REPUBLIC OF ZAMBIA

SOCIAL DIMENSIONS OF ADJUSTMENT

PRIORITY SURVEY I 1991

REPORT

CENTRAL STATISTICAL OFFICE
P. O. BOX 31908
LUSAKA.

Preface

This report contains results of the Social Dimensions of Adjustment (SDA) Priority Survey that took place from October to November, 1991. The survey covered the whole country on a sample basis covering 500 Standard Enumeration Areas. About 10,000 households were interviewed in total.

The survey was conducted wholly by the Central Statistical Office and was fully funded by the Norwegian government through the IDA scheme. The Central Statistical Office is organised into three subject-matter branches, namely Economic and financial statistics, Social and cultural statistics and Agriculture and environment statistics. Each of these branches is headed by an Assistant Director. The Priority survey was conducted and managed by the Social and cultural statistics branch.

The Social Dimensions of Adjustment (SDA) project was launched in 1987 by the World Bank with the United Nations Development Programme and the African Development Bank as partners. Many other multilateral and bilateral agencies have supported the project financially and technically in several countries of sub-saharan Africa.

The SDA priority surveys have been undertaken in many sub-saharan African countries that are undergoing Structural adjustment programs. The ultimate aim of the SDA priority surveys is to highlight social dimensions emanating from a country's adjustment programs, and how they affect different segments of the country's population.

By its very nature the survey was multidimensional covering a wide spectrum of topics. Thus the data collected is vast and rich allowing for indepth analysis at both national and provincial levels. The results contained in this report are basic, comprising mainly cross tabulations, diagrams and charts of some major background variables in most of the topics investigated. Nonetheless, the results presented in this report are by no means exhaustive. A lot more of primary data stored in the computer still remains to be fully investigated and analysed. The Central Statistical Office is committed to making available the stored data to interested users for further analysis.

The success of this survey was dependent on many people and institutions who made various contributions. The Central Statistical Office would therefore like to express its gratitute to the following:-

- The Norwegian Government for having funded the survey and the World Bank for managing the funds and arranging for technical assistance.
- The Norwegian Central Bureau of Statistics in Oslo for providing technical assistance.
- The members of the Priority Survey Secretariat within the Central Statistical Office for planning and executing the survey as well as for compiling this report.
- All the field staff, the Data processing personnel, those who edited and typed the report.
- All the respondents in the selected areas for their cooperation.
- Lastly but not the least, all those who made contributions in one form or another to the content of the survey through several user-producer meetings.

November, 1993

DAVID S. DIANGAMO
DIRECTOR OF CENSUS AND STATISTICS

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List of Abbreviations

C/BELT	Copperbelt
CBR	Crude Birth Rate
CENT	Central
CHW	Community Health Worker
CSA	Census Supervisory Area
CSO	Central Statistical Office
EAST	Eastern
GAR	Gross Attendance Rate
GDP	Gross Domestic Product
LUAP	Luapula
LSK	Lusaka
NAR	Net Attendance Rate
NORTH	Northern
N/WEST	North-Western
PS	Priority Survey
PSU	Primary Sampling Unit
SDA	Social Dimension of Adjustment
SEA	Standard Enumeration Area
SEG	Socio-Economic Group
SMAM	Singulate Mean Age at Marriage
SOUTH	Southern
TBA	Traditional Birth Attendant
TFR	Total Fertility Rate
UTH	University Teaching Hospital
WEST	Western
ZCCM	Zambia Consolidated Copper Mines
ZEN	Zambia Enrolled Nurse
ZFDS	Zambia Flying Doctor Service

Summary

Demographic Characteristics

According to the survey results, the estimated population of Zambia was 7.9 million in 1991. This corresponds well to the 1990 preliminary Census results, from which the projected population in 1991 was 8.0 million.

According to the 1969, 1980 and 1990 census results the urban population grew by 3.7 percent per annum from 1980 to 1990 while the rate was 5.8 percent per annum between 1969 and 1980. This indicates that rural to urban migration declined during the period. The Priority survey results show that 54 percent of the population live in rural areas. Of these 88 percent are living in small-scale agricultural households and 7 percent are in non-agricultural households. Of the urban areas, 53 percent live in low cost residential areas while 33 percent are in medium cost and 14 percent in high cost areas.

The Priority survey results show that 90 percent of the population is less than 45 years old and 45 percent being children aged 14 years or less. This indicates that the Zambian population is relatively young. The sex ratios for rural and urban areas are 99.9 and 95.7 males per 100 females respectively. The overall sex ratio is 97.6 compared to 96.7 males per hundred females from the 1990 census results.

