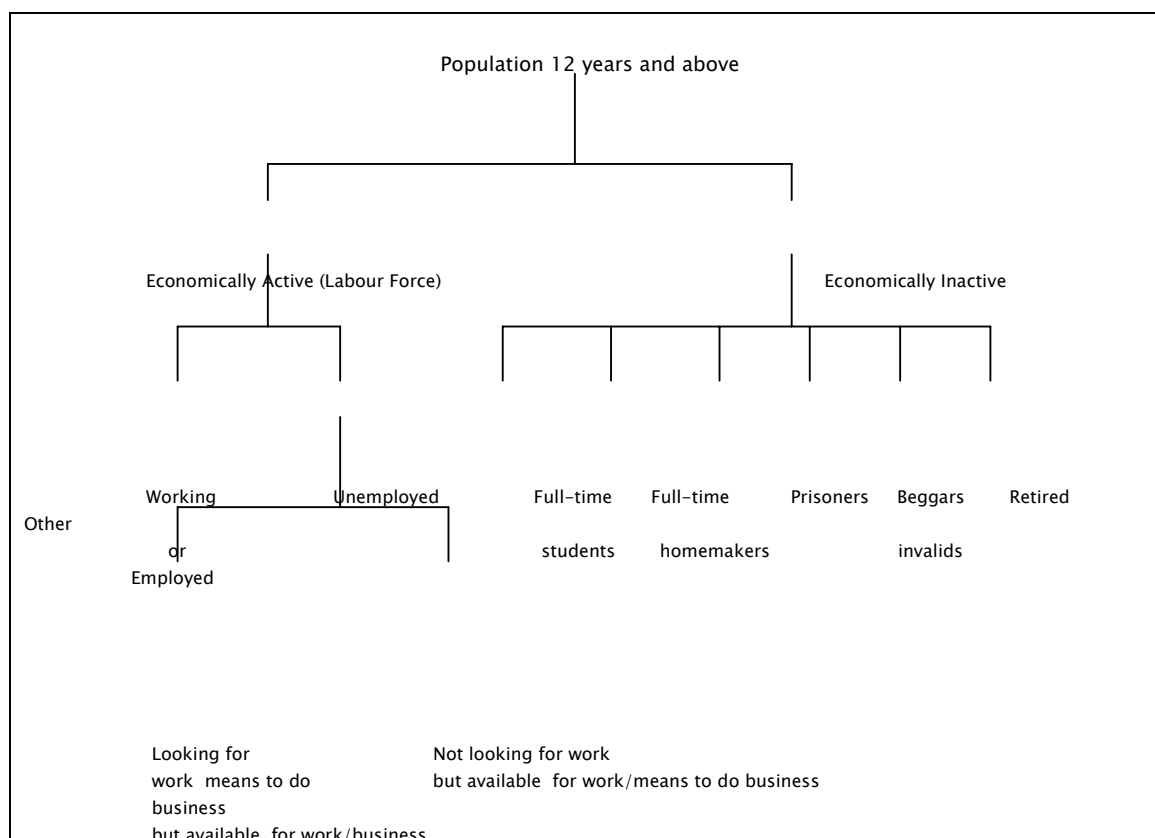
#### **8.2.7. Inactive Population**

This refers to persons aged 12 years and above who were not economically active. This includes full-time students, full-time home-makers, retired persons not doing any gainful work or business, vagabonds, the invalids, tramps, etc.

Below is the diagrammatical representation of the economic activity status of the population aged 12 years and above.

**Figure 8.1: Diagrammatic presentation of economic activity**





### 8.3. Economic Activity Status

Out of the total population aged 12 years and above in the country, 70 percent constituted the labour force. Of these, slightly over half, 59 percent, were employed. Of the remaining 30 percent who were in the inactive population, 27 percent of them were students and 1 percent was retired or too old to work. This is presented in Table 8.1.

The proportion of females in the labour force in relation to other females who were inactive was higher than that of the males. Table 8.1 shows that 59.5 percent of the females and 58.6 percent of the male population were in the labour force. However, there were more males in employment than females. There were no major differences in the unemployment rates between males and females. Of the economically inactive population, students constituted 28.9 percent and 25.8 percent of the male and the female, respectively.

Of the 3,665,600 persons aged 12 years and above residing in rural areas, 69 percent were employed, 4 percent were unemployed and 25 percent were students. In urban areas, however, 41.5 percent were employed, 23.5 percent were unemployed and 32 percent were students, suggesting that high unemployment is a phenomenon more prevalent in urban than rural areas.

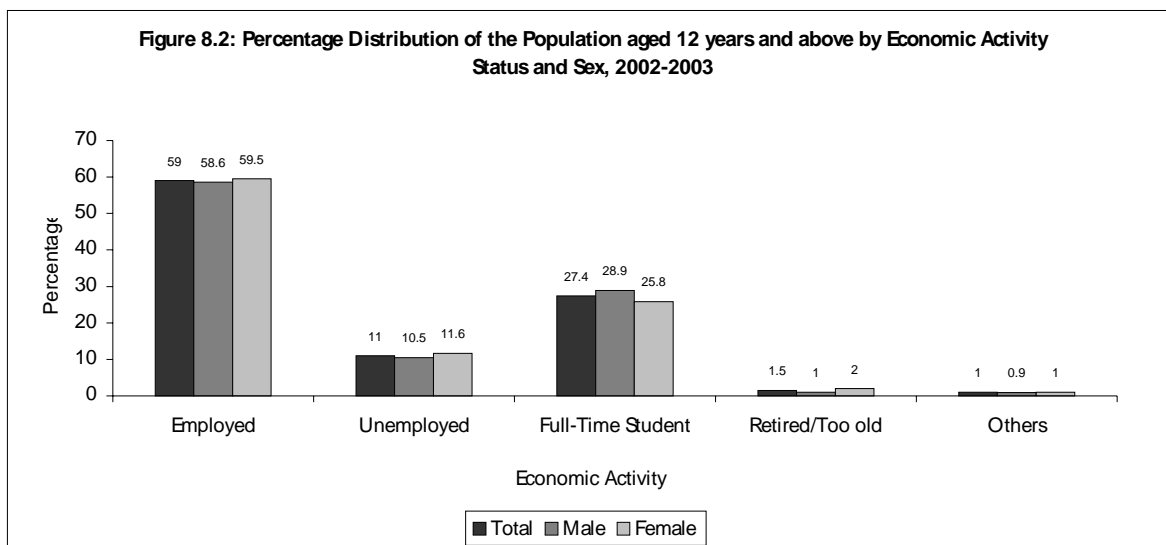
Looking at economic activity status by strata, most of the persons residing in rural areas were employed. Of all persons residing in households engaged in small scale farming, 70 percent were employed, as were 62 percent of those residing in households engaged in medium scale farming. Sixty-five percent of persons residing in households engaged in large-scale farming were

employed while 66 percent of those residing in households not engaged in agricultural activities were employed and 10 percent were unemployed.

Comparison of economic activity status at provincial level shows that Eastern province had the highest proportion of employed persons accounting for 68 percent, followed by Northern and Central provinces, which accounted for 60 and 59 percent, respectively. In contrast, Copperbelt and Lusaka provinces had the lowest proportions of employed persons accounting for about 40 percent of all persons aged 12 years and above. The unemployment rate was highest in Lusaka province at 29 percent, followed by the Copperbelt province at 22 percent. Eastern province exhibited the lowest rate of unemployment about 3 percent.

**Table 8.1: Percentage Distribution of the Population Aged 12 Years and Above by Main Economic Activity Status, Sex, Rural/Urban, Stratum and Province. Zambia, 2002–2003**

Sex/Residence/Stratum/ Province	Economic Activity Status					Total number of persons aged 12 years and above
	Labourforce		Inactive Population			
	Employed	Unemployed	Full time student	Retired/Too old	Other	
All Zambia	59	11	27.4	1.5	1	5,814,389
Sex						
Male	58.6	10.5	28.9	1.1	0.9	3,023,301
Female	59.5	11.6	25.8	2	1.1	2,791,088
Residence						
Rural	69.3	3.7	24.9	1.3	0.8	3,665,662
Urban	41.5	23.5	31.8	1.9	1.3	2,148,727
Stratum						
Small Scale Farmers	69.6	3.4	25	1.3	0.7	3,418,188
Medium Scale Farmers	62.4	2.3	34	0.8	0.5	61,759
Large Scale Farmers	64.9	0.7	34.3	0.0	0.0	2,964
Non-Agricultural	65.9	10	20.1	1.7	2.3	182,751
Low Cost Areas	41.9	25	29.8	1.8	1.5	1,637,943
Medium Cost Areas	38.3	19.6	39.3	2.2	0.6	234,298
High Cost Areas	41.9	18.2	37.1	2.1	0.7	276,486
Province						
Central	63.3	8.4	25.8	1.4	1.2	607,975
Copperbelt	43.1	24.2	29.5	2	1.3	981,750
Eastern	74.5	3.1	20.4	1.4	0.6	798,962
Luapula	66.6	4.9	25.1	2.2	1.2	447,027
Lusaka	43.8	22.5	30.6	1.9	1.3	838,715
Northern	67	3.8	27.5	0.7	1	721,345
North-Western	61.3	6.6	29.5	1.6	1	347,653
Southern	58.1	6.7	33.5	1.3	0.5	638,744
Western	68.8	5.4	24	1.2	0.7	432,218



### 8.3.1 Labour Force Participation Rates

Labour force participation rates measure the proportion of the working age population that is economically active. It distinguishes between those that are economically active (the employed and the unemployed) and those that are economically inactive (Students, Homemakers, Pensioners, Retired, Incarcerated, etc). Low activity rates imply that a large proportion of individuals are not participating in the labour force. This labour market measure is therefore useful for targeting persons that are economically inactive but are of working age population, to encourage them to move into the economically active population since their active participation in production may contribute to higher standards of living and economic growth. If economic participation is considered too high for certain age groups such as children, the priority would be to reduce their participation in the labour market.

Overall labour force participation rate in Zambia is high as can be seen in Table 8.2, which shows that it was 70 percent for both sexes. Among the females aged 12 years and above the labour force participation rate is higher than among males in the same age group. The labour force participation rates for both males and females were higher in the rural areas, standing at 73 percent, compared to 65 percent for the urban areas. There were a marked difference in the labour force participation rate for females in the urban and rural areas. While 76 percent of the females in the rural areas participated in the labour force, only 62 percent of the females participated in the labour force in urban areas. Among males, there was a slight difference in the labour force participation rate between the rural areas and the urban areas.

Labour force participation rates were exceptionally high in Eastern Province at 78 percent. This corresponds with high participation rates among both males and females, with females well above all the other provinces at 80 percent. Lusaka Province had the lowest participation rate among females at 63 percent.

**Table 8.2: Labour Force Participation Rates Among Persons aged 12 Years and Above by Sex, Rural/Urban, Stratum and Province, Zambia, 2002-2003**

Residence/Province	Participation Rates			Total number of persons aged 12 years and above
	Both sexes	Male	Female	
<b>All Zambia</b>	70.0	69.1	71.1	5,814,389
Rural	73.0	70.3	75.8	3,665,662
Urban	65.0	67.2	62.5	2,148,727
<b>Province</b>				
Central	71.7	69.1	74.4	607,975
Copperbelt	67.2	69.0	65.3	981,750
Eastern	77.7	75.0	80.2	798,962
Luapula	71.5	71.7	71.2	447,027
Lusaka	66.3	68.6	63.2	838,715
Northern	70.8	66.9	75.1	721,345
North-Western	67.9	63.1	72.7	347,653
Southern	64.7	65.4	63.9	638,744
Western	74.2	70.7	77.4	432,218

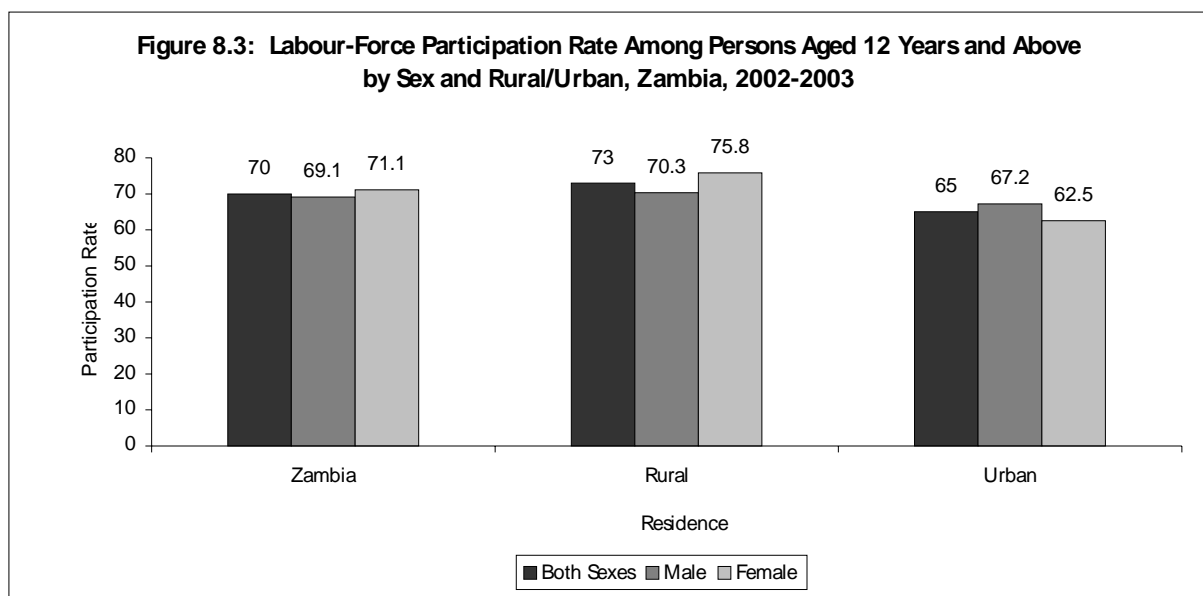


Table 8.3 shows the participation rates among persons aged 12 years and above by age group, sex and residence. The results show that the highest labour force participation rate was among the 30–64 age groups, ranging between 91 to 98 percent. It was lowest among the 12 to 19 years age group at 23 percent. The general trend showed that labour force participation rates increase from the younger age groups to the older age groups. Among males, the participation rates peaked between ages 35 – 39 at 99 percent while among females it peaked in the age group 30–34 at 99 percent. In the rural areas the general trend shows that the labour force participation rate peaked in the age group 35–39 at 99 percent. Participation rates for both males and females peaked in the age group 35–39 at 99 percent. This scenario is reflected in urban areas as well, as the labour force participation rates peaked at the age group of 30–34 at 98 percent.

**Table 8.3: Labour Force Participation Rates Among Persons Aged 12 Years and Above by Rural/Urban, Sex and Age Group Zambia, 2002–2003**

Age Group	Participation Rates			Number of persons aged
	Total	Rural	Urban	

	Both Sexes	Male	Female	Both Sexes	Male	Female	Both	Male	Female	12 years and above
<b>All Zambia</b>	70.0	69.1	71.1	73.0	70.3	75.8	65.0	67.2	62.5	5,814,389
12 – 19	23.1	18.3	27.9	25.0	18.5	31.9	20.2	17.9	22.4	1,866,541
20 – 24	81.5	75.7	87.5	85.2	77.5	92.7	76.0	73.3	79.2	808,524
25 – 29	96.1	96.5	95.6	97.3	97.6	97.0	94.0	94.9	92.9	669,967
30 – 34	98.5	98.4	98.6	98.9	98.4	99.6	97.7	98.4	96.6	568,637
35 – 39	98.4	98.6	98.0	99.5	99.3	99.8	96.6	97.7	95.0	453,198
40 – 44	98.1	98.0	98.1	98.6	98.1	99.1	97.2	97.9	96.3	344,374
45 – 49	98.2	97.8	98.5	99.1	98.8	99.4	96.5	96.4	96.6	282,583
50 – 54	95.0	95.3	94.8	96.3	98.0	95.0	92.7	91.9	94.2	217,568
55 – 59	93.4	91.7	94.7	96.8	96.7	96.9	83.1	83.7	81.9	167,782
60 – 64	91.1	92.4	89.8	94.8	96.2	93.6	76.7	80.1	72.4	146,137
65+	76.9	85.3	67.2	81.4	90.0	71.4	54.1	61.4	45.7	289,047
Not stated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31

### 8.3.2 Unemployment Rates

Unemployment rates measure the proportion of the economically active population of working age (labour force) that are unemployed, where the economically active population includes the employed and the unemployed. This is a measure that is widely used to assess labour market performance. However, it needs to be used in conjunction with other indicators in order to fully understand any shortcomings in the labour market. The International Labour Office (ILO) observed that many developing countries lack unemployment support programmes. Consequently, rather than face unemployment, many people engage in any activity merely to survive, even if it does not adequately utilise their skills or generate sufficient income. Low unemployment rates in developing countries can also be the result of high levels of unpaid family workers in subsistence farming who are taken as employed. Under such circumstances, a substantial proportion of the labour force in developing countries that are classified as employed, tend to work fewer hours than they would choose, earn lower incomes, use their skills less and generally work less productively than they would like to (ILO, 1999).

Table 8.4 shows the proportion of the labour force aged 12 years and above that was unemployed at the time of the survey. Of the 4,055,169 persons in the labour force, 11 percent were unemployed. Looking at sex differentials at national level, 12 percent of the males and 10 percent of the females were unemployed.

The unemployment rates by residence show a marked difference between rural and urban areas, with the urban areas recording higher unemployment rates (26 percent) than rural areas (3 percent). Sex differentials show that the female unemployment rate in rural areas, which stood at 2 percent, was lower than that of males recorded at 4 percent. In contrast, the female unemployment rate in urban areas recorded at 27 percent was higher than that for males at 25 percent. Unemployment rates among the small, medium and large scale farmers was substantially lower than among the persons residing in the low, medium and higher cost areas.

Looking at the unemployment rates across provinces, the Copperbelt and Lusaka provinces recorded higher unemployment rates than the other provinces with 22 percent and 29 percent respectively. Eastern and Northern provinces recorded the lowest unemployment rates at 2 and 3 percent respectively. The highest unemployment rates for females were recorded in Lusaka province, which accounted for 34 percent of all females in the labour force while the

unemployment rate for males stood at 27 percent. There was no difference in the unemployment rate between males and females in the Copperbelt province.

**Table 8.4: Unemployment Rates Among Persons Aged 12 Years and Above by Sex, Rural/Urban, Stratum and Province Zambia, 2002–2003**

Residence/Stratum/Province	Unemployment Rates			Number of persons aged 12 years and above in the labour Force
	Both sexes	Male	Female	
<b>All Zambia</b>	11	12	10	4,055,169
Rural	3	4	2	2,672,301
Urban	26	25	27	1,382,368
<b>Stratum</b>				
Small Scale Farmers	2	3	2	2,492,790
Medium Scale Farmers	2	2	2	39,529
Large Scale Farmers	1	2	0	2,179
Non-Agricultural	11	15	5	137,803
Low Cost Areas	27	25	28	1,084,397
Medium Cost Areas	26	26	26	133,841
High Cost Areas	25	24	25	164,630
<b>Province</b>				
Central	7	8	6	429,149
Copperbelt	22	22	22	655,266
Eastern	2	4	1	630,003
Luapula	4	5	4	323,008
Lusaka	29	27	34	529,900
Northern	3	4	2	539,784
North-Western	5	7	3	230,127
Southern	9	10	7	406,660
Western	5	7	3	311,272

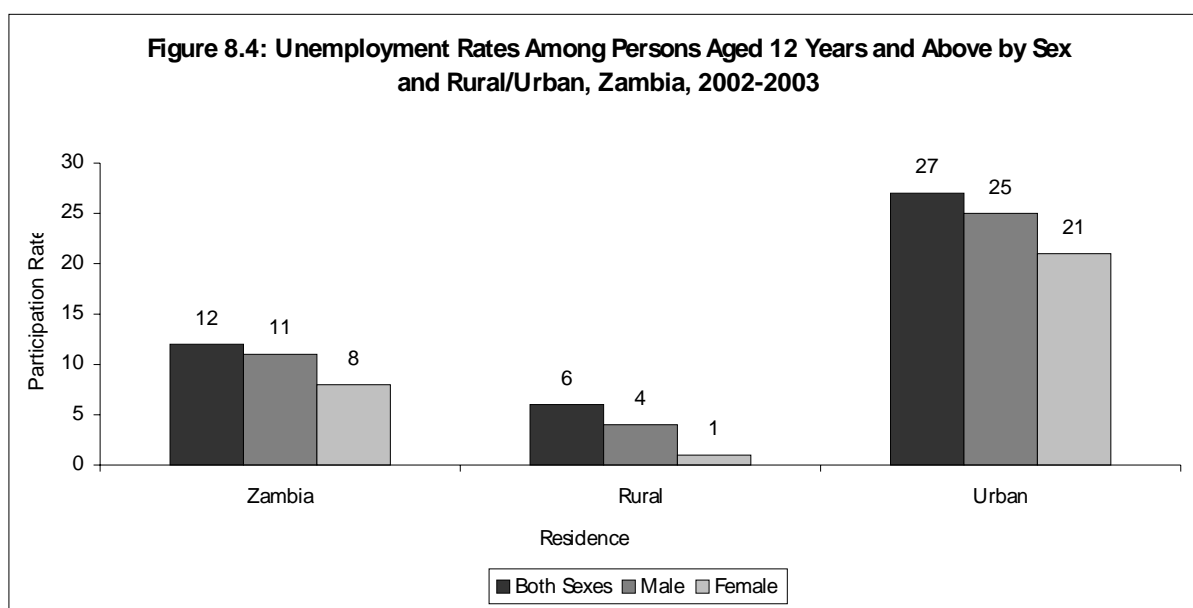


Table 8.5 shows the unemployment rates among persons aged 12 years and above by age group, sex and residence. The results show that unemployment is very high among young persons and reduces with an increase in age. Twenty-one percent of all persons in the labour force in the age

group 12 to 19 years were recorded to be unemployed as was another 21 percent in the age group 20 to 24 years.

The proportion of unemployed persons in the labour force in the age group 25 to 29 was much lower, at 13 percent while 8 percent were recorded as being unemployed in the age group 30 to 34. Looking at sex differentials, unemployment rates for men were much higher than those for women in all age groups except for the age groups 40–44 and 45–49. The results further show that unemployment is an urban phenomenon with the unemployment rates in urban areas being substantially higher than in rural areas.

**Table 8.5: Unemployment Rates Among Persons Aged 12 Years and Above by Rural/Urban, Sex and Age Group, Zambia, 2002–2003**

Age Group	Unemployment Rates									Number of persons aged 12 years and above in the labour force
	Total			Rural			Urban			
	Both Sexes	Male	Female	Both Sexs	Male	Female	Both Sexes	Male	Female	
All Zambia	11	12	10	3	4	2	26	25	27	4,055,169
12 – 19	21	28	17	6	10	4	49	57	43	430,241
20 – 24	21	26	17	5	8	3	47	50	43	651,821
25 – 29	13	14	12	4	5	2	30	30	30	644,861
30 – 34	8	8	9	2	4	1	19	15	24	557,954
35 – 39	6	7	6	2	2	1	14	13	16	444,975
40 – 44	5	5	5	1	2	0	11	9	14	334,144
45 – 49	5	5	5	1	1	1	13	12	14	272,967
50 – 54	5	6	3	2	3	1	10	10	11	209,876
55 – 59	3	4	2	1	1	1	10	11	10	152,660
60 – 64	3	5	1	1	2	1	11	16	4	134,248
65+	2	3	1	1	1	1	12	15	7	221,422



## 8.4 Employment Status, Industry and Occupation of Employed Persons

### 8.4.1 Distribution of Employed Persons by Industry

The distribution of employed persons by province, age and residence are very important for planning purposes. Policy makers require information on employed persons and the type of work they are engaged in to enable them answer questions such as what share of the labour force has gainful employment and which productive sectors of the economy employ the most of the persons.

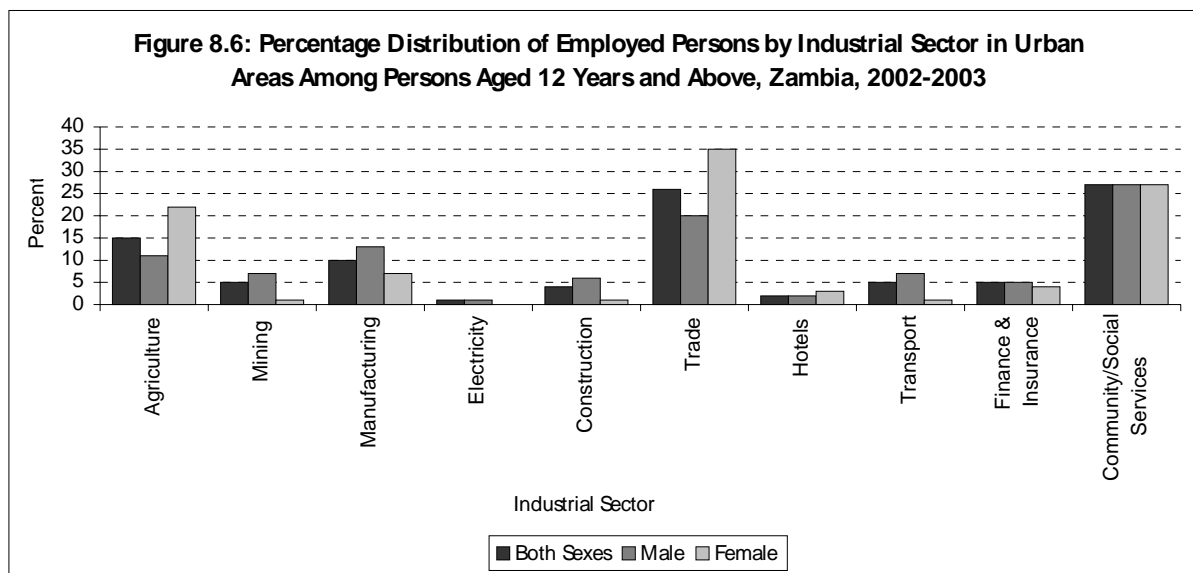
Table 8.6 shows the distribution of the employed persons by industry. The results show that at national level, the majority of the persons were engaged in Agriculture, Forestry and Fisheries accounting for 72 percent of all employed persons. The second most popular industrial sectors of employment were the Trade and Community, Social and Personal Services, with each accounting for 9 percent of all employed persons. Looking at the percentage distribution of employed persons by residence, the results show that the agricultural sector accounted for 93 percent of all employed persons in rural areas. Sex differentials show that 95 percent of all females were employed in the Agricultural sector, 5 percentage points more than the males.

The percentage distribution of employed persons was much more evenly spread across industrial sectors in urban than in rural areas. The Community, Social and Personal Services industrial sector accounted for highest proportion of employed persons accounting for 27 percent in urban areas. The second most popular sector of employment was Trade accounting for 26 percent of all employed persons in urban areas followed by Agricultural sector that accounted for 15 percent. Sex differentials show that females were predominantly engaged in trading while males were predominantly engaged in Community, Social and Personal Services accounting for 35 and 27 percent respectively.

**Table 8.6: Percentage Distribution of Employed Persons Aged 12 Years and Above by Industry, Rural/Urban and Sex, Zambia, 2002–2003**

Type of Industry	Total			Rural			Urban			Total number of employed persons
	Both sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	
All Zambia	100	100	100	100	100	100	100	100	100	3,517,371
Agric., Fores. & Fisheries	72	65	79	93	90	95	15	11	22	2,525,510
Mining and Quarrying	1	2	0	0	0	0	5	7	1	49,528
Manufacturing	3	5	2	1	1	1	10	13	7	121,898
Electricity, Gas & water	0	0	0	0	0	0	1	1	0	10,488
Construction	1	2	0	0	1	0	4	6	1	45,281
Trade	9	8	9	3	3	3	26	20	35	309,223
Hotels and Restaurants	1	1	1	1	1	0	2	2	3	33,014
Transport & Commun.	2	3	0	0	0	0	5	7	1	55,076
Finance & Insurance	1	2	1	0	0	0	5	5	4	50,124
etc.	9	11	7	2	3	1	27	27	27	313,978
Comm & Social services	0.1	0.1	0.1	0.0	0.0	0.1	0.2	0.3	0.2	3,251
Not stated										





#### 8.4.2 Distribution of the Employed Persons by Occupation

The distribution of employed persons by occupation provides a useful indicator of the type of production and the level of technology and automation on which the economy is based. The occupational structure also provides a gauge about the potential for future economic growth.

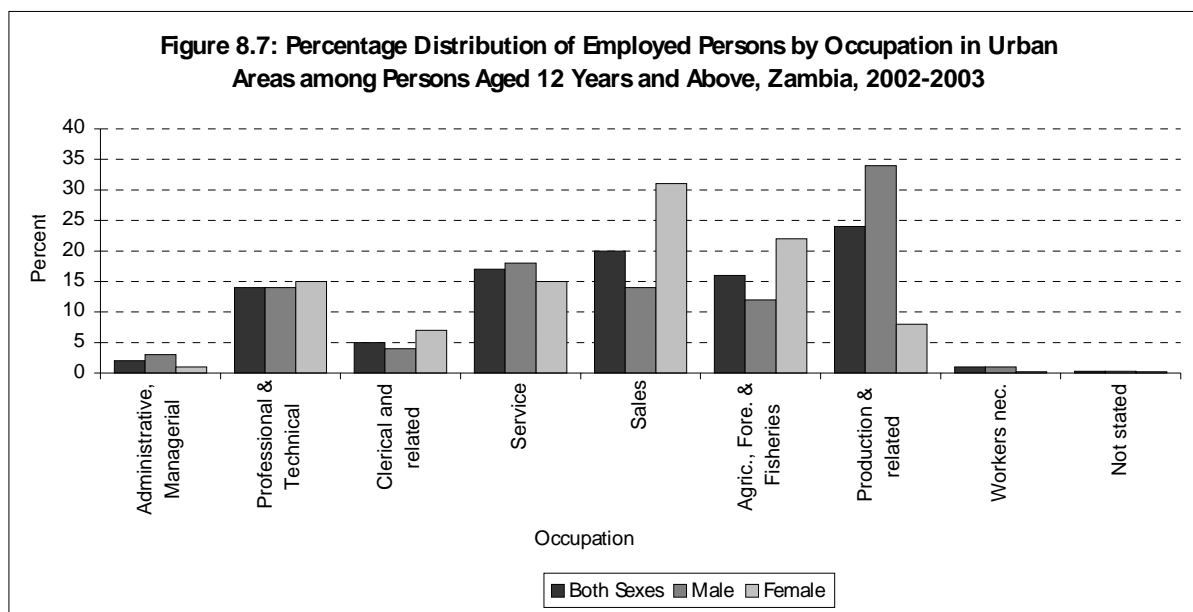
Table 8.7 shows the occupational status of the employed population. At national level, the occupations in Agriculture were the most predominant accounting for 72 percent of all employed persons while Administrative and Managerial occupations were the least accounting for 1 percent of the employed population.

In rural areas 92 percent of all employed persons were working in agricultural occupations, with female employees being the highest employed persons in this occupation at 95 percent. The most common occupation in urban areas is Production and related services. Overall 24 percent of all employed persons in urban areas were in Production and related services. Of all males employed in urban areas, 34 percent were working in the production related occupations, as were 8 percent of all females employed in urban areas. Of all the female workers, 31 percent were working in sales related occupations, as were 14 percent of all males employed in urban areas.

**Table 8.7: Percentage Distribution of Employed Persons Aged 12 Years and Above by Occupation, Rural/Urban and Sex, Zambia, 2002-2003**

Type of Occupation	Total			Rural			Urban			Total number of employed persons
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	
All Zambia	100	100	100	100	100	100	100	100	100	3,517,371
Admin. & Managerial	1	1	0	0	0	0	2	3	1	25,608
Prof., Tech. & related	5	6	4	2	3	1	14	14	15	176,969
Clerical and related	2	1	2	0	0	0	5	4	7	54,980
Services	6	7	4	1	2	1	17	18	15	197,577
Sales	7	6	8	2	2	2	20	14	31	240,478
Agric., For. & Fisheries	72	65	79	92	89	95	16	12	22	2,520,763

Production & related	8	13	3	2	3	1	24	34	8	285,743
Not elsewhere classified	0.3	1	0.1	0.2	0.5	0	1	1	0.2	11,765
Not stated	0.1	0.1	0.1	0	0	0.1	0.3	0.3	0.2	3,488



#### 8.4.3 Distribution of the Employed Persons by Employment Status

Table 8.8 shows the percentage distribution of employed persons by employment status and residence. At national level, 60 percent of all employed persons were self-employed, while 20 percent were unpaid family workers. Private sector employment accounted for 10 percent of all employed persons, while the Central Government accounted for 5 percent. Sex differentials indicate that a large proportion of both male and female were predominantly working as self-employed persons, accounting for 63 and 57 percent respectively. However, among males, 15 percent were employed in the private sector while among the females, only 4 percent were employed in the private sector. A relatively large proportion of females (32 percent) were unpaid family workers.

Of all employed persons in rural areas, 67 percent were working as self-employed persons, while 26 percent were unpaid family workers. Among the males working in rural areas, 77 percent were self-employed, 12 percent were unpaid family workers.

In contrast, 57 percent of the females working in rural areas were self-employed and 39 percent were unpaid family workers.

Looking at the urban areas, 40 percent of all employed persons in urban areas were self-employed, 27 percent were working in the private sector and 14 percent were working for the Central Government. Individuals working in private households accounted for 5 percent of all persons working in the urban areas. Sex differentials show that more females (54 percent) than males (32 percent) were self employed.

**Table 8.8: Percentage Distribution of Employed Persons Aged 12 Years and Above by Employment Status, Rural/Urban and Sex. Zambia, 2002–2003**

Employment Status	Total			Rural			Urban			Total number of employed persons
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	
All Zambia	100	100	100	100	100	100	100	100	100	3,517,371
Self employed	60	63	57	67	77	57	40	32	54	2,099,345
Government employee	5	6	4	2	3	1	14	14	14	173,421
Local Govt employee	0	1	0	0	0	0	1	2	1	17,378
Parastatal employee	1	2	0	0	0	0	4	6	2	46,627
Private Sector Employee	10	15	4	3	5	1	27	35	15	343,678
NGO employee	0	0	0	0	0	0	1	1	1	9,951
Embassy employee	0	0	0	0	0	0	0	0	0	4,555
Employer	0	0	0	0	0	0	0	0	0	1,245
Household employee	2	2	2	1	1	0	5	4	6	61,895
Unpaid Family Worker	20	8	32	26	12	39	3	1	5	690,697
Piece worker	2	3	1	1	2	0	4	5	1	58,399
Other	0	0	0	0	0	0	0	0	0	6,794

Thirty-five percent of all males employed in urban areas were employed in the private sector while 6 percent were employed in the parastatal sector. Similarly, 15 percent of all females employed in urban areas were employed in the private sector, 2 percent were employed in the parastatal sector while 14 percent were working for the Central Government.

### 8.5. Informal Sector Employment

The lack of specialist skills, non-requirement of large capital investment and the ease with which businesses can be established without being subjected to registration, control and taxation, all lead to increased scope for informal sector employment.

Informal sector employment was defined as employment where the employed persons were not entitled to paid leave, pension, gratuity and social security and worked in an establishment employing 5 persons or less. All the three requirements had to be fulfilled in order to classify a person as working in the informal sector.

Table 8.9 shows the proportion of employed persons in the informal sector by residence and stratum. The results show that 83 percent, (about 2.9 million persons), of the employed persons were engaged in the informal sector. Informal sector employment was more common among females (91 percent) than males (76 percent). In addition, informal sector employment was more prevalent in rural than in urban areas, 93 percent as compared to 53 percent.

The survey results also show that informal sector employment in both rural and urban areas was more widespread among females than males. Of all employed females, 91 percent were employed in the informal sector compared with 76 percent of all employed males representing a difference of 15 percentage points. In urban areas, informal sector employment varied by type of residence both for females and males. It was more prevalent in low cost areas than in high cost areas, but was higher for females than for males regardless of residential areas. However, the differences were highest in low cost areas, 27 percentage points as compared to 10 percentage points in high cost areas.

**Table 8.9: Proportion of Persons Aged 12 Years and Above Who Were Employed in the Informal Sector**

by Sex, Rural/Urban, Stratum and Province, Zambia, 2002–2003

Residence/Stratum/Province	Both sexes	Male	Female	Total number of employed Persons
<b>All Zambia</b>	<b>83</b>	<b>76</b>	<b>91</b>	<b>3,517,371</b>
Rural	93	89	96	2,571,153
Urban	56	47	71	946,218
Small scale farmers	94	91	97	2,399,081
Medium scale farmers	83	77	90	38,173
Large scale farmers	75	61	92	2,132
Non agricultural households	73	68	79	131,767
Low cost areas	62	53	80	738,430
Medium cost areas	43	34	56	90,342
High cost areas	27	23	33	117,446
Central	88	81	94	385,260
Copperbelt	64	54	79	444,510
Eastern	93	89	97	610,554
Luapula	95	92	98	307,269
Lusaka	54	48	64	371,564
Northern	93	88	98	517,899
North Western	94	90	97	211,283
Southern	75	68	84	376,272
Western	96	94	97	292,760

Looking at the provincial distribution of persons working in the informal sector illustrated in figure 8.8, Western, Luapula and Northwestern provinces had the highest proportions of employed persons in the informal sector, accounting for 94 percent or more. On the other hand the most urbanized provinces, Lusaka and Copperbelt provinces had the lowest, accounting for 54 percent and 64 percent respectively. In all provinces, females were more often in informal employment than males.

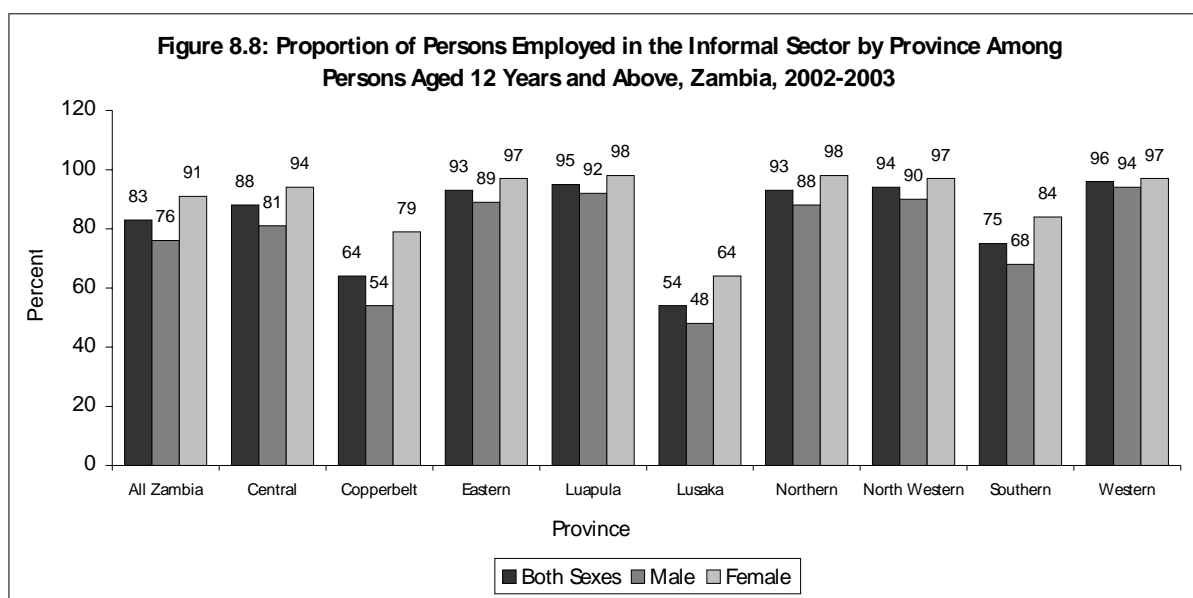


Table 8.10 shows the percentage distribution of employed persons by whether they are in the formal or informal sector by sex, rural/ urban, stratum and province. The results shows that there were more persons in informal sector, 83 percent while 17 percent were in the formal sector. The highest percentage of male and female persons in informal sector was recorded with 76 percent and 91 percent respectively. There were more persons in both rural and urban areas that were recorded in informal sector, 93 percent and 56 percent respectively.

Informal sector employment was more predominant among small scale, medium scale and large-scale farmers. The highest percentage of formal agriculture employment was recorded among high cost areas 73 percent while small-scale farmers had the lowest at 6 percent.

Among the provinces Western, Luapula, Northwestern, Eastern and Northern had the highest percentages of employed persons in the informal sector, over 90 percent. The most urbanized provinces of Lusaka and copperbelt had the highest persons employed in the formal sector, 46 percent and 36 percent respectively.

**Table 8.10: Percentage Distribution of Employed Persons by Whether they are in Formal or Informal Sector by Sex, Rural/Urban, Stratum and Province. Zambia 2002–2003**

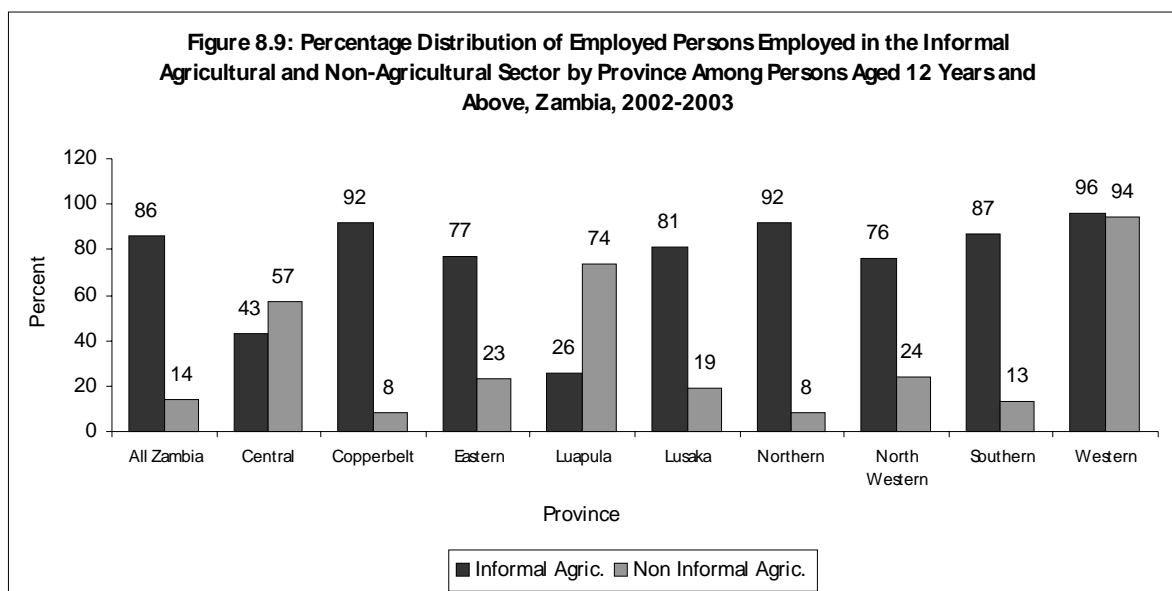
Sex/Residence/Province	Sector of Employment				Number of Persons employed 12 years and above
	Formal Sector		Informal Sector		
	Number of persons	Percent	Number of persons	Percent	
All Zambia	597,953	17	2,919,418	83	3,517,371
Male	441,813	24	1,399,076	76	1,840,889
Female	150,883	9	1,525,599	91	1,676,482
Residence					
Rural	179,981	7	2,391,172	93	2,571,153
Urban	416,336	44	529,882	56	946,218
Stratum					
Small scale farmers	143,945	6	2,255,136	94	2,399,081
Medium scale farmers	6,489	17	31,684	83	38,173
Large scale farmers	533	25	1,599	75	2,132
Non-agricultural	35,577	27	96,190	73	131,767
Low cost areas	280,603	38	457,827	62	738,430
Medium cost areas	51,495	57	38,847	43	90,342
High cost areas	85,736	73	31,710	27	117,446
Province					
Central	46,231	12	339,029	88	385,260
Copperbelt	160,024	36	284,486	64	444,510
Eastern	42,739	7	567,815	93	610,554
Luapula	15,363	5	291,906	95	307,269
Lusaka	170,919	46	200,645	54	371,564
Northern	36,253	7	481,646	93	517,899
North Western	12,677	6	198,606	94	211,283
Southern	94,068	25	282,204	75	376,272
Western	11,710	4	281,050	96	292,760

Table 8.11 shows the agricultural and non-agricultural informal sector employment. The table shows that among those employed in the informal sector, 77 percent were in informal agricultural sector, while 23 percent were in informal non-agricultural sector. The results further show that they were more females in the informal agricultural sector than were males. Generally, persons living in rural areas were more often in informal agricultural sector employment than those residing in urban areas, 89 percent as compared to 19 percent. The highest proportion of non-agricultural informal sector employment was found in urban high cost areas, 90 percent.