The female headed households are more in rural areas with 23 percent as compared to 15 percent in urban areas. The average household size in Zambia is 5.4 persons. However, the male headed households on average are larger than female headed households, 5.7 persons as compared to 4.1 persons.

Health Care

At National level, 87 percent of the households are within 15 kilometre radius of a health facility. In urban areas, 92 percent of households are within 5 kilometre radius as compared to rural with 42 percent. Thus, Urban areas are better served with health facilities as compared to rural areas.

The Zambian population who visited a health facility in the three months preceeding the survey was 13 percent. Of those who had visited a health facility, 75 percent had visited a government ran facility and 12 percent had visited a private health facility. Only 5 percent had visited a health facility owned by a company. Doctors and clinical officers are by far the most often visited health personnel. The population who consulted a doctor or clinical officer constituted 79 percent followed by midwife or nurse at 11 percent. Only 9 percent had consulted a traditional healer. Midwives and nurses are most often consulted by children below 5 years, teenagers and young adults. The pattern is similar in all provinces.

Information on average cost per consultation in the three months preceeding the survey showed that government owned health institutions charged very low fees compared to private health institutions and traditional healers.

Education

Information on Primary school age attendance shows that 70 percent of the children aged 7 to 13 years attend school. In addition 10 percent of children aged 5 to 6 years were recorded as attending school.

At secondary school age level which is 14 to 18 years, 57 percent attend school while 18 percent in age group 19 to 22 years attend school.

Sex differentials do exist in educational attainment. Considering the population aged 14 years and above 28 and 14 percent of women and men respectively had no education at all. The percentage with no education at younger age groups 14 to 20 years is 10 and 14 percent among women and men respectively. The corresponding figures for older age group 60 years or over are 85 percent for women and 48 percent for men.

The survey also found that children living in rural areas have in general a lower school attendance rate at any age than children in urban areas. In primary school age groups, about 60 percent of rural children attend school as compared to 82 percent of urban children. In secondary school age groups, 57 percent of rural boys as compared to 75 percent of urban boys attend school. For girls, the comparable figures are 38 and 61 percent respectively.

The difference in the proportion of males and females in completing primary education is relatively not substantial. However, at secondary school level, there exists striking differences of 32 percent and 20 percent for males and females respectively.

Labour Force

Out of a total population aged 7 years and above of 6.2 million, 52 percent (3.2million) are currently economically active (in the labour force). Among these 54 percent (1.7million) are males and 46 percent (1.5 million) are females.

The survey results show that of the total labour force, 88 percent (2.5 million) are employed (among these 1.4 million being male and 1.1 million females) as compared with 22 percent (695,000) who have indicated to be unemployed (among these 328,000 are males and 367,000 are females). Hence the current unemployment rate for Zambia is 22 percent of the labour force. The unemployment rate is higher among the female labour force than among the male, that is, 25 percent as compared with 19 percent. It is also higher in urban areas than in rural, that is 34 percent as compared with 14 percent. The unemployment rates are very high among the young age groups from 7 to 24 years especially in urban areas. Most of the unemployed were of grade 1 to 7 level of education (51.1 percent).

The results show that of the unemployed who have ever worked, 35 percent worked in the private sector followed by those who worked in Government (27 percent). The major reason for leaving by those who gave a specific reason for leaving, is that of low wage/salary (24 percent), followed by lost job (20 percent). Among those who left Government employment, the major reason given was low wage/salary (20 percent) followed by lost job (16 percent).

The activity rates show a reasonable proportion of young children in the labour force. The survey results indicate that 20 percent of the total labour force and 14 percent of the employed labour force are children aged 7 to 19 years old who mostly engage in agricultural and trade activities.

The percentage distribution of the employed labour force by industry shows that the majority of the work force i.e. 65 percent are engaged in agricultural activity followed by 10 percent in community social and personal services. The percentage distribution by employment status shows that most workers were self-employed (41 percent) followed by unpaid family workers (30 percent).

The survey results also show that out of the total current labour force, 9 percent reported to have secondary jobs/businesses. This was more common among male workers (10 percent) than among female workers (8 percent). There were notable proportions among agriculture workers, the professional technical and related workers, the service and the production workers, about 10 percent in each group, who reported to have secondary jobs. Among paid employees, those working for government seemed to be the highest proportion of secondary job holders. The results also show high proportion of secondary job holders among those whose income from main job are very low (11 percent among those earning

K1,000 to K5,000 and 14 percent among those earning less than K1,000 per month).