**Table 8.11: Percentage Distribution of Employed Persons by Whether they are Informal Agricultural or Informal Non-Agricultural Sector by Sex, Rural/Urban, Stratum and Province, 2002–2003**

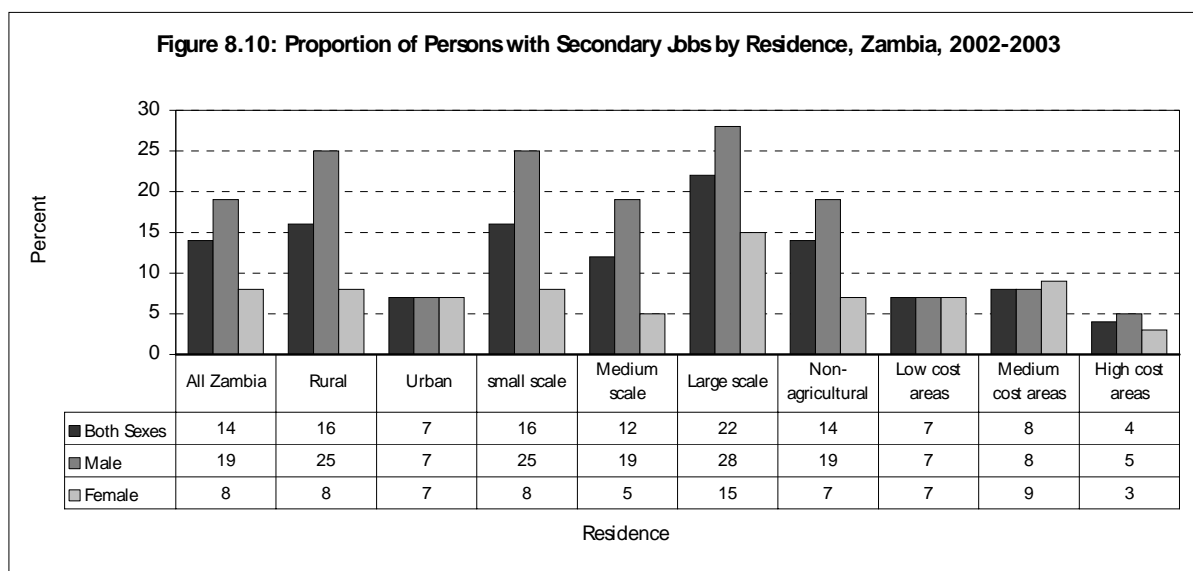
Sex/Residence/Stratum/Province	Sector of Employment				Number of Persons 12 years and above employed in the Informal sector
	Informal agricultural		Informal Non-agricultural		
	Number of persons	Percent	Number of	Percent	
All Zambia	2,247,952	77	671,466	23	2,919,418
Male	993,344	71	405,732	29	1,399,076
Female	1,250,991	82	274,608	18	1,525,599
Rural	2,128,143	89	263,029	11	2,391,172
Urban	100,678	19	482,193	91	582,870
Small scale farmers	2,052,174	91	202,962	9	2,255,136
Medium scale farmers	29,466	93	2,218	7	31,684
Large scale farmers	1,487	93	112	7	1,599
Non-agricultural	46,171	48	50,019	52	96,190
Low cost areas	91,565	20	366,261	80	457,827
Medium cost areas	8,546	22	30,301	78	38,847
High cost areas	3,171	10	28,539	90	31,710
Central	291,565	86	47,464	14	339,029
Copperbelt	122,329	43	162,157	57	284,486
Eastern	522,390	92	45,425	8	567,815
Luapula	224,767	77	67,138	23	291,906
Lusaka	52,168	26	148,477	74	200,645
Northern	390,133	81	91,513	19	481,646
North Western	182,718	92	15,888	8	198,606
Southern	214,475	76	67,729	24	282,204
Western	244,513	87	36,536	13	281,050

Among the provinces, Eastern province had the highest proportions of persons engaged in agricultural informal sector employment, accounting for 92 percent, while Lusaka province had the lowest, with 26 percent. The highest number of non-agricultural informal sector employment was found in urban low cost areas, catering for about 366,000 persons.



## 8.6 Secondary Jobs

Figure 8.10 illustrates the proportion of the currently employed persons with secondary jobs by residence and stratum. About 14 percent of the employed persons held at least one secondary job. The results also show that a higher proportion of persons having a secondary job were found in rural areas than in urban areas, 16 percent as compared to 7 percent. A larger proportion of males than females held secondary jobs in rural areas, accounting for 25 percent and 8 percent respectively, while no differences were found in urban areas.



Among the provinces, the largest proportion of secondary jobholders was found in Luapula, 36 percent, and Western provinces, 16 percent as illustrated in figure 8.11. The highest proportions of both male and female secondary jobholders were recorded in Luapula province, where 53 percent of the males and 16 percent of all females had secondary jobs. Lusaka and Northwestern provinces had the lowest proportions of secondary jobholders, 4 percent and 7 percent respectively. Lusaka and Northwestern provinces also recorded the lowest proportion of male and female secondary jobholders, 5 percent and 2 percent respectively.

**Figure 8.11: Proportion of Persons with Secondary Jobs by Province, Zambia, 2002-2003**

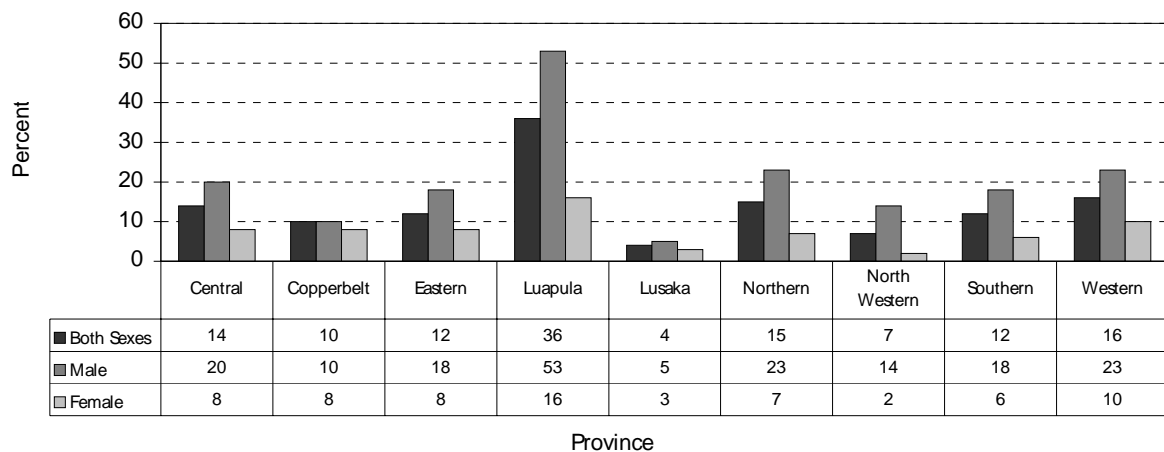
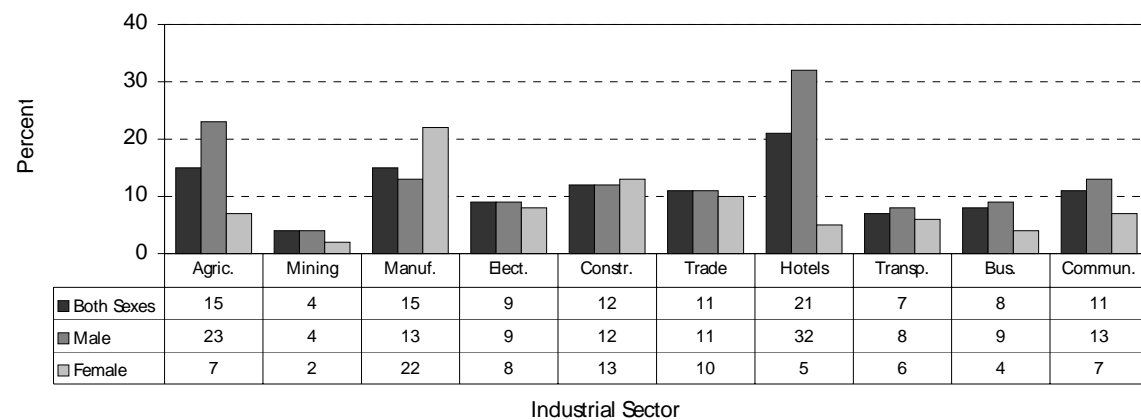


Figure 8.12 illustrates the proportions of secondary jobholders by industry and occupation. The results show that persons employed in the Hospitality, Agricultural and Manufacturing were more likely to have secondary jobs. Of all persons employed in the Hospitality industry, 21 percent had secondary jobs, while 15 percent of all persons working in the Agricultural and Manufacturing sectors had secondary jobs. There were more males in the hospitality and agricultural sectors with secondary jobs, 32 percent and 23 percent respectively than the rest of the sectors. In contrast, secondary jobs in Manufacturing and construction sectors were more popular among females than any other sectors (22 percent and 13 percent, respectively).

**Figure 8.12: Proportion of Employed Persons with Secondary Jobs by Industrial Sector, Zambia, 2002-2003**



The proportions of secondary jobholders by sex and occupation are illustrated in figure 8.13. Looking at occupational categories, the figure illustrates that those employed in the Administrative



and Managerial occupations were recorded as having the highest proportions of secondary jobs with 16 percent followed by employees in the Agricultural (14 percent) and production related (13 percent) occupations.

Agricultural related occupations were predominantly popular among males engaged in secondary jobs (23 percent) followed by Administrative and Managerial occupations, which accounted for 20 percent of all employed males. The most popular secondary occupations among females were the production related occupation which accounted for 20 percent and sales occupations which accounted for 10 percent of all females engaged in secondary jobs.

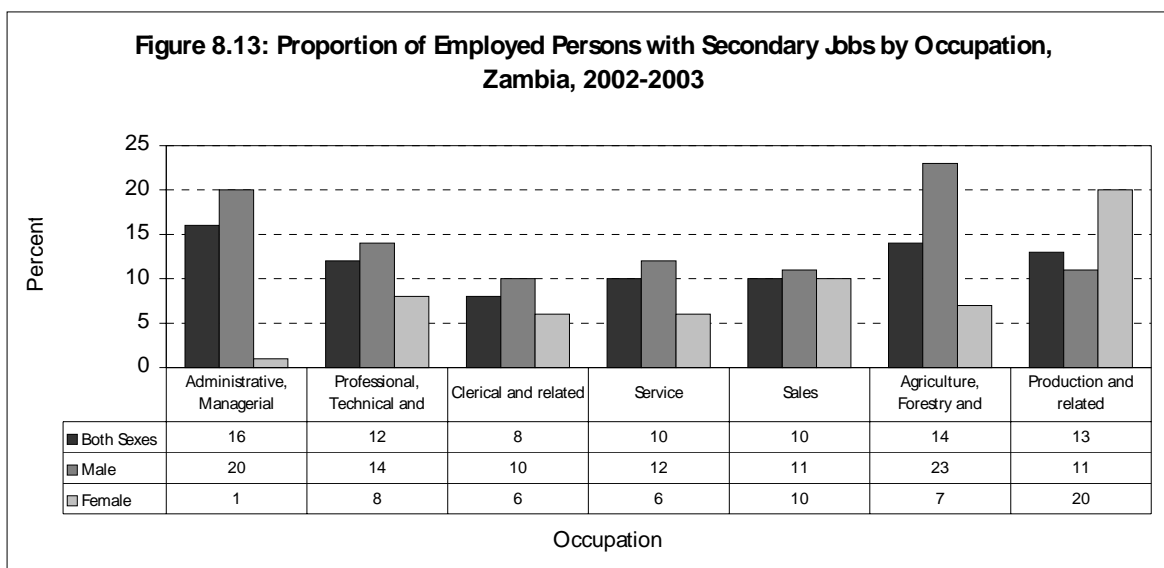


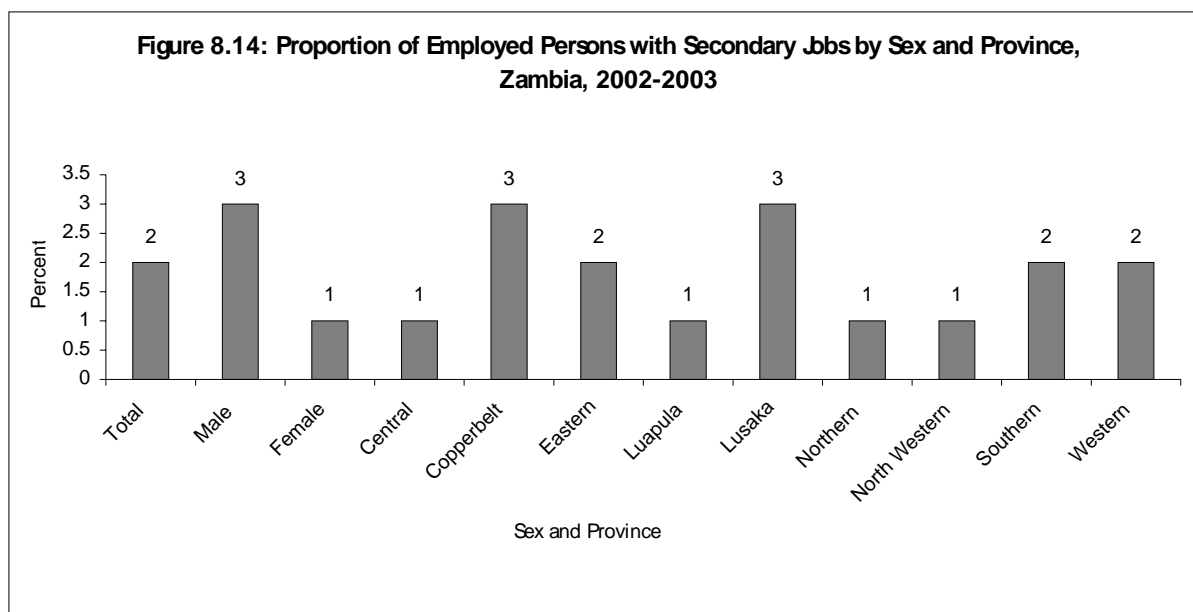
Table 8.12 shows the proportion of secondary jobholders by employment status. Persons working in their own firms (employers) were more likely to have secondary jobs than any other category of employees accounting for 29 percent of all employed persons. The self employed and persons employed in the private sector accounting for 17 percent each of all employed were also more likely to have secondary jobs.

**Table 8.12: Proportion of Employed Persons Who held Secondary Jobs by Sex and Employment Status, Zambia, 2002-2003**

Employment status	Both sexes	Male	Female	Number of Employed persons
<b>All Zambia</b>	<b>14</b>	<b>19</b>	<b>8</b>	3,517,371
Self employed	17	24	9	2,099,345
Government employee	14	17	8	173,421
Local Govt Employees	6	8	2	17,378
Parastatal Employees	11	12	5	46,627
NGO employee	10	11	5	343,678
Private Sector employee	17	20	13	9,951
Embassy employee	9	12	0	4,555
Employer	29	43	0	1,245
Household employee	4	6	2	61,895
Unpaid family worker	6	8	5	690,697
Piece worker	12	11	15	58,399
Other	17	22	7	6,794

## 8.7. Proportion of Persons Changing Jobs

Figure 8.14 illustrates that the proportion of employed persons that changed jobs was very small, accounting for 2 percent of all employed persons. Sex differentials show that males changed their jobs more than their female counterparts, accounting for 3 and 1 percent respectively. Persons employed in the more urbanized provinces of Copperbelt and Lusaka changed jobs more than their counterparts in the remaining provinces, each accounting for 3 percent of all employed persons in their respective provinces.



### 8.7.1 Reason for Changing Jobs

Table 8.14 shows the percentage distribution of persons who changed jobs and the reasons for doing so. The most prevalent reason for changing jobs for males was that the job they changed from was a temporary one, 27 percent. Other than changing jobs as a result of their temporary nature, males were more prone to changing jobs due to ambitions for getting another job, 12 percent and low wages, 11 percent. On the other hand females changed jobs mainly due to lack of profit, 21 percent and temporary job, 18 percent.

**Table 8.14: Percentage Distribution of Presently Employed who Change Jobs by Reason of Changing Jobs, Zambia, 2002-2003**

Reason for Changing Jobs	Both Sexes	Male	Female	Number of employees who changed jobs
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>64,376</b>
Low wage	9.5	11.3	4.4	6,114
Fired	2.3	3.2	0	1,508
Enterprise closed	5.9	7.2	2.3	3,837
Enterprise privatized	0.1	0	0.4	63
Enterprise liquidated	1.4	1.7	0.5	882
Retrenched / Redundant	8.7	9.7	5.7	5,583
Got another job	11.1	12.2	8.0	7,173
Bankruptcy	9.3	7.9	13.4	6,002

Lack of profit	11.3	8.0	20.8	7,297
Temporary job	24.5	27.0	17.8	15,829
Retired	2.3	1.4	4.9	1,461
Other	13.4	10.4	21.9	8,627

## 8.8 Income Generating Activities Among Persons Presently Unemployed or Inactive

An attempt was made to find out whether persons who identified themselves as being inactive or unemployed performed any income generating activities. This was found necessary because for some reasons, some people might not have considered such activities as their main economic activities.

The results in table 8.15 show that about 6 percent of the inactive and unemployed persons were engaged in some income generating activities, and that this was slightly more common among females than among males. Performance of these income-generating activities was higher amongst persons in the age group 35–39 years. Within the rural stratum, persons living in households that were classified as small-scale farming were mostly engaged in some income generating activities, 9 percent. In urban areas, there were no major differences as regards the engagement in some income generating activities.

**Table 8.15: Proportion of Unemployed and Inactive Persons who were Engaged in Some Income Generating Activities by Sex, Age-Group Rural/Urban, Stratum and Main Economic Activity, Zambia, 2002–2003**

Sex/Age Group/Residence/Stratum	Proportion engaged	Number of unemployed and inactive persons
<b>All Zambia</b>	<b>6</b>	<b>2,291,567</b>
Male	5	1,177,177
Female	7	1,114,390
12–19	4	1,604,390
20–24	7	318,013
25–29	8	110,707
30–34	13	55,752
35–39	21	33,885
40–44	8	25,579
45–49	14	18,458
50–54	17	18,175
55–59	14	14,143
60–64	17	17,155
65+	4	75,333
Rural	9	1,093,477
Urban	3	1,198,090
Small scale farmers	9	1,017,976
Medium scale farmers	3	23,082
Large scale farmers	0	1,039
Non-agricultural	6	51,380
Low cost areas	3	897,603
Medium cost areas	3	142,353
High cost areas	2	158,134

## 8.9 Summary

Out of the total population aged 12 years and above in the country, 70 percent constitute the labour force. Of these, slightly over half, 59 percent, were employed and 11 percent were unemployed. Of the remaining 30 percent who were in the inactive population, 27 percent of them were students and 1 percent was retired or too old to work. Of all persons aged 12 years and above residing in rural areas, 69 percent were employed, 4 percent were unemployed and 25 percent were students. In urban areas, however, 41.5 percent were employed, 23.5 percent were unemployed and 32 percent were students, suggesting that high unemployment is a phenomenon more prevalent in urban than rural areas.

The labour force participation rate in Zambia was estimated at 70 percent for both males and females. Among the females aged 12 years and above the labour force participation rate was higher than among males. The rural areas had higher labour force participation rates than urban areas. The labour force participation rate in rural areas was observed at 73 percent, while that for the urban areas was 65 percent. The high participation rate in rural areas is attributed to subsistence farming which is considered as an economic activity in line with the ILO definition of economic activities.

Labour force participation rates were exceptionally high in Eastern Province at 78 percent. This corresponds with high participation rates among both males and females, with females well above all the other provinces at 80 percent. Lusaka Province had the lowest participation rate among females at 63 percent

Copperbelt and Lusaka provinces recorded higher unemployment rates than the other provinces with 22 percent and 29 percent respectively. Eastern and Northern provinces recorded the lowest unemployment rates at 2 and 3 percent respectively.

Very high unemployment rates were observed among young persons and reduced with an increase in age. Twenty-one percent of all persons in the labourforce in the age group 12 to 19 years were recorded to be unemployed as was another 21 percent in the age group 20 to 24 years.

The majority of employed persons were engaged in the Agricultural sector accounting for 72 percent of all employed persons. The second most popular industrial sectors of employment were the Trade and Community, Social and Personal Services, with each accounting for 9 percent of all employed persons.

Eighty-three percent of all employed persons were engaged in the informal sector. Informal sector employment was more common among females (91 percent) than males (76 percent). In addition, informal sector employment was more prevalent in rural than in urban areas, 93 percent as compared to 53 percent.

Of all persons employed in the informal sector, 77 percent were in informal agricultural sector, while 23 percent were in informal non-agricultural sector. The results further show that there were more females engaged in the informal agricultural sector than males.

# CHAPTER 9

## CHARACTERISTICS OF NON-FARM ENTERPRISES

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### 9.0. Introduction

As part of the coping strategies, some households are engaged in income-generating business activities. In the LCMS III, detailed information was collected on all non-farm enterprises operated by households. This component of non-farm enterprises was a new inclusion in the series of the LCMS surveys. Both the 1996 LCMS and 1998 LCMS surveys did not have this topic. It should be noted that the LCMS III was not a fully-fledged enterprise survey. The term 'non-farm enterprise' was loosely defined to mean a business unit engaged in non-agricultural activities. The non-farm enterprise characteristics dealt with in this chapter consist of both the formal and informal enterprises.

Respondents were asked whether any household member operated any non-farm business. If they had, details were collected of the type of activity undertaken, and the person in the household responsible for that activity. Up to two activities were listed in order of importance, in terms of how much money they brought into the household, and very detailed information was then collected for these business activities. This information covered basic background information about how the business was operated, the expenditures incurred, the assets of each business, the revenues received and the estimates of net income and inventory of each business.

This chapter covers the basic characteristics of non-farm enterprises: the ownership of non-farm enterprise, the type of activity they are engaged in, the period the enterprise has been in operation, the major constraints in establishing the enterprise, the main source of capital for setting up the enterprise and the main source of credit used for the enterprise's operations. Other information on the non-farm enterprises, such as data on assets and revenue, will be analysed in the informal sector report to be produced later.

### 9.1. Basic Characteristics of Non-farm Enterprises

The basic characteristics of the non-farm enterprises include: the type of activities carried out; the period the enterprise had been actively operating in the 12 months prior to the survey. Other characteristics are the single most constraint in establishing the enterprise; the main source of capital used in setting up the enterprise; and access to credit facilities offered by commercial banks and other formal financial agencies.

#### 9.1.1. Ownership of Non-farm Enterprises

Of the 2 million households in Zambia, approximately 600,000 households, representing 30 percent of all households, operate a non-farm enterprise of one sort or another. The proportion of households owning a non-farm business enterprise was higher in urban areas, at 37 percent of the households, as opposed to 26 percent of the households in the rural areas. Luapula province recorded the highest percentage of households with non-farm enterprises at 57 percent, followed

by Central, Copperbelt, Western and Lusaka provinces, with about a third of the households in each of these provinces operating non-farm businesses, respectively. North-Western province had the lowest proportion of households with non-farm businesses, at only 5 percent. (Refer to Table 9.1).

### 9.1.2. Non-farm Enterprises by Type of Activity

Households are engaged in different types of business activities. Table 9.1 shows that in terms of the type of household activity, fishing, manufacturing and trading accounted for 82 percent of all non-farm businesses, with trading outnumbering both manufacturing and fishing by 2 to 1. In total, there were about 325, 000 households engaged in trading. Trading was more prominent in the urban areas at 64 percent of the households compared to 48 percent of the households in the rural areas. Lusaka Province had the highest proportion of households with trading enterprises (65 percent), while North-Western Province had the lowest proportion of households with trading enterprises (28 percent).

There was little difference between urban and rural areas in the proportion of households engaged in manufacturing activities. Northern, North-Western and Eastern provinces had the highest proportions of households with manufacturing enterprises, while Lusaka and Central provinces had the least proportions.

Rural households are more likely than urban households to be engaged in fishing activities. Twenty one percent of the rural households were engaged in fishing activities, compared to 4 percent of the urban households. Luapula province had the highest proportion of fishing enterprises, followed by North-Western and Western provinces, while Lusaka and the Copperbelt provinces had the lowest proportions of fishing enterprises.

Urban households were slightly more likely to be engaged in Community, Social and Personal Services than the rural households. Lusaka province recorded the highest proportion of households in the Community, Social and Personal Services industry; Northern province had the lowest proportions.

The 'Other' category included enterprises engaged in Finance, Insurance and Real estate, Construction and Bars and Restaurants.

**Table 9.1: Basic Characteristics of Non-Farm Enterprises, Zambia, 2002–2003**

Background characteristic	Proportion of households operating a business	Total number of household	Proportion of businesses operated, by industrial classification					
			Forestry & Fishing	Manufacturing	Trade	Community, Social & Personal Services	Other	Total
<b>All Zambia</b>	<b>30</b>	<b>2,005,677</b>	<b>14</b>	<b>14</b>	<b>54</b>	<b>6</b>	<b>11</b>	<b>100</b>
<b>Residence</b>								
Rural	26	1,329,702	21	16	48	4	10	100
Urban	37	675,975	4	11	64	7	9	100
<b>Province</b>								
Central	34	194, 444	8	6	62	3	21	100
Copperbelt	33	315, 078	4	12	64	7	13	100
Eastern	26	276, 600	6	22	58	6	7	100
Luapula	57	169, 592	47	13	29	4	8	100

Lusaka	30	271, 421	2	9	65	11	14	100
Northern	22	271, 237	11	26	55	2	6	100
North-Western	5	117, 563	22	23	28	6	20	100
Southern	28	224, 783	7	18	60	3	12	100
Western	31	164, 959	18	12	47	6	17	100

### 9.1.3. Period of Operation

Forty nine percent of these enterprises had been in operation in the last 10 –12 months prior to the survey, more so in the urban areas (68 percent) than in the rural areas (35 percent). This suggests that almost half of the enterprises operated through the greater part of the year.

**Table 9.2: Period of Operation of Non-Farm Enterprises in the Last 12 Months, Zambia, 2002–2003**

Background characteristic	Period of operating in the last 12 months (in months)					Total number of households with enterprises
	1–3	4–6	7–9	10–12	Total	
<b>All Zambia</b>	<b>16</b>	<b>19</b>	<b>16</b>	<b>49</b>	<b>100</b>	<b>601, 703</b>
<b>Residence</b>						
Rural	21	24	20	35	100	340, 786
Urban	9	13	10	68	100	260, 917
<b>Province</b>						
Central	28	20	19	33	100	67, 806
Copperbelt	12	12	8	68	100	104, 715
Eastern	19	26	10	45	100	71, 536
Luapula	10	24	32	33	100	102, 558
Lusaka	8	12	6	74	100	80, 556
Northern	24	19	16	42	100	59, 222
North-Western	27	11	7	56	100	4, 694
Southern	15	18	11	56	100	55, 746
Western	16	28	21	35	100	54, 870

#### 9.1.4. Major Constraints in Establishing the Enterprise

Table 9.3 shows the distribution of non-farm entrepreneurs by major business constraints faced during the year. In order to set up the enterprises, households are faced with numerous challenges. Information collected on the single most importance constraint in establishing the enterprise showed that the major problem was lack of credit or capital to start with. Fifty six percent of the enterprises cited capital or credit as the most limiting factor for their enterprise. Only 5 percent identified technical know-how as their major drawback, while 2 percent attributed the difficulty to Government regulation. Almost a third (31 percent) of the enterprises did not have any difficulty in establishing the enterprises.

Rural households reported a higher proportion of those who did not experience any major constraints in setting up the enterprises. Urban areas had a higher proportion of households whose major constraint was lack of capital or credit. The rural households were more likely to report lack of technical know-how as a major constraint compared to the urban areas, while both the rural and urban households had the same proportions of those who reported Government regulation as a major constraint.

Two-fifths of the households in Eastern province reported to have no major constraints in establishing their enterprises. Southern province had the lowest proportion of households who reported having had no constraints in setting up their enterprises. Households in Luapula province had the highest proportions of households who had lack of capital or credit as a major constraint. Households in Southern province reported the highest proportion of those who reported lack of technical know-how as a major constraint, while North-Western province had the highest proportion of those who viewed Government regulation as a major constraint.

**Table 9.3: Percentage Distribution of Major Constraint in Establishing the Enterprise, Zambia, 2002–2003**

Background characteristic	No constraint	Major constraint					Total number of households with enterprises
		Capital/credit	Technical know-how	Government regulation	Other	Total	
<b>All Zambia</b>	<b>31</b>	<b>56</b>	<b>5</b>	<b>2</b>	<b>6</b>	<b>100</b>	<b>601, 703</b>
<b>Residence</b>							
Rural	34	50	7	2	7	100	340, 786
Urban	26	64	4	2	5	100	260, 917
<b>Province</b>							
Central	36	53	1	2	7	100	67, 806
Copperbelt	32	57	3	2	6	100	104, 715
Eastern	40	49	5	1	6	100	71, 536
Luapula	29	62	4	4	1	100	102, 558
Lusaka	31	60	4	1	4	100	80, 556
Northern	28	50	12	3	6	100	59, 222
N/Western	38	52	–	6	4	100	4, 694
Southern	15	55	16	3	12	100	55, 746
Western	28	58	4	0	9	100	54, 870

#### 9.1.5. Main Source of Capital for Setting up Enterprise



There were various sources of capital used to set up the enterprises. Table 9.4 shows the main source of capital for setting up the non-farm enterprises. Most of the enterprises were set up with household savings, assistance from family and friends and proceeds from family farm. Over a third (36 percent) of the enterprises were set up with household savings, about a quarter (24 percent) were established with the help of friends and relatives, while proceeds from family farm accounted for about 17 percent. Other sources of capital included proceeds from family non-farm enterprises (7 percent), income from family property (3 percent), and loans from banks and other financial institutions (1 percent). Remittances from abroad, support from Non-Governmental Organizations (NGOs), support from associations and church assistance were not significant.

Enterprises in the urban areas were more likely to use household savings and assistance from friends and relatives. Forty-two percent of the households in the urban areas used household savings as their main source of capital, while 32 percent of the rural households used household savings as their main source of capital. While 19 percent of the rural households relied on friends and relatives for sourcing capital, 32 percent of the households in urban areas sourced their capital from friends and relatives.

The enterprises in the rural areas were more likely to use household savings and proceeds from the family farm. Twenty seven percent of the households in the rural areas used proceeds from their family farm to set up non-farm enterprises compared to 3 percent of the households in the urban areas.

Over half (53 percent) of the households with enterprises on the Copperbelt set up their enterprises from household savings, while about a fifth (19 percent) of the households in Eastern province used their savings to set up their enterprises. Households in Eastern province were the most likely to use proceeds from the family farm to establish their enterprises (37 percent), while the households in Lusaka were the least likely (2 percent). Luapula province had the highest proportion of households who used proceeds from the family non-farm to set up their enterprise. Income from family property(ies) as a source of capital was more or less equally proportioned among the provinces, ranging from 2 to 5 percent of the households in each province. Two-fifths of the households with enterprises in Lusaka sourced their capital from relatives and friends compared to about one-tenth (9 percent) of the households with enterprises in North-Western province.

**Table 9.4: Main Source of Capital Used in Setting Up Non-Farm Enterprises, Zambia, 2002–2003**

Background characteristic	Main source of capital								Total number of households with enterprises
	Household savings	Loans from bank	Proceeds from family farm	Proceeds from family non-farm	Income from family property	Relatives/ Friends	Other	Total	
<b>All Zambia</b>	36	1	17	7	3	24	11	100	601, 703
<b>Residence</b>									
Rural	32	1	27	8	2	19	11	100	340, 786
Urban	42	1	3	5	5	32	11	100	260, 917
<b>Province</b>									
Central	36	8	17	6	3	18	11	100	67, 806

Copperbelt	53	1	5	5	4	24	8	100	104,715
Eastern	19	-	37	5	4	20	15	100	71,536
Luapula	41	-	17	11	2	25	4	100	102,558
Lusaka	28	1	2	5	4	40	19	100	80,556
Northern	34	-	28	9	3	18	7	100	59,222
North-Western	30	-	19	5	5	9	32	100	4,694
Southern	48	0	16	0	2	21	12	100	55,746
Western	22	0	23	13	3	27	11	100	54,870

#### 9.1.6. Main Source of Credit

Few enterprises rely on outside sources for their operations. Ninety-two percent of the enterprises did not use any credit from any other sources during the previous 12 months. Of the remaining 8 percent, 3 percent relied on family and friends, 2 percent utilized proceeds from their own operations, while 2 percent used credit from banks and 1 percent from moneylenders. Other financial agencies and co-operatives were not a significant source of credit for the enterprises.

There was more or less equal distribution of the various main sources of credit between the rural and urban areas, and among the nine provinces. (Refer to Table 9.5).

**Table 9.5: Main Source of Credit Used by Non-Farm Enterprises, Zambia, 2002–2003**

Background characteristic	No credit used	Main source of credit					Total number of households
		Bank	Money lender	Family/friend	Proceeds	Total	
<b>All Zambia</b>	<b>92</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>2</b>	<b>100</b>	<b>601, 703</b>
<b>Residence</b>							
Rural	93	2	1	3	1	100	340, 786
Urban	91	1	1	2	3	100	260, 917
<b>Province</b>							
Central	80	9	0	3	3	100	67, 806
Copperbelt	88	0	1	2	7	100	104, 715
Eastern	93	1	–	4	1	100	71, 536
Luapula	96	2	–	2	–	100	102, 558
Lusaka	95	0	–	3	–	100	80, 556
Northern	97	0	3	–	0	100	59, 222
North-Western	87	10	1	1	–	100	4, 694
Southern	95	1	1	3	–	100	55, 746
Western	95	0	1	4	0	100	54, 870

## 9.2. Summary

To answer a number of key policy questions, a module on non-farm enterprises was included in the LCMS III. The objective was to collect data that would provide information to shed light on the existence of household enterprises.

Of the 2 million households in Zambia, almost a third operate a non-farm enterprise of one sort or another. Trading is the most prominent type of business activity in which the enterprises engage in, accounting for 54 percent of the households who reported operating a non-farm enterprise. This is followed by Manufacturing and Forestry and Fishing, which together account for 28 percent of all the households who operate a non-farm enterprise.

Most of the households cited lack of credit or capital as the single most constraint in establishing the enterprise. Most of the enterprises were set up with household savings, assistance from family and friends and proceeds from family farm. Ninety-two percent of the enterprises did not use any credit from other sources other than their household during the 12 months preceding the survey.

The information collected on non-farm enterprises will further be analyzed in a detailed informal sector report to be produced later. The analysis will help determine the contribution of the informal sector informal to the economy's total output. Also to be covered by the report are the type of activities in the informal sector, the proportion of the workforce employed, the proportion of household income generated, the size of capital investment and the extent of the informal sector's contribution to the competitive market in the economy.

# CHAPTER 10

## HOUSEHOLD FOOD PRODUCTION

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### 10.1. Introduction

Agricultural activities contribute to the welfare of households in two ways. Firstly, the production of food crops and ownership of livestock and poultry contribute to food security of households. Secondly, production of crops and the ownership of livestock and poultry provide means of earning income that enable households to get goods and services vital for their welfare.

This chapter presents the following aspects pertaining to Household Agriculture Production and Food Security among other things: –

- Number of households engaged in agricultural activities
- Types and amounts of major food crops produced
- Ownership of cattle, goats, sheep and pigs
- Ownership of chickens, ducks, guinea fowls and other poultry

The LCMSIII survey collected data on agricultural activities from households and not institutions. It should also be noted that the survey was not a fully-fledged agricultural survey designed to obtain year-round farm management data or crop specific input-output information such as labour usage.

An agricultural household was defined as one where at least one of its members was engaged in either growing, livestock/poultry owning, or fish farming or a combination of any of these. Agricultural activities that a member of the household managed on behalf of persons who were not members of the households were excluded. Agricultural activities from other households managed on behalf of a member of a selected household were included. An agricultural household was therefore defined on condition that the holding belonged to a member of the household and would therefore benefit the household.

The information collected and presented in this chapter refers to the agricultural season that started on 1<sup>st</sup> October 2001 and ended on the 30<sup>th</sup> September 2002. The 1997/1998 agricultural season in this chapter is in reference to agricultural activities based on the data collected in the 1998 LCMS.

## 10.2. The Extent of Agricultural Production

### 10.2.1. Agricultural Households

Overall, the survey estimated that 74 percent of households in Zambia or about 1,492,665 households were engaged in agricultural production activities during the 2001/2002 agricultural season an increase of 3 percent when compared to the 1997/98 agricultural season (see Figure 10.1).

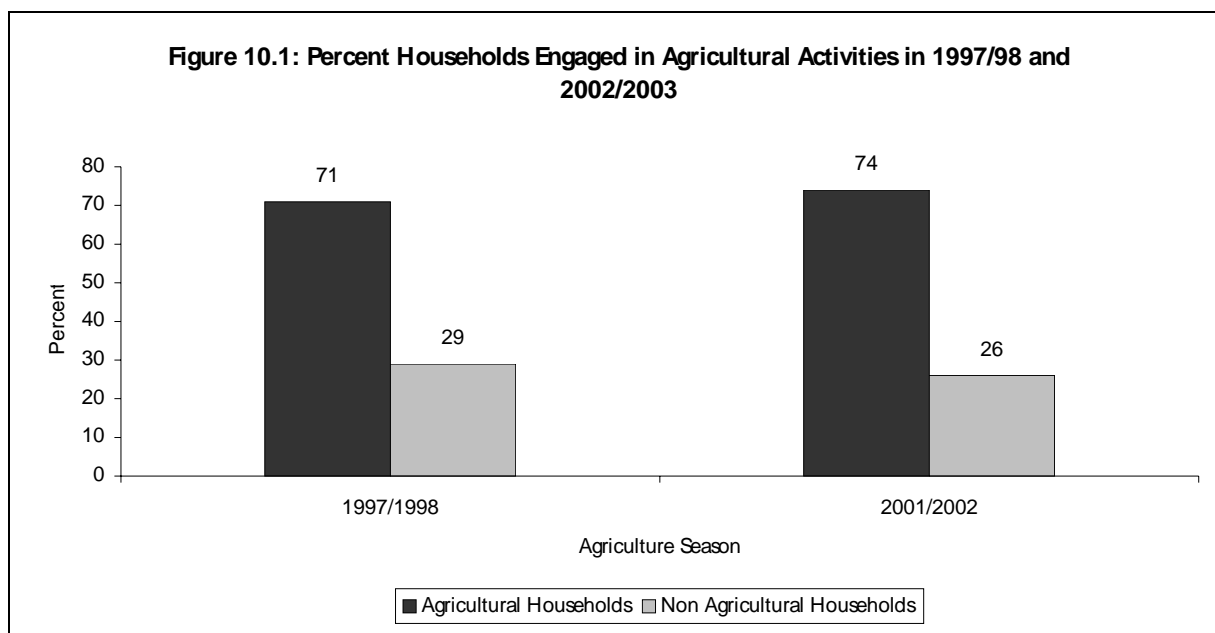


Table 10.1 shows the proportion and number of agricultural households by residence and by province.

Ninety five (95) percent of all rural households and 33 percent of urban households were involved in agricultural production. Compared to the 1997/98–agriculture season, the number of agriculture households increased by four (4) percent in rural areas while the number of households involved in agriculture production in urban areas remained static.

Eastern Province had the highest proportion of households involved in agricultural production (94 percent of all households in the province), followed by Luapula and Western Provinces (93 percent) Northern and North Western Provinces (92 percent). Lusaka province had the lowest proportion of 21 percent a decline from 26 percent during the 1997/98 agricultural season.

**Table 10.1: Proportion of Households Engaged in Agricultural Activities by Place of Residence and Province, 2002–2003**

	All households	Agricultural households	Percentage
<b>Total Zambia</b>	2, 005, 677	1, 492, 665	74
Rural	1, 329, 702	1, 266, 971	95
Urban	675, 975	225, 694	33
Central	194, 444	168, 859	87
Rural	148, 369	144, 486	97
Urban	46, 075	24, 373	53

Copperbelt	315, 078	157, 330	50
Rural	71, 639	61, 717	86
Urban	243, 439	95, 613	39
Eastern	276, 600	259, 600	94
Rural	252, 650	245, 621	97
Urban	23, 950	13, 979	58
Luapula	169, 592	158, 168	93
Rural	144, 967	140, 042	97
Urban	24, 625	18, 126	74
Lusaka	271, 421	56, 622	21
Rural	45, 907	38, 154	83
Urban	225, 514	18, 468	8
Northern	271, 172	249, 029	92
Rural	238, 197	228, 089	96
Urban	32, 975	20, 940	64
North-Western	117, 563	108, 478	92
Rural	103, 631	100, 204	97
Urban	13, 932	8, 274	59
Southern	224, 783	180, 690	80
Rural	175, 218	165, 044	94
Urban	49, 565	15, 646	32
Western	164, 959	153, 889	93
Rural	149, 059	143, 614	96
Urban	15, 900	10, 275	65

## 10.2.2. Food Crop Growing Agricultural Households

### Maize

Maize is widely grown in all provinces of Zambia. This is the most important staple food in Zambia.

Table 10.2 presents the proportions of agricultural households engaged in growing of maize of all types (hybrid and local maize) by place of residence and province.

Seventy six (76) percent of agricultural households grew maize during the 2001/2002 agricultural season compared to 72 percent during the 1997/98 agricultural season. In rural areas, 77 percent of agricultural households grew maize compared to 72 percent of agricultural households in urban areas.

A higher proportion of agricultural households (60 percent) grew local maize compared to 21 percent who grew hybrid maize. Southern, Lusaka and Central provinces had high proportions of households growing hybrid maize at 56, 51 and 39 percent, respectively.

Eastern province had the highest proportion of households (97 percent) that grew maize followed by Southern Province with 93 percent of households. Luapula province reported the lowest proportion of households that grew maize with 33 percent.

An estimated 810, 526 metric tonnes of maize were produced during the 2001/2002 agricultural season with the small scale farmers contributing about 72 percent of the total production.

**Table 10.2: Proportion of Agricultural Households engaged in growing various types of Maize and Distribution of Maize Production by Residence and Province, 2002–2003**

Province/Residence	Agricultural households	Percent growing Maize (all types)	Percent growing Local Maize	Percent growing Hybrid Maize	Maize production (mt)
Zambia	1, 492, 665	76	60	21	810,526
Rural	1, 266, 971	77	62	20	686, 823
Urban	225, 694	72	47	28	123, 703
Central	168, 859	87	53	39	192, 567
Rural	144, 486	87	55	38	161, 172
Urban	24, 373	85	43	44	31, 395
Copperbelt	157, 330	82	68	20	75, 870
Rural	61, 717	94	81	20	33, 169
Urban	95, 613	75	60	19	42, 701
Eastern	259, 600	97	93	13	216, 237
Rural	245, 621	98	95	12	204,879
Urban	13, 979	89	62	35	11,358
Luapula	158, 168	33	27	5	16,392
Rural	140, 042	31	27	5	13,427
Urban	18, 126	43	35	8	2, 965
Lusaka	56, 622	85	43	51	36, 855
Rural	38, 154	95	50	57	23, 330
Urban	18, 468	65	27	40	13, 525
Northern	249, 029	51	44	7	51, 743
Rural	228, 089	51	45	6	45, 643
Urban	20, 940	53	37	17	6, 100
North-Western	108, 478	76	73	5	41, 330

Rural	100,204	75	73	5	35,822
Urban	8,274	81	73	10	5,508
Southern	180,690	93	47	56	144,440
Rural	165,044	94	51	55	138,979
Urban	15,646	81	7	74	5,461
Western	153,889	85	72	16	35,091
Rural	143,614	86	75	14	30,402
Urban	10,275	73	32	44	4,690

### 10.2.3. Other Staple Foods

#### Cassava

Cassava is a staple food grown in many parts of Zambia, most especially in Luapula, Northern and North Western provinces.

Table 10.3 shows the percentage distribution of households involved in production of staple crops other than maize. Other staple crops, in the order of importance, included cassava, millet, sorghum and rice.

The table shows that 36 percent of all the agricultural households grew cassava during the 2001/2002 agricultural season as compared to 28 percent during the 1997/98 agricultural season. This represents an increase of eight (8) percent.

More rural than urban agricultural households grew cassava, 40 percent (compared to 32 percent during the 1997/98 season) as compared to 11 percent (5 percent during the 1997/98 season). Luapula, Northern and North Western provinces had the highest proportion of agricultural households that grew cassava with 92, 81 and 65 percent, respectively.

Cassava production for 2001/2002 agricultural season was estimated at 411,038 metric tonnes. Most of the cassava produced was reported in Northern province followed by Luapula and North Western provinces accounting for 203,009 metric tonnes (49.4 percent), 115,642 metric tonnes (28 percent) and 43,996 metric tonnes (11 percent), respectively.

#### Sorghum

About 7.0 percent of all agricultural households reported growing sorghum and the estimated production was 17,534 metric tonnes with Northern and North Western provinces having the highest production representing 17.6 percent each followed by Western Province with 15.9 percent of the total production.

#### Millet

Millet was mostly grown in Northern, Western and Central provinces. Total production was estimated at 53,003 metric tonnes. Northern province had the highest production of more than half of the total production representing 64.3 percent.

#### Rice



Rice is mainly grown in areas that are well watered especially river valleys, where swamps, plains and marshlands are found.

Only about 4.4 percent of agricultural households were reported to have grown rice during the 2001/2002 agricultural season. The highest number of households that reported growing rice were in Western Province. Total production was estimated at 17,398 metric tonnes. Northern, Western and Eastern provinces had contributed the most to total rice production with Northern Province contributing the most production of 7,916 metric tonnes (45 percent of the total production).

**Table 10.3: Percent of Agricultural Households Engaged in Growing Other Staple Crops and Production, 2002–2003**

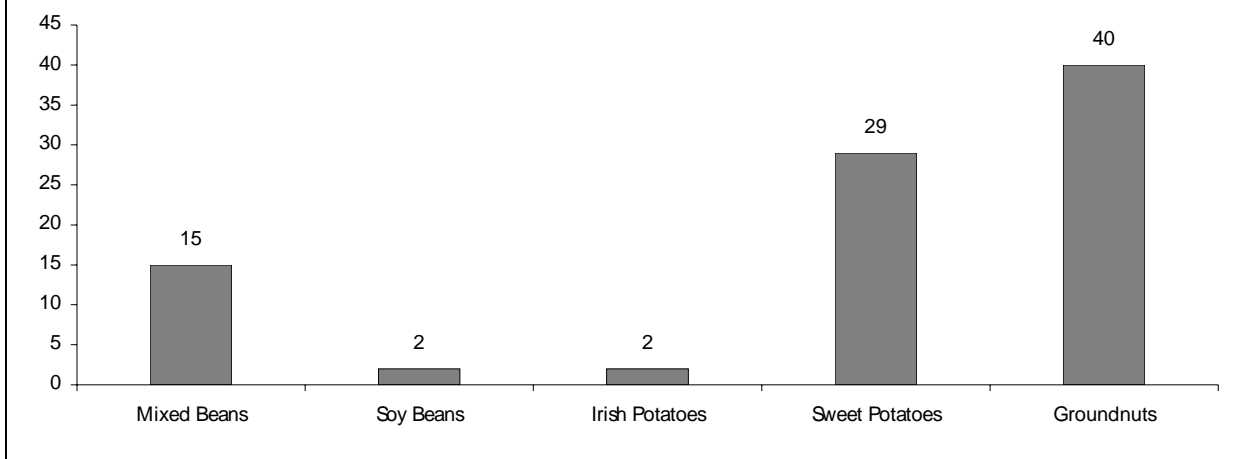
Province/Residence	Agricultural Households	Percent growing Cassava	Cassava production (mt)	Percent growing Sorghum	Sorghum production (mt)	Percent growing Millet	Millet production (mt)	Percent growing Rice	Rice production (mt)
<b>Zambia Residence</b>	1, 492, 665	36	411, 038	7	17, 534	15	53, 003	4	17, 398
Rural	1, 266, 971	40	393, 607	8	17, 007	17	51, 861	5	17, 048
Urban	225, 694	11	17, 431	2	528	1	1, 142	0	350
<b>Province</b>									
Central	168, 859	16	14, 163	7	2, 277	11	6, 133	3	1, 277
Copperbelt	157, 330	6	1, 446	6	1, 924	2	708	0	0
Eastern	259, 600	9	6, 134	4	1, 251	6	1, 922	6	3, 126
Luapula	158, 168	92	115, 642	3	2, 438	6	2, 909	3	680
Lusaka	56, 622	1	0	1	10	0	0	1	51
Northern	249, 029	81	203, 009	9	3, 086	50	34, 103	9	7, 916
North–Western	108, 478	65	43, 282	10	3, 081	6	1, 379	1	341
Southern	180, 690	2	0	4	678	3	807	0	0
Western	153, 889	33	26, 647	19	2, 788	25	5, 043	10	4, 005

#### 10.2.4. Other Food Crops

Other food crops captured in this survey, included groundnuts, sweet potatoes, mixed beans, soya beans and irish potatoes.

Figure 10.2 shows that the growing of groundnuts and sweet potatoes was common in all provinces representing 40 and 29 percent respectively of all agricultural households. Fifteen (15) percent reported to have grown mixed beans while only 2 percent each reported to have grown soya beans and Irish potatoes.

**Figure 10.2: Percentage of Agricultural Households growing Mixed Beans, Soya Beans, Irish Potatoes, Sweet Potatoes and Groundnuts**



### Groundnuts

Groundnuts are widely grown in Zambia. This crop is mostly used as an ingredient in relish especially in vegetables. Manufactured foods such as peanut butter are widely consumed in Zambia.

An estimated 83,812 metric tonnes of groundnuts was produced country wide with most of the produce being reported in Central and Eastern provinces representing 27.9 percent and 24.5 percent respectively.

### Sweet potatoes

Sweet potatoes currently constitute a larger proportion of an average Zambian's breakfast as a substitute for bread. This crop is commonly grown in all provinces and most especially in Northern, Central and Copperbelt provinces. About 30 percent of agricultural households reported growing sweet potatoes. Total production was estimated at 114,514 metric tonnes.

### Mixed beans

Mixed beans has a high nutritional content and is taken by most Zambians. This crop is also grown in most parts of Zambia. Production was estimated at 20,866 metric tonnes with Northern Province contributing 50.7 percent of the total production.

**Table 10.4: Percent of Agricultural Households Engaged in Growing Groundnuts, Sweet potatoes and Mixed Beans by Residence and Province, 2002–2003**

Province/Residence	Agricultural households	Percent growing Groundnuts	Groundnuts production (mt)	Percent growing S/potatoes	S/potatoes production (mt)	Percent growing Mixed beans	Mixed beans production (mt)
<b>Zambia</b>	1, 492, 665	40	83, 812	30	114, 513	15	20, 866
<b>Residence</b>							
Rural	1, 266, 971	42	58, 862	31	104, 570	17	19,026
Urban	225, 694	31	24, 950	15	9, 943	7	1,840
<b>Province</b>							
Central	168, 859	29	23, 406	41	23, 822	5	753
Copperbelt	157, 330	40	10, 267	27	17, 449	11	702
Eastern	259, 600	63	20, 540	22	11, 442	10	2, 237
Luapula	158, 168	45	7, 350	26	6, 849	6	833
Lusaka	56, 622	20	1, 382	28	2, 916	6	774
Northern	249, 029	55	12, 346	40	30, 888	41	10, 577
North-Western	108, 478	65	3, 251	39	12, 060	25	3, 619
Southern	180, 690	32	3, 502	20	3, 887	7	542
Western	153, 889	16	1, 769	19	5, 202	10	829

### 10.3. Ownership of Livestock

A household reported owning livestock if any member of the household owned cattle, sheep, pigs or goats at the time of enumeration.

Table 10.5 shows the number and proportion of agricultural households that owned livestock by type, residence and province during the LCMS III survey.

Overall, 30 percent of all agricultural households in Zambia or about 443,635 households were engaged in raising livestock during the 2002/2003 LCMS. During the 1998 LCMS, 28 percent of all agricultural households reported owning livestock. Among the rural households, 421,386 households reported owning livestock compared to only 22,249 households in urban areas.

Table 10.5 shows that of the 443,635 households that reported owning livestock at the time of the survey, 52 percent owned cattle of all kinds, 55 percent owned goats, 25 percent owned pigs and 4 percent owned sheep. In Western, Southern, Central and Eastern provinces, cattle ownership was more predominant representing 87, 66, 58, and 58 percent of livestock owning households, respectively. In Eastern Province, 42 percent of all the households that reported owning livestock owned pigs.

**Table 10.5: Number and Proportion of Livestock Owning Households by Type of Livestock, Residence and Province, 2002–2003**

Province/Residence	Agricultural households	Livestock owning households	Cattle %	Goats %	Pigs %	Sheep %
<b>Zambia</b>	1, 492, 665	443, 635	51.6	55.2	25.2	3.7
<b>Rural</b>	1, 266, 971	421, 386	51.4	55.4	25.7	3.8
<b>Urban</b>	225, 694	22, 249	55.4	50.5	14.7	2.9
<b>Central</b>	168, 859	51, 708	57.6	60.2	8.1	5.9
<b>Rural</b>	144, 486	49, 777	58.2	61.2	7.5	5.7
<b>Urban</b>	24, 373	1, 931	43.9	33.9	24.4	8.8
<b>Copperbelt</b>	157, 330	11, 575	34.1	59.1	19.0	0.0
<b>Rural</b>	61, 717	8, 046	31.7	60.7	18.5	0.0
<b>Urban</b>	95, 613	3, 529	39.5	55.5	20.1	0.0
<b>Eastern</b>	259, 600	101, 984	58.3	45.7	41.5	5.1

Rural	245, 621	100, 112	58.3	45.4	42.0	5.0
Urban	13, 979	1, 872	57.9	60.5	16.0	7.3
Luapula	158, 168	23, 395	4.4	82.1	13.6	3.6
Rural	140, 042	22, 326	3.9	82.0	13.9	3.8
Urban	18, 126	1, 069	15.2	84.8	8.2	0.0
Lusaka	56, 622	18, 040	53.6	68.1	16.4	3.2
Rural	38, 154	14, 773	53.0	69.5	19.1	2.5
Urban	18, 468	3, 267	56.4	62.0	4.3	6.2
Northern	249, 029	73, 904	24.5	63.2	35.3	4.2
Rural	228, 089	71, 486	24.6	63.2	35.5	4.3
Urban	20, 940	2, 418	19.7	64.0	29.7	0.0
North-Western	108, 478	25, 952	25.3	67.1	25.9	8.8
Rural	100, 204	25, 373	25.3	66.8	25.9	8.7
Urban	8, 274	579	26.6	80.5	24.5	11.2
Southern	180, 690	87, 447	65.6	67.9	19.7	0.9
Rural	165, 044	83, 441	65.1	68.8	20.1	0.9
Urban	15, 646	4, 006	76.4	49.5	12.1	1.6
Western	153, 889	49, 630	86.5	10.3	13.8	1.7
Rural	143, 614	46, 052	86.0	9.9	14.4	1.8
Urban	10, 275	3, 578	92.5	15.5	6.2	0.0

Figure 10.3 shows the percentage distribution of livestock-owning households by Province. The highest proportion was recorded in Southern Province (48 percent), followed by Eastern Province (39 percent), Western and Lusaka provinces (32 percent each) and Central Province (31 percent). The lowest proportion was recorded in Copperbelt Province (7 percent).

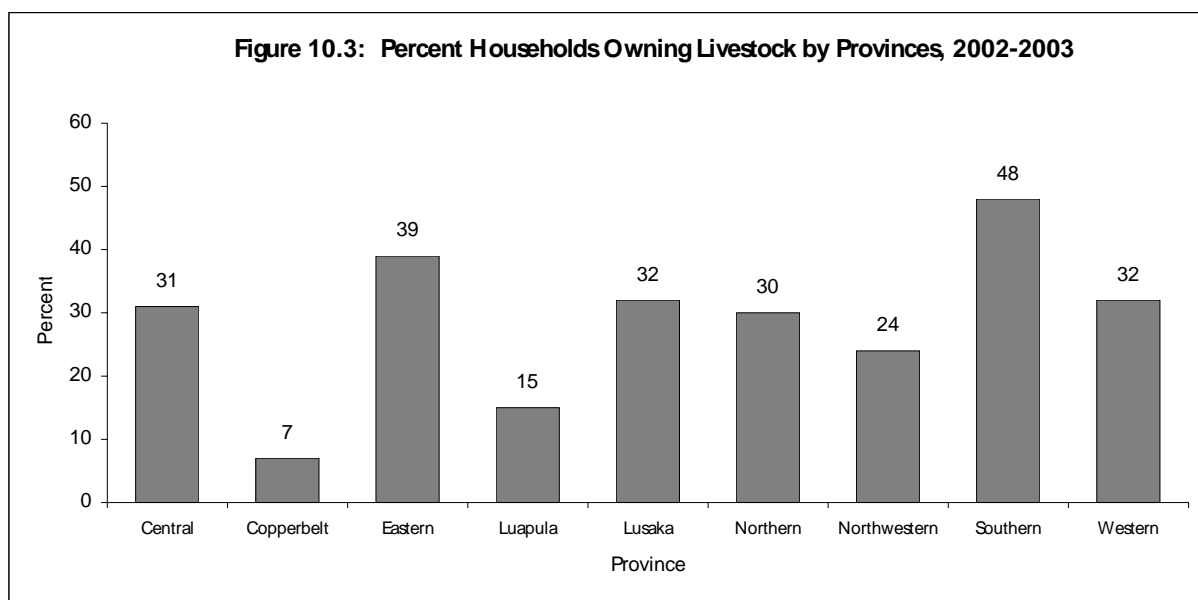


Table 10.6 shows the numbers and percentage distribution of livestock by type, residence and province.

### Cattle

A total number of 1,799,816 cattle were reported to be owned during the 2001/2002 LCMS with a share of 98.7 percent being owned by rural households. Among the provinces that recorded the highest number of cattle, Southern Province had the highest number representing about 32.4 percent of total cattle owned. Western and Eastern provinces followed with 18.7 and 17.8 percent, respectively.

## Goats

Of the total 443,635 households that reported owning livestock, 16.4 percent reported owning goats. The population of goats was estimated at 1,333,198. Southern Province had the highest number of goats owned with a share of 32.1 percent followed by Central Province with 15.4 percent. The least population of goats was recorded in Western Province representing only 2.1 percent.

## Sheep

The number of sheep owned was 101,284. About 95.3 percent were reported to be owned in rural areas. At provincial level, Central Province had the highest number of sheep followed by Eastern province at 40.4 percent and 25.8 percent respectively. There were no significant number of sheep reported to have been owned in the Copperbelt Province.

## Pigs

About 7.5 percent of livestock owning household reported owning pigs and an estimated 482,632 pigs were owned during the 2001/2002 agricultural season. Of these, 39.1 percent were reported to be owned in Eastern Province followed by Northern Province with 14.7 percent. Copperbelt and Luapula provinces had the least number of pigs having a share of 1.3 and 1.9 percent, respectively.

**Table 10.6: Number and Percentage Distribution of Livestock by Type, Residence and Province, 2002–2003**

Province/Residence	Cattle	Percent distribution of cattle	Goats	Percent distribution of goats	Pigs	Percent distribution of pigs	Sheep	Percent distribution of sheep
	Number	%	Number	%	Number	%	Number	%
<b>Zambia Residence</b>	<b>1, 799, 816</b>	<b>100</b>	<b>1, 333, 198</b>	<b>100</b>	<b>482, 632</b>	<b>100</b>	<b>101, 284</b>	<b>100</b>
Rural	1, 613, 875	89.7	1, 249, 800	93.7	466, 752	96.7	96, 520	95.3
Urban	185, 941	10.3	83, 398	6.3	15, 880	3.3	4, 764	4.7
<b>Province</b>								
Central	200,733	11.2	205, 448	15.4	18, 963	3.9	40, 946	40.4
Copperbelt	27, 495	1.5	44, 151	3.3	6, 317	1.3	0	0
Eastern	319, 855	17.8	196, 977	14.8	188, 327	39.1	26, 103	25.8
Luapula	9, 951	0.6	58, 579	4.4	9, 411	1.9	3, 586	3.5
Lusaka	117, 096	6.5	88, 808	6.7	44, 445	9.2	3, 199	3.2
Northern	170, 020	9.4	199, 023	14.9	71, 089	14.7	10, 133	10.0
North-Western	34, 884	1.9	84, 768	6.4	23, 540	4.9	10, 504	10.4
Southern	583, 281	32.4	427, 669	32.1	59, 234	12.3	2, 203	2.1
Western	336, 501	18.7	27, 775	2.1	61, 306	12.7	4, 610	4.6

## 10.4 Ownership of Poultry

A household owned poultry if any of its members owned either chickens, ducks/geese, guinea fowls or any other type of poultry at the time of enumeration. Other types of poultry included turkeys, rabbits, pigeons etc.

Table 10.7 shows poultry owning households and percentage distribution of households owning poultry by type, by residence and province. An estimated number of 955,823 households reported to have owned poultry during the LCMS III representing a 7.9 percent increase compared to the 1998 LCMS.

This also shows that about 47.7 percent and 64 percent of all households and agricultural households respectively own poultry. In rural areas, 869,091 households reported to have owned poultry which represents about 91 percent of total poultry owning households compared to 9 percent in urban areas.

Of the 955,823 households that owned poultry, 97.4 percent owned chickens, 9.2 percent and 5.5 percent owned ducks/geese and guinea fowls respectively while only 4.7 percent reported to have owned other poultry.

**Table 10.7: Number and Percent Distribution Poultry Owning Households by Type of poultry, Residence and Province, 2002–2003**

Province/Residence	All households	Agricultural households	Poultry raising households	Chicken %	Ducks/Geese %	Guinea Fowl %	Other Poultry %
Zambia	2, 005, 677	1, 492, 665	955, 823	97.4	9.2	5.5	4.7
Rural	1, 3298, 637	1, 266, 971	869, 091	98.3	8.4	5.8	4.4
Urban	675, 975	225, 694	86, 732	89.3	17.6	2.8	7.7
Central	194, 444	168, 859	113, 751	96.3	8.5	6.2	6.8
Rural	148, 369	144, 486	106, 287	96.7	8.0	6.4	6.0
Urban	46, 075	24, 373	7, 464	90.8	15.3	3.4	17.4
Copperbelt	315, 078	157, 330	66, 824	93.8	14.0	0.7	6.0
Rural	71, 639	61, 717	36, 473	100	9.3	0.7	3.9
Urban	243, 439	95, 613	30, 351	86.4	19.6	0.8	8.5
Eastern	276, 600	259, 600	175, 875	99.2	8.2	7.0	5.0
Rural	252, 650	245, 621	170, 247	99.4	8.1	7.1	5.0
Urban	23, 950	13, 979	5, 628	95.6	12.3	3.6	5.3
Luapula	169, 592	158, 168	103, 556	94.5	18.7	3.0	0.9
Rural	144, 967	140, 042	93, 183	94.8	18.4	3.2	1.0
Urban	24, 625	18, 126	10, 373	91.4	21.4	1.4	0.4
Lusaka	271, 421	56, 622	32, 942	98.9	9.9	7.1	5.9
Rural	45, 907	38, 154	24, 689	99.1	10.2	7.7	6.4
Urban	225, 514	18, 468	8, 253	98.3	9.1	5.2	4.6
Northern	271, 172	249, 029	184, 201	97.9	7.3	4.5	4.3
Rural	238, 197	228, 089	173, 212	99.0	6.2	4.5	3.9
Urban	32, 975	20, 940	10, 989	79.8	25.6	4.8	11.5
North–Western	117, 563	108, 478	69, 095	98.4	5.0	4.6	1.5
Rural	103, 631	100, 204	65, 636	98.9	4.4	4.7	1.4
Urban	13, 932	8, 274	3, 459	90.4	16.8	3.5	3.6
Southern	224, 783	180, 690	117, 614	97.8	5.5	12.1	9.3
Rural	175, 218	165, 044	111, 979	98.2	5.2	12.3	9.5
Urban	49, 565	15, 646	5, 635	91.4	12.6	8.0	6.0
Western	164, 959	153, 889	91, 965	98.7	9.3	1.6	1.4
Rural	149, 059	143, 614	87, 385	98.8	9.3	1.6	1.1
Urban	15, 900	10, 275	4, 580	96.6	9.0	0.9	7.2

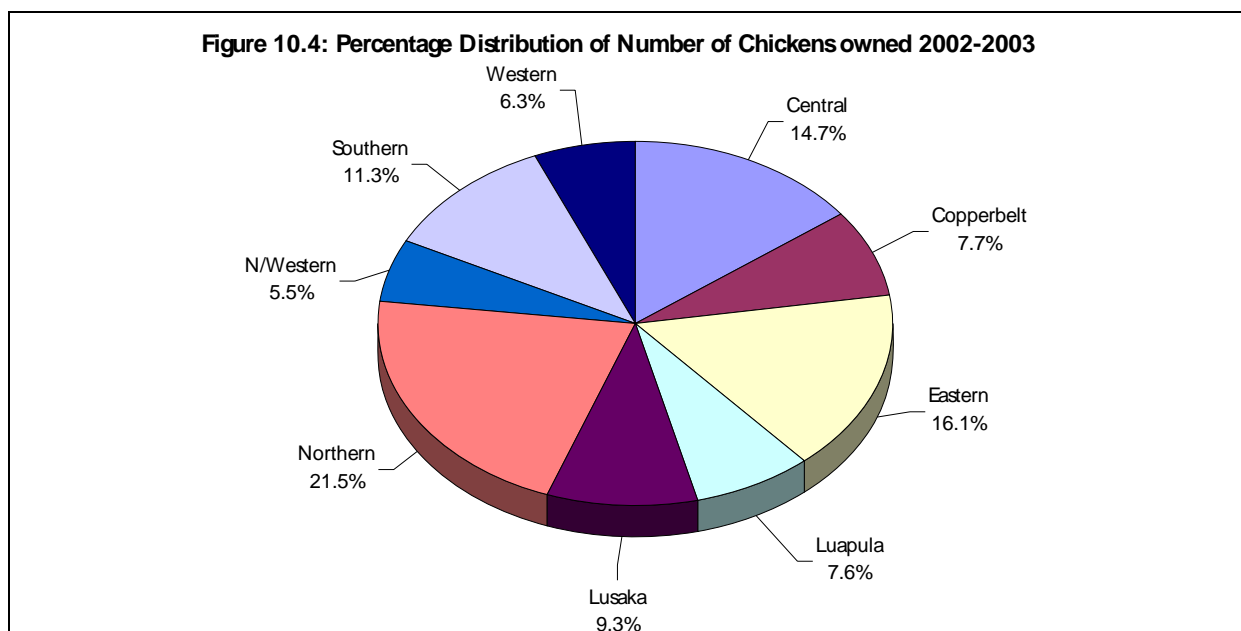
Table 10.8 shows the number of poultry owned by type, residence and province.

During the LCMS III, a total number of 9,874,975 chickens, 481,858 ducks/geese, 263,464 guinea fowls were owned countrywide. Chickens were the most predominantly owned poultry. Of the 9,874,975 chickens owned, urban households owned 1,525,504 while rural households owned 8,349,471.

**Table 10.8: Number of Poultry by Type, Residence and Province, 2002–2003**

Province/Residence	Chicken	Percent distribution of chickens	Ducks/Geese	Percent distribution of Ducks/Geese	Guinea Fowl	Percent distribution of Guinea Fowl	Other Poultry	Percent distribution of Other Poultry
	Number	%	Number	%	Number	%	Number	%
<b>Zambia</b>	<b>9, 874, 975</b>	<b>100</b>	<b>481, 858</b>	<b>100</b>	<b>263, 464</b>	<b>100</b>	<b>627, 692</b>	<b>100</b>
Rural	8, 349, 471	84.6	368, 678	76.5	248, 569	94.3	539, 450	85.9
Urban	1, 525, 504	15.4	113, 180	24.5	14, 895	5.7	88, 242	14.1
<b>Province</b>								
Central	1, 453, 200	14.7	62, 909	13.1	50, 017	19.0	189, 016	30.1
Copperbelt	763, 230	7.7	46, 397	9.6	1, 882	0.7	26, 308	4.2
Eastern	1, 588, 430	16.1	74, 116	15.4	55, 489	21.1	108, 081	17.2
Luapula	751, 030	7.6	101, 190	21.0	7, 453	2.8	6, 443	1.0
Lusaka	918, 568,	9.3	25, 763	5.3	20, 966	8.0	22, 165	3.5
Northern	2, 120, 381	21.5	75, 434	15.7	40, 504	15.4	78, 930	12.6
North-Western	543, 540	5.5	25, 516	5.3	13, 319	5.1	10, 676	1.7
Southern	1, 117, 514	11.3	39, 372	8.2	66, 709	25.3	177, 710	28.3
Western	619, 082	6.3	31, 161	6.5	7, 125	2.7	8, 363	1.3

Figure 10.4 shows percentage distribution of chickens owned by province. The highest number of chickens owned were recorded in Northern Province (21.5 percent) followed by Eastern Province representing 16.1 percent of all the chickens owned. Luapula Province had the highest reported number of ducks/geese with 21.0 percent. For guinea fowls, Southern Province had the highest share of 25.3 percent followed by Eastern Province with 21.1 percent.



## 10.5. Summary

An estimated 1,492,665 households were reported to be engaged in agricultural production activities during the 2001/2002 agricultural season representing an increase of 3 percent over the 1997/1998 agricultural season.

Rural-urban comparisons show that 95 percent of rural households and 33 percent of urban households were involved in agricultural production activities. Eastern Province had the highest number of agricultural households with 259,600, while Lusaka Province had the lowest with 56,622.

A total of 810, 526 metric tonnes of maize was produced national wide with Eastern Province producing 216,237 metric tonnes as the highest followed by Central Province with 192,567 metric tonnes.

About 443,637 households were owning livestock. Of these, 52 percent owned cattle, 56 percent owned goats, 25 percent owned pigs and only 4 percent owned sheep.

A total of 1,799,816 cattle were owned during the 2002/2003 LCMS. Of these, rural households owned 1,613,875.

An estimated number of 955,823 households reported to have owned poultry during the 2002/2003 LCMS representing a 7.9 percent increase over to the 1998 level. Of these 97.4 percent reported to have owned chickens.

A total of 9,874,975 chickens were owned during the 2002/2003 LCMS. Of these, rural households owned 8,349,471.



# CHAPTER 11

## HOUSEHOLD INCOME AND ASSETS

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### 11.0. Introduction

Household poverty is most often closely associated with low incomes or the lack of assets or both. Household incomes and assets play a vital role in the economy in several ways. Most importantly, both contribute to poverty reduction and to the well being of the population. Households generally depend on an income to meet their day-to-day expenditures on food, housing, clothing, education, health, etc. By providing goods, services or income the stocks and types of household asset contribute towards household wealth and higher standards of living. Empowering the Zambian population by enhancing its incomes and accumulation of assets is one of the main targets of Government's poverty reduction and gender policies.

This chapter looks at household incomes and asset ownership in Zambia. It comprises 7 Sections, five of which focus on the different aspects of household income. Section 11.1 looks at various concepts and definitions of income. Section 11.2 covers distribution of households by income group, residence, stratum, poverty status and province. Section 11.3 discusses distribution of households by income group, sex, age and educational status of household head. The distribution of mean per capita incomes by sex of household head, residence, stratum and province is the subject for Section 11.4. Section 11.5 covers income distribution in Zambia and analyses the extent of inequality in its distribution using per capita income deciles, Lorenz curves and Gini coefficients. Section 11.6 discusses the distribution of household income by source, residence, stratum, and province. Finally, Section 11.7 looks at household assets by residence and sex of household head.

Where applicable, corresponding statistics from LCMS 1996 and 1998 are presented alongside statistics for 2002–2003. Caution needs to be exercised, however, when comparing statistics among the three years. Data for 2002–2003 covers some months of the 2002–2003 period. Data for 1996 relate to the period 'September to November' while data for 1998 to the period 'November to January'. Consequently, statistics for 1996 and 1998 have a seasonal influence that the survey methodology for LCMS 2003 was specifically designed to eliminate by using a combination of cross-sectional and time series analysis covering the twelve months of the year.

### 11.1. Definitions

**Household monthly income:** Monthly income is the monthly earnings of a household member from engaging in economic activity such as the production of goods and services, and from ownership of financial and non-financial assets. Household income is the sum of all incomes of household members.

**Per capita mean monthly income:** Per capita mean monthly income denotes the average monthly income of a household member. It is calculated as a quotient of total household monthly income and the total number of persons in the household.

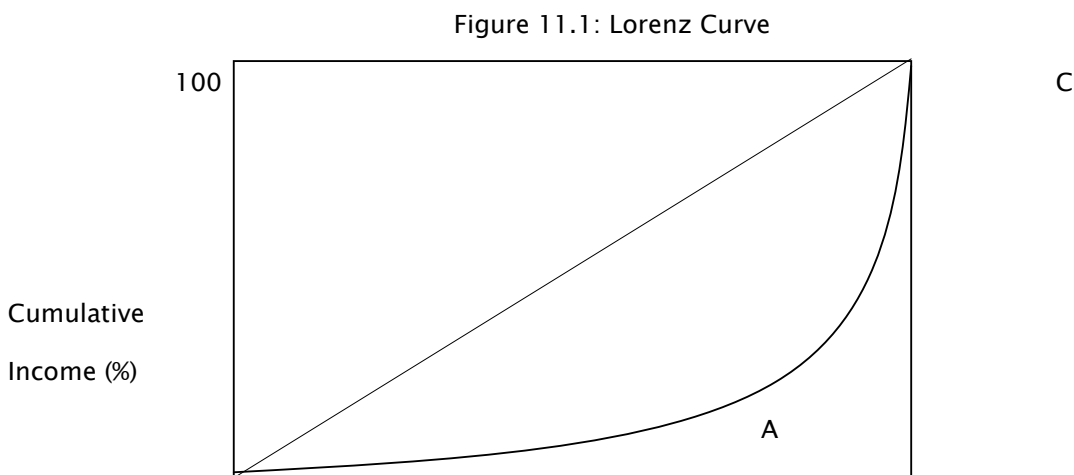
**Household mean monthly income:** Household mean monthly income is the average monthly income of a household, and is calculated as a quotient of total monthly income of all households and the total number of households in Zambia. Related to the mean monthly income is the modal income representing the income received by the majority of the households.

**Per Capita Income deciles:** Per capita income deciles are a tabular representation of income distribution of a population. Per capita income deciles divide an income distribution arranged in ascending or descending order into 10 equal parts called deciles. For each decile, the percentage of total income is calculated as well as the percentage of total population receiving the total income in the decile. The difference between the two percentages varies directly with inequality in income distribution.

**Lorenz curve:** A Lorenz curve (curve OC in Figure 11.1) is a graphical representation of income distribution of a population. It shows, in form of a graph, the different proportions of total income going to different proportions of the population. The curve depicts income inequalities by the extent to which it diverges from an equi-income distribution line. The equi-income distribution line (OC) is a straight line joining the ends of the Lorenz curve and represents total equality in income distribution. Each point on the equi-income distribution line is such that a given percentage of the population receives an equal percentage share of total income. This means that 10 percent of the population receive 10 percent of the total income, 90 percent of the population receive 90 percent of the total income, etc.

**Gini coefficient:** The Gini coefficient measures income distribution using an index of inequality. The coefficient gives the numerical degree to which the Lorenz curve diverges from the equi-income distribution line. In Figure 11, the straight line OC is the equi-income distribution line while the curve OC represents the Lorenz curve. The Gini coefficient is the ratio of area A to the sum of areas A and B. Hence; the Gini coefficient (G) is given by;  $G = A/(A + B)$

A Gini coefficient always ranges from 0 to 1. A coefficient of 0 represents total equality in income distribution while a coefficient of 1 represents total inequality. A coefficient such as 0.57 can be considered to represent a high incidence of inequality in income distribution while a coefficient such as 0.15 represents a more equitable income distribution.



0

100

Cumulative population (%)

**Poverty status and household income:** The poverty status of a household (extremely poor, moderately poor or not poor) is determined by household expenditure on a goods basket comprising specially selected food and non-food items. Expenditures on exceptional items (items that are not part of the basket) do not go directly into determining household poverty status. The LCMSIII 2002/2003 survey used neither household income nor income groups to determine a household's poverty status.

## 11.2. Distribution of Households by Income Group, Residence, Poverty Status, Stratum and Province, 2003

Table 11.1, Figures 11.2 and 11.3 summarize the distribution of households by income group, residence, poverty status, stratum and province. The tables show that the modal income group for rural households in Zambia is the income group 'K150,001–K300,000', with 39 percent. The distribution for urban households is bi-modal; K150,000 – K300,000 and 'K800,001 and above', each with 24 percent of households.

Table 11.1 and Figure 11.3 also show that households in Zambia generally receive low incomes. Both rural and urban areas have more households in the lower income groups. About 92 percent of rural households and 68 percent of urban households receive K600,000 or less. The modal income group for rural households is '150,001–300,000', with 39 percent of total number of rural households. This is followed by the income group '50,000–150,000', with 29 percent of households. For urban households, the modal income groups are '150,001–300,000' and the relatively high-income group '800,000 or above', with 24 percent each of urban households. In terms of mean monthly income, urban households receive K790, 652 as compared with K283,796 for rural households. The average monthly income for urban households was almost 3 times that received by rural households.

Analysis of households by poverty status reveals the same pattern that a high percentage of households in Zambia generally receive low incomes, even for the apparently non-poor households. Ninety-six percent of extremely poor households, 90 percent of moderately poor households and 71 percent of non-poor households received K600,000 or less. The lowest income group (less than 50,000) had about 5 percent of the extremely poor, 3 percent of the moderately poor and 2 percent of the non-poor households. The modal income group for all the poverty classes was '150,001–300,000'. For the extremely poor and moderately poor households, followed by the relatively lower income group '50,000–150,000', with 37 percent and 21 percent of households, respectively. In the case of the non-poor households, the income group 800,001 and above catered for the significant proportion of households, at 21 percent of households. For

incomes above K600,000, the proportion of extremely poor, moderately poor and non-poor households were at 4, 10 and 21 percent, respectively.

In terms of mean income, non-poor households received the highest mean monthly income (K724,208) or more than 3 times the mean income for extremely poor households. Generally, the higher the mean monthly household income, the less severe is the poverty level.

Table 11.1 also shows that 93 percent of small-scale agricultural households received K600, 000 or less. This was followed by 84 percent for non-agricultural households, and 63 percent for medium-scale agricultural households. Large-scale agricultural households had only 56 percent of their households receiving K600,000 or less, the lowest proportion in rural strata. Medium-scale agricultural households receiving very low incomes include mainly the emergent agricultural households that had just recently moved from small-scale into medium-scale agriculture. Large-scale agricultural households in the lower income groups include mainly the new entrants in large-scale agriculture who still have to adapt to large-scale agricultural activities. The modal income group for all strata was '150,001-300,000' except large-scale agricultural households. The modal income group for large-scale agricultural households was 'above 800,000', with 37 percent of households. In general, the higher the scale of agricultural activity, the lower is the proportion of households in low-income groups. In terms of mean monthly income, large-scale agricultural households received the highest mean income equivalent to K1,959,765 or more than 7 times the mean income for small-scale agricultural households (K270,059). In general, the scale of agricultural activity is positively related to the mean monthly household income.

Within urban strata, the general pattern that most households in Zambia receive incomes below K600,000 is slightly reversed for medium-cost and high-cost housing areas. Urban low-cost housing areas had 75 percent of their households receiving incomes below K600,000 and only 25 percent receiving incomes above K600,000. Medium-cost housing areas had more households (52 percent) receiving incomes above K600,000 than those receiving K600,000 or less (48 percent). High-cost housing areas had the least proportion of households receiving K600,000 or less (29 percent) and the highest proportion in the income groups above K600,000 (71 percent). The modal income-group for households in low-cost housing areas was '150,001-300,000' while households in medium-cost (43 percent) and high-cost housing areas (63 percent) had a modal income group of 'above 800,000'. Generally, the higher the cost of the housing area, the higher is the proportion of households in high-income groups. In terms of mean monthly household income, households in high-cost housing areas received the highest mean monthly income equivalent to K2,452,644 or 5 times the mean monthly income for households in low-cost housing areas (K506,190). Households in medium-cost housing areas ranked second to their counterparts in high-cost housing areas, with a mean monthly income of K1,145,814 or more than twice the mean income of households in low-cost housing areas. In general, the higher the cost of the housing area, the higher is the mean income.

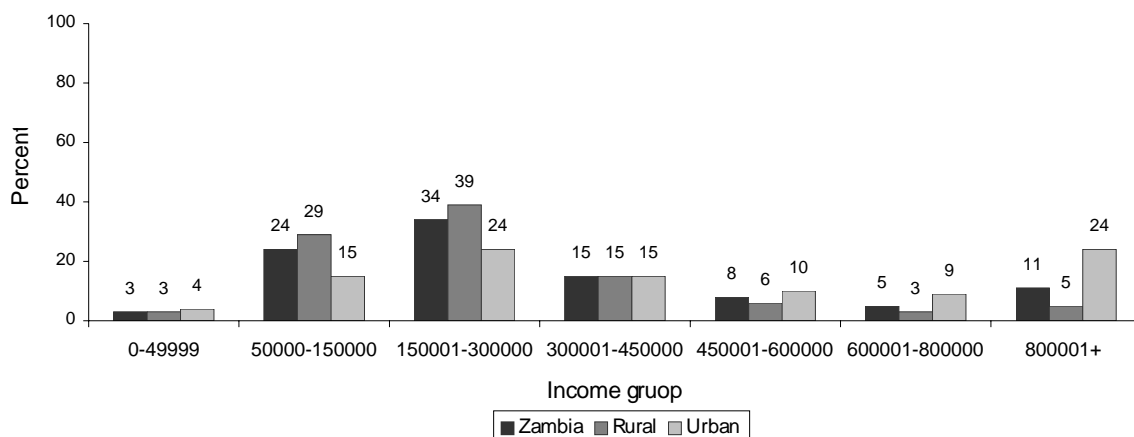
At provincial level, Northern, Luapula and North-western provinces had the largest percentage (94 percent each) of their households receiving K600,000 or less and only about 6 percent receiving

income above K600,000. This was followed by Eastern and Central provinces each recording 89 percent of their households receiving K600,000 or less, closely pursued by Southern province with 81 percent. Lusaka province had the least percentage (66 percent) of households receiving K600,000 or less but the highest percentage (34 percent) receiving more than K600,000. Copperbelt province had the highest proportion (73 percent) of its households receiving K600,000 or less. The modal income group for households in all provinces was '150,001 – 300,000' except for households in Lusaka province whose modal class was 'above 800,000'. In terms of mean monthly income, households in Lusaka province received the highest mean monthly income (K933,647). Households on the Copperbelt province were next with a mean monthly household income of K630,815. Households in Northern province receive the least mean monthly income of K265,222, or less than a third of the mean income for households in Lusaka province. Among households with small mean incomes are Households in Luapula province (K282,900) and in Northwestern province (K295,156).

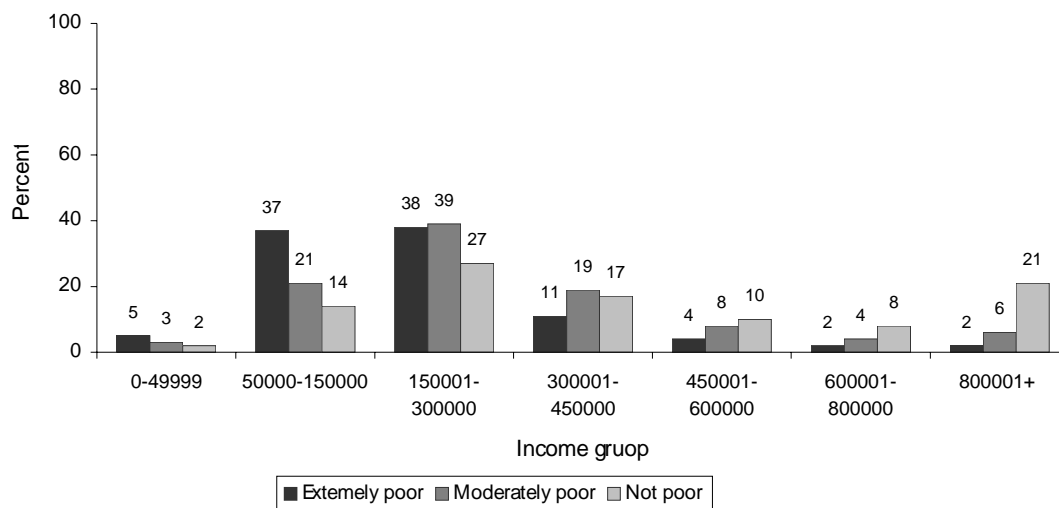
**Table 11.1: Percentage Distribution of Households by Income Group, Residence, Stratum, Poverty Status, Area, and Province, 2002–2003**

Residence/Poverty Status/ Stratum/Province	Income Group (Kwacha)							Total	Mean Income	Number of Households
	Less Than 50000	50000–150000	150001–300000	300001–450000	450001–600000	600001–800000	800001 +			
<b>All Zambia</b>	3	24	34	15	8	5	11	100	453,784	2,005,677
Rural	3	29	39	15	6	3	5	100	283,796	1,329,702
Urban	4	15	24	15	10	9	24	100	790,652	675,975
Extremely poor	5	37	38	11	4	2	2	100	228,331	757,683
Moderately poor	3	21	39	19	8	4	6	100	323,483	418,882
Not poor	2	14	27	17	10	8	21	100	724,208	828,048
<b>a. Rural</b>										
Small Scale Farmers	3	29	39	15	6	3	4	100	270,059	1,229,244
Medium Scale Farmers	1	12	23	14	13	7	30	100	992,556	13,890
Large Scale Farmers	0	5	14	33	4	7	37	100	1,959,765	688
Non-agricultural households	4	23	35	15	7	6	9	100	353,167	85,880
<b>b. Urban</b>										
Urban Low Cost	4	17	27	17	10	9	16	100	506,190	534,538
Urban Medium Cost	2	8	14	14	10	9	43	100	1,145,814	64,247
Urban High Cost	2	4	7	8	8	8	63	100	2,452,644	77,190
Central	8	29	30	15	7	4	7	100	339,812	194,444
Copperbelt	3	20	28	14	8	7	20	100	630,815	315,078
Eastern	1	26	40	15	7	4	7	100	319,397	276,600
Luapula	4	33	39	12	6	2	4	100	282,900	169,592
Lusaka	1	11	24	19	11	8	26	100	933,647	271,421
Northern	4	37	36	11	6	3	4	100	265,222	271,237
North-Western	3	26	42	16	7	2	5	100	295,156	117,563
Southern	2	16	35	20	8	7	11	100	435,356	224,783
Western	2	22	41	16	9	4	6	100	325,895	164,959

**Figure 11.2: Percent Distribution of Households by Income Group and Residence, 2002-2003**



**Figure 11.3: Percent Distribution of Households by Income Group and Poverty Status**



### 11.3. Percentage Distribution of Households by Income Group, Sex, Age and Educational Level of Household Head, 2002-2003

This section of the report looks at the distribution of household income by sex, age and educational level of household head. This information is summarized in Table 11.2.

The table shows that the mean monthly income for male-headed households (K490,227) was higher than that for female-headed households (K333,275). The Low-income groups had a higher proportion of both male and female-headed households than high-income groups. The modal income group for households headed by either sex was '150,001-300,000' with 34 percent each of male- and female-headed households. The proportion of households receiving K600,000 or

less was 83 percent for male-headed and 90 percent for female-headed households. The proportion of male-headed households receiving more than K600,000 (17 percent) was higher than for female-headed households (10 percent).