The Priority survey data on earnings indicates that 55 percent of current paid employees earn K1,000 to K5,000 per month. The overall average earnings for all paid employees is K7,677 per month. However, among the profit earners, the employers have the highest average monthly earnings of K19,955 per month compared with self-employed persons with only K5,526. Examination of earnings by occupation reveals that the highest average monthly earnings are among the Administrative and managerial workers (K16,597) followed by professional and technical workers (K11,044). The lowest is among the agricultural, animal husbandry and forestry workers (K4,400).

Average monthly earnings of paid employees by employment status are highest among parastatal employees (K9,013) followed by Government (K7,337) and then the private sector employees (K6,746).

Household income and assets

Household income comprised income from all sources accruing to household members aged 7 years and above. Wide disparities exist between rural and urban household incomes, averaging K3,634 and K10,738 respectively. However, these disparities may be affected by the non inclusion of data on consumption of own produce and imputed rent.

On the average, male headed households had higher incomes (K7,250) than their female counterparts (K4,417) at national level. Central, Copperbelt, Lusaka and Southern provinces had more households with higher incomes (K20,000+) than Eastern, Luapula, Northern, N/western and Western provinces.

As far as ownership of assets is concerned, very few households own cars, fishing boats, hammermills, handgrinding mills, tractors and motor-cycles. Most households, however, own radios than any other asset (60 percent as against 23 percent for urban and rural households respectively).

Household expenditures

Rural/urban consumption profiles indicated that the proportion of expenditure on food took up the largest share of total household expenditure both in rural and in urban households, 54 percent and 60 percent respectively.

However, the least proportion of household expenditure went to medical care and education, owing to largely free services at the time of the survey.

Apart from food, housing expenditure accounted for a substantial share of total household expenditure, 19 percent, in urban households. Most of the expenditure on housing was devoted to rent, 28 percent, then charcoal, 15 percent. In rural households, expenditure on clothing, 16 percent, and housing, 11 percent, dominated household expenditure after food. Housing expenditure was dominated by paraffin, 40 percent, with equal proportions going to rent and charcoal, 7 percent.

No data on imputed rent and consumption of own produce was collected during the survey. About 20 percent of the total households were female headed as against 80 percent male headed households at national level. It should be noted that figures may in certain cases not exactly add up to 100 due to rounding.

Household Amenities and Facilities

Type of tenancy: Sixty-five percent of Zambian households occupy their own dwellings, whilst 25 percent are renting and 8 percent have free housing. Home ownership is more predominant in rural areas (91 percent), while renting is the most common feature in urban areas.

Lighting: The most common source of lighting among Zambian households is kerosene, which accounts for slightly over ⅔ of households. A small proportion (18 percent) of Zambian households rely on electricity for lighting, whilst 13 percent use some other form of lighting than the ones specified above

Drinking water treatment: Among Zambian households only 16 percent treat their drinking water. Drinking water treatment is more common among male headed households (17 percent) as opposed to female headed households (12 percent).

Type of cooking fuel: Slightly over ½ of Zambian households use collected wood for cooking purposes, with 28 percent of households using charcoal as a form of cooking fuel. Only 11 percent of Zambian households use electricity for cooking purposes.

Type of toilet facility: One half of Zambian households use a pit latrine as a form of toilet facility, while a flush toilet is used by about ¼ of Zambian households. Twenty six percent of the Zambian households use some other form of toilet facility than the ones mentioned above.

Garbage disposal: A small proportion (8 percent) of Zambian households have their garbage collected from their homes, while 52 percent of households just dump their garbage. Fourty percent of the Zambian households use a pit as a form of garbage disposal.

Proximity to various facilities: Ninety-two percent of urban households are within a vicinity of 5 km from a food market, whilst 32 percent of rural households are within this distance.

Post Office: In urban areas, 90 percent of the households, live within 5 km away from the post office, whereas in rural areas, only 25 percent households live within this distance.

Primary School: Ninety percent of Zambian households live within 5 km from a primary school.

Hospital/Health Centre: A large proportion (64 percent) of Zambian households are in a vicinity of less than 5km from the above facility.

The pattern of source of drinking water show that 23 percent of households get their drinking water from a river or lake, 12 percent from unprotected well, 25 percent from protected well, 19 percent from a public tap while 19 percent get their drinking water from own tap.