Age-wise, the modal income group for all age groups was '150,001–300,000' except the age group '12–19 years' which had a lower modal income group of '50,000–150,000'. For income groups above K600,000, household heads in the age group '40–49 years' have the highest proportion (22 percent) of households, while for income groups K600,000 or below the age group '12–19' years had the highest proportion of households (94 percent). The age groups '12–19 years', '20–29 years', and '60 years and above', had the lowest proportions of households receiving above K600,000. There was a positive relationship between educational level of household head and average monthly household income. Households of heads possessing a degree and above had a mean monthly household income (K2,079,370), which was much higher than households of heads with no academic qualifications (K268,011). The proportion of households in high-income groups was higher for households with heads having a degree and above (76 percent) than for households with Heads possessing lower qualifications (24 percent).

**Table 11.2: Percentage Distribution of Household Income by Sex, Age, and Educational Level of Household Head, 2002–2003**

Sex of Head/Age/ Educational Level	Income Group (Kwacha)							Total	Mean Income (K)
	Less than 500000	500000– 150000	150001– 300000	3000001– 450000	450001– 600000	600001– 800000	800001 +		
<b>Zambia</b>	3	24	34	15	8	5	11	100	453,783
Male	3	22	34	16	8	5	12	100	490,227
Female	4	32	34	14	6	4	6	100	333,275
<b>Age Group</b>									
12–19	0	44	30	20	0	5	0	100	224,807
20–29	3	26	40	14	6	4	6	100	335,978
30–39	3	22	33	16	8	5	13	100	502,075
40–49	2	19	31	16	9	5	17	100	585,793
50–59	4	25	30	14	8	5	13	100	502,876
60+	5	30	34	15	7	4	5	100	300,871
<b>Education Level</b>									
Grade 1–7	5	38	38	10	4	2	3	100	268,011
Grade 8–9	3	28	40	16	6	3	3	100	278,412
Grade 10–12	3	19	38	19	8	6	8	100	364,746
Grade 12 GCE	2	11	20	19	14	11	23	100	671,947
(a)	1	9	9	11	8	9	52	100	1,162,245
College/Undergraduate									
Degree and above	2	3	4	6	9	8	68	100	2,079,370

#### 11.4. Mean Per Capita Income by Sex of Head, Residence, Stratum, and Province, 2003

The mean per capita income for Zambia for January/December 2003 was K101,495 (Table 11.3). The table also shows that urban households (K177,283) have a mean per capita income higher than that of rural households (K63,252).

Analysis by province shows that households in Lusaka province had the highest per capita income (about K220,659), followed by households on the Copperbelt (K140,566). Households in Northern province had the lowest per capita income (about K59,576). In general, provinces with high per capita incomes also had high mean monthly household incomes. Generally, male-headed households had higher per capita incomes than female-headed households in most provinces except Eastern, Luapula and Northwestern provinces. The exceptional provinces had higher per capita incomes for female-headed households of about K74,632, K75,966 and K75,825 respectively. The respective per capita incomes for male-headed households for the same provinces were K70,620, K60,606 and K61,591.

In terms of per capita mean incomes by strata, small-scale agricultural households had the lowest per capita mean income (K59,136) while large-scale agricultural households had the highest per capita incomes (K298,549). Female-headed small-scale agricultural households (K61,011) and medium-scale (K192,715) agricultural households had higher per capita incomes than male-headed small-scale agricultural households (K58,514) and male-headed medium-scale agricultural households (K132,729). In urban areas, households in low-cost housing areas received the lowest per capita income (K110,186) while households in high-cost housing areas received the highest mean per capita incomes (K590,220).





**Table 11.3: Mean Per Capita Income by Sex of Head, Residence, Stratum, and Province, Zambia, 2002–2003**

Residence/Stratum/province	All sexes	Mean Per Capita Income (Kwacha)	
		Male	Female
<b>All Zambia</b>	<b>101,495</b>	<b>104,541</b>	<b>91,426</b>
Rural	63,252	63,436	62,673
Urban	177,283	183,195	155,595
<b>Stratum</b>			
Small Scale Farmers	59,136	58,514	61,011
Medium Scale Farmers	136,204	132,729	192,715
Large Scale Farmers	298,549	309,185	116,620
Non-agricultural households	108,883	111,883	92,789
Urban Low Cost	110,186	111,478	105,463
Urban Medium Cost	235,887	249,819	194,366
Urban High Cost	590,220	604,895	523,159
<b>Province</b>			
Central	68,470	71,647	58,281
Copperbelt	140,566	142,215	134,694
Eastern	71,696	70,620	74,632
Luapula	63,616	60,606	75,966
Lusaka	220,659	230,397	181,413
Northern	59,576	59,907	58,328
North-Western	65,385	61,591	75,825
Southern	88,113	92,904	69,757
Western	75,639	77,618	71,633

#### **11.5. Income Distribution By Residence and Per Capita Income Deciles; Lorenz Curves and Gini coefficient; 2002–2003**

Inequality in income distribution is one of the factors determining inequality in levels of household expenditures, and access to goods and services. Studies have shown that it requires high growth rates in the Gross Domestic Product (GDP) to raise household expenditures to acceptable levels in countries with significant inequality in income distribution. With high inequality and low GDP growth rates, therefore, it may be more difficult for Government to meet basic needs targets for all the people. This section looks at the extent of inequality in income distribution in Zambia. Table 11.4a shows households by per capita income deciles and residence. The table also gives the Gini coefficients for Zambia.

An analysis of income deciles reveals that distribution of income in Zambia is very unevenly distributed. According to Table 11.5a, the bottom 50 percent of the Zambian population claimed meagre 15 percent of total income, while the top 10 percent claims 48 percent of the total income, or more than 3 times the income share for the bottom 50 percent. In September/November 1996, the bottom 50 percent claimed a mere 11 percent of total income while the top 10 percent claimed about 53 percent of total income. The corresponding figures for November/January 1998 were bottom 50 percent with 10 percent and top 10 percent with 57 percent. Within rural areas, the bottom 50 percent of the rural population claims 22 percent of the total income, while the top 10 percent claims 33 percent, or 1.5 times the income share for the bottom 50 percent. For urban areas, the bottom 50 percent of urban population received only 12.0 percent of total income, with the top 10 percent receiving slightly more than half of the total income (51 percent).

In terms of the Gini coefficient, Zambia as a whole has a coefficient of 0.57 (0.61 for September/November 1996 and 0.66 for November/January 1998). These coefficients are among the highest in the world, and indicate that income is very unevenly distributed in Zambia. Income inequalities are more pronounced in the urban areas with a Gini coefficient of 0.61 than in rural areas with a coefficient of 0.42.

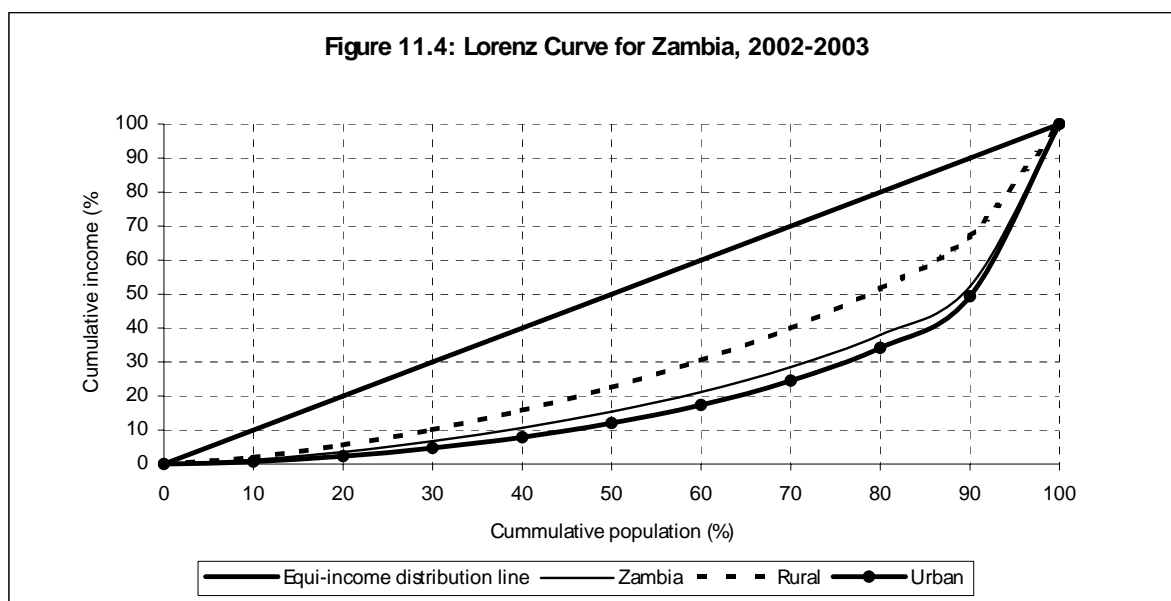
**Table 11.4a: Percentage Distribution of Households by Per Capita Income Deciles and Residence, 2002–2003**

Decile	All Zambia			Rural		Urban	
	Cumulative percentage of household	Percent Share of per capita income	Cumulative share of per capita income	Percent share of per capita income	Cumulative share of per capita income	Percent share of per capita income	Cumulative share of per capita income
First decile	10	1.21	1.21	1.98	1.98	0.72	0.72
Second decile	20	2.34	3.55	3.56	5.54	1.58	2.30
Third decile	30	3.14	6.69	4.60	10.14	2.39	4.69
Fourth decile	40	3.92	10.61	5.63	15.77	3.19	7.88
Fifth decile	50	4.76	15.37	6.71	22.49	4.13	12.02
Sixth decile	60	5.83	21.20	7.94	30.43	5.33	17.35
Seventh decile	70	7.29	28.49	9.43	39.86	7.18	24.53
Eighth decile	80	9.55	38.03	11.75	51.61	9.70	34.23
Ninth decile	90	14.27	52.30	15.43	67.04	15.09	49.32
Tenth decile	100	47.70	100.00	32.96	100.00	50.68	100.00
Gini Coefficient		0.57		0.42		0.61	

Table 11.4b shows that income distribution in Zambia is biased towards urban areas. With about 35 percent of total population, urban areas claimed about 59 percent of total income while rural areas with about 65 percent of total population claimed only 41 percent of the total income. The uneven distribution of income in Zambia is better represented by Lorenz curves (Figure 11.4). The Lorenz curve for urban areas exhibits greater divergence than the curve for rural areas, indicative of higher inequalities in income distribution in urban areas than in rural areas.

**Table 11.4b: Percent Income Shares by Residence, 2002–2003**

Residence	Mean Monthly Household income (Kwacha)	Mean Household size	Population		Annual household income	
			Number	Percent	Amount (Kwacha)	Percent
<b>Zambia</b>	<b>453,784</b>	<b>5.4</b>	10,765,284	<b>100</b>	<b>10,941,901,133,904</b>	<b>100.0</b>
Urban	790,652	5.5	3,717,863	35	6,413,531,828,400	59
Rural	283,796	5.3	7,047,421	65	4,528,369,305,504	41





## 11.6. Household Income by Source, Residence, Stratum and Province, 2002–2003

Table 11.5 shows total household income by source of income, residence, stratum and province. The majority of households in Zambia derived the largest proportion of their incomes from regular wages and salaries (42 percent) followed by own-produce (21 percent) and businesses (18 percent). Other sources of income, covering borrowing, begging, and sales of assets, accounted for 16 percent of income. The sale of agricultural produce accounted for only 3 percent.

For September/November 1996, regular wages and salaries accounted for 36 percent, and 34 percent for November/January 1998.

Urban households earned a higher proportion of income from regular salaries and wages (63 percent) than rural households (13 percent). Consumption of own produce was much more predominant among rural households (48 percent as compared with 2 percent for urban households). The proportion of household income from business was higher for urban households (20 percent) than for rural households (15 percent). Other sources of income contributed about 15 percent to incomes of urban households and 17 percent to incomes of rural households.

Most of the income (51 percent) for small-scale agricultural households came from consumption of own produce followed by other sources (18 percent), and then business (13 percent). The sale of agricultural produce yielded a meager 6 percent of incomes for small-scale agricultural households, 20 percent for medium-scale, and 17 percent for large-scale agricultural households. Non-agricultural households, households in low-cost housing areas, households in medium-cost housing areas and households in high-cost housing areas received most of their income from regular salaries (40 percent, 53 percent, 64 percent and 77 percent respectively) as compared with small-scale, medium-scale and large-scale agricultural households (10 percent, 8 percent, and 13 percent respectively).

Analysis by province shows that Households in all the provinces except Copperbelt and Lusaka received more than 30 percent of their income from consumption of own produce. Households on the Copperbelt and Lusaka provinces earned the largest share of household income from regular wages and salaries (65 percent and 63 percent respectively). Other sources of income accounted for the largest proportion of income in Eastern Province (25 percent), followed by households in Northwestern province (21 percent).

**Table 11.5: Proportion Distribution of Total Households Income by Source of Income, Province, Residence, and Stratum, 2002–2003**

Residence/Stratum/ Province	Household source of income (percent)								Consumption of Own Produce	Total
	Sale of food crops	Non food crops	Sale of live- stock	Sale of poultry	Other Farm	Business	Regular salaries	Other		
<b>All Zambia</b>	1	0	1	1	0	18	42	16	21	100
Rural	2	1	3	1	0	15	13	17	48	100

Urban	0	0	0	0	0	20	63	15	2	100
Rural										
Small Scale	2	1	2	1	0	13	10	18	51	100
Medium Scale	7	2	9	2	0	36	8	8	27	100
Large Scale	0	0	13	4	0	54	13	5	10	100
Non Agriculture	0	0	0	0	0	25	40	16	17	100
Urban										
Low Cost areas	0	0	0	0	0	29	53	15	3	100
Medium Cost areas	0	0	0	0	0	17	64	17	2	100
High Cost areas	1	0	0	0	0	7	77	14	1	100
Central	3	2	2	1	0	24	24	12	32	100
Copperbelt	1	0	0	0	0	16	65	13	5	100
Eastern	2	2	2	1	0	17	16	25	35	100
Luapula	1	0	0	1	0	29	20	14	34	100
Lusaka	0	0	0	0	0	17	63	17	2	100
Northern	2	0	1	1	0	22	19	13	42	100
North Western	1	0	1	1	0	14	16	21	46	100
Southern	1	1	4	1	0	14	34	14	32	100
Western	1	0	3	0	0	16	12	15	53	100

### 11.7. Household Ownership of Assets by Type of Asset and Sex of Household Head; 2002–2003

LCMSIII 2002–2003 survey also collected data on household ownership of assets. Households were asked whether they owned any of the assets listed in Table 11.6a. The proportion of households who reported having at least one of these assets is shown in Table 11.6a and Table 11.6b.

According to Table 11.6a, the most commonly owned assets in Zambia were; a hoe (82 percent); a residential house (66 percent); an axe (70 percent); a brazier (59 percent); a radio (43 percent); a bicycle (30 percent); and a non–electric iron (25 percent). Twenty percent of households in Zambia owned a TV.

The proportion of rural households who owned a residential house (77 percent) was higher than for urban households (46 percent). Slightly more than one third (35 percent) of rural households owned a bicycle as compared with only 19 percent for urban households. There were proportionately more urban households owning a motor vehicle (7 percent) than rural households (1 percent).

Generally, ownership of agriculture–related assets (plough, axe, crop sprayer, and fishing net) was more common among rural households than among urban households while ownership of electrical household appliances (TV, video player, radio, electric iron, refrigerators/deep freezer and stove) was more prevalent among urban households than rural households.

A very small proportion of households in rural or urban areas (about 1 percent or less) owned the relatively larger and more valuable assets (fishing boat, tractor, grinding mill and computer). This also applies to non–residential buildings (3 percent of rural households and 2 percent of urban households), but not to residential building.

**Table 11.6a: Percentage Distribution of Assets Owned, by Residence, 2002–2003**

Type of assets	All Zambia	Rural areas	Urban areas
Plough	10	15	2

Crop sprayer	5	6	2
Fishing boat	1	1	0
Canoe	6	8	1
Brazier (Mbaula)	59	43	91
Fishing net	9	13	1
Bicycle	30	35	19
Motor cycle	0	0	1
Motor vehicle	3	1	7
Tractor	0	0	1
Television set (TV)	20	4	51
Video player	8	1	20
Radio	43	34	62
Grinding/Hammer mill	1	1	1
Electric iron	13	2	36
Non-electric iron	25	23	28
Refrigerator/deep freezer	10	1	28
Land phone Line	2	0	4
Cellular Phone	4	0	12
Satellite Dish/Decoder	1	0	2
Sewing Machine	6	4	9
Knitting Machine	0	0	0
Electric/Gas Stove	12	1	34
Non-residential building	3	3	2
Residential building	66	77	46
Scotch Cart	4	5	0
Donkey	0	0	0
Computer	1	0	2
Hoe	82	97	54
Axe	70	88	35
Hunting Gun	1	2	1

Among the transport equipment (canoe, bicycle, motor cycle, and motor vehicle), the majority of households in Zambia owned a bicycle (30 percent), with 35 and 19 percent of rural and urban households owning bicycles.

The most common telecommunication equipment (television, video player, radio, land phone, cellular phone, satellite dish/decoder) among households in Zambia were radio and television. Forty-three percent of all households in Zambia owned a radio (34 percent of rural households and 62 percent of urban households). Twenty percent of all households in Zambia owned a television set (4 percent for rural households and 51 percent for urban households). Twenty percent of urban households owned a video player and 12 percent a cellular phone, with very small proportions for rural households (1 percent and less).

Table 11.6b analyses household assets by sex of household head. In general, male-headed households had a higher proportion of households than female-headed households that owned any one of the assets listed, except a residential building and a hoe. Sixty-eight percent and 66 percent of households who owned a residential building were female-headed and male-headed respectively. For a hoe, 82 percent of households that own a hoe were male-headed while 84 percent were female-headed. Male-head households dominate in terms of ownership of agriculture-related assets (plough, axe, crop sprayer, and fishing net) and most of the telecommunication equipment (television, video player, radio, land phone, cellular phone, satellite dish/decoder).

**Table 11.6b: Percentage Distribution of Assets Owned by Sex of Household Head, 2002/3**

Type of assets	All Zambia	Male	Female
Plough	10	12	6



Crop sprayer	5	5	3
Fishing boat	1	1	1
Canoe	6	7	1
Brazier (Mbaula)	59	60	54
Fishing net	9	11	2
Bicycle	30	35	13
Motor cycle	0	0	0
Motor vehicle	3	3	1
Tractor	0	0	0
Television set (TV)	20	22	14
Video player	8	9	4
Radio	43	49	25
Grinding/Hammer mill	1	1	1
Electric iron	13	15	9
Non-electric iron	25	26	21
Refrigerator/deep freezer	10	11	7
Land phone Line	2	2	1
Cellular Phone	4	5	3
Satellite Dish/Decoder	1	1	1
Sewing Machine	6	7	4
Knitting Machine	0	0	0
Electric/Gas Stove	12	13	9
Non-residential building	3	3	2
Residential building	66	66	68
Scotch Cart	4	4	2
Donkey	0	0	0
Computer	1	1	0
Hoe	82	82	84
Axe	70	73	61
Hunting Gun	1	2	0

## 11.8. Summary

Results from the LCMSIII survey shows that 16 percent of all households in Zambia, 8 percent of rural households and 33 percent of urban households receive incomes above K600,000. The majority of both rural and urban areas receive K600,000 or less. The average monthly household income was at K453,874. Urban households receive a higher mean monthly income (K790,652) than rural households (K283,796).

The modal income group for all poverty classes was '150,001 – 300,000'. The lowest income group (less than 50,000) had 5 percent of the extremely poor, 3 percent of the moderately poor and 2 percent of the non-poor households. About 4 percent of the extremely poor, 10 percent of the moderately poor and 29 percent of the non-poor households received incomes above K600,000.

The modal income group for all rural strata was '150,001–300,000' except large-scale agricultural households whose modal income group was 'above 800,000'. In terms of mean monthly household incomes, large-scale agricultural households received the highest mean income of K1,959,765 as compared with K270,059 for small-scale agricultural households.

The modal income group for urban housing areas was '150,001–300,000'. In terms of mean monthly household income, households in high-cost housing areas received the highest mean monthly income of K2,452,644 as against 506,190 for low-cost housing areas).

Households in all provinces except those in Lusaka had the modal income group '150,001 – 300,000'. The modal income group for households in Lusaka province was 'above K800,000'. In terms of mean monthly income, households in Lusaka province received the highest mean monthly income (K933,647). Households in Northern province received the least mean monthly income of K265,222. Among households in Zambia with small mean incomes were Households in Luapula province (K282,900) and in North-western province (K295,156).

In terms of mean monthly income, male-headed households (K490,227) had a higher mean income than female-headed households (K333,275).

The low-income groups '0 – 600, 000' had 83 percent of male-headed and 90 percent of female-headed households. Household heads in the age group '40–49 years' had the highest proportion (22 percent) of households receiving incomes above K600, 000. The age group '12–19 years' had the highest proportion of households (94 percent) receiving K600, 000 or less. The age groups '12–19 years', '20–29 years', and '60 years and above', had the lowest proportions receiving incomes above K600, 000. Heads possessing a degree and above had a mean monthly household income (K2,079,370), higher than heads with lower academic qualifications.

The mean per capita income for Zambia for January/December 2003 was K101,495. Urban households (K177,283) had a mean per capita income that was higher than that for rural households (K63,252).

Lusaka province had the highest per capita income of about K220,659 while Northern province has the lowest of about K59,576.

Generally, male-headed households had higher per capita incomes than female-headed households in most provinces except Eastern, Luapula and North-western provinces.

Female-headed small-scale agricultural households (K61,011) and medium-scale (K192,715) agricultural households had a higher per capita income than male-headed small-scale agricultural households (K58,514) and male-headed medium-scale agricultural households (K132,729).

The bottom 50 percent of the Zambian population claims a mere 15 percent of total income, while the top 10 percent claims 48 percent of the total income. In September/November 1996, the bottom 50 percent claimed 11 percent of total income while the top 10 percent claimed about 53 percent of total income. Corresponding figures for November/January 1998 are bottom 50 percent with 10 percent, and top 10 percent with 57 percent. Within rural areas, the bottom 50 percent of the rural population claimed 22 percent of the total income, while the top 10 percent claimed 33 percent. For urban areas, the bottom 50 percent of urban population received only 12 percent of total income, with the top 10 percent receiving 51 percent.

More than half the total income (59 percent) was claimed by urban households who only constituted 35 percent of the total population. This implies that 65 percent of the population had to scramble for the remainder 41 percent of the income.

The Gini coefficient for Zambia is 0.57 (0.61 for September/November 1996 and 0.66 for November/January 1998). Income inequalities were more pronounced in the urban areas with a Gini coefficient of 0.61 than in rural areas with a coefficient of 0.42.

Households in Zambia derived the largest proportion of their incomes from regular wages and salaries (42 percent) followed by own-produce (21 percent) and businesses (18 percent). Other sources of income, covering borrowing, begging, sales of assets etc, accounted for 16 percent of income.

Income from consumption of own produce was much more predominant among rural households (48 percent as compared with 2 percent for urban households). The proportion of household income from business was higher for urban areas (20 percent) than for rural areas (15 percent).

Households in all the provinces except Copperbelt and Lusaka received more than 30 percent of their income from consumption of own produce. Households on the Copperbelt and in Lusaka province earned the largest share of household income from regular wages and salaries (65 percent and 63 percent respectively).

The most commonly owned assets in Zambia are; a hoe (82 percent); a residential house (66 percent); an axe (70 percent), a brazier (59 percent); a radio (43 percent); a bicycle (30 percent); and a non-electric iron (25 percent). Twenty percent of households in Zambia own a TV. Except for a residential building and a hoe, the proportion of male-headed households that own any of the assets listed was greater than for female-headed households. Sixty eight percent of female-headed households and 66 percent of male-headed households owned a residential building. The gap in asset ownership between the two types of household was greatest for communication equipment (radio), followed by transport equipment (bicycle).

# CHAPTER 12

## HOUSEHOLD EXPENDITURE

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### 12.0. Introduction

Household expenditure is an important indicator of the welfare of a household. The status of individuals or households in society depends, among other things, on their level of consumption of goods and services. The share of food expenditure from total expenditure on goods and services or income is one of the indicators of how constrained a household is. Generally, households in the lower income group tend to spend more of their incomes on food – Engel's law. Households have a tendency to acquire or consume much more than just food the more income they earn. Therefore the proportion of food expenditure decreases with increased income.

Expenditure data collected in the LCMS 2002–2003 were as follows:

- Education expenditure: include school fees, school uniforms, contribution to Parents Teachers Association (PTA), private tuition, school stationary, etc.
- Medical expenses: include medicines, fees to doctors, pre-payment schemes, etc.
- Expenditure on clothing and footwear
- Expenditure on remittances, in cash and in kind.
- Expenditure on public and personal transport: include expenses to and from work, to and from school, expenses on fuel and vehicle maintenance.
- Expenditure on personal services: include expenses on various services such as laundry, entertainment, domestic servant and hairdressing.
- Expenditure on housing: include rent, water, electricity, candles, paraffin, charcoal including own produce, firewood and housing maintenance
- Expenditure on various food items: include value of consumption of own produce.
- Expenditure on alcohol and non-alcoholic beverages, cigarettes and tobacco

Households spend their money on either food or non-food items. Food items were defined as all the food items the household consumed during the period of the survey. Total Food Expenditure consisted of the values of all purchased food items, home produced food and food received in-kind. Non-food items were defined as all goods and services including purchased, own produced and goods received in kind the household consumed during the period of the survey. The value of non-food items comprised the value of all non-food items, use-value of durable goods such as stove, cars and televisions and the value of services the household consumed during the time of

the survey. To get total household expenditure, the total food and non-food values were summed up.

The data collected on consumption of own produce included both food and non food items. The amounts of own produced food and non-food stuffs were converted to cash values by multiplying their respective quantities used by the household and their respective unit prices.

These amounts were then added to the corresponding cash expenditure to give total expenditure on the items.

### 12.1. Average Monthly Household Expenditure

Table 12.1 shows the average monthly household expenditure and per capita expenditure by residence, stratum and province.

The table shows that the average monthly household expenditure for Zambia was K490,530 with an average per capita expenditure of K111,444. Total average monthly household expenditure, on both food and non- food items, as well as per capita expenditure were lower among the rural households, K386,676 and K87,911 respectively, as compared to K695,340 and K157,853 for the urban households.

Disaggregating rural households by scale of agricultural activities reveals that the small scale farming households followed by the Non agricultural households had the lowest monthly expenditure, K377,001 and K453,018 respectively, while the large scale farmers followed by urban high cost incurred more than twice as much expenditure of about K1,800,000.

**Table 12.1: Average Monthly Expenditure (Kwacha), by Rural/Urban, Stratum and Province, LCMS 2002–2003**

Residence/Stratum/ Province	Monthly average expenditure on Food	Monthly average expenditure on non Food	Monthly average expenditure on rent	Monthly average expenditure on both food and non food	Monthly average per capital expenditure	Households
<b>All Zambia</b>	317,585	115,536	44,283	490,530	111,444	<b>2,004,613</b>
Rural	292,887	70,596	14,330	386,676	87,911	1,330,132

Urban	366,291	203,964	103,352	695,340	157,853	67,4481
<b>Stratum</b>						
Small scale Farmers	290,532	65,016	12,763	377,001	83,561	1,230,692
Medium scale Farmers	514,812	213,443	17,336	759,491	101,663	14,022
Large Scale Farmers	706,819	786,572	260,454	1869,494	319,090	715
Non agricultural households	286,862	122,322	34,526	453,018	146,879	84,703
Urban low cost	322,428	115,545	56,530	508,553	111,358	533,319
Urban middle Cost	453,717	310,300	157,245	944,928	198,500	64,072
Urban High cost	597,081	729,123	382,478	1780,115	445,729	77,090
<b>Province</b>						
Central	396,291	88,243	20,886	521,893	109,206	194,811
Copperbelt	325,557	152,719	81,449	594,252	136,483	315,239
Eastern	298,949	77,254	15,950	410,946	95,352	276,217
Luapula	312,275	70,082	23,349	419,395	93,400	169,574
Lusaka	328,402	265,621	114,929	708,269	169,598	270,743
Northern	240,496	54,884	17,626	321,915	74,168	271,068
North-Western	316,926	61,012	18,510	405,067	89,073	117,537
Southern	341,470	131,214	40,246	513,938	106,340	224,702
Western	322,925	57,656	21,534	410,269	100,416	164,722

The table reveals that households in Lusaka province followed by Copperbelt province had the highest monthly average expenditure on both food and non food items, K708,269 and K594,252 respectively, while Northern province had the lowest (K321,915).

It is also worth to note that monthly average per capita expenditure was highest in Lusaka province (K169,598) and lowest in Northern province (K74,168).

## 12.2. Household Expenditure on Food and Non Food

Table 12.2 shows percentage distribution of household expenditure by items, residence and province. Results in the table show that the households spent 64 percent of their budget on food while 26 percent was spent on non-food items and 10 percent was spent on rentals.

The table also shows that 75 percent of the budget expenditure in rural areas was on food items while their urban counterpart spent 52 percent of their budgets on food and 16 percent on rentals. It further shows that small-scale farmers spent more on food items, 77 percent as compared to large-scale farmers, 38 percent. On the other hand, large-scale farmers spent more on non-food items than small-scale farmers. Large-scale farmers also spent more on rentals (14 percent) than small-scale farmers (4 percent) and medium scale farmers (2 percent) combined together.

In urban areas, households in low cost areas had the highest share of their budget expenditure devoted to food at 63 percent compared to 33 percent for households in high cost areas. In high cost areas households spent more on non-food items, 45 percent, while low cost areas spent the least on non-food items, 25 percent. The findings further show that households in high cost areas spent more of their budgets on rentals (22 percent) than households in urban low cost areas (12 percent).

The provincial findings show that households in Western province recorded the highest expenditure on food items, 79 percent and Lusaka recorded the least expenditure on food items

at 46 percent. On non-food expenditure, Lusaka province had the highest percentage at 37 percent with Western province registering the least at 15 percent. Lusaka and Copperbelt provinces had recorded the highest expenditure in rentals (16 percent and 15 percent, respectively) while central province had the lowest (4 percent).

**Table 12.2: Percentage Distribution of Household Expenditure by Various Expenditure Items, Residence and Province, Zambia 2002–2003**

Residence/Stratum/Province	Percentage share on Food	Percentage share on non food	Percentage share on Rental	Total%	Household
<b>All Zambia</b>	<b>64</b>	<b>26</b>	<b>10</b>	<b>100</b>	<b>2,00,4613</b>
Rural	75	20	4	100	1,330,132
Urban	52	32	16	100	674,481
<b>Stratum</b>					
Small scale	77	19	4	100	1,230,692
Medium scale	67	30	2	100	14,022
Large Scale Farmers	38	48	14	100	715
Non agricultural Households	62	30	8	100	84,703
Urban low cost	63	25	12	100	533,319
Urban medium Cost	47	35	17	100	64,072
Urban High cost	33	45	22	100	77,090
<b>Province</b>					
Central	76	19	4	100	194,811
Copperbelt	55	30	15	100	315,239
Eastern	73	23	5	100	276,217
Luapula	75	19	6	100	169,574
Lusaka	46	37	16	100	270,743
Northern	75	19	6	100	271,068
North-Western	78	17	5	100	117,537
Southern	67	26	8	100	224,702
Western	79	15	6	100	164,722

### 12.3. Percentage Share of Household Food Expenditure

In rural areas the expenditure share on food items was higher, (75 percent) than in urban areas (52 percent). The percentage share of food is an indicator of household welfare. The lower the share of the household expenditure on food, the better off is the household.

Table 12.3 shows the distribution of household expenditure on various food items by stratum. The table shows that the highest percentage of household budget expenditure at national level was spent on food. Sixty four percent of the total household budget expenditure at national level was on food. In terms of percentage share of the household budget expenditure on food, bread and cereals recorded the highest share at 21 percent followed by vegetables at 14 percent. The national household budget share on non-food was 26 percent while the expenditure on rentals was 10 percent.

Therefore, it can be argued that urban households in this case were much better off than rural households. The most important household food expenditure in rural areas was bread and cereals (26 percent) followed by vegetables (20 percent). In urban areas the most important household food expenditure was again bread and cereals (16 percent) with meat and vegetables being the second most important (8 percent each). It is also worth noting that household budget share on rentals were higher in urban areas (16 percent) than in rural areas (4 percent). Urban dwellers also

had a high budget share on non-food items (32 percent) compared to their rural counterparts (20 percent).

Analysis of food expenditure shares by stratum reveals that bread and cereals were the most popular food item consumed by households in various strata, with small scale, medium scale, large scale farmers and non agricultural households recording 27, 20, 12 and 19 percent, respectively. The next popular food item consumed by these households was vegetables. It is also important to note that bread/cereals and vegetables accounted for 48, 37, 22 and 32 percent of the food shares of households in the small scale, medium scale, large scale and non-agricultural strata, respectively.

Bread and cereals remained the dominant food item among all urban households. The next popular food items for households in the low cost, medium cost and high cost were vegetables (10 percent), meat (9 and 8 percent), respectively.

Protein food items such as meat, fish, milk and oils catered for large percentage of the total food share for all households in various strata.

**Table 12.3: Household Expenditure on Food by Stratum, Zambia, 2002–2003**

	All Zambia	Rural	Urban	Small scale Farmers	Medium Scale Farmers	Large Scale Farmers	Non-agric Household	Urban Low cost	Urban Medium cost	Urban High Cost
Total food Share	64	75	52	77	67	38	62	63	47	33
Bread and cereals	21	26	16	27	20	12	19	21	13	8
Meat	7	6	8	6	7	6	7	8	9	8
Fish	7	7	7	7	5	3	7	9	5	3
Milk, Cheese & eggs	2	2	2	2	4	2	2	2	3	2
Oil & Fats	3	3	4	3	2	2	5	4	3	2
Fruits	1	2	1	2	1	1	1	1	1	1
Vegetables	14	20	8	21	17	10	13	10	7	4
Sugar & Sweets	3	4	3	4	3	3	3	3	2	2
Confectionery	1	2	1	2	1	0	1	1	1	1
Nuts	1	2	0	2	2	0	1	1	0	0
Coffee	0	0	0	0	0	0	0	0	0	0
Minerals	1	1	1	1	3	1	2	1	2	1
Alcohol	1	1	1	1	1	1	2	1	1	1
Restaurant	0	0	0	0	0	0	0	0	0	0
Canteens	0	0	0	0	.	.	.	0	.	.
Hotels	0	0	0	0	0	.	0	0	0	0
Percentage share on rent	10	4	16	4	2	14	8	12	17	22
Percentage share on non food	26	20	32	19	30	48	30	25	35	45
Households	2,004,613	1,330,132	674,481	1,230,692	14,022	715	84,708	533,319	64,072	77,090



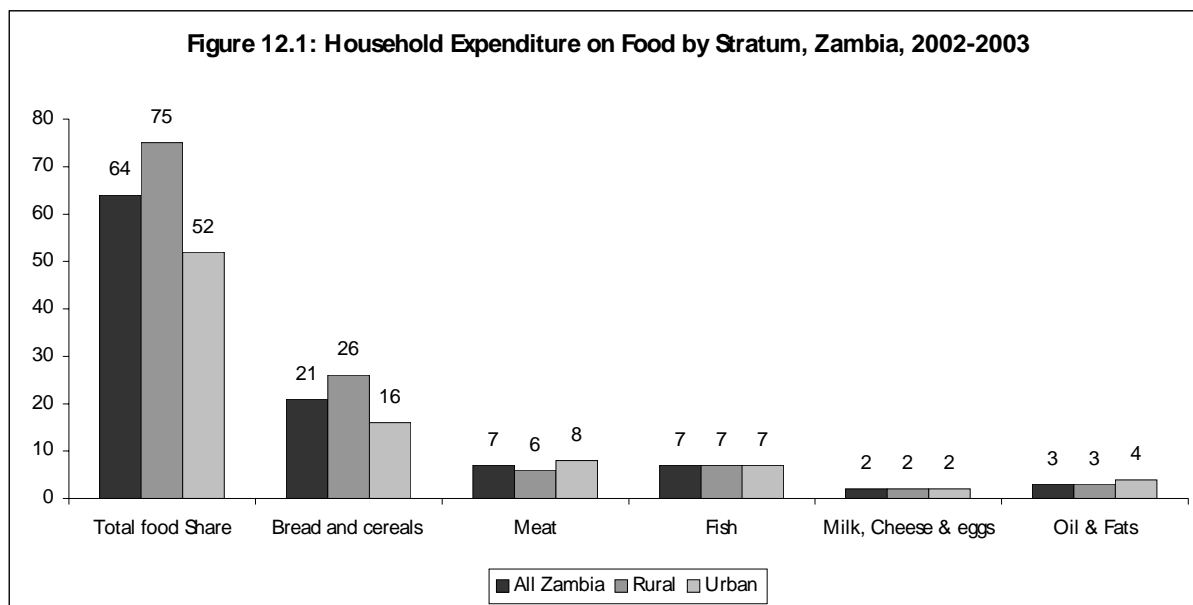


Table 12.4 shows the percentage distribution of household food expenditure per province. The table shows that households in Western province had the highest expenditure on food items compared to other provinces. The table also shows that in all the provinces bread and cereals had the highest food percentage share of expenditure, followed by Vegetables. Also worth noting is that a significant amount was spent by all households in all the provinces on meat and fish.

**Table 12.4: Percentage Share of Household Expenditure on Different Food Items by Province, 2002-2003**

	All Zambia	Central	Copperbelt	Eastern	Luapula	Lusaka	Northern	North western	Southern	Western
Total food Share	64	76	55	73	75	46	75	78	67	79
Bread and cereals	21	22	17	23	34	13	24	25	22	37
Meat	7	6	8	7	4	9	8	9	6	4
Fish	7	11	6	4	12	4	10	10	6	8
Milk, Cheese & eggs	2	2	2	2	1	3	1	1	4	2
Oil & Fats	3	3	4	3	3	4	3	3	3	1
Fruits	1	1	1	3	1	1	1	1	1	3
Vegetables	14	15	10	21	14	8	21	24	16	18
Sugar & Sweets	3	8	3	4	2	3	2	2	3	2
Confectionery	1	5	1	1	1	1	1	1	1	1
Nuts	1	1	1	3	2	0	3	1	1	1
Coffee	0	0	0	0	0	0	0	0	0	0
Minerals	1	1	1	1	1	1	1	1	3	1
Alcohol	1	1	1	1	1	1	1	0	1	1
Restaurant	0	0	0	0	1	0	0	0	0	0
Canteens	0	0	0	.	.	0	.	.	.	.
Hotels	0	0	0	.	0	0	.	0	0	0
Percentage share on non food	26	19	30	23	19	37	19	17	26	15
Percentage share on rent	10	4	15	5	6	16	6	5	8	6
Households	2,004,613	194,811	315,239	276,217	169,574	270,743	271,068	117,537	224,702	164,722

#### 12.4. Percentage Share of Household Budget on Non Food Expenditure

Table 12.5 shows households distribution of expenditure on non-food items. The table reveals that 26 percent of households budgets at national level was spent on non-food items. The table further shows that households spent more on rentals (10 percent) followed by household utilities and clothing and footwear (6 percent each).

Urban households spent more on non-food items than rural households (32 percent and 20 percent respectively). The table also shows that urban households (26 percent) incurred huge expenses on rentals as compared to rural households (4 percent).

Across the strata among farmers, the small-scale farmers spent the lowest on non-food items (19 percent) while large-scale farmers recorded the highest (48 percent). Small-scale farmers and medium scale farmers recorded the highest expenditure on clothing and foot wear (6 percent each) while large-scale farmers recoded highest expenditures on housing rentals and household utilities (14 percent each). Non-agricultural households had their expenditures distributed across the different non-food items with rentals (8 percent) recording the highest followed by clothing and footwear (7 percent)

In urban areas, households in high cost areas recorded the highest spending on nonfood items (45 percent) with those in low cost areas recording the lowest (25 percent). Rentals accounted for the highest expenditure share in urban areas with urban high cost areas having the highest (22 percent) and urban low cost areas the lowest (12 percent). Clothing was the second most popular expenditure in all urban areas at 7 percent.

**Table 12.5: Percentage Distribution of Non-Food Household Expenditure by Stratum, 2002–2003**

	All Zambia	Rural	Urban	Small scale Farmers	Medium Scale Farmers	Large Scale Farmers	Non-agric Household	Urban Low cost	Urban Medium Cost	Urban High Cost
Total nonfood	26	20	32	19	30	48	30	25	35	45
Education	3	2	5	1	3	7	5	4	6	7
Household non food Perishables	3	2	3	2	3	4	4	2	3	6
Household Rental	10	4	26	4	2	14	8	12	17	22

Household										
Utilities	6	5	6	5	5	14	5	5	6	7
Health	1	1	1	0	2	3	2	1	1	1
Clothing& Footwear	6	6	7	6	6	3	7	7	7	7
Transport including own car	3	2	4	2	6	11	4	3	6	5
Personal care	2	2	2	2	2	1	2	2	2	3
Communication and recreation	1	0	2	0	0	3	0	1	2	5
Remittance	2	1	2	1	3	2	1	1	2	5
Prostitution	0.0	0.0	0.0	0.0	0.0	.	0.0	0.0	0.0	0.0
Tobacco & Narcotics	0.1	0.2	0.1	0.2	0.0	.	0.2	0.1	0.0	0.0
Households	2,004,613	1,329,731	674,882	1,230,692	14,022	715	84,703	533,319	64,072	77,090

Table 12.6 shows percentage share of household expenditure on non-food by province. The table reveals that non food expenditure was dominated by rentals, household utilities and clothing and footwear. The 2 most developed provinces in Zambia, Lusaka and Copperbelt provinces show that rentals were the highest non food expenditure items 16 percent and 15 percent, respectively. Worth noting is the expenditure on prostitution in Southern province which was recorded at 0.1 percent.

**Table 12.6: Percentage Share of Household Expenditure on Non-food by Province, Zambia, 2002-2003**

	All Zambia	Province								
		Central	Copperbelt	Eastern	Luapula	Lusaka	Northern	North- Western	Southern	Western
Total nonfood	26	19	30	23	19	37	19	17	26	15
Education	3	2	5	1	1	6	2	1	2	1
Household non food Perishables	3	2	3	3	2	4	2	2	2	1
Household Rental	10	4	15	5	6	16	6	5	8	6
Household Utilities	6	5	5	5	7	6	5	5	7	6
Health	1	1	1	1	0	1	0	0	1	0
Clothing& Footwear	6	5	7	6	5	6	7	6	7	5
Transport including own car	3	2	4	2	1	5	1	1	3	0
Personal care	2	2	2	2	1	2	1	1	2	1
Communication and recreation	1	0	1	0	0	3	0	0	1	0
Remittance	2	1	1	2	1	3	1	1	2	0
Prostitution	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Tobacco Narcotics	0.1	0.2	0.1	0.2	0.4	0.0	0.2	0.1	0.1	0.2
Households	2,004,613	194,811	315,239	276,217	169,574	27,0743	271,068	117,537	224,702	164,722

### 12.5. Percentage Share of Own Produced Food Consumed

Table 12.7 shows the consumption of own produced food as a percentage of total food expenditure. At national level, 34 percent of total food expenditure was own food consumption. In rural areas own produced food constituted the largest proportion of total food expenditure, 55 percent as compared to 4 percent in urban areas.

Medium-scale farmers had the largest share of own produce consumed at 59 percent of total food expenditure while large-scale farmers consumed the least (31 percent). Small-scale farmers share

of own produce was at 57 percent. In urban areas, households in low cost and medium cost areas consumed the same amounts of own produce (5 percent each) while those in high cost areas consumed the least (3 percent).

Across the provinces, households in Western province had the highest percentage of own produce of food consumption (62 percent) followed by Northern and Northwestern provinces (55 percent each). Lusaka province had the least percentage of own produced food, accounting for only 7 percent of total expenditure on food.