In rural areas, more than half the households get their drinking water from an unprotected well. More than 80 percent of the households in urban areas get their drinking water from a public or own tap. Treatment of water by households is an important factor in eliminating some of the water borne diseases such as dysentery, cholera, etc. In Zambia, only 16 percent of Households treat their drinking water. Both rural and urban areas show small proportions of households that treat their drinking water, 10 percent in rural and 24 percent in urban areas. Treatment of water by gender of household head show that 17 percent of male headed households treat their drinking water as opposed to 12 percent of female headed households.

Agriculture

It is evident that the bulk of agricultural production of crops, livestock and poultry is done in the rural areas and mostly by small scale farmers. On the average about 82 percent of all the agricultural production is done by households residing in the rural areas and about 65 percent by small scale farmers. Particularly to note is that 86 percent of hybrid maize production and 90 percent of local maize production comes from households in the rural areas of Zambia.

The urban households do also contribute to agriculture production on a smaller scale. Urban households

usually work on the agricultural plots of land in their spare time when they are off from work. Most agricultural production in urban areas is done on a small scale to supplement households' incomes or expenditure on food while there are also some farmers who reside in urban areas and produce on a large scale.

Maize is the pre-dominant crop produced in Zambia while cassava which is drought resistent is not grown extensively.

Cattle is the pre-dominant livestock produced in Zambia while chicken is the most prominent poultry.

Poverty

The male adult equivalent scale has been used to calculate the minimum income level to sustain an individual. At the time of the survey the cost of the minimum needs of the individual was K1,380 per adult male equivalent per month.

The results show that 71 percent of the total population is poor and 29 percent is non-poor. The Copperbelt and Lusaka provinces have the largest proportions of the non-poor persons. Within rural areas the extremely poor persons account for nearly 80 percent of the rural population as compared to 45 percent of the urban population.

Poverty within the socio-economic groups is more pronounced among the small scale farmers in rural areas and among urban low cost areas. The results also show the Intensity of poverty. It is noticed that Lusaka province has the lowest intensity, that means the smallest number of people in the lowest income brackets and Western province has the highest intensity or number in those income brackets.

Female headed households have a much bigger proportion of those who are extremely poor (70 percent) as compared to the male headed (57 percent).

Anthropometry

The measurement of weights and heights of children aged between 3 and 59 months allowed the calculation of indicators of malnutrition namely, stunting, wasting and under-nutrition. The results indicate that malnutrition is widespread in Zambia with 39, 22 and 6 percent of children being stunted, under-nourished and wasted respectively.