**Table 12.7: Percentage Share of Own Produce to Total Food Expenditure by Rural/Urban, Stratum and Province, 2002–2003**

Residence/Stratum/Province	Percentage share of own Consumption	Households
<b>All Zambia</b>	<b>34</b>	<b>2,004,613</b>
Rural	55	1,330,132
Urban	4	674,481
<b>Stratum</b>		
Small Scale Farmers	57	1,230,692
Medium scale farmers	59	14,022
Large scale farmers	31	715
Non agric	23	84,703
Urban low cost	5	533,319
Urban medium cost	5	64,072
Urban high cost	3	77,090
<b>Province</b>		
Central	31	194,811
Copperbelt	11	315,239
Eastern	48	276,217
Luapula	42	169,574
Lusaka	7	270,743
Northern	55	271,068
Northwestern	55	117,537
Southern	42	224,702
Western	62	164,722

## 12.6 Summary

Average Monthly household expenditure for Zambia was K490,530 with an average per capita expenditure of K111,444. Most of the households' income went towards food, 64 percent, 26 percent on non food and 10 percent on rentals. The proportion of household food expenditure was higher in rural areas (75 percent) than in urban areas (52 percent). The higher the expenditure on food, the more constrained or poorer the household is, (Engels law). Households in rural areas depended to a large extent on own- produced food. This accounted for 55 percent of total household food expenditure (consumption), compared to only 4 percent for urban households.

# CHAPTER 13

## POVERTY ANALYSIS

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### 13.0 Introduction

In Zambia the need to monitor the living conditions of the people became focused during the 1990s when the country vigorously started implementing the Structural Adjustment Programs (SAP). The Government and its cooperating partners realized that a segment of the population was adversely affected by these policies and programs meant to reform the economy. The continued deterioration of socio-economic conditions in the country have led the Government and donor community to reassess their development and assistance strategies from the point of view of poverty alleviation. The reassessment culminated into the development of the Poverty Reduction Strategy Paper (PRSP) in 2001. The successful implementation of such policy-oriented strategies requires both a suitable framework of poverty monitoring and analysis using relevant data to support the analyses empirically.

The Central Statistical Office (CSO) has been undertaking poverty analysis using household expenditure and income data from household Indicators Monitoring Surveys (IMS) since 1991. However, the priority surveys (PS) of 1991 and 1993 and the Living Conditions Monitoring Surveys (LCMS) of 1996 and 1998 were collecting cross sectional consumption expenditure data using the recall method. Cross-sectional consumption expenditure data does not provide a good measure of poverty mainly because it fails to capture the effect of seasonal changes on household welfare. Furthermore, the PS and the LCMS surveys never collected price information required to adjust for differences in the cost of living in different regions. These shortcomings on the part of cross-sectional or IMS surveys prompted CSO and the World Bank (WB) to undertake an Integrated LCMSIII Survey that was conducted over a period of 12 months. The survey was carried out from November 2002 to October 2003.

The current poverty monitoring and analysis framework is based on the above-mentioned types of surveys. The IMS surveys are designed to be undertaken every two years while the integrated surveys are planned to be conducted every after 5 years. Since the 2 surveys employ different sample survey designs and collect household expenditure data differently, results from these surveys are not directly comparable.

The Living Conditions Monitoring Surveys III (LCMSIII) offers rich database upon which to base a detailed analysis of poverty in Zambia. The survey can be utilized to investigate the extent and dimensions of poverty prevailing in the country. The consumption modules in this survey are detailed enough to permit the construction of a comprehensive household - level indicators of well-being, based on consumption expenditures.

This chapter looks at both measured poverty using consumption expenditure data and self-assessed poverty based on households' own judgment. The chapter also looks at possible causes of poverty as perceived by the households. The chapter further attempts to look at changes in

household welfare compared to the previous year. Various coping strategies that households rely on during times of need are also investigated. Furthermore, the chapter also looks at food security issues by assessing the number of meals that households take in a day and also the consumption of protein food in a month.

### 13.1 Data Requirements for Money–Metric poverty Analysis

The Central Statistical Office (CSO) has been using household consumption expenditure data to provide a measure of welfare of households. The LCMSIII survey collected expenditure data using the diary method. The survey collected data on the following items;

- Household consumption of frequently purchased goods and services
- Household consumption of own produce
- Household consumption of gifts and gatherings
- Household consumption of durable goods and other less frequently purchased goods
- Household consumption of housing services

### 13.2 Constructing Relevant Consumption Aggregates

The household consumption aggregates constructed for measuring poverty were obtained by adding together the various goods and services reported to have been consumed by households during the reference survey month of 31 days. The overall consumption aggregates are made up of the following items:

- Consumption of food items
- Consumption of housing
- Consumption of non–food items including durable goods

(i) **Food Consumption Sub–Aggregate:** This item consisted of consumption of purchased food, own produced food, wild food gatherings and food received in–kind during the household survey month of 31 days.

(ii) **Consumption of Housing:** Housing provides some services which are very central to the wellbeing of households. The provision of shelter and protection from hazardous elements has some bearing on the standard of living of households. In most housing studies based on LCMS data, the actual rent paid is used as a measure of the value of housing services particularly in societies where the rental market functions perfectly. However, this is not the case in Zambia since the majority of households especially in rural areas occupy their own dwelling. In addition, there are also households who enjoy free housing services.

In order to measure in monetary terms the value of services that households receive from occupying their own dwellings, a hedonic regression model was used to impute this value of housing services. The model was based on households reporting non–zero monthly rental payments, with rentals as the dependent variable. The actual rent paid were then regressed on a

set of housing characteristics including quality of dwelling such as floor, roof, walls, type of sanitation, source of water and cooking energy, wealth status of households, as well as regional dummies. The parameter estimates obtained from this model were then used to impute monthly rent for those households that reported zero monthly rent.

(iii) **Consumption of non-food items:** This consumption sub-aggregate was constructed by aggregating consumption of all other goods and services covered in the LCMSIII household expenditure section. This comprised items such as consumption of durable goods, which is estimated by calculating the use value of household unproductive assets. The asset use values were estimated by adjusting the reported current value of assets using the sum of real interest rates and the applicable depreciation rates. Other components of the non-food item include expenditures on health, education, personal services, transport, clothing, house wares, electricity, charcoal, tobacco, alcohol, etc.

However, some non-food items were excluded from this sub-aggregate such as taxes and levies, which do not constitute part of household consumption. The other excluded items include those lumpy and relatively infrequent expenditures such as expenditure on productive durable goods, dowry payments, funeral expenses, marriage and birthday celebration expenses, etc.

The three sub-aggregates were then added together to obtain a measure of nominal total monthly household consumption expenditure. Since welfare analysis is much more meaningful when it is done in per capita terms, the total monthly consumption expenditure was then divided by household size to obtain estimates in per-capita consumption terms.

### 13.3 Adjusting for Differences in Cost of Living

The LCMS survey was conducted over a period of 12 months employing a rolling sample of households. The households were covered in 10 cycles of 36 days each in every province. The very fact that households were covered at different times and in different regions implies that these households were facing different prices for comparable goods and services. Therefore, it is desirable to take these differences into consideration before the ultimate poverty measure is computed. The LCMSIII survey also collected unit prices facing households from various outlets including, shops and markets during the survey. This information was used to compute relevant Paasche price indices using household specific food weights in line with the principles of the money-metric utility concept of welfare measurement. In order to convert total household expenditure into money metric utility, the price index was tailored to the household's own demand pattern, a demand pattern that varied with the household's income, demographic composition, location and other characteristics (Deaton et al, 2002).

Two types of the Paasche price indices, namely; the temporal and spatial food indices were computed similarly but achieving different purposes.

- (i) **Temporal Paasche Index:** This index was computed by using household specific current weights (food shares) and applicable price relatives, using cycle one prices as the base. In order to make the consumption measure comparable across time, the nominal household consumption expenditure values were deflated using the temporal food indices.
- (ii) **Spatial Paasche Index:** This index was computed by using Lusaka province cycle one prices as the reference base prices. The consumption expenditures which, were already at cycle one price level in all the provinces, were deflated to arrive at real consumption measure that is comparable across different provinces.

The Paasche price indices were approximated using the following formula;

$$P_p^h = \frac{P^h \cdot q^h}{P^o \cdot q^h} = \sum_{i=1}^n w_k^h \ln \left\langle \frac{p_k^h}{p_k^o} \right\rangle$$

The right-hand side of the above equation is easily measured by data from household budget surveys, where:

$w_k^h$  = The current share of household h's food budget devoted to food item k.

$p_k^h$  = The median food market price for good 'k' that household 'h' is facing at any given cycle.

$p_k^o$  = The reference median food market price for good 'k'.

In addition to the above food indices, a simple spatial housing index was computed using estimated rental values of medium cost houses in all the provinces. The index was derived by comparing all the median housing values in Lusaka to other provinces. The nominal housing values were then adjusted to Lusaka 'price' level. The computation of non-food price indices has not been done due to lack of availability of standard unit prices for most of the non-food items. Instead a total index calculated from the food and housing indices, was used to adjust the non-food household expenditure.

Table 13.1 shows the spatial food indices by province. The indices show that the cost of food was higher in Lusaka than in the rest of the provinces. For example, households in Central province spent 14 percent less on food compared to their Lusaka counterpart. Similarly, households in Eastern province spent 17 percent less on food compared to households in Lusaka province. However, households in Southern province nearly spent as much on food (only one percent less the cost of food in Lusaka province) as their Lusaka counterpart.



**Table 13.1: Spatial Price Indices Relative to Lusaka Prices**

Province	Median Food Index at household level	Food Index at provincial level
Central	0.86	0.99
Copperbelt	0.87	0.88
Eastern	0.83	0.82
Luapula	0.87	0.87
Lusaka	1.00	1.00
Northern	0.89	0.88
North Western	0.90	0.86
Southern	0.99	1.01
Western	0.90	0.86

### 13.4 Adjusting for Differences in Household Size and Composition

Households differ in size and composition in terms of age of members. It is reasonable to consider a large household to be poorer than a small one if the two households have the same expenditure. However, this is not always true especially if the age composition of household members vary considerably between the two households. Nutritional studies have shown that calorie requirements vary substantially with age and sex. Therefore, when comparing living standards across households, it is important to take into account the differences in household size and composition. Adults require more calories than children because they are exposed to strenuous work that requires a lot more energy. Further, an additional child to the household is associated with lower expenditures compared to an additional adult.

An Adult Equivalent Scale (AES) is in this case used as a tool of normalization for differences in household size and composition. For a household of any given size and demographic composition, an adult equivalent scale will measure the number of adults which that particular household is deemed to be equivalent to (Ravillion, 1992).

Table 13.2 shows the calorie requirements per person per day and the emerging adult equivalent scale based on the ratio of calorie required for an adult person aged 13 years and above to those required by a child aged below 13 years. The equivalent scale in tables below is based on the assumption that a child aged 1 to 3 years consumes about 36 percent of what a typical adult would consume. This scale increases to 62, 78 and 76 percent for children aged 4 to 6, 7 to 9 and 10 to 12 years, respectively. The final scale that has been used for this poverty analysis makes no distinction between female and male adults in terms of calorie requirements.

**Table 13.2: Calorie Requirements for a Family of Six and the Adult Equivalent Scale**

Age Group	Calorie Requirement	Adult Equivalent scale	Adjusted Adult Equivalent Scale
Child			
0 – 3 years	1,000	0.36	0.36
4 – 6 years	1,700	0.62	0.62
7 – 9 years	2,150	0.78	0.78
10 – 12 years	2,100	0.76	0.76
Adult above 12 years			
Female	2,600	0.95	1.00
Male	2,750	1.00	1.00
Total	12,300	4.47	4.52

Source: The Evolution of Poverty in Zambia, 1991 – 1996

### 13.5 Construction of the Food Basket

CSO has been using the food basket approach when measuring absolute poverty in the country. The Zambian basket, which was earlier compiled in 1981 by the ILO/JASPA basic needs mission to Zambia, was updated by a joint study by National Food and Nutrition Commission (NFNC) and the Price and Incomes Commission (PIC) in 1991. This food basket meets the daily caloric and protein requirements of 12,564 and 335 grams (proteins) for a family of six.

However, this basket has received a lot of criticism mainly originating from the fact that the basket is quite old and may not reflect the current existing consumption patterns of the Zambian population. Further, the food composition of this basket is biased to urban areas and leaves out some food items, which are very popular among the majority of the poor households. It is from this backdrop that CSO has attempted to construct a food basket that meets the same recommended minimum calorific requirements of 12,564 for an average family of 6 or 2,094 per person per day.

For the purposes of this analysis, it is sufficient to note that the minimum nutritional requirements have been expressed only in terms of calorie intake; hence excluding protein and micronutrient needs. The exclusion of these extra nutritional requirements is based on the premise that it is now fairly common to assume that their intake is met by virtue of meeting the minimum calorie requirements (P. Lanjouw et al, 1996).

Most of the available literature recommend that the food basket be constructed using food expenditure values of households in the first or second lowest quintile. The idea behind this approach is that the emerging basket should reflect the consumption pattern of the poor. CSO has deliberately deviated from this approach simply because the basket falls short of meeting the required calorific requirements. In addition, given the problem of food insecurity and poverty in the country, getting households in the first or second lowest quintile would run the risk of misclassifying some households as non-poor when in actual fact they are poor.

The current food basket that has been used for poverty analysis in this report was developed from households whose food expenditure in per adult equivalent terms was 20 percent around the national median food expenditure. It is felt that this approach would yield a representative food basket reflecting the consumption patterns of both the poor and the non-poor.

Since the quantity information was missing, the quantities were estimated by dividing household food expenditure by unit market prices that these households were facing in their respective regions. The food quantities were then converted to calories using conversion factors adopted from the Africa Food Composition Table developed and compiled by Food Agricultural Organisation (FAO). This approach treats the 20 percent households around the national reference median as one standard household. The basket accommodates about 90 percent of all food items consumed in the country. The inclusion of various food items in the basket depended on the size of their mean shares. However, the nominal food basket was valued using Lusaka median prices so as to facilitate the derivation of real poverty lines for different regions. The food basket yielded

about 2094 calories per person per day and was valued at K336, 847 at Lusaka prices. *A list of food items that have been included in the food basket is found in the Appendices.* Table 13.3 below shows province specific food baskets relative to Lusaka prices.

**Table 13.3: Provincial Food Poverty Line**

Province	Food Index (Paasche)	Food Basket	Basic Needs Basket
Central	0.86	289,688	413,841
Copperbelt	0.87	293,057	418,653
Eastern	0.83	279,583	399,404
Luapula	0.87	293,057	418,653
Lusaka	1	336,847	481,210
Northern	0.89	299,794	428,277
North Western	0.9	303,162	433,089
Southern	0.99	333,479	476,398
Western	0.9	303,162	433,089
National		303,537	433,624

### 13.6 Determination of the Absolute Poverty Lines

In most cases, absolute poverty lines are constructed with reference to some minimum dietary requirements. The argument for this nutritional anchor is that if households fail to have enough food to meet the minimum nutritional requirements of it's members, then the members are considered to be poor.

There is no straightforward approach to the determination of the non-food poverty line. However, the food poverty line sets the basis of determining the non-food poverty line particularly when the famous Engel's law of welfare has been evoked. Engel's law states that the budget share devoted to food tends to decrease with an increase in total real consumption expenditure. This law implies that poor households will devote most of their income to food than to non-food items.

Engel's law further states that households that spend the same proportion of total expenditure on food enjoy the same level of welfare. Accordingly, the non-food component of the poverty line can be determined by observing the share of non-food expenditure among households whose total expenditure is exactly equal to the cost of the food basket. According to Ravillion, if a person's total income is just enough to reach the food threshold, anything that he or she spends on nonfood items can be regarded to be absolutely basic non food requirements. In this case the non-food poverty line relates to absolutely essential expenditure on items other than food.

In practice it is extremely difficult to find households with total expenditures that are exactly equal to the food poverty line. Available literature suggest that one can select households whose total expenditures are within 10 percent of the poverty line for determining an appropriate Engel's ratio required for adjusting the food poverty line (Kakwani, 2002). This procedure for Zambia generated a non-food share of 30 percent of total expenditure or an Engel's ratio of 70/100. Variation of the total expenditure bands from 5 to 30 percent around the food poverty line still produced the same ratio of 0.70. In order to obtain the upper poverty line that takes into account the non-food requirements of individuals, the food poverty line was then divided by the Engel's ratio.

The above stated procedure eventually leads to the development of 2 poverty lines namely the extreme and moderate poverty lines. In order to take into account the differences in household size and composition, the poverty lines used in this analysis are expressed in Per Adult Equivalent (PAE) terms. The extreme poverty line relates to the monthly cost of the food basket whilst the moderate line relates to the monthly cost of all basic needs including non-food items. The cost of the extreme and moderate poverty line came to about K64, 530.00 and K92, 185.00 in per adult equivalent terms, respectively. It follows that if a household or an individual fails to meet the cost of the food basket (extreme line), then he or she is classified as extremely poor. Conversely, if an individual meets the cost of the food basket but falls short of affording the cost implied by the moderate poverty line, that person is classified as being moderately poor. Therefore, the total poor is simply obtained by adding the extremely and the moderately poor. For the purposes of this analysis, the moderate poverty line constitutes the ultimate poverty line that is used for deriving aggregate poverty measures.

### 13.7 Estimates of Poverty

The Foster, Greer and Thorbecke (FGT) Alpha class of decomposable poverty index measure enables us to determine the extent, depth and severity of poverty. In addition, it is possible to ascertain the contribution to overall poverty by different population sub groups.

Below is the FGT Poverty estimator in its original form;

$$P\alpha = 1/N \sum_{i=1}^n \left( Z - Y_i/Z \right)^\alpha$$

Where:            N= the total population in a group of interest  
                       Z= the poverty line (Moderate)  
                       n= the number of individuals below the poverty line

$Y_i$  = the adult equivalent expenditure  
 $\alpha$  = the poverty aversion parameter which takes on values of 0,1,2  
 $Z - Y_i$  = the poverty gap.

The following indices are derived from this formulation;

- $P_0$ : Head count poverty, which measures the percentage of the population below the poverty line  
 $P_1$ : Indicates the depth of poverty. It shows the average gap between the expenditure of a poor person and the poverty line. When the gap is averaged just over the poor population, the index (I) shows the income of the poor expressed as a percentage of the poverty line. It is also called the Income Gap ratio. On the other hand, if the gap is averaged across the total population, it then measures the amount of resources that each individual has to contribute so as to bring all the poor persons just onto the poverty line. The wider the gaps the greater the resources required to eradicate poverty.  $P_1$  is also called the Per Capita Aggregate Poverty Gap. This is an index that is commonly used for eradicating poverty under conditions of perfect targeting. The measure takes into account both the head count and the income gap ratio.  
 $P_2$ : is simply the square of the poverty gap for each poor individual in a given population. This index is more sensitive to the poorest in society as it gives them a higher weight in calculating the depth of poverty. The wider the squared gap, the greater the severity of poverty. This index has no intuitive interpretation other than just as a measure of comparing how policies affect independent groups.

### 13.8 Incidence of Poverty Among Individuals by Location and Provinces

The following table presents estimates of poverty rates based on the poverty lines constructed in the previous section. Results in the table shows that 67 percent of the population was poor. The extremely and moderately poor catered for 46 and 21 percent respectively.

These results imply that 46 percent of the population was living in extreme poverty since their income could not meet the cost of the minimum food basket, whilst 21 percent of the population was able to afford the food basket but fall short of acquiring other non food needs of life. Results further show that the non poor constituted only about one third of the total population in the country.

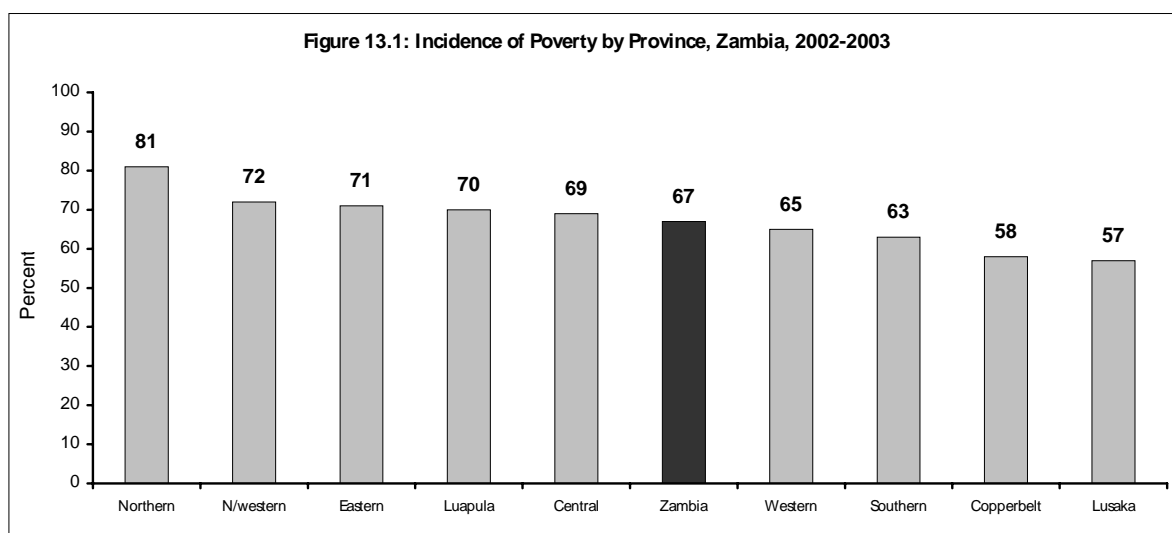
The incidence of poverty was higher in rural areas, at 74 percent, than in urban areas, at 52 percent. Nearly 1 in every 2 persons in rural areas (52 percent) was living in extreme poverty compared to 1 in every 3 persons in urban areas, at 32 percent. No major differences were observed in terms of the population living in moderate poverty between the rural and urban areas.

Regional analysis of the incidence of poverty reveals high proportions of the poor in Northern province, at 81 percent, followed by North western (72 percent), Eastern (71 percent) and Luapula province (70 percent). The lowest rate of poverty was observed in Lusaka and Copperbelt provinces, at 57 and 58 percent, respectively.

Whilst the proportion of the population living in moderate poverty did not vary much among the provinces, there were quite significant variations in terms of the proportion of the population living in extreme poverty across the provinces. The rate of extreme poverty varied from 36 percent in Lusaka province to 63 percent in Northern Province. The observed high levels of extreme poverty in Northern, North western, Central and Eastern provinces have a telling effect on the food security situation in these regions. The extremely poor are more likely to be food insecure especially that they are unable to access a minimum food basket in order to meet their minimum nutritional requirements (Refer to figure 13.1).

**Table 13.4: Incidence of Poverty by Residence, Province and Poverty Status, Zambia, 2002/2003**

	Poverty Status					Total Population
	Extremely Poor	Moderately Poor	Total Poor	Non Poor	Total	
All Zambia	46	21	67	33	100	10,757,192
<b>Rural/Urban</b>						
Rural	52	22	74	26	100	7,002,932
Urban	32	20	52	48	100	3,754,260
<b>Province</b>						
Central	50	19	69	31	100	1,097,632
Copperbelt	38	20	58	42	100	1,707,843
Eastern	49	22	71	29	100	1,440,604
Luapula	47	23	70	30	100	852,351
Lusaka	36	21	57	43	100	1,496,428
Northern	63	18	81	19	100	1,371,234
North western	51	21	72	28	100	637,112
Southern	40	23	63	37	100	1,335,538
Western	38	27	65	35	100	818,450



### 13.9 Incidence of Poverty Among Individuals by Stratum

Table 13.5 shows the incidence of poverty by stratum. Stratification of rural households by farming status reveals high levels of extreme poverty among small scale and medium scale farming households, at 76 and 64 percent respectively. More than half (55 percent) of the non-agricultural rural households were living in poverty. Results further reveal that the incidence of extreme poverty was highest among small scale farming households in rural areas. More than half of the small scale farmers could not afford the cost of the minimum food baskets; hence living in extreme poverty. No differences in the incidence of extreme poverty were noticed between the medium scale and non-agricultural rural households.

Results in the table further show that urban poverty was more visible among households residing in the low cost areas than those living in medium and high cost areas. The incidence of poverty was highest among households living in low cost areas, at 62 percent followed by those in medium cost areas. The proportion of the poor in high cost areas was very negligible, at 8 percent only. Results further show that a significant proportion of households residing in low cost areas of Zambia were afflicted by extreme poverty. About 39 percent of the households found in low cost areas, as opposed to 13 and 4 percent of their medium and high cost counterpart were faced with extreme poverty, respectively.

**Table 13.5: Incidence of Poverty by Stratum and Poverty Status, Zambia, 2002/2003**

	Poverty Status					Total Population
	Extremely Poor	Moderately Poor	Total Poor	Non Poor	Total	
All Zambia	46	21	67	33	100	10,757,192
<b>Rural Stratum</b>						
Small Scale Farmers	54	22	76	24	100	6,533,086
Medium Scale Farmers	35	29	64	36	100	118,906
Large Scale Farmers	–	33	33	67	100	5,053
Non-Agricultural Households	35	20	55	45	100	349,563
<b>Urban Stratum</b>						
Low Cost Areas	39	23	62	38	100	2,928,775
Medium Cost Areas	13	17	30	70	100	392,373
High cost Areas	4	4	8	92	100	429,436

### 13.10 Incidence of Poverty Among Individuals by Survey Quarter

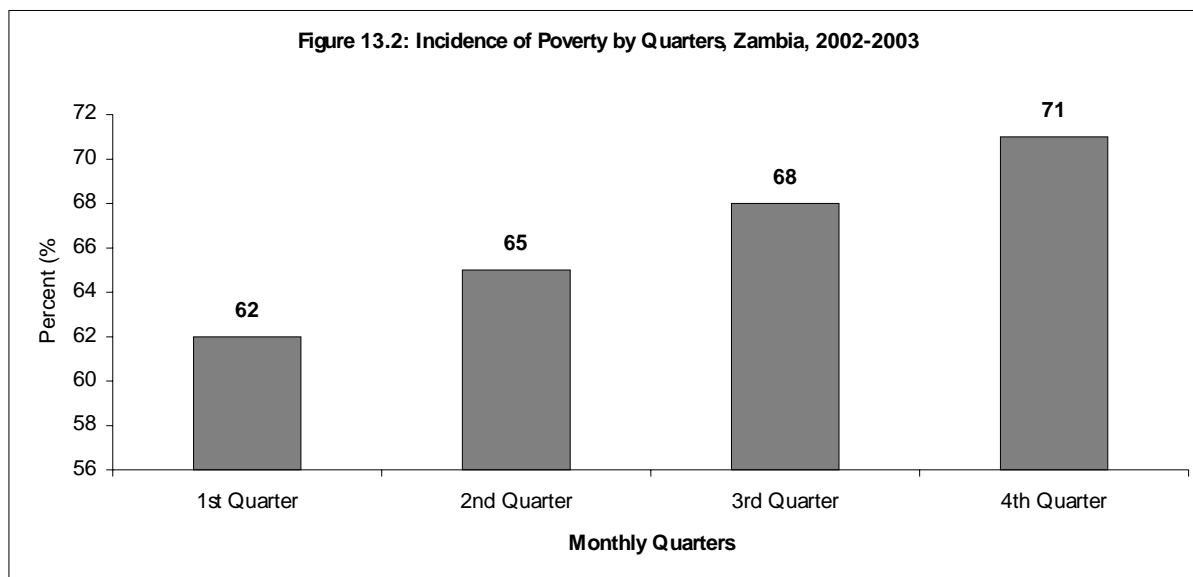
The data required to develop a measure of household welfare was collected over a period of 12 months, starting in November 2002 and ending in October 2003. Therefore it is possible to observe how living standards vary with seasonal changes. For the purposes of this analysis, various households covered during the survey were grouped into quarters of three months each. The first quarter covers the first 3 months of the year namely January, February and March. The second quarter covers April, May and June. The months of July, August and September constitute the third quarter. Finally, the fourth quarter consists of October, November and December.

Table 13.6 and Figure 13.2 shows the incidence of poverty by survey quarter. Results in this table reveal high levels of poverty during the 4<sup>th</sup> quarter of the year, at 71 percent, followed by the third quarter, at 68 percent. These results clearly exhibit seasonal variations in poverty levels over a year. The majority of households are mainly afflicted by food poverty during the last quarters. Indeed, Lower levels of poverty were observed during the first and second quarters of the year, at 62 and 65 percent respectively. The quarterly increase in the proportion of households failing to meet the cost of the food baskets has a telling effect on the vulnerability of households to food insecurity, particularly during the fourth quarter.

**Table 13.6: Incidence of Poverty by Survey Quarters and Poverty Status, Zambia, 2002/2003**

	Poverty Status					Total Population
	Extremely Poor	Moderately Poor	Total Poor	Non Poor	Total	
All Zambia	46	21	67	33	100	10,757,192
<b>Survey Quarters</b>						
1 <sup>st</sup> Q (January, February, March)	40	22	62	38	100	3,112,891
2 <sup>nd</sup> Q (April, May, June)	41	24	65	35	100	2,080,221
3 <sup>rd</sup> Q (July, August, September)	46	22	68	32	100	2,211,919
4 <sup>th</sup> Q (October, November, December)	52	19	71	29	100	3,352,161





### 13.11 Intensity of Poverty Among Individuals

So far, the above analysis has only looked at the head-count poverty index. Most of the poverty analyses undertaken by many countries employ this index when setting up a poverty profile simply because it is very easy to compute and also interpret. However, knowing the percentage of the population below a poverty line is not always sufficient especially when available poverty mitigation resources are scarce. The head-count index does not show how far below the poverty line the poor are. It is natural to contend that various population sub-groups will actually exhibit different dimensions of poverty. Therefore, one major draw back of the head-count poverty rate is that it is insensitive to the degree of poverty amongst the poor.

The Foster-Greer-Thorbecke (FGT) measure makes it possible to compute other poverty indices that not only take into account the head count poverty, but also look at the degree of poverty among different population sub-groups. This estimator produces four indices namely, the head-count poverty index, the Poverty Gap index, the Income Gap index and the severity of poverty index, as outlined in section 13.7.

Table 13.7 shows the head-count, poverty gap and severity of poverty ratios as measured by the FGT measure. The poverty gap ratio measures the size of the consumption transfer that is required to eradicate poverty. The wider the gap the more intense is the level of poverty. In 2002/2003, the poverty gap ratio was at 27.1 percent, implying that the incomes of the poor were 72.9 percent of the poverty line. This further implies that if all persons in Zambia had to chip in 27 percent of the poverty line under conditions of perfect targeting, there would be just enough resources to bring the poor onto the poverty line. The ratio is sometimes called the per capita aggregate poverty gap ratio since the poverty gap is averaged across the total population of interest.

Results in table 13.7 also illustrate the fact that the degree of poverty is more acute among rural than urban households. The gap ratio for rural areas was at 31.3 percent as opposed to only 19.2 percent in urban areas. More resources would be required to eradicate poverty in rural than in urban areas.

Regional analysis of the degree of poverty reveals huge resource requirements in Northern, North western, Central, Luapula and Eastern provinces. Conversely, the degree of poverty was less intense in Lusaka, followed by Copperbelt and Southern provinces, which recorded poverty gap ratios of less than 25 percent.

Another poverty index that measures the degree of poverty is the severity of poverty index. This ratio has no intuitive interpretation other than that of showing the severity of poverty among various population sub-groups under study. Results in the table below show that poverty was much severe in rural (16.5 percent) than in urban areas (9.3 percent). Severity of poverty varied from 21.1 percent in Northern province to 10.9 percent in Lusaka province.

**Table 13.7: Intensity of Poverty by Stratum and Poverty Status, Zambia, 2002/2003**

Province	Head Count Ratio (P <sub>0</sub> )	Poverty Gap ratio (P <sub>1</sub> )	Severity of Poverty Index (P <sub>2</sub> )	Total Population
<b>All Zambia</b>	0.665	0.271	0.139	10,757,192
<b>Rural/Urban</b>				
Rural	0.743	0.313	0.165	7,002,932
Urban	0.522	0.192	0.093	3,754,260
<b>Province</b>				
Central	0.691	0.295	0.155	1,097,632
Copperbelt	0.588	0.231	0.116	1,707,843
Eastern	0.707	0.282	0.141	1,440,604
Luapula	0.704	0.290	0.152	852,351
Lusaka	0.563	0.216	0.109	1,496,428
Northern	0.805	0.377	0.211	1,371,234
North western	0.719	0.300	0.155	637,112
Southern	0.629	0.236	0.115	1,335,538
Western	0.654	0.240	0.117	818,450

### 13.12 Perception of Poverty

It has now been widely acknowledged that the main weakness of development programmes, particularly those connected to poverty reduction is linked to ignorance of the genuine concerns of the population and their vision of their own problems (UNDP, 1998). Therefore, it becomes

imperative to take into account the poor person's perception of poverty during the development and formulation of any anti-poverty policies and programmes.

Individuals' perceptions of dimensions and characteristics of poverty are not always well reflected in the objective poverty measures, which are mainly based on household expenditure data. The LCMSIII collected information on self-assessed poverty. This measure of poverty was purely subjective based on the perception of the household being enumerated. Households were asked to give indications of their poverty status. The subjective information was meant to supplement information obtained using money metric measures of poverty.

Table 13.8 shows self-assessed poverty by gender of head, rural/urban, stratum and province. Results in the table clearly show that the majority of households in Zambia either identified themselves to be moderately (48 percent) or very poor (47 percent). Only 5 percent of the 2 million households perceived themselves to be non poor.

Analysis of perceived poverty by gender of household head shows that more than half of female headed households, at 58 percent, perceived themselves to be very poor compared to only 43 percent of male headed households. However, the majority of the male headed households identified themselves to be living in moderate poverty (51 percent) compared to 39 percent of female headed households.

Further analysis of self-assessed poverty by location reveals high percentages of households in rural areas that reported to be very poor, at 52 percent, compared to 37 percent in urban areas. The proportion of households that reported living in moderate poverty was higher in urban (55 percent) than in rural areas (45 percent).

Classification of rural households by their socio-economic groups reveals that the majority of small scale farmers perceived themselves to be very poor, at 52 percent. On the other hand, the majority of households classified as medium and large scale farmers, and non- agricultural households, identified themselves to be moderately poor, at 61, 70 and 54 percent respectively.

In the case of urban households, a large percentage of households residing in low cost areas considered themselves to be very poor (42 percent) compared to those living in medium and high cost areas, at 22 and 16 percent respectively. Other than having the majority of households reporting moderate poverty in all areas, a higher percentage of the non poor households (27 percent) was observed in high cost areas.

Regional analysis of self-assessed poverty indicates that Western province had the highest percentage of very poor households (65 percent) followed by Eastern province, at 58 percent. More than half of the households in Central and Southern provinces also identified themselves to be very poor. Alternatively, the majority of households in Northern, Luapula, Lusaka, North western and Copperbelt provinces reported moderate levels of poverty. The percentage of the non poor was highest in Lusaka province and lowest in Eastern province.

**Table 13.8: Percentage Distribution of Households by Self-Assessed Poverty, Rural/Urban, Gender of Head, Stratum and Province, Zambia, 2002/2003**

Sex of Head, Rural/urban, Stratum and Province					Total number of Households
	Very poor	Moderately Poor	Not Poor	Total	
<b>All Zambia</b>	47	48	5	100	2,005,677
<b>Sex of Head</b>					
Male Head	43	51	5	100	1,541,437
Female Head	58	39	3	100	464,240
<b>Rural/Urban</b>					
Rural	52	45	3	100	1,329,702
Urban	37	55	8	100	675,975
<b>Rural Stratum</b>					
Small Scale Farmer	52	44	3	100	1,229,244
Medium Scale Farmer	29	61	9	100	13,890
Large Scale Farmer	15	70	15	100	688
Non-agricultural Household	42	54	3	100	85,880
<b>Urban Stratum</b>					
Low Cost Areas					
Medium Cost Areas	42	54	4	100	534,538
High Cost Areas	22	64	14	100	64,247
	16	57	27	100	77,190
<b>Province</b>					
Central	52	44	4	100	194,444
Copperbelt	44	48	8	100	315,078
Eastern	58	40	2	100	276,600
Luapula	40	58	3	100	169,592
Lusaka	37	55	9	100	271,421
Northern	35	60	5	100	271,237
North-western	42	52	6	100	117,563
Southern	52	45	3	100	224,783
Western	65	32	3	100	164,959

### 13.13 Reasons for Household Poverty

One of the advantages of collecting information on perception of poverty is that one is able to find out possible reasons for living in poverty from the same household that reported to be living in poverty. Table 13.9 shows the percentage distribution of households reporting to be either very poor or moderately poor by reasons or possible causes of their poverty. Results clearly show that the most prominent cause of poverty among self-assessed poor households was the inability to afford the cost of agricultural inputs such as fertilizer, seeds, etc (23 percent). A significant proportion of households also attributed their poverty to low pension, wage or salary, at 13 percent.

Lack of cattle possibly due to death (8 percent), lack of employment (7 percent), hard economic times (7 percent), followed by lack of business capital (6 percent) and high commodity prices (5 percent) were also cited by households as main causes of their poverty.

The dominant reason for poverty in rural areas turned out to be the inability to afford agricultural inputs, accounting for about 32 percent of the households. Another 12 percent of the households in rural areas attributed their poverty to lack of cattle probably due to death of cattle. On the other hand, the majority of urban households associated their poverty to low wages/salaries and pension, at 32 percent. Lack of employment, hard economic times and high commodity prices

were also reported by urban households as the main causes of poverty, at 14, 13 and 10 percent, respectively.

Analysis of possible causes of poverty by gender of household head reveals that a significant percentage of male headed households were living in poverty due to inability to afford the cost of agricultural inputs and prevalence of low wages and salaries, at 22 and 15 percent in that order. Conversely, inability to afford agricultural inputs and loss of a Breadwinner due to death dominated various causes of poverty that female headed households faced.

Other possible causes of poverty among male and female headed households were lack of cattle, lack of employment especially among male headed households, hard economic times, lack of business capital and high commodity prices.

As stated earlier, developmental programmes such as the PRSP, would grossly benefit from such a categorization of possible causes of poverty as reported by households themselves. The poor are better placed to recount possible causes of the poverty that is afflicting them. Indeed, the success of any poverty reduction programme largely depends on the degree of integration of the poor themselves from planning to implementation stages.

**Table 13.9: Percentage Distribution of Self-Assessed Poor Households by Main Reason of Poverty, Rural/Urban and Gender of Head, Zambia, 2002/2003**

Reasons for Living in Poverty	Location and Sex of Head					Total number of self-assessed poor households
	Total	Rural	Urban	Male head	Female head	
All Zambia	100	100	100	100	100	1,906,291
Cannot afford Agricultural Input	23	32	3	22	23	432,654
Agricultural inputs not Available for purchase	2	2	0	2	2	33,570
Lack of agricultural inputs due to other reasons	3	4	0	3	2	52,093
Low agricultural production	3	5	0	3	3	64,338
Drought	2	3	0	2	3	37,657
Floods	1	1	-	1	1	11,258
Inadequate land	1	1	0	1	1	14,713
Low prices for agricultural produce	1	1	0	1	1	12,587
Lack of market for agricultural produce	1	2	0	1	1	21,965
Lack of Cattle and Oxen/death of Cattle	8	12	0	8	7	152,454
Lack of capital to start/expand agriculture output	4	6	2	4	4	82,864
Lack of agricultural credit	1	2	1	1	1	25,935
Lack of capital to start/expand business	6	4	9	6	6	112,568
Lack of business credit	1	1	2	1	1	21,440
Lack of employment opportunities	7	4	14	8	4	135,056
Low pension, salary/wages	13	4	32	15	7	247,892
Retrenchment/redundancy	1	0	2	1	1	15,610
High commodity prices	5	2	10	5	5	95,279
Hard economic times	7	4	13	8	5	131,349
Poor business/too much competition	2	0	4	2	1	30,631
Disability	1	1	0	1	0	11,100
Death of Breadwinner	4	4	4	1	16	78,546
Other	4	5	3	4	6	84,732

### 13.14 Household Welfare Comparisons

During the 2002/2003 survey, households were requested to make an assessment of their current welfare compared to that of the previous year (last year). Households were implored to indicate whether their household was better off, the same or worse off compared to last year. Table 13.10 presents results on household welfare as perceived by the household themselves.

Overall, about 28 percent of the households reported to be better off compared to the previous year. Further, 40 percent of households did not notice any change in their welfare compared to last year (i.e. same welfare level). Conversely, slightly over one third of households (34 percent) indicated that they were actually worse off compared to last year.

The proportion of households who reported their living conditions to be worse off compared to last year was highest among female (40 percent) than male headed households (32 percent). The proportion of female headed households that experienced no change in their household welfare was slightly higher than that of male headed households, 40 percent as opposed to 38 percent, correspondingly. Noticeable from table 13.9 is the low percentage of female headed households that reported to be better off compared to that of male headed households. Nearly one third of male headed households were reported to be better off compared to only one fifth of female headed households. (See Figure 13.3).

Further analysis of perceived household welfare status reveals that the majority of the households in both the rural (39 percent) and urban areas (38 percent) reported that their welfare status was the same compared to the previous year. However, there were proportionately more urban (35 percent) than rural households (33 percent) that reported to have become worse off.

Stratification of rural households by agricultural activity status shows that the majority of the small scale-farming households experienced the same welfare, at 39 percent, while another 33 percent reported to have become worse off. On the contrary, the majority of medium scale, large scale and non-agricultural households indicated that they were better off compared to the previous year, at 47, 36 and 34 percent respectively.

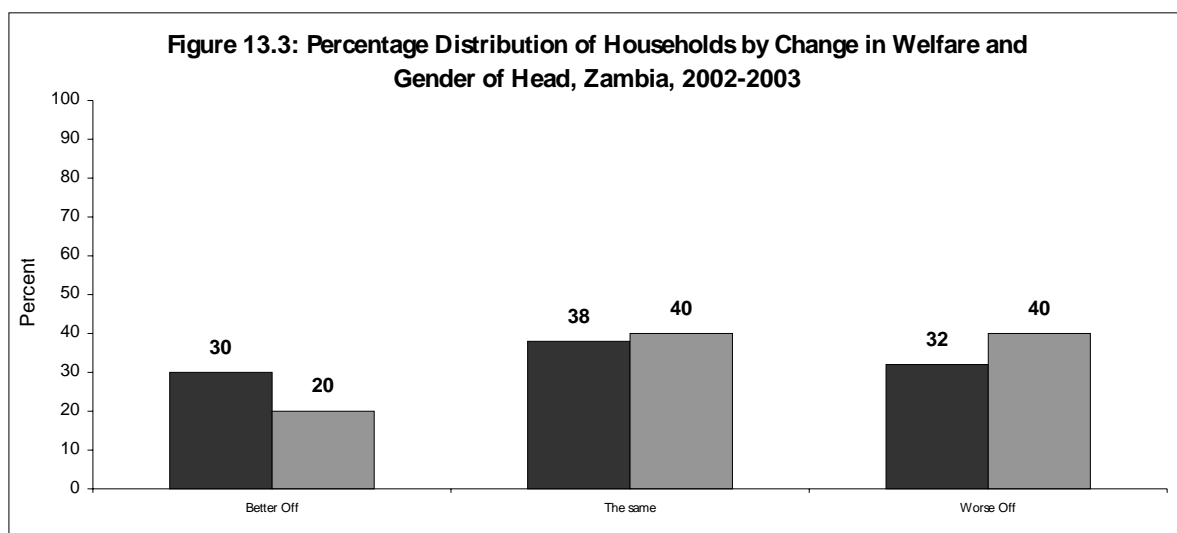
Alternatively, the proportions of urban households that reported no change in welfare were largest among those residing in the low (40 percent) and medium cost areas (36 percent). The majority of the households residing in high cost areas indicated that they were better off compared to last year, at 39 percent. Households residing in the low cost areas had the highest proportion of those reported to be worse off followed by those living in medium cost areas.

Provincial analysis of self assessed household welfare reveals that Copperbelt and Western provinces had the highest rates of households that had become worse off compared to last year, at 41 percent each. Southern province equally had a higher percentage of households that had become worse off, at 39 percent. Notable from the table is the high percentage of households in Luapula province who experienced no improvement in their welfare since the previous year, at 56

percent. Other provinces that recorded higher percentages of households with no improvement at all are North western, Western and Lusaka provinces, at 47, 42 and 41 percent respectively.

**Table 13.10: Percentage Distribution of Households by Change in Welfare, Rural/Urban, Stratum, Province and Gender of Head, Zambia, 2002/2003**

	Household welfare compared to last year				Total number of Households
	Better Off	The Same	Worse Off	Total	
All Zambia	28	39	34	100	2,005,677
Sex of Head					
Male Head	30	38	32	100	1,541,437
Female Head	20	40	40	100	464,240
Rural/urban					
Rural	28	39	33	100	1,329,702
Urban	27	38	35	100	675,975
Rural Stratum					
Small Scale Farmer	28	39	33	100	1,229,244
Medium Scale Farmer	47	30	24	100	13,890
Large Scale Farmer	36	29	35	100	688
Non-agricultural Household	34	33	33	100	85,880
Urban Stratum					
Low Cost Areas	24	40	36	100	534,538
Medium Cost Areas	30	36	34	100	64,247
High Cost Areas	39	30	31	100	77,190
Province					
Central	33	38	29	100	194,444
Copperbelt	27	31	41	100	315,078
Eastern	30	38	32	100	276,600
Luapula	15	56	29	100	169,592
Lusaka	31	41	28	100	271,421
Northern	35	33	32	100	271,237
North-western	27	47	26	100	117,563
Southern	27	34	39	100	224,783
Western	17	42	41	100	164,959



### 13.15 Average Number of Meals in a Day and Required Household Monthly Income

The minimum number of meals for an average person is 3 meals per day. However, not all households can afford to consume three meals in a day. According to Nutritionists, reduced number of dietary food intakes in most cases lead to dietary deficiencies in life-sustaining nutrients such as vitamins, minerals, proteins and carbohydrates. It is important to note that normal growth, particularly among under-five children, occurs if various body organs and tissues receive adequate nutrients.

Table 13.11 shows the distribution of households by the average number of meals consumed in a typical day. The table also shows the average income that is required by a household to be able to meet minimum standards of living.

Results in the table indicate that the majority of households in Zambia cannot afford to have 3 meals in a day. Slightly more than half of the households (51 percent) could only manage to have 2 meals in a day. Another 11 percent of the households could only afford 1 meal per day. This only leaves about 38 percent of households that could manage to have 3 meals or more.

There were proportionately more female (68 percent) than male headed households (60 percent) that could not manage to have 3 meals or more per day. The proportion of households that managed 3 meals per day was higher among male (38 percent) than female headed households (30 percent). Rural-urban differentials reveal inadequacies in the number of meals taken among the rural dwellers. (See Figure 13.4).

Analysis by rural stratum reveals that the majority of the small scale framers (59 percent) and non-agricultural households (49 percent) could only afford 2 meals in a day.

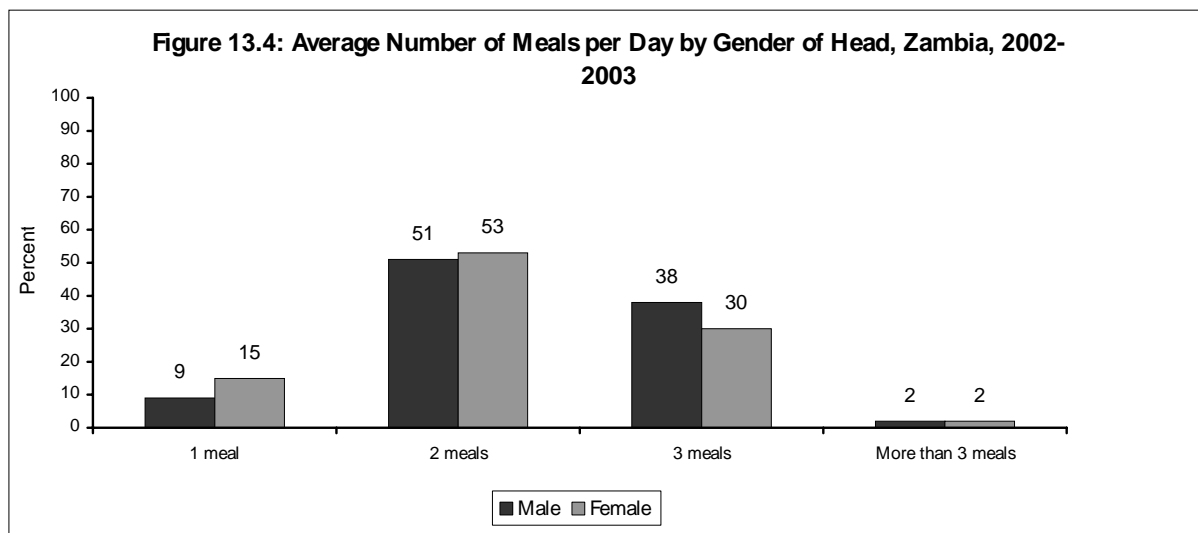
In case of urban households, the majority of households residing in low cost areas could afford 2 to 3 meals in a day at 43 percent each. About 64 percent of households in high cost areas managed to have at least 3 meals in a day.

Provincial analysis reveals that Luapula (20 percent), Western (21 percent), Northern (26 percent) and Western (28 percent) had the least proportions of households that managed to have 3 meals and over in a day.



**Table 13.11: Average Number of Meals per Day by Gender of Head, Rural/Urban, Stratum and Province, Zambia, 2002/2003**

	Number of meals per Day					Average Minimum Household Income	Total number of Households
	1 meal	2 Meals	3 Meals	More than 3 meals	Total		
All Zambia	11	51	36	2	100	641,935	2,005,677
<b>Sex of Head</b>							
Male Head	9	51	38	2	100	675,365	1,541,437
Female Head	15	53	30	2	100	531,004	464,240
<b>Rural/urban</b>							
Rural	11	58	31	1	100	395,415	1,329,702
Urban	11	38	47	4	100	1,126,850	675,975
<b>Rural Stratum</b>							1,229,244
Small Scale Farmer	11	59	30	0	100	386,151	13,890
Medium Scale	5	43	51	1	100	694,315	688
Farmer	3	34	63	-	100	2,481,090	85,880
Large Scale Farmer	9	49	41	2	100	462,946	
Non-agricultural H/hold							
<b>Urban Stratum</b>							
Low Cost Areas	12	43	43	2	100	845,529	534,538
Medium Cost Areas	5	29	58	7	100	1,357,721	64,247
High Cost Areas	2	18	64	15	100	2,882,103	77,190
<b>Province</b>							
Central	12	46	41	1	100	628,087	194,444
Copperbelt	17	46	35	2	100	995,835	315,078
Eastern	11	51	38	0	100	323,682	276,600
Luapula	12	68	18	2	100	392,962	169,592
Lusaka	7	35	52	6	100	1,186,472	271,421
Northern	6	68	25	1	100	320,913	271,237
North-western	9	70	21	0	100	456,275	117,563
Southern	8	37	55	0	100	679,807	224,783
Western	14	58	27	1	100	484,884	164,959



### 13.16. Household Coping Strategies

There are times in life when households are faced with problems that negate their desired level of welfare. In most cases, households attempt to come out of their predicament by using largely

unconventional survival strategies available to them. The LCMSIII survey collected information on various ways that households apply in order to cope with bad times. These mechanisms of overcoming hard times were referred to as coping strategies.

Table 13.12 shows the proportion of households that used various coping strategies by location and sex of household head. The most popular coping strategy among households was reducing the number of meals taken in a day (75 percent) followed by reduction in the consumption of other household items such as soap, polish, cooking oil and other household utilities. Receiving assistance from friends, relatives and neighbours and substituting ordinary meals catered for 69 and 64 percent of the households respectively.

The most common coping strategies in use by households in rural areas were reducing the number of meals and household utilities, at 78 and 75 percent, followed by seeking for assistance from friends, relatives and neighbours, at 71 percent. On the other hand, the majority of the urban households resorted to reducing household utilities (68 percent) and number of meals taken in a day (67 percent) in order for them to overcome their tribulations.

Analysis of coping strategies by gender of household head reveals that the majority of male headed households attempted to make ends meet in their daily struggle by reducing the number of ordinary meals and the consumption of household utilities, at 74 and 72 percent respectively. These coping strategies were also popular among female headed households catering for about 77 and 74 percent correspondingly. Seeking assistance from friends and relatives and substituting ordinary meals with other edibles also accounted for significant proportions of both male and female headed households as coping strategies.

**Table 13.12: Percentage Distribution of Households by Main Type of Coping Strategy Used in Times of Need, Rural/Urban and Gender of head, Zambia, 2002/2003**

Coping Strategies	Proportion of Households (%)				
	All Zambia	Rural	Urban	Male Head	Female Head
<b>Number of households</b>	<b>2,005,677</b>	<b>1,329,702</b>	<b>675,975</b>	<b>1,541,437</b>	<b>464,240</b>
Piecework on farms	37	49	13	36	42
Other piecework	37	43	26	38	35
Food for work/assets programs	13	17	5	13	14
Relief food	26	37	3	24	30
Eating wild foods only	20	27	7	19	25
Substituting ordinary meals	64	69	56	63	71
Reducing number of meals	75	78	67	74	77
Reducing other household items	73	75	68	72	74
Informal borrowing (e.g. Kaloba)	34	29	42	35	30
Formal borrowing	7	5	13	8	5
Church charity	6	6	5	5	7
NGOs charity	7	9	3	7	9
Pulling children out of school	7	7	8	7	9
Sale of assets	19	20	16	19	16
Petty vending	14	12	17	13	14
Asking from friends, relatives, neighbours	69	71	65	68	73
Begging from streets	1	1	1	1	1
Other	1	1	1	1	1

### 13.17 Summary

The cost of the food basket for a family of six was K590, 685 in Lusaka province. The value of the basket varied from K590,685 in Lusaka province to K490,269 in Eastern province. The results show that 67 percent of the population fall below the poverty line which was equal to K92,185.00 in per adult equivalent terms. Most of this poverty was attributed to the inability to acquire enough food. The levels of poverty were higher in rural than in urban areas of Zambia. The incidence of poverty varied from 57 percent in Lusaka province to 81 percent in Northern provinces. Poverty levels were exceptionally high among the rural small-scale households and households residing in urban low cost areas. Head count poverty rates are likely to be high during the last 2 quarters of the year than during the beginning of the year.

Overall, the poverty gap ratio was at 27.1 percent, implying that the incomes of the population, especially the poor, were on average 72.9 percent of the poverty line. The poverty gap ratio also shows that poverty was much intense in rural than in urban areas of Zambia. The depth of poverty varied from about 21.6 percent in Lusaka province to about 37.7 percent in Northern Province. Equally, poverty was quite severe in rural than in urban areas.

There were about 47 percent of the households that perceived themselves to be very poor. Another 48 percent reported to be living in moderate poverty. The main reason cited for living in poverty was lack of agricultural inputs, followed by low salaries and wages. A significant proportion of female headed households were living in poverty due to loss of a breadwinner.

Welfare comparisons to the previous year reveal that 34 percent of the households considered themselves to be worse off, while 39 percent indicated no change in their welfare. Only 28 percent of the households declared themselves to be better off compared to last year.

The majority of the households (51 percent) could only afford two meals in a typical day. Only 38 percent of the households were able to have 3 meals and over in a day. The proportion of households that could not manage at least 3 meals in a day was higher in rural than in urban areas.

The most popular coping strategy that household rely on in times of need is reducing number of meals consumed in a day. This is followed by reduction of other households items such as soap, polish cooking oil, etc.

# CHAPTER 14

## HOUSING CHARACTERISTICS, HOUSEHOLD AMENITIES AND ACCESS TO FACILITIES

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### 14.0. Introduction

Poverty among many households in Zambia is also evidenced by the housing standards and the extent to which the population has access to safe water sources, good sanitation and other social economic infrastructure. Provision of clean and safe water supply should be the top priority for Government because of the link that exist between inadequate supply of safe water and incidence of water borne diseases.

The 2002–2003 Living Conditions Monitoring Survey (LCMS III) collected data on housing and household characteristics pertaining to types of dwelling, building materials used for roofing, walls and floors, tenancy of housing units, main source of water supply for housing unit, sanitation, energy for cooking and lighting and households' access to facilities.

Facilities for which information was collected included the food market, post office, bank and others. Information on facilities such as the community school, input market, public phone and Internet café included in the LCMSIII were being collected for the first time. These facilities were included in the survey so as to provide further background variables in the analysis of poverty at the household level. For each of these facilities, various aspects such as distance, walking time, means of getting to the facility, use and reason for not using a particular facility were recorded.

### 14.1. Housing Characteristics

This section on housing characteristics includes findings on type of dwelling used by households and the materials used in the construction. Construction materials discussed include those for the roof, walls and floor.

#### 14.1.1. Type of Dwelling

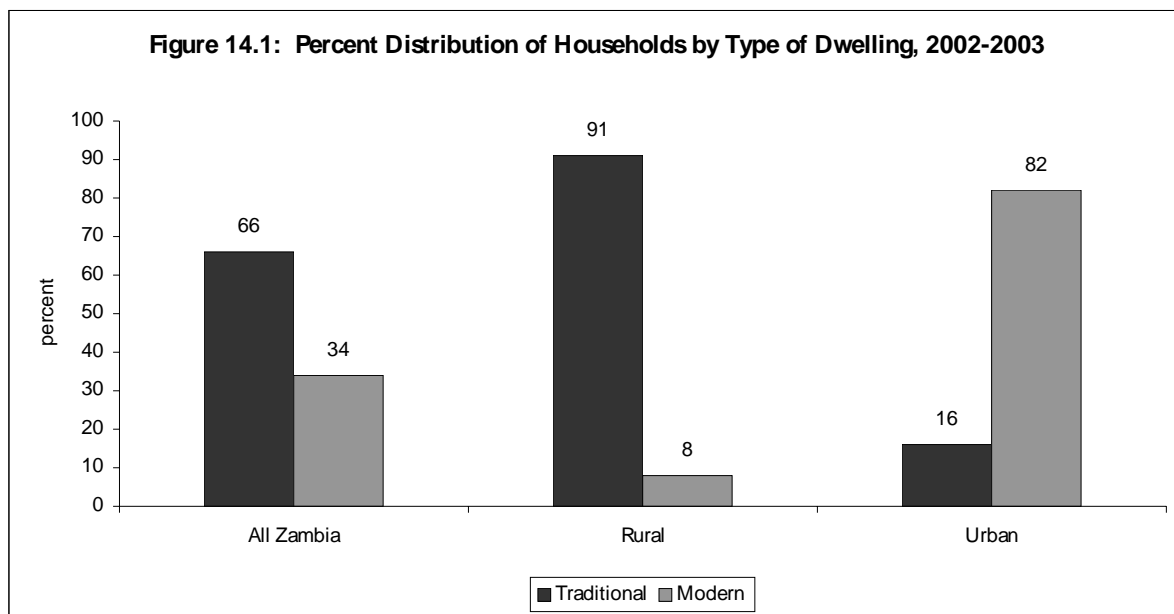
Table 14.1 presents information on type of dwellings in the country by province and by rural and urban areas. The most common type of housing according to the LCMS III in Zambia is traditional housing, occupied by 66 percent of the households. Fifty percent of the households occupy traditional huts while 16 percent occupy improved traditional houses. The next common type is conventional housing occupied by about one third of the total households in Zambia (23 percent occupy detached housing, 6 percent flat/apartment and 3 percent semi- detached). According to the survey guest house/wing, hostels, non-residential buildings and unconventional buildings were never used as dwellings by a very small proportion of households.

**Table 14.1: Percent Distribution of Households by Type of Dwelling by Rural/Urban Stratum and Province, 2002–2003**

	Type of Dwelling													Total Number Of Households
	Traditional Hut	Improved Traditional	Detached House	Flat/ Apartment	Semi detached	Servant Quarters	Guest House/ wing	House Attached to Shop	Hostel	Non-Residential	Uncon-ventional	Other	Total	
<b>All Zambia</b>	50	16	23	7	3	1	0	0	0	0	0	1	100	2,005,677
<b>Residence</b>														
Rural	71	20	7	1	0	0	.	0	.	0	0	0	100	1,329,702
Urban	9	7	55	18	7	2	0	0	0	0	0	1	100	675,975
<b>Stratum</b>														
Small Scale farmers	73	20	6	0	0	0	.	0	.	0	0	0	100	1,229,244
Medium Scale Farmers	48	32	18	1	.	0	.	1	.	.	.	.	100	13,890
Large Scale Farmers	26	25	49	.	.	.	.	.	.	.	.	.	100	688
Non-Agri Households	52	16	18	3	3	5	.	1	.	0	.	1	100	85,880
Urban Low Cost	11	8	54	17	7	1	0	0	0	0	0	2	100	534,538
Urban medium Cost	6	3	64	20	5	1	.	.	0	0	0	0	100	64,247
Urban high Cost	1	1	52	28	9	8	0	.	.	0	.	0	100	77,190
<b>Province</b>														
Central	61	21	13	2	3	0	.	0	.	0	.	0	100	194,444
Copperbelt	12	10	57	8	7	2	0	.	.	.	.	3	100	315,078
Eastern	74	9	13	1	1	0	.	1	.	0	0	1	100	276,600
Luapula	53	37	8	0	1	0	.	.	0	0	.	0	100	169,592
Lusaka	7	5	50	32	4	2	0	0	.	.	.	0	100	271,421
Northern	70	23	5	1	1	0	.	.	0	0	.	0	100	271,237
North-Western	57	29	12	0	1	0	.	.	.	.	0	0	100	117,563
Southern	59	15	19	4	2	1	.	.	.	0	0	0	100	224,783
Western	90	4	5	1	0	0	0	.	.	0	0	0	100	164,959

**Note:** a dot (.) means no cases

A zero (0) means very few cases (below 0.1)



In rural areas, the vast majority of households (91 percent) occupy traditional housing compared with only 16 percent in urban areas. Conventional housing is the most common type of housing in urban areas and is occupied by 80 percent of the households. Conventional housing include detached house, flat/apartment and semi-detached house.

Except in Lusaka and Copperbelt Provinces, traditional housing is the most common in all provinces.

Results regarding type of dwelling are also in agreement with the 2000 Census results.

#### 14.1.2. Construction Materials of Roofs, Walls and Floors

The LCMS collected information on building materials for roofing, walls and floors and the results are discussed in this section. Also related to health, the quality of building materials among other factors could contribute to unfavorable in-door environmental conditions that may lead to respiratory related diseases.

##### Roof Materials

Table 14.2 and Figure 14.2 presents data relating to roofing materials in the occupied housing units. Grass/thatch roofing was found to be the most common type of roofing material used by 60 percent of the households nationwide. Nineteen percent used asbestos, 17 percent iron sheets, 2 percent asbestos tiles and 2 percent other types of roofing materials.

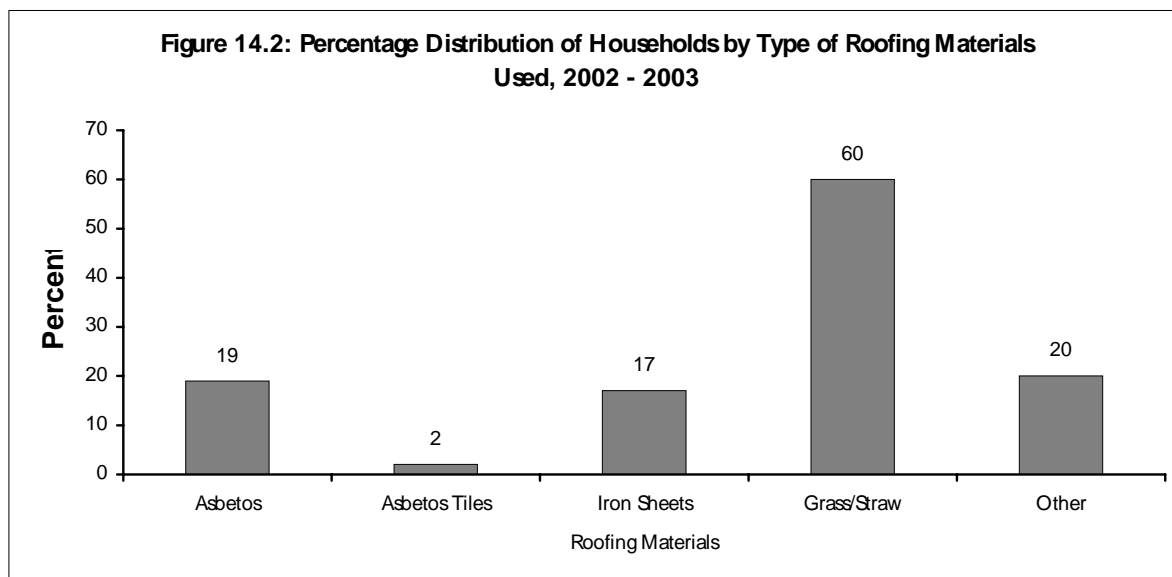
**Table 14.2: Percent Distribution of Households by Type of Roof by Rural/Urban, Stratum and Province, 2002–2003**

Residence/Stratum/Province	Type of Roof						Total Number of Households
	Asbestos	Asbestos tiles	Iron sheets	Grass/Straw	Other	Total	
All Zambia	19	2	17	60	2	100	2,005,677
Rural	3	1	11	85	–	100	1,329,702
Urban	49	5	29	11	6	100	675,975
<b>Stratum</b>							
Small Scale farmers	3	1	10	87	.	100	1,229,244
Medium Scale Farmers	7	1	33	59	.	100	13,890
Large Scale Farmers	23	6	40	31	.	100	688
Non–Agri Households	13	1	22	64	.	100	85,880
Urban Low Cost	46	4	31	12	6	100	534,538
Urban medium Cost	68	7	19	7	.	100	64,247
Urban high Cost	56	9	24	1	10	100	77,190
<b>Province</b>							
Central	11	1	18	70	.	100	194,444
Copperbelt	38	5	31	15	11	100	315,078
Eastern	3	1	16	79	.	100	276,600
Luapula	7	1	6	87	.	100	169,592
Lusaka	61	5	24	8	1	100	271,421
Northern	3	1	7	90	.	100	271,237
North–Western	4	–	15	80	.	100	117,563
Southern	15	1	17	67	.	100	224,783
Western	3	–	6	90	.	100	164,959

As might be expected in rural areas, the majority of households (85 percent) resided in grass/straw houses compared with only 11 percent in urban areas. Asbestos roofing was found to be the most common in urban areas. Nearly half of the urban households occupied housing units roofed with asbestos, followed by 29 percent of households who used iron sheets.

According to stratum results use of traditional roofing materials (grass/thatch) is highest (87 percent) among small–scale farmers while use of modern roofing materials (asbestos, iron sheets and asbestos tiles) is the highest in the urban stratum among the medium cost households (94 percent).

At the provincial level as might be expected, the proportion of households living in housing units with modern roofing (asbestos sheets, asbestos tiles and iron sheets) is highest in Lusaka Province at 90 percent, followed by Copperbelt Province with 74 percent.



### Wall Materials

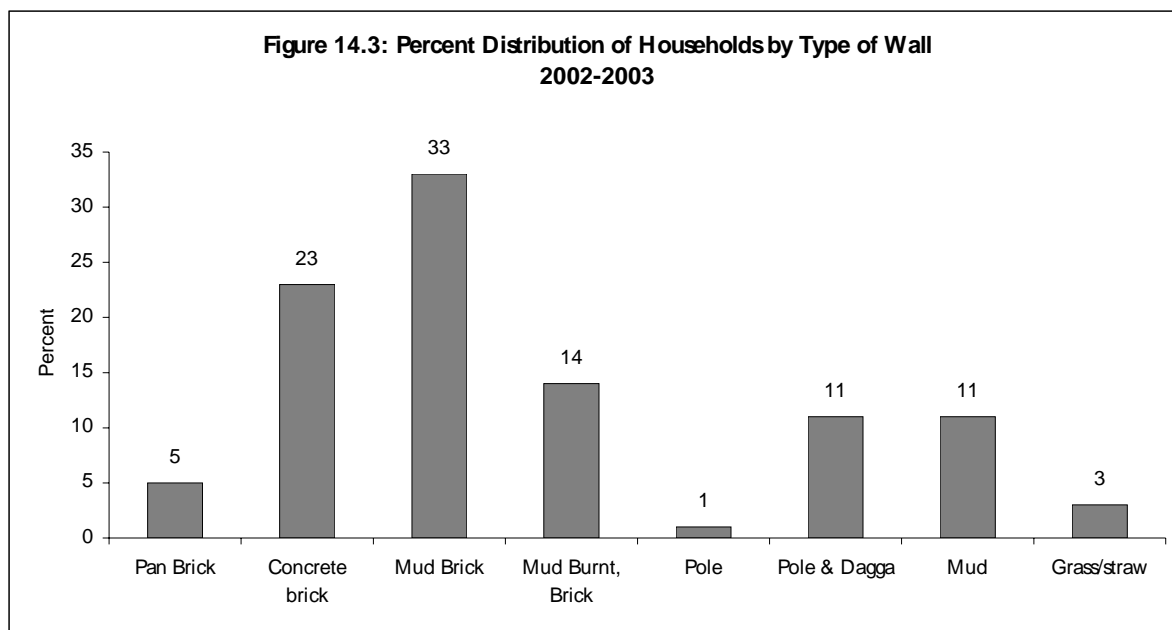
Results relating to types of materials used for constructing walls are presented in Table 14.3 and Figure 14.3. According to Figure 14.3 showing results at national level, one third of the households in Zambia use mud bricks for constructing walls, followed by 23 percent of households who use concrete bricks, 14 percent using mud burnt bricks, 11 percent pole and dagga, another 11 percent use mud, 5 percent pan bricks and 3 percent grass/straw. The survey also found that other materials such as pole, iron sheets, hard board, mixtures and others were rarely used for constructing walls.

Table 14.3 further shows that mud bricks, which are the most common overall, are used in rural areas by 38 percent of the households. In urban areas 23 percent of the households use mud bricks. Only 4 percent of rural households have concrete floors while the majority of households in urban areas (60 percent) occupy dwellings with concrete floors.



**Table 14.3: Percent Distribution of Households by Type of Walls by Rural/Urban, Stratum and Province, 2002–2003**

Residence/Stratum/Province	Type of Wall												Total	
	Pan Brick	Concrete Brick	Mud Brick	Mud Burnt, Brick	Pole	Pole & Dagga	Mud	Grass/Straw	Iron Sheets	Hard Board	Mixtures	Other		
All Zambia	5	23	33	14	1	11	11	3	0	0	0	0	100	2,005,677
Rural	2	4	38	18	1	16	16	5	0	.	0	0	100	1,329,702
Urban	9	60	23	5	.	2	0	0	0	0	0	0	100	675,975
<b>Stratum</b>														
Small Scale farmers	2	3	39	18	1	16	16	5	0	.	0	0	100	1,229,244
Medium Scale Farmers	13	6	31	37	0	6	8	0	.	.	0	.	100	13,890
Large Scale Farmers	14	22	36	26	.	.	2	.	.	.	.	.	100	688
Non-Agri Households	4	14	31	16	1	13	13	5	2	.	.	2	100	85,880
Urban Low Cost	6	59	28	5	.	2	0	0	0	0	.	0	100	534,538
Urban medium Cost	6	79	7	4	.	2	1	1	0	.	0	0	100	64,247
Urban high Cost	38	57	2	3	.	.	0	0	1	.	.	0	100	77,190
<b>Province</b>														
Central	6	10	62	11	0	4	5	1	0	.	0	1	100	194,444
Copperbelt	15	41	38	2	0	1	2	0	0	.	.	.	100	315,078
Eastern	1	2	5	20	1	10	58	1	0	.	0	0	100	276,600
Luapula	0	6	55	36	.	1	0	2	.	.	.	.	100	169,592
Lusaka	4	82	7	4	.	1	1	0	0	.	0	0	100	271,421
Northern	1	3	55	24	3	9	4	.	0	0	.	0	100	271,237
North–Western	2	4	69	8	0	9	1	6	0	.	.	.	100	117,563
Southern	6	19	26	20	.	18	6	4	0	.	.	0	100	224,783
Western	1	6	5	0	0	62	3	22	0	.	.	0	100	164,959



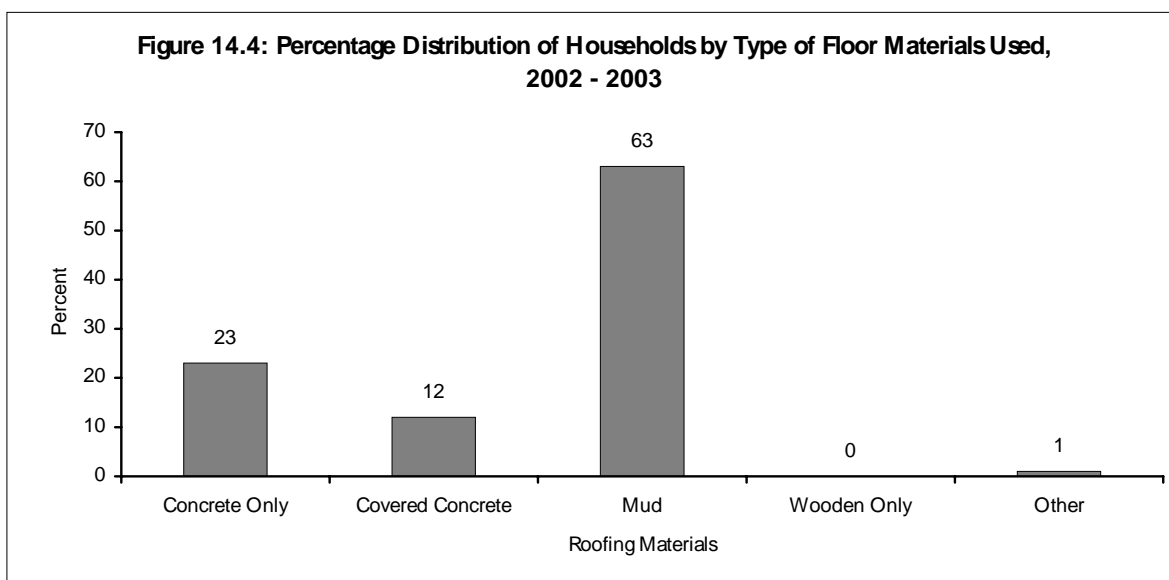
At provincial level, mud bricks are widely used in North–Western with 69 percent of households followed by 62 percent in central province. Mud bricks are least used in Eastern and Western Provinces with 5 percent of household in each province using mud bricks. Concrete bricks are most common in Lusaka Province. Pole and Dagga and grass/straw are predominantly used in Western Province while mud is most common in Eastern Province.

## Floor Materials

Information pertaining to material used for constructing floors is presented in Table 14.4 and figure 14.4. According to the findings of the survey, about two thirds of households (63 percent) occupied housing units with floors constructed out of mud. This finding is in agreement with the census 2000 finding. Twenty three percent of households lived in houses with floors covered with concrete only while 12 percent lived in those with floors that had covered concrete. Wooden material is almost never used for floors and other floor types are rarely used.

**Table 14.4: Percent Distribution of Households by Type of Floor by Rural/Urban, Stratum and Province, 2002–2003**

Residence/Stratum/Province	Type of Floor						Total Number of Households
	Concrete only	Covered Concrete	Mud	Wooden only	Other	Total	
All Zambia	23	12	63	0	1	100	2,005,677
Rural	6	7	85	0	2	100	1,329,702
Urban	58	23	19	0	0	100	675,975
<b>Stratum</b>							
Small Scale farmers	5	6	87	0	2	100	1,229,244
Medium Scale Farmers	21	10	68	.	1	100	13,890
Large Scale Farmers	28	35	37	.	.	100	688
Non-Agri Households	16	12	69	0	3	100	85,880
Urban Low Cost	58	19	23	.	1	100	534,538
Urban medium Cost	61	31	8	.	0	100	64,247
Urban high Cost	52	46	1	0	0	100	77,190
<b>Province</b>							
Central	9	14	75	0	1	100	194,444
Copperbelt	53	15	32	0	.	100	315,078
Eastern	9	10	81	0	0	100	276,600
Luapula	6	11	80	1	1	100	169,592
Lusaka	66	23	11	.	0	100	271,421
Northern	5	5	86	.	3	100	271,237
North-Western	9	5	85	.	1	100	117,563
Southern	16	16	68	0	.	100	224,783
Western	5	3	87	0	6	100	164,959



In rural areas 85 percent of the households occupy housing units that have floors made of mud, 6 percent and 7 percent live in houses with concrete only and covered concrete respectively. Only 2

percent of households lived in houses with floors made of other materials. As for urban areas, more than half the households (58 percent) live in houses with concrete floor followed by those that lived in houses with floors covered with concrete.

In all provinces except Lusaka (11 percent) and Copperbelt (32 percent) the percentages of households that lived in dwellings with floors made of mud were above the national average of 63 percent. Sixty six percent and 53 percent of households in Lusaka and Copperbelt respectively lived in dwellings with floors that had concrete only.

#### 14.2. Tenancy Status of Dwelling

Table 14.5 provides data on tenancy—whether the dwelling is owner occupied, Rented or provided free. Information on tenancy was collected, by asking the household head, the basis on which the household occupied the housing unit they lived in. The 2002 LCMS found that at national level, the majority of households (78 percent) lived in their own dwelling, 12 percent rented from private landlords and 8 percent occupied free housing.

**Table 14.5: Percent Distribution of Households by Tenancy Status, Rural/Urban, Stratum and Province, 2002– 2003**

Residence/Stratum Province	Tenancy Status									Total	Total
	Owner Occupied	Rented from Local Government	Rented from Central Government	Rented from Private	Rented from Parastatal	Provided Free by employer	Other Free Housing	Other	Total		
All Zambia	78	0	1	12	0	4	4	0	100	2,005,677	
Rural	91	0	0	2	0	3	4	0	100	1,329,702	
Urban	52	0	2	34	1	6	4	1	100	675,975	
<b>Stratum</b>											
Small Scale farmers	93	.	0	1	0	2	4	0	100	1,229,244	
Medium Scale Farmers	94	.	1	0	.	4	1	.	100	13,890	
Large Scale Farmers	72	.	.	6	.	22	.	.	100	688	
Non-Agri Households	60	0	0	13	0	12	13	0	100	85,880	
Urban Low Cost	55	0	1	35	0	4	4	0	100	534,538	
Urban medium Cost	53	0	1	34	0	7	3	0	100	64,247	
Urban high Cost	33	1	7	24	7	16	6	7	100	77,190	
<b>Province</b>											
Central	85	0	0	6	.	7	2	0	100	194,444	
Copperbelt	67	0	1	21	2	4	5	0	100	315,078	
Eastern	89	.	0	4	0	4	4	.	100	276,600	
Luapula	85	.	0	5	0	2	7	.	100	169,592	
Lusaka	44	0	3	43	.	5	5	1	100	271,421	
Northern	89	0	0	5	0	2	3	.	100	271,237	
North-Western	91	0	0	3	0	3	2	.	100	117,563	
Southern	80	0	1	6	0	5	6	2	100	224,783	
Western	92	.	1	1	0	2	3	0	100	164,959	

Home ownership was higher in rural (91 percent) than urban areas at 52 percent. However, this finding should be cautiously interpreted because the survey did not take into account aspects of housing quality. The majority of households in rural areas occupy traditional housing, which may not compare with the housing quality in urban areas. Rented housing is prominent in urban areas more especially in the most urbanized provinces of Lusaka followed by Copperbelt province with 43 percent and 21 percent of households occupying rented houses, respectively.

### 14.3. Household Amenities

This section discusses findings on various households' access to various amenities including sources of water supply, lighting and cooking energy. The section also looks at the type of toilet facility and the garbage disposal methods used by the households.

#### 14.3.1. Source of Drinking Water During The Wet Season

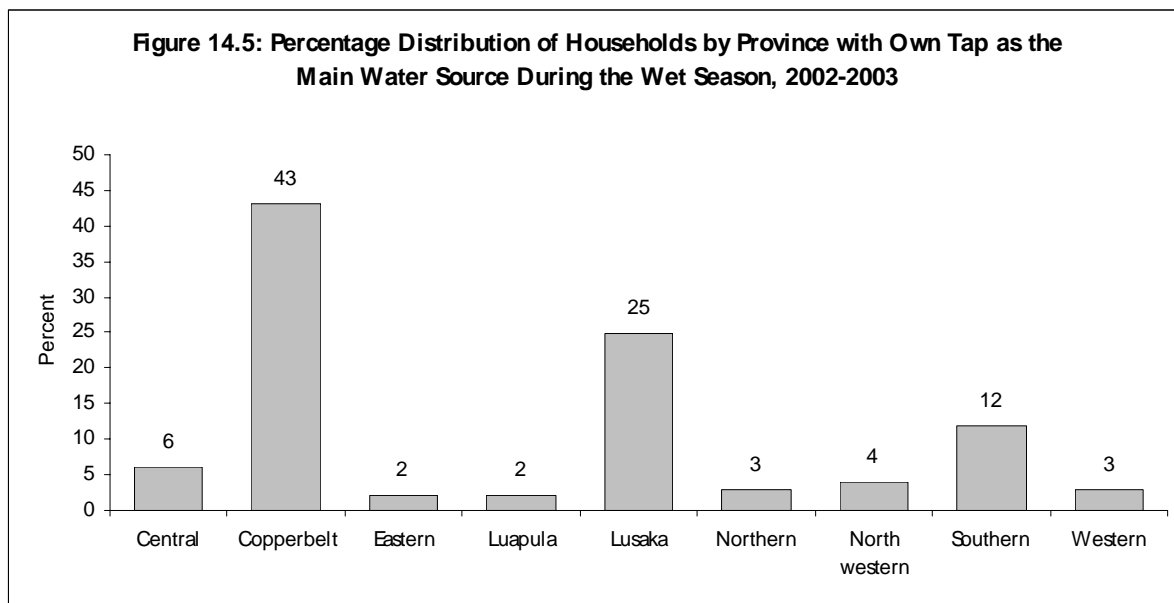
The sources of water considered were lake/stream, unprotected well, pumped water, protected well, borehole public tap and own tap. Among these water sources, protected wells, bore holes, pumped water and taps are regarded as clean and safe sources of water supply; whereas, unprotected wells, rivers and lakes/streams are considered unclean and unsafe sources of water supply.

Table 14.6 indicates that at national level about 52 percent of households had access to clean and safe water supply. The remaining 48 percent access water from unclean and unsafe sources.

Among the nine provinces, Lusaka province had the largest proportion of households accessing clean and safe water sources; accounting for 94 percent, followed by the Copperbelt province with 77 percent and Southern province with 65 percent. The province with the least proportion of households accessing clean and safe water sources was Luapula accounting for only 13 percent.

**Table 14.6: Percentage Distribution of Households by Main Source of Water Supply (Wet Season) by Rural/Urban, Stratum and Province, 2002– 2003**

Residence/Stratum Province	Source of water										Total	Total number of households
	Lake/ Stream	Unprotected Well	Pumped (pipd) Water	Protected Well	Bore hole	Public Tap	Own tap	Other tap	vendor	Other		
<b>All Zambia</b>	<b>17</b>	<b>29</b>	<b>3</b>	<b>9</b>	<b>11</b>	<b>13</b>	<b>13</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>100</b>	<b>2,005,677</b>
Rural	25	38	3	12	15	3	1	1	.	2	100	1,329,702
Urban	0	12	2	4	3	33	38	7	0	0	100	675,975
<b>Stratum</b>												
Small Stratum												
Farmers	26	39	3	13	14	2	0	0	.	2	100	1,229,244
Medium Scale												
Farmers	22	36	5	10	21	0	2	.	.	4	100	13,890
Large Scale												
Farmers	7	35	.	9	12	12	25	.	.	.	100	688
Non agric												
household	14	26	4	5	28	15	2	5	.	1	100	85,880
Urban low cost	0	15	3	4	3	39	28	8	.	0	100	534,538
Urban medium												
cost	0	6	1	3	3	9	69	9	0	0	100	64,247
Urban high cost	0	1	1	0	1	8	84	4	.	.	100	77,190
<b>Province</b>												
Central	13	46	3	10	12	7	6	0	0	2	100	194,444
Copperbelt	2	20	4	7	4	13	43	6	.	0	100	315,078
Eastern	14	26	2	24	24	6	2	1	.	0	100	276,600
Luapula	27	53	2	2	3	3	2	1	.	9	100	169,592
Lusaka	2	3	0	4	10	49	25	6	.	.	100	271,421
Northern	46	30	4	6	2	3	3	4	.	2	100	271,237
North western	13	55	2	21	3	1	4	0	.	0	100	117,563
Southern	16	17	5	5	24	17	12	2	.	0	100	224,783
Western	21	51	5	6	9	3	3	1	.	0	100	164,959



The provinces with the largest proportion of households with own tap as the main water source were Copperbelt, with 43 percent Lusaka province 25 percent and Southern province with 12 percent. The rest had negligible proportions of own tap as the main source of water supply.

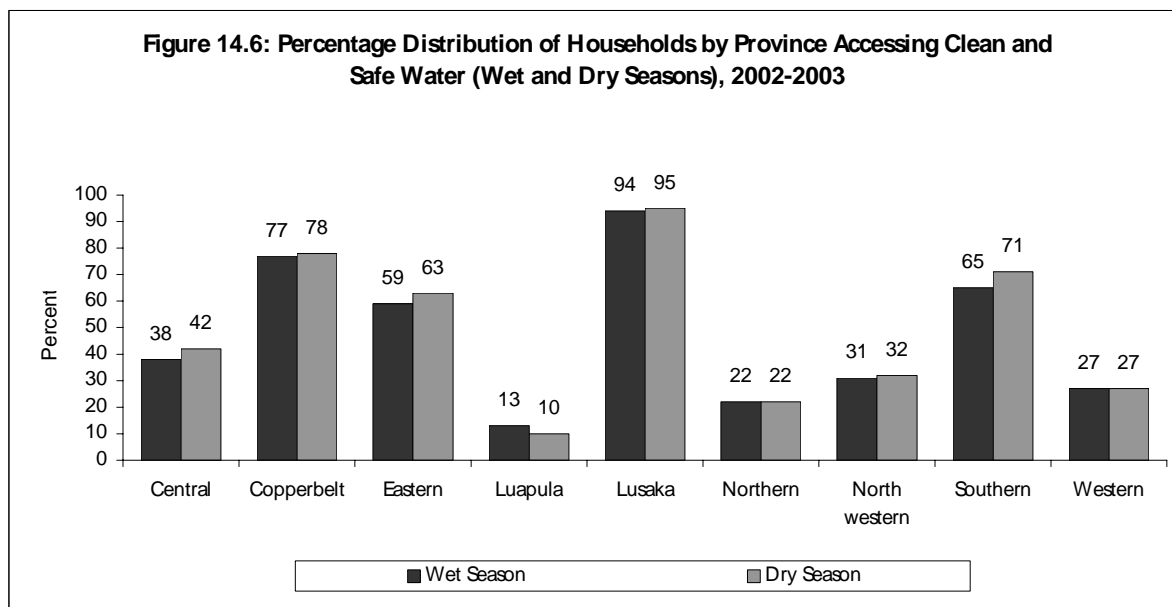
#### 14.3.2. Sources of Drinking Water during the Dry Season

The main sources of water supply during the dry season for households in Zambia are as shown in Table 14.7 below:

**Table 14.7: Percentage Distribution of Households by Main Source of Water (Dry Season) by Rural/Urban, Stratum and Province, 2002–2003**

Residence/ Stratum/ Province	Source of water										Total	Total number of households
	Lake/ Stream	Unprotected Well	Pumped Water	Protected Well	Bore hole	Public Tap	Own tap	Other tap	Vendor	Other		
All Zambia	16	29	3	9	12	13	13	3	0	1	100	2,005,677
Rural	24	38	3	12	17	3	1	1	.	2	100	1,329,702
Urban	1	12	2	3	3	33	38	7	0	0	100	675,975
<b>Stratum</b>												
Small												1,229,244
Farmers	25	38	3	13	16	2	0	0	.	2	100	
Medium												13,890
Scale												
Farmers	19	36	4	10	25	0	2	.	.	4	100	
Large												688
Scale												
Farmers	3	23	.	13	23	12	25	.	.	.	100	
Non agric												85,880
household	13	26	4	5	29	15	2	5	.	1	100	
Urban low												534,538
cost	1	14	3	4	3	39	28	8	.	0	100	
Urban												64,247
medium												
cost	0	6	1	3	3	9	69	9	0	.	100	
Urban high												77,190
cost	0	1	1	0	1	8	84	4	.	.	100	
<b>Province</b>												
Central	12	44	3	9	16	8	6	0	0	2	100	194,444
Copperbelt	3	20	5	6	4	13	44	6	.	0	100	315,078
Eastern	12	26	2	25	27	6	2	1	.	0	100	276,600
Luapula	29	51	2	2	2	3	1	0	.	8	100	169,592
Lusaka	2	3	0	4	11	49	25	6	.	.	100	271,421
Northern	46	30	2	8	2	3	3	4	.	2	100	271,237
North												117,563
western	13	55	3	21	3	1	4	0	.	0	100	
Southern	15	15	4	6	30	17	12	2	.	0	100	224,783
Western	21	52	5	6	9	3	3	1	.	0	100	164,959

Generally sources of water supply do not vary according to season. Results show that in both the wet and dry season, the same percentage of households in Zambia (53 percent) access clean and safe water. Further, about 86 percent of urban households had access to clean and safe water sources while about 37 percent of rural households access clean and safe water sources in both the wet and dry seasons. Figure 14.6 shows the distribution of households accessing clean and safe water by province. The graph shows clearly that there are very little or no variations according to season among households in terms of accessing clean and safe water.