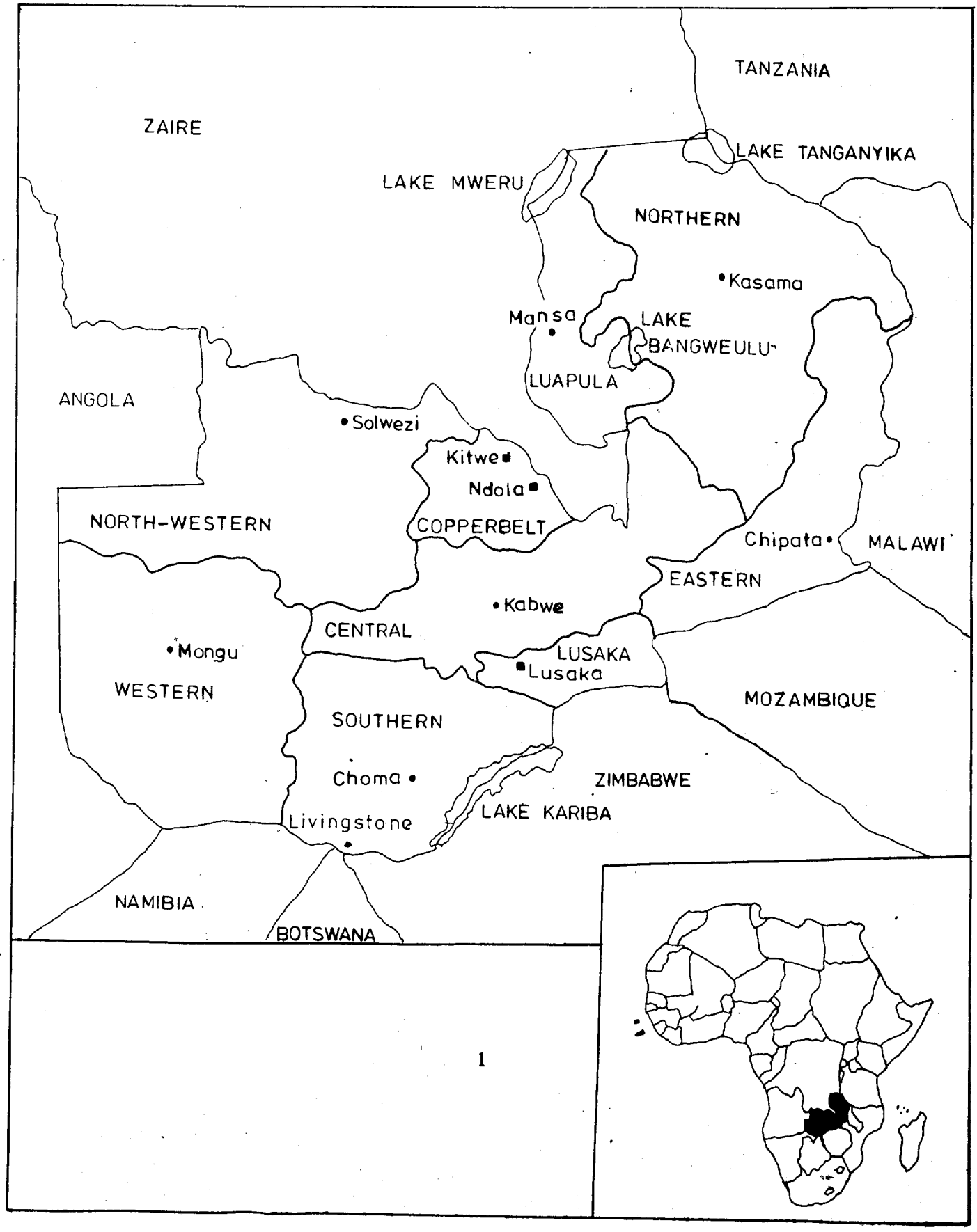
The rural areas exhibit higher incidences of stunting and under-nourished than the urban areas of 46 and 25 percent as compared to 35 and 20 percent respectively. Male children are more likely to be malnourished than their female counterparts. It is estimated that 41, 24 and 8 percent of male children as compared to 36, 19 and 5 percent of their female counterparts are stunted, under-nourished and wasted respectively.

The Incidences of stunting and under-nutrition are highest at age group 13 to 18 months and are both lowest at age 3 to 6 months. While that of wasting is highest at age group 19 to 24. Children of highly educated mothers have lower incidences of malnutrition in general. Female headed households have higher incidence of malnutrition among their children than those male headed.

PART I OVERVIEW OF ZAMBIA

Map of Zambia

Figure 1 Map Of Zambia



Overview of Zambia

Zambia is a sub-saharan African country sharing borders with eight countries, Malawi and Mozambique to the east, Zimbabwe, Botswana and Namibia to the south, Angola to the west, Zaire and Tanzania to the north. Zambia is a landlocked country and covers an area of 753,000 square kilometres.

Politics and Administration

Zambia was a British colony until 24th October, 1964 when she gained her political independence. Since then the country has undergone three major phases of governance. Firstly the post independence era of multi party politics up to 1971. This was followed by one-party rule before reverting to the multi party system in October, 1991.

Administratively the country is divided into nine provinces and fifty-seven districts. The nine provinces being Central, Copperbelt, Eastern, Luapula, Lusaka, Northern, North-Western, Southern and Western provinces. Lusaka is the capital city of Zambia and seat of government. The government comprises the central and the local government. The local government is administered through fifty-seven district councils.

Land and the people

Zambia's vegetation is made up of savanna woodland and grassland. Although there are small amounts of forest and swampland, savanna woodland form the greater part of the country's vegetation.

Zambia has a tropical climate with three distinct seasons; the cool and dry season which starts in April and ends in mid-August, the hot and dry season between mid-August and about early November, and the hot and wet season for the remaining months in the year. Generally Copperbelt, Luapula, Northern and North-Western Provinces experience the highest rainfall.

The country is one of the highly urbanised in sub-saharan Africa with about 46 percent of her population living in urban areas. The population of Zambia was estimated to be 5.7 million in 1980, 7.8 million in 1990 and 7.9 million in 1991. Generally Zambia is a sparsely populated country with an overall population density of 10.4 person per square kilometre. The highest population concentration is in Lusaka and Copperbelt provinces with 55.2 and 50.4 person per square kilometre respectively.

English is the official language in Zambia, used in the media, schools and work-places. However, a number of different local languages are spoken. These languages are grouped into five main categories, which are further broken down into 72 dialects. The major languages spoken include Nyanja, Tonga, Lozi, Bemba, Kaonde, Lunda and Luvale.

Demography

According to the past censuses,(see tables 1 and 3), the population of Zambia has been recorded as 4.0, 5.7 and 7.8 million in 1969, 1980,and 1990, respectively.

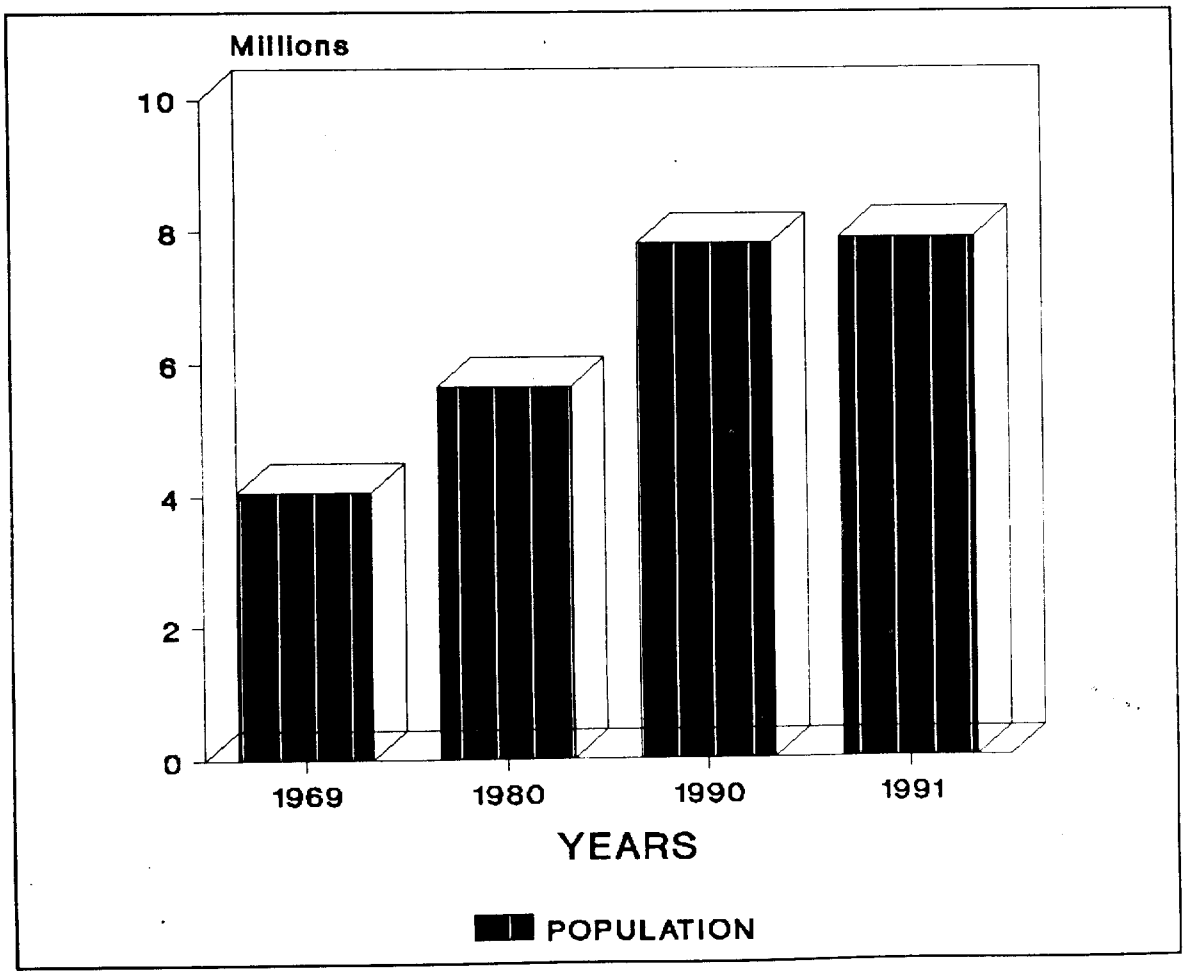
Table 1: Percentage distribution of Growth rates and densities by Province, Zambia

Province	Percentage Distribution		Growth Rates	Densities	
	1980 Census	1990 Census	1980 - 1990	1980	1990
Central	9	9	3.5	5.4	7.7
Copperbelt	22	20	2.3	39.9	50.4
Eastern	12	13	4.0	9.4	14.1
Luapula	7	7	2.2	8.3	10.4
Lusaka	12	16	5.6	31.7	55.2
Northern	12	11	2.5	4.6	5.9
North-Western	5	4	2.3	2.4	3.0
Southern	12	12	3.4	7.9	11.1
Western	9	8	2.2	3.9	4.8
Total	100	100	3.2	7.5	10.4
Size '000'	5662	7818			