#### 14.3.3. Treatment/Boiling of Drinking Water during the Wet and Dry Season

In Zambia, water supplied through the public water supply systems is normally chlorinated and safe for drinking. However health authorities, encourage households to boil or treat their drinking water, as an added precaution. This exercise is mainly for those households whose main sources of drinking water are considered unclean and unsafe.

Table 14.8 and figure 14.7 show the proportion of households who treated or boiled their drinking water during the wet and dry seasons.

Results show that treatment of water is not widespread in Zambia and does not vary much by season. At National level, the data from the table above indicates that about one in four households treated or boiled water in both the dry and wet season.

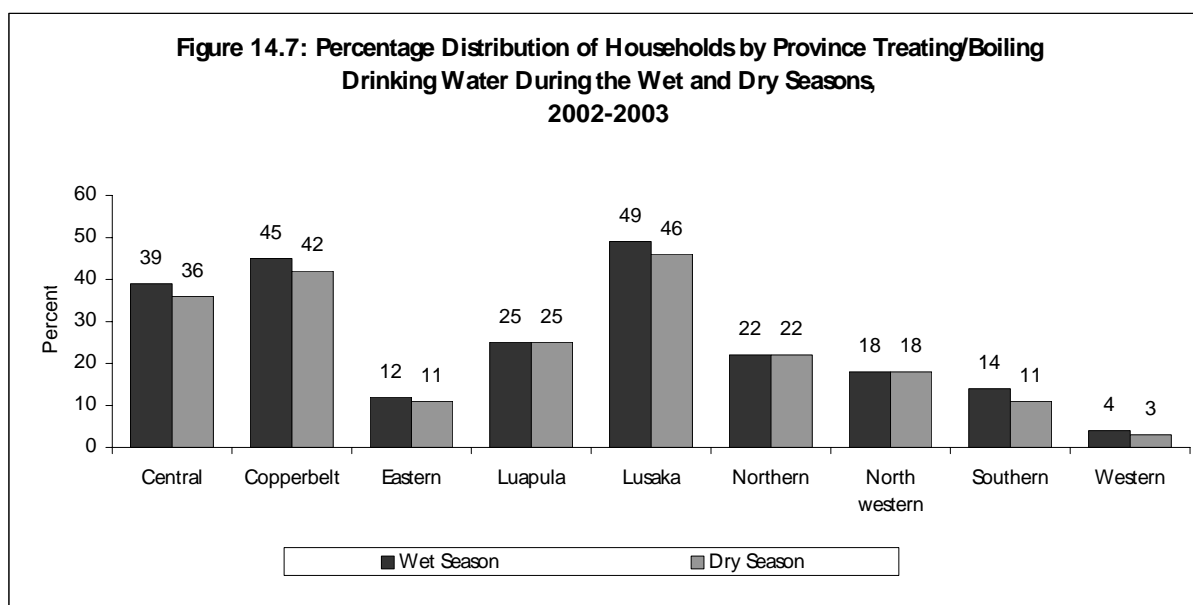
Results further indicate that in urban areas, 48 percent of households' boiled/treated their drinking water in wet season while 45 percent did so in the dry season. The proportions of rural households that boiled or treated drinking water were 17 and 15 percent during the wet and dry seasons, respectively.

At stratum level, treatment of water in both the wet and dry season was more prevalent in the urban high cost compared with the other strata.

At provincial level water treatment in both the wet and dry season is most common in Lusaka. The percentages of households who treated water in both the wet and dry season in Lusaka province were 49 and 46 percent, respectively, followed by those in Copperbelt at 45 and 42 percent, respectively. The least proportions of households that treated water were in Western province with only 4 percent and 3 percent of households' treating/boiling water in the wet and dry season, respectively.

**Table 14.8: Proportion of Households that Treated/Boiled Drinking Water during Wet and Dry Seasons by Rural/Urban, Stratum and Province, 2002– 2003**

Residence/Stratum/Province	Proportion that Treated/Boiled Drinking water (Wet Season)	Proportion that Treated/Boiled Drinking water (Dry Season)	Total number of Households
All Zambia	27	25	2,005,677
Rural	17	15	1,329,702
Urban	48	45	675,975
<b>Stratum</b>			
Small Stratum Farmers	16	15	1,229,244
Medium Scale Farmers	26	23	13,890
Large Scale Farmers	53	49	688
Non agric household	25	23	85,880
Urban low cost	42	39	534,538
Urban medium cost	62	59	64,247
Urban high cost	76	74	77,190
<b>Province</b>			
Central	39	36	194,444
Copperbelt	45	42	315,078
Eastern	12	11	276,600
Luapula	25	25	169,592
Lusaka	49	46	271,421
Northern	22	22	271,237
North western	18	18	117,563
Southern	14	11	224,783
Western	4	3	164,959





#### 14.3.4.Sources of Lighting Energy

Data relating to the main type of energy used for lighting by households was also collected in the 2002–2003 LCMS survey. Results are shown in Table 14.9

The table indicates that about half (51 percent) of households in Zambia depended on kerosene/paraffin as a major source of lighting energy. Electricity was used by 18 percent and candle by 11 percent of the households. The rest of the lighting sources are open fire 10 percent, Diesel 6 percent and other energy sources at 2 percent.

In rural areas, use of kerosene/paraffin was above the national average of 51 percent. Sixty three percent of households in rural areas depend on this source of energy for lighting. However, in urban areas electricity was the most commonly used source of lighting energy (48 percent) while kerosene/paraffin was used by 27 percent of the households.

At provincial level use of kerosene/paraffin was most common in Luapula province (82 percent) and least common in Lusaka province (15 percent). Other provinces with the proportion of households using kerosene/paraffin below the national average of 51 percent were Copperbelt and Western provinces. In the urbanised provinces of Lusaka and Copperbelt, 47 and 43 percent of households used electricity, respectively.

**Table 14.9: Percentage Distribution of Households by Main Type of Lighting Energy by Rural/Urban, Stratum and Province, 2002–2003**

Residence/ Stratum/ Province	Type of Lighting Energy									Total	Total number of Households
	Kerosene/ Paraffin	Electricity	Candle	Diesel	Open fire	Torch	Solar Panel	Other	None		
All Zambia	51	18	11	6	11	0	0	2	1	100	2,005,677
Rural	63	3	5	9	16	0	0	3	1	100	1,329,702
Urban	27	48	24	0	0	0	0	0	.	100	675,975
<b>Stratum</b>											
Small Scale Farmers	64	2	4	9	16	0	0	3	1	100	1,229,244
Medium Scale Farmers	74	4	6	8	4	.	3	1	.	100	13,890
Large Scale Farmers	41	37	10	4	8	.	.	.	.	100	688
Non – Agricultural household	53	16	14	9	7	0	0	2	1	100	85,880
Urban low cost	31	39	29	0	0	0	0	0	.	100	534,538
Urban medium cost	16	73	11	0	1	.	0	.	.	100	64,247
Urban high cost	6	88	6	0	0	.	0	.	.	100	77,190
<b>Province</b>											
Central	63	9	11	12	4	0	1	1	0	100	194,444
Copperbelt	38	43	14	3	1	.	0	0	.	100	315,078
Eastern	61	4	5	8	17	.	1	3	3	100	276,600
Luapula	82	5	2	0	10	.	0	1	.	100	169,592
Lusaka	15	47	36	1	0	.	0	0	0	100	271,421
Northern	72	3	4	7	12	.	0	2	0	100	271,237
North western	56	5	6	12	13	0	.	7	1	100	117,563
Southern	55	19	6	8	9	0	0	1	1	100	224,783
Western	28	3	12	6	43	.	0	7	1	100	164,959

#### 14.3.5.Sources of Cooking Energy

This section provides results pertaining to households' main type of cooking energy. The percentage distribution of households is as shown in Table 14.10.

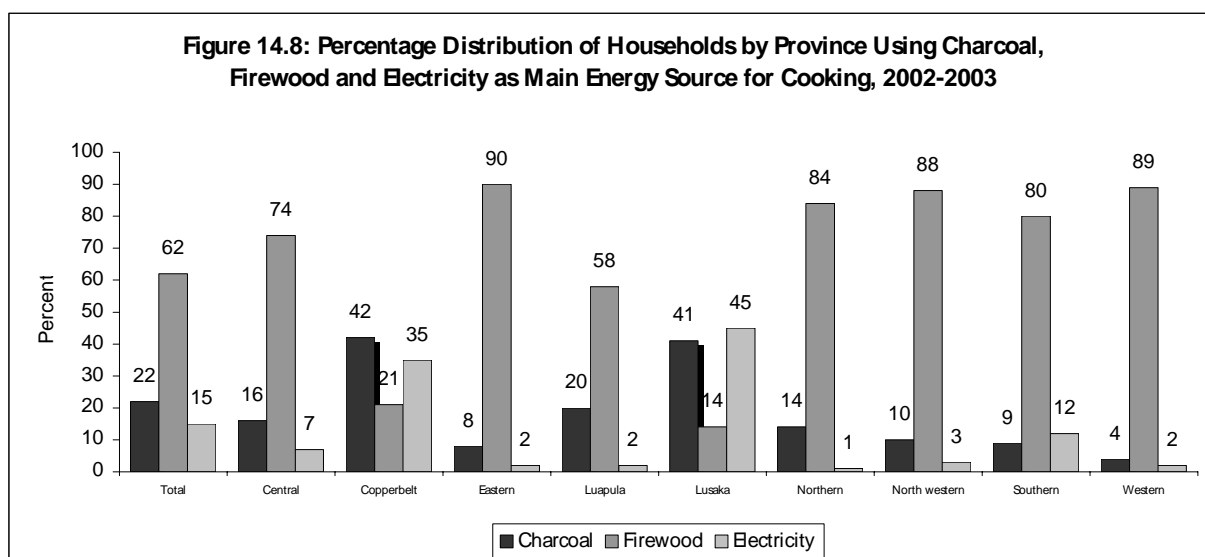
At national level, the majority of households use firewood as the main source of cooking energy; representing about 60 percent followed by Purchased Charcoal with 20 percent and electricity reporting 15 percent of the households.

Comparing use of electricity for lighting and cooking; Tables 14.9 and 14.10 indicate some slight difference in the proportion of households that used electricity for lighting, (18 percent) and that, which used electricity for cooking, (15 percent). This shows that even if some households had access to electricity, they more often used it for lighting than cooking. In rural areas most households, about 90 percent used firewood for cooking, followed by charcoal with 9 percent; and electricity reporting only 1 percent of households. Considering urban areas, most households used charcoal for cooking reporting 49 percent, followed by electricity with 41 percent and firewood accounting for only 9 percent.

The distribution of households by strata indicates that, about 90 percent among small and medium scale farmers used firewood for cooking. However, a notable proportion of large-scale farming households (29 percent) also used electricity for cooking; and only 7 percent used Gas as source of cooking energy. Further, the majority of households in the urban-low cost areas (59 percent) used charcoal for cooking. However, 67 percent of households in urban-medium cost areas and 86 percent in urban-high cost depend on electricity as the main type of cooking energy.

**Table 14.10: Percentage Distribution of Households by Main Type of Cooking Energy by Rural/Urban, Stratum and Province, 2002–2003**

Residence/ Stratum/ Province	Type of Cooking Energy										Total	Total number of households
	Collected fire wood	Purchased fire wood	Charcoal own produced	Charcoal purchased	Coal	Kerosene/Paraffin	Gas	Electricity	Crop/Livestock residues	Other		
<b>All Zambia</b>	<b>60</b>	<b>2</b>	<b>2</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>2,005,677</b>
Rural	88	2	3	6	0	0	0	1	1	0	100	1,329,702
Urban	6	3	1	48	0	0	0	41	0	.	100	675,975
<b>Stratum</b>												
Small Scale Farmers	90	1	3	4	0	0	0	1	1	0	100	1,229,244
Medium Scale Farmers	91	2	1	2	.	0	.	3	.	.	100	13,890
Large Scale Farmers	48	.	16	.	.	.	7	29	.	.	100	688
Non – Agricultural household	58	7	2	25	.	1	.	7	0	.	100	85,880
Urban low cost	7	3	2	57	0	0	0	31	0	.	100	534,538
Urban medium cost	6	4	1	22	.	0	0	67	.	.	100	64,247
Urban high cost	2	1	0	11	.	.	.	86	.	.	100	77,190
<b>Province</b>												
Central	73	1	1	16	.	1	0	7	.	0	100	194,444
Copperbelt	19	2	3	42	0	.	0	35	.	.	100	315,078
Eastern	87	3	0	8	.	0	0	2	.	.	100	276,600
Luapula	56	2	20	20	.	0	.	2	.	.	100	169,592
Lusaka	12	2	0	41	..	.	0	45	.	.	100	271,421
Northern	83	1	1	14	.	0	.	1	0	.	100	271,237
North western	86	2	0	10	.	.	.	3	.	.	100	117,563
Southern	75	5	0	9	.	.	.	12	.	.	100	224,783
Western	86	3	0	4	0	.	0	2	5	.	100	164,959



### 14.3.6. Type of Cooking Devices

The Survey inquired from households about the type of cooking devices they used. Results are presented in Table 14.11. At national level over half the households (56 percent) used brick/stone on open fire as a cooking device, 22 percent used a brazier, 14 percent stove/cooker. Metal stand on open fire and other devices, were used by 4 percent and 2 percent of households respectively. This is consistent with the type of energy used for cooking as reported in the preceding section.

In rural areas brick/stone on open fire was the most widely used device for cooking by 81 percent of the households while in urban areas, the brazier was the most common used by half the households. The stove/cooker is also substantially used in urban areas by 40 percent of households.

At stratum level use of brick/stone on open fire was predominant in the rural strata. The highest percentage of households using this type of device was recorded among small-scale farmers at 84 percent followed by 75 percent medium scale farmers. Half of the non-agric households and 43 percent of the large-scale farmers use the brick/stone on fire as cooking device. The stove/cooker was used by a considerable proportion of large-scale farmers (36 percent). In urban strata households in high cost areas used the stove/cooker the most (84 percent) followed by those in the medium cost with 65 percent. In the low cost the brazier was the most used device with over 50 percent of households using it.

**Table 14.11: Percent Distribution of Households by Cooking Device Used by Rural/Urban, Stratum and Province, 2002-2003**

Residence/ Stratum/ Province	Type of Cooking Device										Total number of households
	Stove/ Cooker	Brazier	Clay Stove	Brick/stone on open Fire	Metal Stand on Open fire	Vehicle tyre rim	Hot plate without Stand	Welded Stand with Hot plates	Other Device	Total	
All Zambia	14	22	0	56	4	0	0	0	2	100	2,005,677
Rural	2	8	0	81	5	0	0	0	3	100	1,329,702
Urban	40	50	1	7	0	.	1	1	0	100	675,975
<b>Stratum</b>											
Small Scale farmers	1	7	0	84	5	0	0	0	3	100	1,229,244
Medium Scale Farmers	3	3	0	75	16	0	.	0	1	100	13,890
Large Scale Farmers	36	10	.	43	2	6	.	.	3	100	688
Non-Agri Households	7	32	.	51	7	.	1	.	2	100	85,880
Urban Low Cost	30	59	1	8	0	.	1	1	0	100	534,538
Urban medium Cost	65	26	0	8	0	.	0	1	.	100	64,247
Urban high Cost	84	12	0	2	0	.	1	1	0	100	77,190
<b>Province</b>											
Central	9	15	0	59	14	0	1	0	1	100	194,444
Copperbelt	34	46	0	18	0	.	0	1	1	100	315,078
Eastern	2	8	0	89	1	.	.	0	.	100	276,600
Luapula	5	40	0	54	1	0	.	.	0	100	169,592
Lusaka	43	41	0	12	0	.	1	1	1	100	271,421
Northern	2	14	1	83	0	.	0	.	0	100	271,237
North-Western	3	10	0	68	0	.	0	0	8	100	117,563
Southern	12	9	0	64	15	.	0	0	.	100	224,783
Western	2	4	0	86	1	.	0	0	7	100	164,959

Among provinces, use of stove/cooker was above the national average of 14 percent in Lusaka (43 percent) and Copperbelt Province (34 percent) while use of brazier was above the national average (22 percent) in Copperbelt (46 percent) Lusaka (41 percent) and Luapula province (40 percent). Few households in Lusaka and Copperbelt reported used of brick/stone device for cooking (12 and 18 percent, respectively).

### 14.3.7. Garbage Disposal

Results pertaining to the household's main method of garbage disposal are presented in Table 14.12. The most common method used for disposing garbage was pitting. About one in two households in Zambia used a dug pit to dispose of garbage. Dumping was the next common method of garbage disposal used by 43 percent of the households overall.

About half the households in rural areas disposed of garbage by dumping while 47 percent used pits for disposing of garbage. In urban areas, dug out pits was the most common method practiced by 62 percent of households while dumping accounted for 28 percent of the households. A sizeable proportion of households (9 percent) reported refuse collection as their main method of disposing garbage in urban areas.

Results by strata indicate that digging pits was most common among large-scale farmers (65 percent) while dumping was most prevalent among small-scale farmers (51 percent).

Among the provinces, Central province recorded the highest proportion of households digging pits for garbage disposal (74 percent), followed by Northern Province with 68 percent. Other provinces with proportions of households using pits above the national average of 52 percent are Luapula, Lusaka and N/Western Provinces.

The majority of households in Western province reported dumping as the main method (74 percent) followed by 64 percent in Eastern Province and 62 percent in Southern Province.

**Table 14.12: Percent Distribution of Households by main Type of Garbage Disposal, Rural/Urban Stratum and Province, 2002–2003**

Residence/Stratum/Province	Type of Garbage Disposal						Total number of households
	Refuse Collection	Pit	Dumping	Burning	Other	Total	
All Zambia	4	52	43	1	0	100	2,005,677
Rural	1	47	51	1	0	100	1,329,702
Urban	9	62	28	1	0	100	675,975
<b>Stratum</b>							
Small Scale farmers	1	47	51	1	0	100	1,229,244
Medium Scale Farmers	2	63	34	1	.	100	13,890
Large Scale Farmers	15	65	20	1	.	100	688
Non-Agri Households	1	48	50	1	.	100	85,880
Urban Low Cost	7	61	31	1	0	100	534,538
Urban medium Cost	10	68	21	0	1	100	64,247
Urban high Cost	24	61	12	4	0	100	77,190
<b>Province</b>							
Central	2	74	23	1	0	100	194,444
Copperbelt	9	52	37	2	.	100	315,078
Eastern	1	35	64	0	0	100	276,600
Luapula	1	67	32	0	.	100	169,592
Lusaka	9	59	31	1	0	100	271,421
Northern	1	68	31	0	.	100	271,237
North-Western	1	58	41	1	.	100	117,563
Southern	3	33	62	2	0	100	224,783
Western	0	24	74	2	.	100	164,959

### 14.3.8. Toilet Facilities

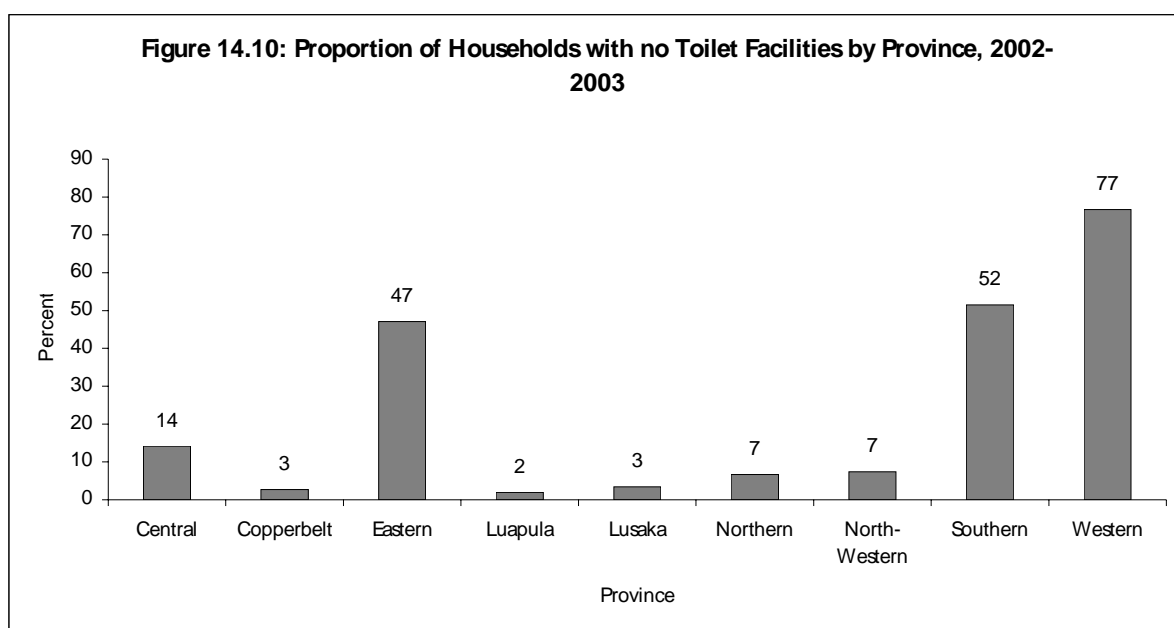
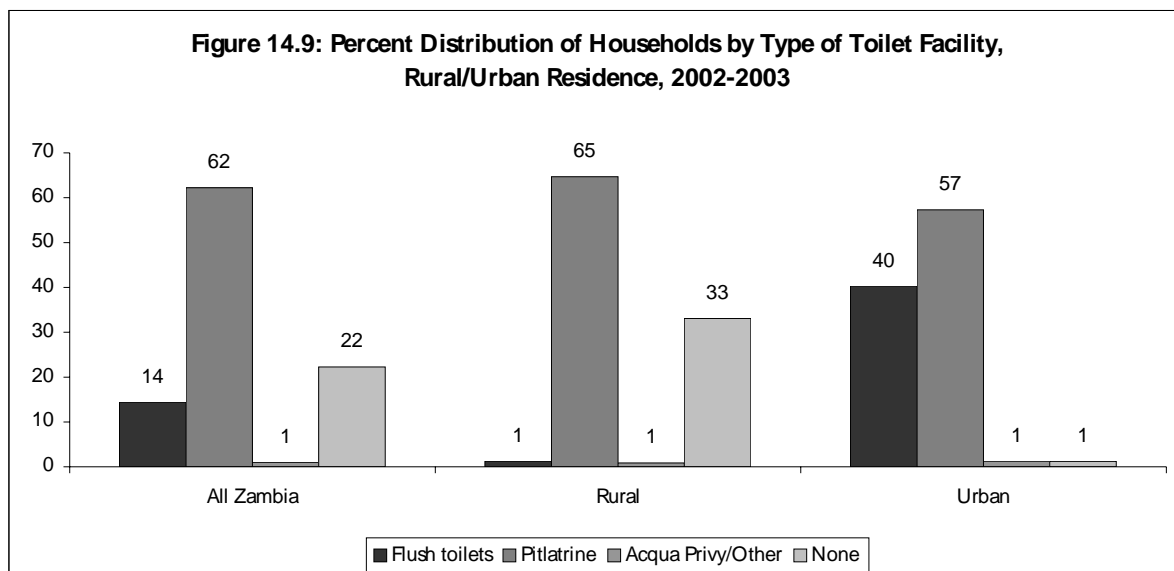
Table 14.13, Figures 14.9 and 14.10 show results pertaining to toilet facilities available for households. Results indicate that over half of the households countrywide used pit latrines. About 51 percent had own pit latrine, 6 percent communal latrine, and another 6 percent used neighbours' pit latrines. Fourteen percent used flush toilets (9 percent own flush toilet inside house, 4 percent own flush toilet outside house and 1 percent shared flush toilet). About one in five households regrettably did not have any toilet facility.

More of the rural households than the urban households used pit latrines (65 percent) of the rural households compared with 57 percent of the urban households.

Analysis by province indicates that the majority of households in the predominantly rural provinces used pit latrine while the majority in the urbanised Lusaka and Copperbelt provinces used flush toilets. Three quarters of households in Western province, 52 percent in Southern Province and 47 percent in Eastern Province did not have a toilet facility.

**Table 14.13: Percent Distribution of Households by Main Type of Garbage Disposal, Rural/Urban Stratum and Province, 2002–2003**

Residence/Stratum/ Province	Own flush toilet inside	Own Flush Toilet outside	communal shared flush toilet	Own Pit latrine	communal pitlatrine	Neighbors/ Other households pitlatrine	Acqua privy	Other	None	Total
All Zambia	9	4	1	51	6	6	0	1	22	100
Rural	1	0	0	56	3	6	0	1	33	100
Urban	25	13	3	40	13	5	1	0	1	100
Small Scale farmers	1	0	0	57	3	6	0	1	34	100
Medium Scale Farmers	2	0	.	73	1	3	.	1	19	100
Large Scale Farmers	15	.	.	74	.	.	.	.	11	100
Non-Agri Households	4	1	2	45	8	13	.	0	27	100
Urban Low Cost	13	13	3	47	15	6	1	0	1	100
Urban medium Cost	61	6	2	20	7	0	0	0	3	100
Urban high Cost	72	14	3	8	2	0	.	.	0	100
Central	4	3	1	67	5	4	.	2	14	100
Copperbelt	28	17	4	40	3	4	2	0	3	100
Eastern	1	0	0	39	3	9	0	0	47	100
Luapula	3	2	.	78	2	13	0	1	2	100
Lusaka	18	5	2	43	24	4	0	0	3	100
Northern	2	1	0	81	3	6	.	1	7	100
North-Western	3	1	1	76	5	7	.	0	7	100
Southern	7	3	1	29	5	3	1	0	52	100
Western	1	1	0	15	4	1	.	1	77	100



#### 14.4. Access to Facilities

This section covers findings related to household access to various socio-economic facilities. The access is discussed in terms of usage and proximity of households to these facilities.

##### 14.4.1 Use of Various Amenities

Most households in Zambia, 83 percent in all had accessed a food market. More urban than rural households reported having used the facility (95 percent versus 78 percent). Other facilities reported to be commonly used at national level were the health facility, used by 94 percent of households, public transport (90 percent) and the hammermill used by 78 percent.

An analysis of the differentials in the use of facilities between rural and urban households shows

that more urban than rural households used the food market, post office, secondary school, police station/post, bank, public transport, public phone and Internet café. The remainder of the facilities, notably the health facility and input markets, were used more by rural than urban households.

**Table 14.14: Percentage Distribution of Households by Use of Various Facilities by Rural/Urban, Zambia, 2002–2003**

Facility	All Zambia	Residence	
		Rural	Urban
Food Market	83	78	95
Post Office	41	31	60
Community School	7	7	8
Low Basic School (1–4)	7	8	7
Middle Basic School (1–7)	30	34	23
Upper Basic School (1–9)	33	28	42
High School	7	4	12
Secondary School	11	7	19
Health Facility	94	95	92
Hamermill	78	88	58
Input Market	35	37	29
Police Station/Post	52	43	71
Bank	19	10	38
Public Transport	90	86	96
Public Phone	20	7	46
Internet Café	2	0	7

#### 14.4.2. Proximity to Facilities

More than half of the households in Zambia were within a 5km radius of a food market, middle or upper basic school, health facility, a hammer mill or public transport. The remainders of the facilities were over 5 km away from more than half the number of households in the country.

A closer examination of the distribution of households by proximity to facility, by residence indicates that urban households had relatively easier access to all the facilities than rural households. In general, a high proportion (over 50 percent) of rural households were at a distance of over 16km from major amenities such as a Post office (65 percent), High School (71 percent), Input market (57 percent), bank (78 percent) and so on.



**Table 14.15: Percent Distribution of Households by Proximity to Facilities, 2002–2003**

Facility	Total/Residence	0–5 Km	6–15 Km	16+ Km	Not Stated	Total	Total Number of Households
1. Food Market	All households	58	19	22	1	100	2,005,677
	Rural	37	28	34	0	100	1,329,702
	Urban	100	0	0	.	100	675,975
2. Post Office	All households	39	16	43	2	100	2,005,677
	Rural	12	20	65	3	100	1,329,702
	Urban	91	9	1	0	100	675,975
3. Community School	All households	41	12	12	35	100	2,005,677
	Rural	25	18	16	41	100	1,329,702
	Urban	73	2	2	23	100	675,975
4. Low Basic School (1 – 4)	All households	21	7	16	56	100	2,005,677
	Rural	16	10	21	54	100	1,329,702
	Urban	30	1	7	61	100	675,975
5. Middle Basic School	All households	64	18	5	13	100	2,005,677
	Rural	58	26	7	8	100	1,329,702
	Urban	74	4	2	21	100	675,975
6. Upper Basic School	All households	63	23	11	3	100	2,005,677
	Rural	46	34	17	4	100	1,329,702
	Urban	97	1	0	2	100	675,975
7. High School	All households	22	9	51	18	100	2,005,677
	Rural	3	7	71	18	100	1,329,702
	Urban	59	13	9	18	100	675,975
8. Secondary School	All households	36	15	43	5	100	2,005,677
	Rural	8	20	64	7	100	1,329,702
	Urban	90	6	2	2	100	675,975
9. Health Facility	All households	69	22	8	0	100	2,005,677
	Rural	54	34	12	1	100	1,329,702
	Urban	99	1	0	0	100	675,975
10. Hammer mill	All households	76	16	6	2	100	2,005,677
	Rural	65	25	9	1	100	1,329,702
	Urban	97	0	.	3	100	675,975
11. Input Market	All households	40	19	38	4	100	2,005,677
	Rural	16	22	57	5	100	1,329,702
	Urban	85	12	1	2	100	675,975
12. Police Station/Post	All households	44	19	36	2	100	2,005,677
	Rural	15	28	54	3	100	1,329,702
	Urban	99	1	0	.	100	675,975
13. Bank	All households	30	13	52	5	100	2,005,677
	Rural	4	12	78	7	100	1,329,702
	Urban	82	15	3	0	100	675,975
14. Public Transport	All households	70	17	13	1	100	2,005,677
	Rural	54	26	19	1	100	1,329,702
	Urban	100	0	0	.	100	675,975
15. Public Phone	All households	38	10	46	6	100	2,005,677
	Rural	8	14	69	8	100	1,329,702
	Urban	95	2	1	1	100	675,975
16. Internet Café	All households	24	8	35	33	100	2,005,677
	Rural	1	5	51	43	100	1,329,702
	Urban	69	14	5	13	100	675,975

#### 4.4.3. Walking time to facilities

The time it takes to walk to a facility is another measure of accessibility to facilities. The information collected referred to those households, which used any given facility. Over one-fifth (22 percent) of households in Zambia lived within 10 minutes walking distance to the health facility while 49 percent lived within 10 to 60 minutes to the health facility.

However, 23 percent of households were at a distance that required more than one hour's walk to reach the health facility. This distribution is similar for access to a hammer mill.

**Table 14.16: Percent Distribution of Households by Walking Time to Facilities**

Facility	Total/Residence	Less than 10 Minutes	10-19 Minutes	20-29 Minutes	30-59 Minutes	60 Minutes and over	Not Applicable
1. Food Market	All households	22	11	8	14	28	17
	Rural	7	7	5	11	22	15
	Urban	21	7	3	0	0	2
2. Post Office	All households	7	9	7	6	11	59
	Rural	1	2	2	5	11	45
	Urban	6	7	5	1	0	13
3. Community School	All households	3	2	1	1	0	59
	Rural	2	1	1	1	0	62
	Urban	2	1	0	0	.	31
4. Low Basic School (1 - 4)	All households	3	2	1	1	1	93
	Rural	2	1	1	1	1	61
	Urban	1	1	0	0	.	31
5. Middle Basic School	All households	9	8	5	5	3	70
	Rural	44	5	5	4	3	44
	Urban	4	3	1	0	0	26
6. Upper Basic School	All households	11	10	5	3	4	68
	Rural	4	5	3	3	4	48
	Urban	7	5	2	0	0	20
7. High School	All households	1	2	1	1	2	93
	Rural	0	0	0	1	1	64
	Urban	2	2	1	1	0	30
8. Secondary School	All households	2	3	2	2	3	89
	Rural	0	0	1	1	3	61
	Urban	2	2	1	1	0	27
9. Health Facility	All households	22	20	13	16	23	6
	Rural	9	9	8	14	23	3
	Urban	13	11	5	2	0	3
10. Hammer mill	All households	26	16	10	12	14	22
	Rural	13	11	8	11	14	8
	Urban	12	5	2	1	.	14
11. Input Market	All households	5	5	4	7	14	65
	Rural	2	1	3	6	13	42
	Urban	3	4	2	1	0	24
12. Police Station/Post	All households	14	9	6	7	16	48
	Rural	1	2	3	6	16	38
	Urban	13	7	3	1	0	10
13. Bank	All households	4	6	3	2	4	81
	Rural	0	1	1	1	4	60
	Urban	4	5	3	1	1	21
14. Public Transport	All households	44	11	7	9	18	10
	Rural	18	7	5	9	18	9
	Urban	26	4	2	0	0	1
15. Public Phone	All households	10	5	2	2	2	80
	Rural	1	1	0	1	2	61
	Urban	9	4	1	0	0	18
16. Internet Café	All households	1	1	0	0	0	97
	Rural	.	0	0	0	0	66
	Urban	1	1	0	0	0	31

#### 14.4.4. Reason for not using facilities

Of the households that did not use the various facilities, the majority reported that the reason for not doing so was mainly that household members did not need to use the facilities. The same reason was advanced by more than 80 percent of all households that did not use schools of all categories, from community schools to secondary schools and high schools. The prevalence of

households, which did not need to use a school, was reported to be relatively higher in urban areas than in rural areas for all the categories of schools. The only exception to this fact is the food market for which distance was reported (by 58 percent households) to be the main reason why they did not use the facility. The markets were deemed to be too far from their dwelling units.

Countrywide, 18 percent of households that did not use a health facility stated that the reason for not doing so was that the health facilities were too far, 15 percent stated that they were too expensive and 10 percent indicated that they were of poor quality. The proportion of households reporting distance to be the reason for non use of health centres in rural areas was very high at 32 percent whereas no household in the urban areas reported this to be the reason for non-use. More urban households however, reported that the use of health facilities was too expensive (27 percent) compared with 5 percent in the rural areas.

For the majority of households who did not use the market, post office, health facility and a hammer mill, the main reason was that the facility was too far. The most frequently cited reason for not using the market

**Table 14.17: Percentage Distribution of Households by Reason for not using Facility Rural/Urban, 2002–2003**

Facility	Reasons for Non Use	All Zambia	Residence	
			Rural	Urban
Food Market	Too Expensive	13	9	45
	Too Far	58	65	4
	Poor Administration	0	0	–
	Poor Quality	7	6	17
	Corruption	0	0	–
	Did not need	19	18	24
	Other	3	2	10
Post Office	Too Expensive	7	8	7
	Too Far	23	28	5
	Poor Administration	0	0	0
	Poor Quality	2	2	2
	Corruption	0	0	0
	Did not need	62	56	82
	Other	5	5	3
Community School	Too Expensive	0	0	0
	Too Far	9	12	2
	Poor Administration	1	0	1
	Poor Quality	1	1	2
	Corruption	0	0	0
	Did not need	81	76	90
	Other	8	10	5
Lower Basic School (1 – 4)	Too Expensive	1	0	1
	Too Far	10	13	4
	Poor Administration	0	0	0
	Poor Quality	0	0	0
	Corruption	0	.	0
	Did not need	80	77	86
	Other	10	10	9
Middle Basic School (1 – 7)	Too Expensive	1	1	1
	Too Far	11	15	4
	Poor Administration	0	0	0
	Poor Quality	1	0	
	Corruption	0	.	0
	Did not need	81	78	87

Facility	Reasons for Non Use	All Zambia	Residence	
			Rural	Urban
	Other	6	6	6
Upper Basic School (1-9)	Too Expensive	1	1	2
	Too Far	8	11	1
	Poor Administration	0	0	0
	Poor Quality	1	0	2
	Corruption	0	0	.
	Did not need	84	81	91
	Other	6	6	4
High School	Too Expensive	2	2	1
	Too Far	7	10	3
	Poor Administration	0	0	0
	Poor Quality	0	0	1
	Corruption	0	0	0
	Did not need	84	8	90
	Other	7	7	5
Secondary School	Too Expensive	2	2	2
	Too Far	6	8	2
	Poor Administration	0	0	0
	Poor Quality	0	0	1
	Corruption	0	0	0
	Did not need	85	82	93
	Other	6	7	3
Health Facility	Too Expensive	15	5	27
	Too Far	18	32	.
	Poor Administration	1	2	0
	Poor Quality	10	11	7
	Corruption	1	2	0
	Did not need	43	42	45
	Other	12	6	21
Hummer Mill	Too Expensive	6	16	0
	Too Far	11	28	0
	Poor Administration	0	1	0
	Poor Quality	3	5	2
	Corruption	0	1	.
	Did not need	77	44	96
	Other	3	5	1
	Too Far	15	23	2
	Poor Administration	1	2	0
	Poor Quality	0	0	0
	Corruption	0	0	0
	Did not need	57	38	89
	Other	3	4	2
Police Station/Post (1-4)	Too Expensive	1	1	0
	Too Far	26	32	0
	Poor Administration	1	0	2
	Poor Quality	0	0	1
	Corruption	1	0	3
	Did not need	67	61	89
	Other	5	5	4
Bank	Too Expensive	16	16	13
	Too Far	9	12	2
	Poor Administration	0	0	0
	Poor Quality	0	0	1
	Corruption	0	0	0
	Did not need	68	65	76
	Other	7	7	8
Public Transport	Too Expensive	17	18	6
	Too Far	23	26	2
	Poor Administration	0	0	.
	Poor Quality	0	0	0
	Corruption	0	0	.
	Did not need	57	53	86
	Other	3	3	6
Public Phone	Too Expensive	21	20	22

Facility	Reasons for Non Use	All Zambia	Residence	
			Rural	Urban
	Too Far	10	12	2
	Poor Administration	0	0	0
	Poor Quality	0	0	1
	Corruption	0	0	0
	Did not need	66	64	72
	Other	3	3	2
Internet Cafe	Too Expensive	10	8	4
	Too Far	5	6	2
	Poor Administration	0	0	0
	Poor Quality	0	0	0
	Corruption	0	0	0
	Did not need	72	70	76
	Other	13	16	6

## 14.5. Summary

### Housing Characteristics

Traditional housing was the most common type of dwelling in Zambia. Sixty six percent of households occupied traditional dwellings while 34 percent lived in modern/conventional dwellings. Ninety one percent of households in rural areas occupied traditional housing compared with only 16 in urban areas. Lusaka and Copperbelt provinces were the only ones with the majority of households occupying modern/conventional types of dwelling (86 percent and 72 percent of households, respectively).

The most common building materials were Grass/Straw for roofs (60 percent households), Mud bricks for walls (33 percent households) and mud for floors (63 percent households).

The majority–78 percent of households live in own dwellings. Home ownership was higher in rural (91 percent) than urban areas (52 percent). Renting of houses was most common in urban areas especially in Lusaka and Copperbelt provinces.

About half of the households nationwide had access to sources of water considered clean and safe both in the wet and dry season. Only one in four households treated water in both the wet and dry seasons.

Kerosene/paraffin was the major source of energy–51 percent of the households used this source. Only 18 percent of households overall used electricity. The majority of households in rural areas (63 percent) used kerosene/paraffin for lighting compared with only 27 percent of urban households. The highest proportion of households in urban areas used electricity (48 percent). Use of electricity for lighting was highest in Lusaka province (47 percent) followed by Copperbelt province with 43 percent of the households.

The majority of households (62 percent) at national level used firewood for cooking, followed by charcoal, which was used by 22 percent of the households. Electricity was only used by 15 percent of the households overall. Among rural households, the vast majority (91 percent) used firewood for cooking compared with 9 percent of the urban households. Charcoal was used by the largest

percentage of urban households (48 percent), followed by 41 percent households who use electricity.

More than half (56 percent) of the households nationwide used the brick/stone on open fire as a device for cooking, 22 percent used a brazier and 14 percent the stove/cooker and the rest used other devices. The brick/stone on open fire was more widely used in rural (81 percent households) than urban areas with only 7 percent of households using it. The brazier was the most common cooking device in urban areas, followed by the stove/cooker, used by 50 percent and 40 percent of the urban households respectively.

About one in two households used a dug pit to dispose of garbage, 43 percent uses dumping while 1 percent used burning as a way to dispose of garbage. Only 4 percent of the households in Zambia had their refuse collected regularly. Digging pits was most common among the urban households while dumping was most common among the rural households.

Over half the households countrywide use pit-latrines with more rural households (65 percent) than urban households at 57 percent. About one in 5 households did not have a toilet facility. Three quarters of households in Western Province, Half of the households in Southern and nearly half in Eastern Province did not have a toilet facility.

More than half of the households were within a 5kilometer radius of a food market, middle basic school and upper basic school, health facility, a hammer mill and public transport. Over 50 percent of households in rural areas were at a distance of over 16 kilo meters from the post office, high school, secondary school, in-put market, police station/post and a bank. All households in urban areas were within 5kilometers to a food market and public transport.

# CHAPTER 15

## CHILD HEALTH AND NUTRITION

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### 15.0. Introduction

This chapter presents an analysis on the nutrition and health status of children in Zambia. Nutrition and health status was widely regarded, as an important basic indicator of welfare in an economy. There are two reasons that are given to support this importance:

- (i) There is likely to be significant economy wide benefits (or externalities) from improved nutrition and health status. In particular, there is likely to be important benefits in terms of improved mental and physical productivity, and in reduced health care requirements, and
- (ii) Societies in general have a particular aversion to malnutrition and to its correlate, hunger.

As a result, description and analysis of the levels and determinants of malnutrition, and in particular child malnutrition not only provides information on the overall welfare of the economy, but furthermore can assist in advocacy, policy-making, planning, targeting and growth-monitoring activities by various stakeholders interested in the welfare of children in Zambia.

The LCMS III questionnaire on anthropometry section collected information on:

- Child feeding Practices
  - Breast feeding
  - Feeding on solids
- Immunization
  - BCG
  - DPT
  - Polio
  - Measles
- Anthropometric data
  - Child's age
  - Height
  - Weight

The anthropometry information was collected for all children aged 0–59 months (under-5) that were in the survey households whether they were children of the head of household or not. However, measurements of stunting, wasting and under nutrition were only done for children aged 3–59 months.

## 15.1. Child Feeding Practices

The pattern of infant feeding has important influences on both the child and mother. Feeding practices are the principal determinants of child's nutritional status. Poor nutritional status in young children exposes them to greater risks of morbidity.

### 15.1.1. Breast Feeding and Supplements

Breast-feeding initiation is universal in Zambia, although exclusive Breast-feeding is not widely practiced. The Global strategy for infant and young child feeding adapted by Zambia, recommends that the child should be exclusively breastfed for the first six months of life. During the first six months, exclusive breastfeeding plays an important role in the survival of the child. The first Breast milk after delivery contains colostrum, which has a high concentration of antibodies that protect babies from infections and illnesses. Early introduction of supplementary food or plain water increases incidences and severity of diseases such as diarrhea, acute respiratory infections and other illnesses in young children. It also reduces breast milk output since the production and release of milk is modulated by the frequency and intensity of sucking. Hence, health practitioners discourage early introduction of supplementary food.

Table 15.1a shows the proportion of children less than five years of age who were being breastfed at the time of the survey, by age group and rural/urban. At national level, 97 percent of children aged 0–3 months were being breastfed. The percentage of children who were being breastfed dropped sharply from 82 percent for children aged 16–18 months to 56 percent for children aged 19–21 months.