Source: CSO (1990)

This implies that the population has been growing at 3.0 and 3.2 percent per annum in the two decades, 1969 -1980 and 1980-1990. Variations do exist in the 9 provinces. The highest annual population growth rate is recorded in Lusaka province with 5.6 percent. The lowest annual growth rates are recorded in Copperbelt, Luapula, North-Western and Western Provinces with between 2.2 and 2.3 percent. High population growth rates are recorded in Central, Southern and Eastern Provinces with 3.5, 3.4 and 4.0 percent, respectively. Northern Province has 2.5 percent.

Figure 2 Population of Zambia, 1969 1980 1990 1991.



SOURCE: CSO (1973, 1985a, 1991b,)

The population density increased from 5.3 people per square kilometre in 1969 to 7.5 in 1980 and 10.4 in 1990. Zambia's population density is low compared to most other countries in the sub-region. The average density in Zambia in 1990 ranged from 55 people per square kilometre in Lusaka Province and 50 in Copperbelt Province to as low as 5 and 3 people per square kilometre in Western and North-Western Provinces, respectively.

Fertility and Mortality

The Priority survey did not collect information on both fertility and mortality. However, some indicators are shown in Table 2 from other sources.

Table 2: Demographic Indicators, Zambia, 1969, 1980, 1990 and 1991

Indicator	National Censuses			PSI
	1969	1980	1990	1991
Population (Millions)	4.0	5.7	7.8[c]	7.9
Density (pop/sq.km)	5.3	7.5	10.4[c]	10.5
Percent urban	29.4	39.9	42.0[c]	46.0
Crude Birth Rate (per 1000)	47.7	50.0	50.0[a]	NA
Crude Death Rate (per 1000)	19.7	16.7	18.0[a]	NA
Growth Rate (per 100)	2.6	3.0	3.2[c]	NA
Total Fertility Rate	7.1	7.2	7.0[b]	NA
Completed Family size (women aged 45-49)	5.1	6.5	NA	NA
Singulate mean age at marriage (years)	18.4	19.4	NA	21.0
Infant mortality rate	129	97	89.6[b]	NA
Life Expectancy at birth, males	41.8	50.4	52.9[b]	NA
Life Expectancy at birth, females	45.0	52.5	55.0[b]	NA

NA- Not available
a= Estimates based on preliminary Report of 1990 census with growth rate of 3.2
b= Estimates based on 1980 census.
c= Based on 1990 census preliminary results
PSI= Priority Survey Phase I results
Sources: Central Statistical office, 1985a, 1985b and 1990

Regional Distribution of Population

There has been continuous migration of people to mining towns and other urban centres lying along the old line-of-rail. These centres include urban centres in Southern, Lusaka, Central and Copperbelt Provinces. Table 2 shows that, as a result the proportion of the population living in urban areas has increased steadily from 29 percent in 1969 to 42 percent in 1990. The proportion of urban population varies within the provinces from 91 percent in Copperbelt to 9 percent in Eastern Province. Lusaka Province has 86 percent of its population in urban areas. Overall the population in urban areas has grown by 3.7 percent per annum from 1980 to 1990. The percentage share of urban population between provinces shows that Copperbelt province has 44 percent of the urban population followed by Lusaka province with 32 percent. North-Western province has the lowest share, only 1 percent. The population in rural areas has increased by 2.8 percent. During the previous decade 1969-1980, the urban population grew at an even higher rate at 5.8 percent per annum, as compared to 1.6 percent in rural areas.

Table 3: Percentage distribution of rural and urban population by province

Province	1969				1980			
	Size '000'	Total	Rural	Urban	Size '000	Total	Rural	Urban
Central	359	100	82	18	512	100	70	30
Copperbelt	816	100	9	91	1251	100	18	82
Eastern	509	100	97	3	651	100	90	10
Luapula	336	100	98	2	421	100	87	13
Lusaka	354	100	23	77	691	100	20	80
Northern	545	100	97	3	675	100	82	18
N\Western	232	100	100	-	303	100	86	14
Southern	496	100	87	13	672	100	75	25
Western	410	100	98	2	486	100	83	17
Total size '000'	4057	100	71	29	5662	100	60	40