In rural areas more children were being breastfed than in urban areas. For example in the age category of 0–3 months 98 percent of children in rural areas were being breastfed as compared to 93 percent of children in urban areas. The difference in breastfeeding status between the children in rural and urban areas (for children aged below 24 months) is most pronounced in the age category, 16–18 months. In rural areas, 88 percent of the children in this age group were being breastfed compared to 64 percent in urban areas.

**Tale 15.1a: Proportion of Children (Under-five Years) who were Currently being Breastfed by Age Group and Rural/Urban, Zambia, 2002–2003**

Sex/Age Group	All children	Rural	Urban	Number of children under five years
Total Zambia	39	41	34	1, 637, 000
Boy	40	43	34	805,000
Girl	38	40	33	832, 000
Age groups in months				
0 – 3	97	98	93	128,000
4 – 6	97	97	97	91,000
7 – 9	97	97	95	96, 000
10 – 12	92	93	90	92, 000
13 – 15	91	92	87	86, 000
16 – 18	82	88	64	86, 000
19 – 21	56	60	46	70, 000
22 – 24	33	40	12	91, 000



25 – 27	15	17	10	82, 000
28 – 30	6	6	7	87, 000
31 – 33	7	8	5	92, 000
34 – 36	3	4	1	114, 000
37 – 59	1	2	1	522, 000

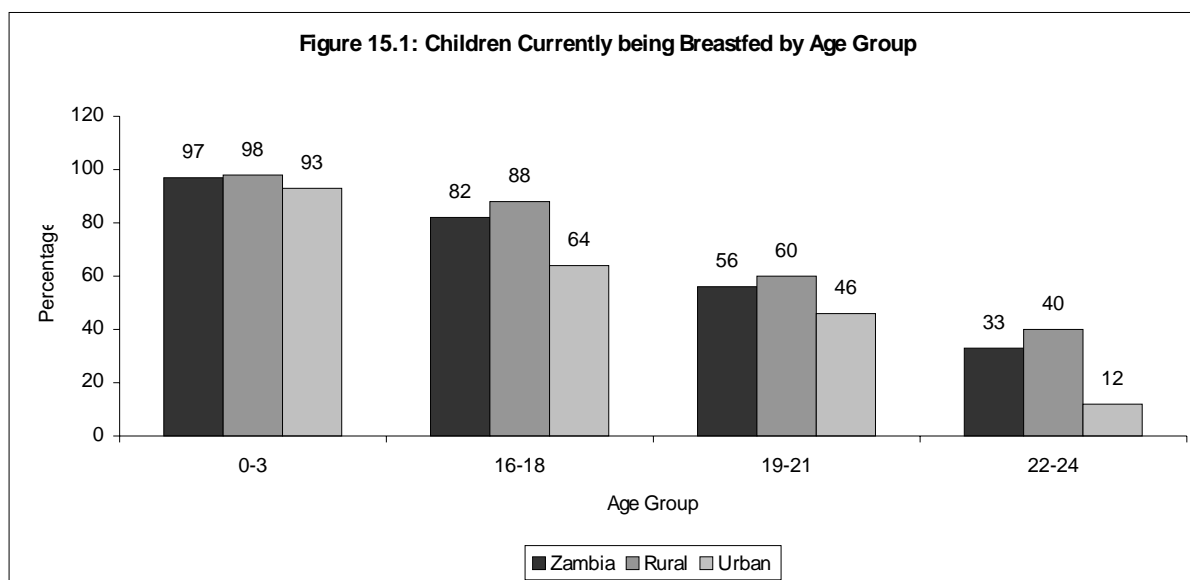


Table 15.1b shows a significant rise, at national level in the number of children who were being exclusively breastfed, 25 percent as compared to 6 percent reported during the LCMS-1998. The table also reveals that 39 percent of children in the age group 0–3 months and 87 percent in the age group 4–6 months had already started on other food supplements. The table also shows that 21 percent of children in the age group 0–3 months were given plain water only in addition to breast milk respectively Compared to 4 percent of children in the age groups 4–6 months.

Rural areas had a slightly higher proportion of children that were given food supplements, with 59 percent, as compared to 57 percent in urban areas. The urban areas however had a higher proportion of children that were being exclusively breastfed 29 percent compared to 23 percent in the rural areas. More children in rural areas were given water in addition to breast milk, 15 percent in comparison to urban areas with 8 percent.

At provincial level, Southern Province had the highest proportion of children that were being exclusively breastfed with 47 percent, followed by Lusaka Province with 38 percent; Luapula and Copperbelt Provinces had 24 percent each. Northwestern and Eastern provinces recorded the highest proportion of children that were being given food supplements with 70 and 69 percent, respectively.

Although breastfeeding is highly practiced as shown in Table 15.1b, exclusive breast-feeding is not very common. Overall only 38 percent of infants between the ages 0–3 months were exclusively breastfed. The table also reveals that 39 percent of infants in this age group had already been introduced to other food supplements. Those that received plain water in addition to breast milk account for 21 percent of those under this age group.

In the age group of 4–6 months, 7 percent of children were exclusively breastfed. The proportion of children that were being given food supplements in addition to breast milk was 87 percent. Children who were given water only in addition to breast milk constituted 4 percent of this age group.

**Table 15.1b: Percentage Distribution of Children (0–6 months) by Breastfeeding Status, Age Group, Rural/Urban and Province, Zambia, 2002–2003**

Residence/ Province/ Age Group	Not breast feeding	Exclusively breastfeeding	Plain water only	Breastfeeding with supplements	Total	Number of children 0– 6 months
<b>All Children</b>	<b>3</b>	<b>25</b>	<b>14</b>	<b>58</b>	<b>100</b>	<b>219,000</b>
Rural/urban						
Rural	3	23	15	59	100	163,000
Urban	6	29	8	57	100	56,000
Province						
Central	11	24	22	43	100	24,000
Copperbelt	8	24	14	54	100	24,000
Eastern	1	19	11	69	100	31,000
Luapula	2	24	10	64	100	22,000
Lusaka	3	38	5	54	100	21,000
Northern	.	21	14	65	100	44,000
North–Western	1	8	21	70	100	15,000
Southern	1	47	8	44	100	22,000
Western	5	18	22	55	100	16,000
Age group in months						
0 – 3	2	38	21	39	100	128,000
4 – 6	2	7	4	87	100	91,000

### 15.1.2. Frequency of Feeding on Solid Foods

The study also assessed the frequency with which mothers fed their children on solid foods. Table 15.2 indicates that more than 60 percent of the children were fed at least three times in a day. The table further shows that there are differences in feeding children on solid foods between the rural and urban areas. In rural areas 62 percent of children were fed at least three times in a day compared to 70 percent in urban areas. About 60 percent of children in age category 10 – 12 months were fed three or more times in a day.

Further differences in feeding frequency were also observed, in respect to the mother's education. The table shows that Mothers with higher education levels fed their children three or more times in a day. About 80 percent of children from mothers' with higher education levels were fed, at least three times in a day as compared to 53 percent of those whose mothers had no education.

At provincial level, Southern province had the highest proportion of children that were fed at least three times, with 80 percent followed by Lusaka province, with 74 percent. Luapula province recorded the highest proportion of children that were fed only once or twice in a day, with 60 percent.

**Table 15.2: Percentage Distribution of Children (0–59 months) who were Given Food Supplement by Number of Times they were given per Day by Rural/Urban, Age of Children and Mother's Education, 2002–2003**

	Once	Twice	Thrice	Four times	Five times	More than five times	Total	Number of children
<b>All Children</b>	5	31	49	11	3	1	100	1,403,000
Boy	6	30	48	11	3	2	100	688,000
Girl	5	31	49	11	3	1	100	715,000
Rural	5	33	50	8	2	2	100	1,005,000
Urban	6	24	44	18	5	3	100	398,000
Central	9	29	45	13	2	2	100	137,000
Copperbelt	7	27	48	13	4	1	100	188,000
Eastern	5	25	60	8	1	1	100	221,000
Luapula	4	56	33	6	1	0	100	126,000
Lusaka	4	22	43	22	5	4	100	158,000
Northern	4	39	45	10	1	1	100	218,000
Northwestern	5	48	42	3	1	1	100	93,000
Southern	6	14	62	12	4	2	100	167,000
Western	4	26	49	14	4	3	100	95,000
<b>Age of Child in months</b>								
0 – 3	30	36	15	6	.	13	100	37,000
4 – 6	17	42	34	5	1	1	100	72,000
7 – 9	9	32	44	9	4	2	100	88,000
10 – 12	6	34	45	12	2	1	100	86,000
13 – 59	4	29	51	12	3	1	100	1,120,000
<b>Mother's education</b>								
No Education	7	40	41	9	1	2	100	263,000
Primary	6	32	50	9	2	1	100	811,000
Secondary	5	21	48	18	5	3	100	294,000
Higher	2	18	28	28	18	6	100	36,000

## 15.2. Immunization

The induction of an immune response through vaccination is a widely accepted public health strategy for the prevention of vaccine-preventable infectious diseases. To be considered fully vaccinated a child should have received one dose of BCG, three doses each of DPT and polio vaccines and one dose of measles vaccine. The WHO recommends that a child should complete the schedule of vaccinations before the age of 12 months. Vaccinations are more effective when given at the appropriate age.

During the LCMSIII, information on childhood immunizations was obtained for all under-five children found in the household, including those that did not have clinic cards. The results indicate that majority of the children were adequately vaccinated against the major child killer diseases in all the areas.

Table 15.3 presents data for the percentage of children aged 12 – 23 months who had received specific vaccines by the time of the survey. About 72 percent of children had their vaccination cards available at the time the fieldwork was undertaken. At national level 65 percent of children aged 12–23 were reported to have received full vaccination. Urban children had better vaccination coverage, 72 percent, as compared to rural children, 62 percent. Information from both vaccination cards/clinic cards and mothers' reports showed 98 percent of children had been vaccinated against tuberculosis, 97 percent and 96 percent had received three doses of DPT and polio, respectively. The coverage rate for measles was 88 percent. There was no notable difference in vaccination coverage by sex of child (98 percent for females and 97 percent for male children).

**Table 15.3: Percentage Distribution of Children 12–23 Months who had Received Various Vaccination, by Sex and Age Group, Zambia, 2002–2003**

Residence/ Sex/Age Group	BCG	DPT	POLIO	MEASLES	ALL VACCINATIONS
<b>All children</b>	98	97	96	88	65
Rural	97	96	95	87	62
Urban	98	98	98	90	72
<b>Male</b>	97	96	96	87	63
<b>Female</b>	98	97	96	89	66
<b>Age group in months</b>	97	96	95	84	56
12 – 14	97	96	95	84	56
15 – 17	98	97	96	88	64
18 – 20	98	97	97	92	72
21 – 23	98	96	97	89	69

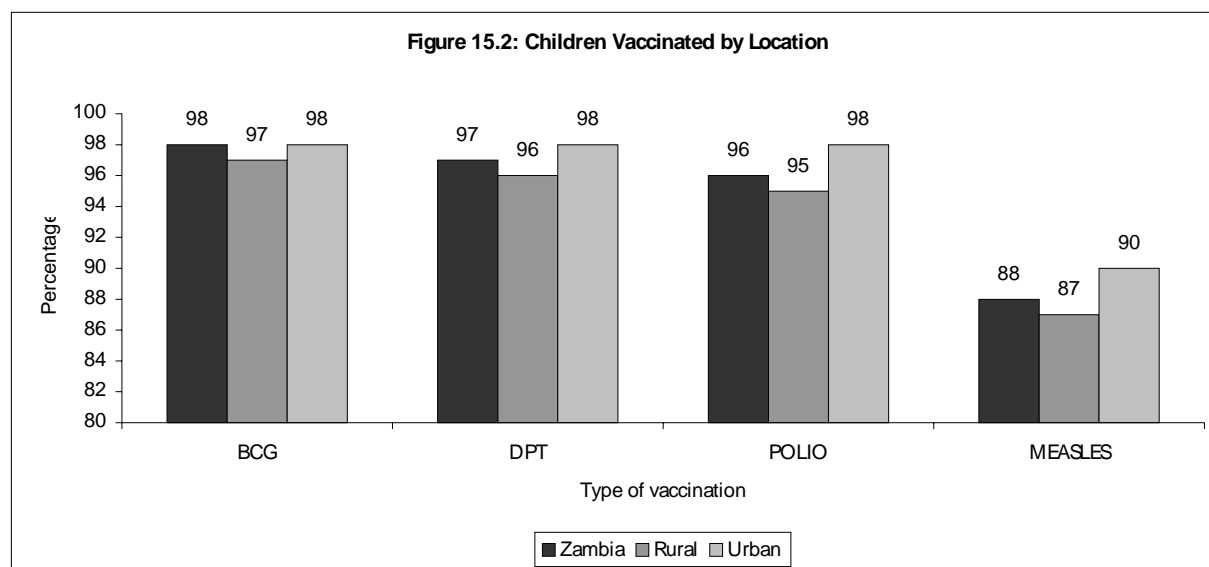


Table 15.4 presents data for the percentage of children 12–23 months who were vaccinated, by province, Stratum and by Rural/Urban. The table also shows no major differences in the vaccination coverage by province, rural/urban and in the different strata. The results indicate that majority of the children were adequately vaccinated, with all the provinces recording over 90 percent coverage for BCG, DPT and Polio. It is worth noting that although measles recorded an impressive coverage of 88 percent it was not as good when compared to the coverage for BCG, DPT and Polio, all of which recorded over 95 percent coverage.

The highest percentage of children with under five clinic cards was recorded in Southern province with 86 percent. Luapula province had the lowest percentage of children with under-five clinic cards at 43 percent.

**Table 15.4: Percentage Distribution of Children 12 – 23 Months who had Received Various Vaccinations, Zambia, 2002–2003**

Residence/Stratum/Province	BCG	DPT	POLIO	MEASLES	ALL VACCINATIONS
<b>All children</b>	98	97	96	88	65
Rural	97	96	95	87	62
Urban	98	98	98	90	72
<b>Stratum</b>					
Small scale	97	96	95	87	61
Medium scale	99	90	95	83	48
Large scale	100	100	100	100	100
Non-agricultural	100	98	98	92	82
Low cost areas	98	97	98	90	72
Medium cost areas	98	98	98	88	66
High cost areas	100	100	100	92	79
<b>Province</b>					
Central	98	96	97	92	68
Copperbelt	99	98	98	89	68
Eastern	97	96	95	86	81
Luapula	97	95	93	86	61
Lusaka	99	99	99	91	76
Northern	96	93	93	79	66
North western	97	97	96	92	66
Southern	99	98	98	94	81
Western	96	99	99	92	79

### 15.3. Child Nutritional Status

The anthropometrics data on Weight and height collected during the LCMSIII permit for measurement and evaluation of the overall nutritional and health status of young children below the age of five in Zambia. This evaluation allows identification of subgroups of the child population that are at increased risk of faltered growth, disease, impaired mental development and death. The factors that influence nutritional status of children are many. Among them are poverty status of mothers, poor diet and poor environmental conditions of households. These can impair growth in children and result in reduced weight or height.

The three standard indices of physical growth that describe the Nutritional status of children are defined as follows: –

- Height – for– Age (Chronic malnutrition) – Stunting
- Weight– for – Height (Current malnutrition) – Wasting
- Weight-for – Age (Chronic and current malnutrition) – Underweight

*Stunting* (Height–for–age) is a condition reflecting the cumulative effect of chronic malnutrition.

*Wasting* (weight–for–height) is failure to gain weight in relation to height. This can be a result of recent illness or sudden lack of appetite, which can cause muscle and fat loss in a child. It is actually a short–term effect.

Under-weight (Weight-for-age) is low weight in relation to age. It is a composite index for weight-for-height and height-for-age and thus does not distinguish between acute malnutrition (wasting) and chronic malnutrition (stunting). A child can be underweight for his/her age because he/she is stunted, because he/she is wasted, or because he/she is wasted and stunted. Weight for age is a good overall indicator of a population's nutritional health.

A number of indicators have been developed to express the various types of malnutrition affecting growth of children. Chosen for this report are the most commonly used indicators. The indicators expressed as Z- scores were generated using the ANTHRO software package. According to the World Health Organisation (WHO), the nutritional status of children in the sample is compared with an international reference population defined by the U.S. National Centre for Health Statistics (NCHS). Indicators described below are expressed in standard deviation units, i.e. Z-score. For this report Z-score below 2SD of the reference median have been used for information on height/age, weight/age and weight/height.

In the survey, all children (except for those in the age group, 0–2 months) listed in the household questionnaire as under-fives were eligible for height and weight measurements. The following analysis focuses on these children.

Table 15.5 shows the variations in malnutrition indices of children aged 3–59 months by urban–rural, province, and mother’s education. Results in general show that urban children have better nutritional status than rural children. For example, only 40 percent of urban children are stunted, compared to 52 percent for rural children. Variations in wasting and underweight by background characteristics follow patterns similar to those observed for stunting.

At National level, 49 percent of children aged 3–59 months were stunted, 23 percent were underweight and 5 percent were wasted. Provincial results show that More than 50 percent of children in Eastern, Luapula, Northern, and Northern western were stunted while Low percentages of stunted children were observed in Lusaka and Copper belt, 42 and 43 percents respectively.

Children’s nutritional status is inversely related to their mother’s education. This was true for stunting and underweight. Children whose mothers had no education were more likely to be stunted as compared to those whose mothers had higher education. Results indicate that stunting varied from 57 percent for Children whose mothers had little education to 29 percent for those children whose mothers had higher education. This big difference may be attributed to differences in the quality of care (i.e. food preparation, hygiene, weaning and water preservation) as they relate to both health and nutrition.

**Table 15.5: Incidence of Stunting, Underweight and Wasting of Children Aged 3 – 59 Months by Residence, Province and Mother’s Level of Education, Zambia, 2002–2003**

<b>Residence/Province/ Mother’s Education</b>	<b>Stunting</b>	<b>Underweight</b>	<b>Wasting</b>	<b>Number of children</b>
<b>All Zambia</b>	<b>49</b>	<b>23</b>	<b>5</b>	<b>1,296,000</b>
<b>Rural/urban</b>				
Rural	52	25	4	932,000
Urban	40	18	5	364,000
<b>Province</b>				
Central	47	19	7	127,000
Copperbelt	43	21	5	167,000
Eastern	55	24	2	209,000
Luapula	54	28	7	120,000
Lusaka	42	17	5	146,000
Northern	57	26	3	189,000
North western	55	27	4	84,000
Southern	39	22	5	159,000
Western	47	20	4	96,000
<b>Mother’s Education</b>				
No education	57	28	4	239,000
Primary	50	23	5	755,000
Secondary	40	17	6	270,000
Higher	29	10	2	31,000

Table 15.6 shows the proportion of children classified as stunted, underweight and wasted by some demographic characteristics. Stunting patterns show an expected delayed onset due to the longer time it takes for deprivation to affect growth in height. The data indicates that stunting

occurs at all ages except at the infant age group where lower prevalences have been observed due to difficulties in measuring the length of such children.

By age 30 months, children do not decline further and stunting is slightly less due to adaptation and attrition due to death. From the table it is evident that the incidence of stunting increases, as children get older. The situation is however different for children who were 30 months or older. For these children stunting levels remained stable at 52 percent. The Incidence of stunting, underweight and wasting were higher in male children than female children.



The table also shows the association of increasing family size with prevalence of child malnutrition. Prevalence of long-term malnutrition (stunting) and underweight decreased with increasing family size. The smaller the household size the higher the incidence of stunting and underweight. Stunting constituted 67 percent of children who lived in households with members less than 3 as compared to 40 percent of those in households with greater than 10 members. Stunting was more prevalent among children from poor households than those children from non-poor households. Over 50 percent of poor children were stunted, while less than 50 percent of non-poor children were stunted.

**Table 15.6: Proportion of Children Classified as Stunted, Underweight and Wasted by Age, Sex of Child and Household Size, Zambia, 2002–2003**

	Stunting	Underweight	Wasting
<b>All children</b>	<b>49</b>	<b>23</b>	<b>5</b>
<b>Age in months</b>			
4 – 6	24	6	3
7 – 9	32	14	5
10 – 12	44	28	8
13 – 15	50	33	8
16 – 18	56	30	5
19 – 21	58	27	7
22 – 24	58	34	8
25 – 27	55	28	5
28 – 30	52	27	3
31 – 33	52	25	4
34 – 36	52	19	2
37 +	52	20	4
<b>Sex of child</b>			
Male	51	24	5
Female	47	21	4
<b>Household size</b>			
1 – 2	67	31	6
3 – 4	51	24	5
5 – 6	50	23	6
7 – 9	49	21	4
10+	40	20	3
<b>Poverty Status</b>			
Extremely Poor	52	25	4
Moderately Poor	50	23	5
Not Poor	43	18	4

Table 15.7 shows prevalence of different forms of malnutrition in children aged 3 – 59 months by who takes care of them in the absence of their parents or guardians. Children under the care of nannies/maids reported low stunting (28 percent), wasting (2 percent) and underweight (11 percent) levels. The Highest levels of stunting reported were for those children who were under the care of neighbors (52 percent) followed by those who were under the care of older sister or brother and other relatives at 51 percent each.

**Table 15.7: Incidence of Stunting, Under Nutrition and Wasting by Child Minder of Children (3– 59 Months) in the Absence of the Parents or Guardians, Zambia, 2002/2003**

Child Care	Stunting	Under weight	Wasting	Number of children
<b>All children</b>	<b>49</b>	<b>23</b>	<b>5</b>	<b>1,117,000</b>
Nursery School	36	12	9	14,000

Nanny/Maid	28	11	2	16,000
Male servant	38	19	7	6,000
Older sister/brother	51	23	4	462,000
Other relative	51	23	5	567,000
Neighbour	52	18	2	41,000
Other	45	20	.	11,000

#### 15.4. Summary

A significant rise was recorded at national level during the LCMS III for those children who were being exclusively breastfed, 25 percent, as compared to 6 percent recorded during the LCMS - 1998.

Almost half, 49 percent, of children under the age of five who had started receiving food supplements were fed three times a day.

Children in urban households were on average fed more times than those in rural households.

Children with educated mothers were on average fed more times than those with less educated mothers.

For those children who were aged 12–23 months, 98 percent had received vaccination tuberculosis (BCG), 97 percent had received the DPT vaccine, 96 percent had received the Polio vaccine and about 88 percent had received the measles vaccine.

Almost half (49 percent) of children aged 3–59 months were stunted (too short for their height), 23 percent were underweight (low weight for their age) and 5 percent were wasted (low weight for their height).

The higher the educational level of the mother of the child, the lower the incidence of stunting, underweight and wasting.

# ***References***

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1. Central Statistical Office: **'Demographic Projections 1990–2015'** Lusaka, Zambia.
2. Central Statistical Office: **Revised Projections (unpublished) 1999** Lusaka, Zambia.
3. Central Statistical Office (1994), **'1990 Census of Population, Housing and Agriculture' (Volumes I–X)**, Government Printers, Lusaka, Zambia.
4. Central Statistical Office (1995), **'Census of Population, Housing and Agriculture 1990, Analytical Reports' (Volumes 1–10)**, Government Printers, Lusaka, Zambia.
5. Central Statistical Office (Zambia), Ministry of Health (Zambia), Macro International Inc (USA); **'Zambia Demographic and Health Survey 1996'**, Calverton, Maryland – USA September 1997.
6. Central Statistical Office: **'Crop Forecast Survey Report for 1997/98'**.
7. Central Statistical Office (1998) – **Post Harvest Survey (1997/98) results**.
8. Central Statistical Office (1993): **'The Social Dimensions of Adjustment Priority Survey I (1991)**, Lusaka, Zambia.
9. Central Statistical Office (1994): **'The Social Dimensions of Adjustment Priority Survey II (1993)**. Lusaka, Zambia. Central Statistical Office (1997): **'Living Conditions Monitoring Survey Report (1996)**, Lusaka, Zambia.
10. Cochran W.G. (1997): **'Sampling Techniques'**, (Third Edition), John Wiley & Sons Inc.
11. Central Statistical Office (1997): **'Living Conditions Monitoring Survey Report (1996)**', Lusaka, Zambia.
12. Central Statistical Office (1997): **'The Evolution of Poverty in Zambia (1991–1996)'**, Lusaka, Zambia.
13. International Labour Office: **'International Standard Classification of Occupations (ISCO)**', Revised Edition, Geneva (ILO), Switzerland.
14. Kalton G., (1987), **'Introduction to survey sampling'**, Sara Miller McCune, Sage Publications Inc. USA.
15. Kish L. (1965), **'Survey Sampling'**, John Wiley & Sons, New York, USA.
16. United Nations (1990): **'International Standard Industrial Classification (ISIC) of all Economic Activities'**; series M.No.4 Revision 3, New York, USA. (UN publication).
17. Kpedekpo, GMK (1992), **'Essentials of Demographic Analysis'**, London, Heinman Educational Book Ltd
18. Shryrock HS, Siegal JS, et al (1975); **'The Methods and Materials of Demography, Volume 2'**, Washington DC, Bureau of the Census

19. Central Statistical Office (1998): **'Living Conditions Monitoring Survey Report**, CSO Printing Press, Lusaka, Zambia.
20. Foster J. et al, (1984): **'A Class Decomposable Poverty Measures'**, Vol. 52.
21. Kakwani N. (2002) **'Measurements of Poverty'**, ADB.
22. Lanjouw J. O. (2002), **'Demystifying Poverty Lines,'** World Bank.
23. Lamjouw P. et al, (1996), **'Building Blocks for a Consumption Based Analysis of Poverty in Nepal**, World Bank.
24. Ravillion M. (1994): **'Poverty Comparisons**, Harwood Press, Chur.
25. DeatonA. Et al (2002), **Guidelines for Constructing Consumption Aggregates for Welfare Analysis**, World Bank
26. UNDP (1998): **'Poverty Analysis Manual–Benin**, Canada.

# Appendix 1

## Composition of the Zambian Food Basket, 2002–2003

NO	FOOD ITEM	FOOD CODE	FOOD SHARE	CALORIES PER 100GRAMS
1	Maize Grain	0110	7.5	359
2	Mealie meal breakfast	0111	5.9	368
3	Cooking oil, Kwach	0513	5.1	884
4	Beef(any cut_fresh	0220	4.6	201
5	Bread/Buns, Kwacha	0104	4.4	261
6	Cassava Meal, Kwac	0105	4.1	351
7	Sugar, Kwacha'	0808	4.0	351
8	Fish(fresh/frozen)	0338	3.6	52
9	Dried/smoked fish,	0337	3.5	363
10	Mealie meal (Rolle	0112	3.3	345
11	Chickens,Kwacha'	0222	3.2	193
12	Dried beans leaves	0736	2.8	200
13	Sweet potato, Kwac	0742	2.6	96
14	Kapenta dried/smok	0339	2.6	203
15	Tomatoes, Kwacha'	0732	2.4	20
16	Rape, Kwacha'	0729	2.2	22
17	Rice in all forms,	0115	2.2	363
18	Fresh maize, Kwach	0710	1.9	148
19	Hammer milled meal	0109	1.8	345
20	Pumpkins, Kwacha'	0727	1.7	18
21	Groundnuts, Kwacha	1018	1.6	434
22	Other small fish,	0341	1.5	155
23	Pumpkin leaves(chi	0725	1.4	99
24	Fresh milk, Kwacha	0404	1.3	39
25	eggs, per month'	0403	1.1	125
26	Cabbage, per month	0703	1.0	16
27	Grinding, Kwacha'	0108	1.0	0
28	Salt, Kwacha'	0909	0.8	0
29	Munkoyo, Kwacha'	1206	0.8	384
30	Prepared meats(sau	0229	0.8	378
31	Cassava (tuber or	0704	0.7	101
32	Onion, Kwacha'	0721	0.7	39
33	Traditional vegeta	0733	0.7	20
34	Cassava, Kwacha'	0739	0.6	101
35	Game Meat, Kwacha'	0223	0.6	201
36	Cassava leaves, Kw	0723	0.6	79
37	Millet Meal, Kwach	0118	0.6	387
38	Mushrooms, Kwacha'	0719	0.6	147
39	Bread Flour, per m	0103	0.6	364
40	Goat Meat, Kwacha'	0224	0.5	154
41	Okra, Kwacha'	0720	0.5	29
42	Mangoes, Kwacha'	0609	0.5	38
43	other grains	0144	0.5	100
44	Potatoes (irish),	0741	0.5	71
45	Pig meat, Kwacha'	0228	0.4	314
46	Peas, Kwacha'	0724	0.4	340
47	Sweet potato leave	0734	0.4	40
48	Kapenta fresh/froz	0340	0.4	45
49	Other milks, Kwach	0410	0.4	93
50	Fanta	1201	0.3	30
51	Bananas, per month	0603	0.3	68
52	Other bread and ce	0119	0.3	358
53	Fresh beens, Kwach	0709	0.3	313
54	other flours	0145	0.3	280
55	Opeque beer(	1304	0.3	33

56	Fritters/doughnuts	0107	0.3	330
57	Offals, Kwacha'	0225	0.3	187
58	Traditional beer	1306	0.2	31
59	Impwa(garden eggs)	0717	0.2	34
60	Maheu/thobwa, Kwac	1204	0.2	384
61	Millet meal	0113	0.2	352

## ***Appendix 2***

### **List of Personnel who took part on the Living Conditions Monitoring Survey**

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#### **EDITORS**

1. Buleti Nsemukila (Dr.), Director (Central Statistical Office)
2. M. Banda, Deputy Director (Information Technology and Dissemination)
3. William. Mayaka, Deputy Director (Social and Demographic Statistics)
4. Peter M. Mukuka, Deputy Director (Economics Statistics)
5. G. Sinyenga, Head (Living Conditions Monitoring Branch)

#### **CORE SURVEY STAFF**

1. Buleti Nsemukila, Director (Central Statistical Office)
2. Peter M. Mukuka, Deputy Director (Economics Statistics)
3. Goodson Sinyenga, Head (Living Conditions Monitoring Branch)
4. Solomon Tembo, Manager (Information Technology)
5. Nchimunya Nkombo, Senior Nutritionist (Living Conditions Monitoring Branch)
6. Frank Kakungu, Senior Statistician (Information Technology)
7. Lubinda Mukata, Nutritionist (Living Conditions Monitoring Branch)
8. Stephen Ngenda, Statistician (Living Conditions Monitoring Branch)
9. Kambaila Munkoni, Statistician (Living Conditions Monitoring Branch)
10. Tukiya Kalima, Statistical Clerk (Living Conditions Monitoring Branch)
11. Brenda M. Kawana Secretary (Living Conditions Monitoring Branch)

#### **MASTER TRAINERS**

- |                        |                     |
|------------------------|---------------------|
| 1. Ryan Ngilazi (Late) | Central Province    |
| 2. Joseph Mutemwa      | Copperbelt Province |
| 3. Patrick Chuni       | Eastern Province    |
| 4. Charles Mugala      | Luapula Province    |
| 5. Stephen Ngenda      | Lusaka Province     |
| 6. Richard Kaela       | Northern Province   |
| 7. Kambaila Munkoni    | Northwestern        |
| 8. Lubinda Mukata      | Southern Province   |
| 9. Shebo Nalishebo     | Western Province    |

#### **PROVINCIAL HEADS**

- |                       |                     |
|-----------------------|---------------------|
| 1. Late Martin Njovu  | Central Province    |
| 2. Dickson Chintansha | Copperbelt Province |
| 3. Phillip Tembo      | Eastern Province    |



- |    |                  |                   |
|----|------------------|-------------------|
| 4. | Overson Njovu    | Luapula Province  |
| 5. | Phillip Miti     | Lusaka Province   |
| 6. | Henry Banda      | Northern Province |
| 7. | Alfonso Susiku   | North Western     |
| 8. | Late D. Simwizyi | Southern Province |
| 9. | Martin Tolosi    | Western Province  |

# **SUPERVISORS**

## **CENTRAL PROVINCE**

1. Joseph Musonda
2. Unity S. Banda
3. Daniel Chongo
4. Michael Banda

## **COPPERBELT PROVINCE**

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2. Mercy Lubemba
3. Steven Kayoka
4. Henry Sampa

## **EASTERN PROVINCE**

1. Michael Njovu
2. Joseph Difficult Lungu
3. Jackson Phiri
4. Evan Lupiya

## **LUAPULA PROVINCE**

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3. Dominic chikopela
4. Mubiana Seenge

## **LUSAKA PROVINCE**

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2. Monica Muyabi
3. Francise Zulu
4. Frank Chipokosa

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1. B. Mutambo
2. S. Phiri
3. E. Mulenga
4. E. Chikoti

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2. Richard M. Kufanga
3. Shyton Sakala
4. Martin Mulowa

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2. Kelly Siamulena
3. Webster Muyabi
4. Geoffrey Kuyewana

## **WESTERN PROVINCE**

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2. Patrick Mulai
3. Mutamwandi Pumulo
4. Jonathan Lutangu

# ENUMERATORS

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2. Adam F. Banda
3. Livenos Chimuka
4. Mukubesa Mukubesa
5. David Kabamba
6. Christopher Mwanza
7. Museya Bwalya
8. Godfrey Manda
9. Nyimba Donarvan
10. Perce Mubanga
11. Cliford Mubanga

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2. Chester Daka
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4. Edwin Tutwa
5. George Kangwa
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9. Godwin Simataa
10. Lawrence S. Zimba
11. Chilamulo Mabeka
12. David Nguvulu
13. Jiva Banda
14. Stephen Daka

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2. Richard Zulu
3. Mully Phiri
4. Masoka Zimba
5. Titus Phiri
6. Kizito Ndlovi
7. Mundia Nyirongo
8. Mussa Mwale
9. Joel S. Mudenda
10. Moses Banda
11. Amon Gondwe
12. Charles Zulu
13. Gilbert Hara

## LUAPULA PROVINCE

1. Benjamin Kalenshi
2. Mwandama Aaron
3. Mwape Eusto
4. Mumba Mathews
5. Febby Chitungu Chama
6. Prosper Milambo
7. Mwelwa Andrew
8. Mwansa Justine (Late)
9. Sinkamba Stephen Wilson
10. Mubanga K David.
11. Kunda Joseph
12. Sinyangwe Shadreck

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1. Annie Chikoti
2. Gloria Kashinga
3. Lindunda Petty Sibeso
4. Lilian Beenzu
5. Caroline Shinkanga
6. Robert Mwanza
7. Peter Mwasa
8. Sida Lweendo
9. Patrick Chilimboyi
10. Raphael Simaluba
11. Frank Moyo
12. Cassiano Namangala
13. Hilda Mubanga Ngenda
14. Geoffery Simenda.

#### **NORTHERN PROVINCE**

1. H.Lupiya
2. P.Chewe
3. L. Kasonde
4. B.Senkelo
5. L. Zulu
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7. C.Sichilima
8. M. Shigakula
9. B. Mwasa
10. D. Kabwe
11. P. Sampa
12. O. Kabwe
13. J. Silavwe

**NORTH WESTERN PROVINCE**

1. Cletus Kaluwa
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3. Samuel Kapandula
4. Simon Sondashi
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7. John Langeni
8. Evelyn Fainela
9. Prince Chilongo
10. Justin Kanema
11. C. Mbashila
12. D. Mingochi

**SOUTHERN PROVINCE**

1. Isaac Phiri
2. Gift Habasimbi
3. Fielder Shampile
4. Aukray Mang'wato
5. Donisius Siatombwe
6. Geoffrey Machwani
7. Votali Hamukali
8. Begger Beenzu
9. Kelvin Hampokomona (Late)
10. Joe Masiye Maambo (Late)
11. Manix Sibinda
12. George White Palicha
13. Kabali wamunyima

**WESTERN PROVINCE**

1. Nasilele Kozi
2. Isiyombo Pelebo
3. Simaata Simaata
4. Makayi Makayi
5. Kanyanga Kanyanga
6. Kaumba Chiyaze
7. Kakulubelwa Nalumino
8. Ignatius Sishau
9. Situmbeko Nyambe
10. Munukayumbwa Malumo

**LISTERS/MAPPERS****CENTRAL PROVINCE**

1. Edmond Mweene
2. David siwo
3. Estone Kanchule
4. Museya Bwalya
5. Muchima Ngosa
6. Musupelo Clement

**COPPERBELT PROVINCE**

1. Paulson Chilyata
2. Chris Lubinda
3. Israel J Maduma
4. Borniface Chulu
5. Henry Lukole
6. Justin Hambamba
7. Awkright Milupi
8. Chingembu Kawasha

**EASTERN PROVINCE**

1. Kondwani Nyasulu
2. George Lungu (Late)
3. Fredrick Simango
4. Benson Mbewe
5. Gilbert Hara
6. Geoffrey Daka

**LUAPULA PROVINCE**

1. Mwasa Kapoka
2. Mary chonganya
3. Wilson S. Sinkamba
4. Shadreck Sinyangwe

**LUSAKA PROVINCE**

1. Stanely Nyendwa– Supervisor
2. Saidi Mbewe
3. Stanely Mukanda
4. Lywali
5. Simuyuni Mubita Sitwala
6. Paul Daka
7. Darlington Kalumba
8. Ngenda Ngenda

**NORTHERN PROVINCE**

1. Peter Kamangu
2. Evaristo Kabwe
3. Douglas Somili Kalombo
4. Sunday Chilufya Mulenga
5. Remmy Ngoma
6. Steven Chanda

**NORTHWESTERN PROVINCE**

1. Mwasa Nsumbukeni – Supervisor
2. A Mumba
3. D. Mingochi
4. J. Sambambi
5. L. Ntambu
6. C. Mbashila

**SOUTHERN PROVINCE**

1. Simugande
2. B. Kameya
3. Simaata Simaata
4. Mwiinga
5. Siachinganya
6. Febby Nyanga

**WESTERN PROVINCE**

1. Titus Sinyembe Sinyemba
2. Makai Makai
3. Songiso Songiso
4. Fred Siwanasoyo
5. Aaron Chikwaya

**DATA ENTRY CLERKS****Central Province**

1. Elby M. Nyondo
2. Rose Mumbi

**Copperbelt Province**

1. Ireen Mambotwe
2. Chris Kalaba

**Eastern Province**

1. Stephen Phiri
2. Catherine Mukosa

**Luapula Province**

1. Mubanga Mulenga
2. Bertha Ng'ona

**Lusaka Province**

1. Juliet
2. Shine Lubobya

**Northern Province**

1. Elias Chanda
2. Michael Chibesa

**North Western Province**

1. Grad Imbila
2. Rose Kasokomba

**Southern Province**

1. Bertha Malunga
2. Yvonne Njenganjenga

**Western Province**

1. Zex Siamukompe
2. W. Wamusheke

## DRIVERS

### Central Province

1. Joseph Mwenda
2. Nyaweka Phiri

### Copperbelt Province

1. George Tembo
2. Francis Lesa

### Eastern Province

1. Aston Tembo
2. Moses Mbewe

### Luapula Province

1. Jacob Sikazwe
2. Enock Makamba (late)

### Lusaka Province

1. Anthony Njovu
2. Laison Banda

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1. Green Sikalumbi
2. Faiton Siwale

### Northwestern Province

1. Charles Michelo
2. Wisamba Njapau

### Southern Province

1. James Siakavuba

### Western Province

1. Manfred Kasama
2. Mayunyi Simandi

## List of Analysts

Name	Title	Topic
1. Dr. B. Nsemukila	Director	Poverty Analysis
2. Mr. PM Mukuka	Deputy Director	Household Income and Expenditure
3. Mr. S. Tembo	IT Manager	Education Characteristics
4. Mr. G. Sinyenga	Principal Statistician	Poverty Analysis and Survey Design
5. Mr. C. Banda	Principal Statistician	Household Income and Assets
6. Mr. B. Muwele	Principal Statistician	Overview of the Zambian Economy
7. Mrs. S. Mudenda	Senior Statistician	Overview of the Zambian Economy
8. Mr. F. Kakungu	Senior Statistician	Poverty Analysis
9. Ms. N. Nkombo	Senior Statistician	Child Nutrition and Health
10. Mr. L. Mukata	Nutritionist	Child Nutrition and Health
11. Mr. S. Kamocha	Senior Statistician	Economic Activities and the Labour Force
12. Mrs. B. Chilopa	Senior Statistician	Household Amenities and Access to Facilities



13. M. Mwanamwenge	Senior Demographer	Demographic Characteristics
14. Mr. C. Lwamba	Demographer	Demographic Characteristics
15. Mr. R. Banda	Demographer	Demographic Characteristics
16. Mr. P. Chewe	Demographer	Migration
17. Mr. K. Munkoni	Statistician	Household Consumption Expenditure
18. Mr. S. Ngenda	Statistician	Education Characteristics
19. Mr. R. Kaela	Statistician	Household Income and Assets
20. Mr. J. Tembo	Statistician	Household Amenities and Access to Facilities
21. Mr. K. Mushota	Statistician	Household Amenities and Access to Facilities
22. Mr. S. Nalishebo	Statistician	Non-farming Enterprise
23. Mrs. D. Kaemba	Statistician	Economic Activities and the Labour Force
24. Mr. C. Mugala	Statistician	Economic Activities and the Labour Force
25. Mr. M. Sooka	Principal Statistician	Household Agricultural Production
26. Mr. P. Chuni	Statistician	Household Agricultural Production
27. Mr. C. Nyasulu	Statistician	Household Agricultural Production

## **PAGE LAYOUT AND REPORT FORMATING**

1. Perry Musenge Desktop Publishing Officer
2. Anthony Nkole Desktop Publishing Officer
3. Nelson Nkhoma Systems Programmer



## Republic of Zambia

DAIRY  OF 

CENTRAL STATISTICAL OFFICE  
P.O. BOX 31908, LUSAKA, ZAMBIA  
TEL Nos. 251377/251380/252575/  
250195/253609/251385/253908/253468/226087

FORM 

## LIVING CONDITIONS MONITORING SURVEY III (LCMS III): 2002-2003

## DAIRY OF CONSUMPTION AND EXPENDITURE

HOUSEHOLD IDENTIFICATION PARTICULARS	CODE NUMBER
1. PROVINCE NAME	<input type="text"/>
2. DISTRICT NAME	<input type="text"/> <input type="text"/> <input type="text"/>
3. CONSTITUENCY NAME	<input type="text"/> <input type="text"/> <input type="text"/>
4. WARD NAME	<input type="text"/> <input type="text"/>
5. CSA NUMBER	<input type="text"/>
6. SEA NUMBER	<input type="text"/>
7. RURAL...1 URBAN...2	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
8. STRATUM <b>RURAL:</b> 1. Small Scale 2. Medium Scale 3. Large Scale 4. Non-Agric <b>URBAN:</b> 5. Low Cost 6. Medium Cost 7. High Cost	<input type="text"/> <input type="text"/>
9. HOUSEHOLD NUMBER (HHN)	<input type="text"/> <input type="text"/>
10. CENTRALITY	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
11. PANEL NUMBER	<input type="text"/>
12. VILLAGE OR LOCALITY NAME	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
13. CHIEF'S/CHIEFTAINNESS' AREA (RURAL AREAS ONLY) FOR URBAN=888 (NOT APPLICABLE)	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
14. HOUSEHOLD STATUS; 1 - Originally selected household 2=Replacement household	<input type="text"/> <input type="text"/>
15. IF REPLACEMENT HOUSEHOLD, REASON FOR REPLACING; 1.Refusal 2. Non contact 3. Dwelling can not be found 4. Other (specify)	
16. ENUMERATED HOUSEHOLD Name of head Residential address Sampling Serial	

number	
17. NAME OF MAIN RESPONDENT ROSTER	SERIAL NUMBER FROM HOUSEHOLD

**HOUSEHOLD DAILY EXPENDITURE AND CONSUMPTION**  
(FOR ALL MEMBERS OF THE HOUSEHOLD)

Date	Description of items bought/consumed	Kind of consumption	Unit of measure	Unit price	Quantity	Amount (K)	*Place of purchase
		Purchased.....1 Own produce.....2 <i>Gifts, relief food</i> .....3 Payment in kind.....4 Gathering/hunting/fishing.....5 Barter.....6 Other (specify).....7					
1	2	3	4	5	6	7	8
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**\*CODES:** 01...RETAIL SHOP      02...WHOLESALE      03...MARKET      04...NTEMBA ATTACHED TO HOUSE  
05...NTEMBA      06...MINIMARKET/SUPERMARKET      07...BUTCHERY      08...STREET VENDOR  
09...PRIVATE HOUSEHOLD      10...FARM      11...PEDDLER      12...LIQUOR STORE  
14...OTHER (SPECIFY)