Table 3: (Continued)

Province	1990			
	Size '000'	Total	Rural	Urban
Central	726	100	70	30
Copperbelt	1579	100	9	91
Eastern	974	100	91	9
Luapula	527	100	84	16
Lusaka	1208	100	14	86
Northern	868	100	86	14
N\Western	383	100	88	12
Southern	946	100	80	20
Western	607	100	88	12
Total size '000'	7818	100	58	42

SOURCE: CSO,(1973, 1985a, 1991a)

Health system in Zambia

There are three major organisations running health services in Zambia. These organisations are the government through the Ministry of Health, Zambia Consolidated Copper Mines (ZCCM) and religious organisations. The Ministry of Health is responsible for all government hospitals and health centres. The ZCCM hospitals and clinics are concentrated in Kabwe, Lusaka and Copperbelt towns. ZCCM runs mine hospitals and clinics. Missionary health institutions are mostly found in rural areas. Other non-governmental organisations having urban or rural health centres are the defence forces, some private and parastatal companies.

Hospitals in Zambia are classified as central, special, general, district and other hospitals.
The hospitals include 3 central hospitals, 5 special hospitals, 9 general hospitals, 36 district hospitals, and 29 other hospitals. For distribution of hospitals see table 4. Under central hospitals, Zambia has the University Teaching Hospital (UTH), Ndola Central Hospital and Kitwe Central Hospital. The role of central hospitals is to act as referral hospitals for patients having complicated illnesses from other hospitals throughout Zambia. However, this role has not been strictly adhered to. As a result even minor illnesses are attended to at these central hospitals.

Specialised hospitals deal with specific population groups. These are Arthur Davison Hospital in Ndola for children diseases, Chainama Hills Hospital for mental patients. Liteta, Lukupa and Kabalenge Leprosaria for leprosy patients. General hospitals are found in all 9 provincial headquarters. District hospitals are found in 36 districts. There are only 9 districts without hospitals. These districts are Mkushi, (Central Province); Chama and Chadiza (Eastern Province); Mwense (Luapula Province); Chilubi and Kaputa (Northern Province); Mufumbwe (North-Western Province); Kalomo and Sinazongwe (Southern Province).

Table 4: Health facilities and number of beds by Province, Zambia, 1990

Province	Hospitals		Health centres		Total	
	No	Beds/cots	No	Beds/cots	No	Beds/cots
Central	6	991	84	929	90	1920
Copperbelt	17	4381	173	684	190	5065
Eastern	9	1812	93	895	102	2707
Luapula	6	988	86	836	92	1824
Lusaka	4	2437	70	156	74	2593
Northern	8	1272	110	1390	118	2662
North-Western	10	1566	109	978	119	2544
Southern	11	1808	124	751	135	2559
Western	11	1470	93	690	104	2160
Total	82	16725	942	7309	1024	24034

Source: Ministry of Health (1990b)

The number of health institutions in Zambia has grown overtime from 48 hospitals and 306 health centres in 1964 to 82 hospitals and over 900 health centres in 1990. It can be derived from Table 4 that about 19 percent of Health institutions are found on the Copperbelt. Northern and North-Western Provinces have an equal percentage of about 12 percent. Lusaka Province has least number of hospitals and health centres, but has the largest hospital in terms of bed capacity and health personnel. Urban areas are better

served with a sizeable number of better hospitals and health centres as compared to rural areas. In addition to public health institutions, urban areas are also served with private clinics.

Ownership Pattern

According to table 5 the breakdown of hospitals by ownership is as follows; government has 42 hospitals, religious organisations 29 hospitals and 11 hospitals for mining companies.

With regard to both rural and urban health centres, 85 percent are government owned, 7 percent are owned by religious organisations while 8 percent are company owned.

Table 5: Medical facilities by ownership, Zambia, 1964-1990

Medical facilities		1964	1980	1990	1964-1990 Percent increase
Hospitals	All	48	81	82	70.2
	Government	19	42	42	121.1
	Mission	19	29	29	52.6
	Mines/other	10	11	11	10.0
Health centres and clinics		306	721	942	207.8
Rural health centers	Government	187	469	661	253.5
	Mission	63	66	73	15.9
Urban clinics	Government	39	120	133	241.0
	Mines/other	17	66	75	341.2
Total hospitals/Health centres		354	802	1024	189.3
Number of beds and cots	Hospitals	7710	14889	16725	116.9
	Health centres	3140	5630	7309	132.8

Source: CSO (1992b)

Private clinics

There are about 1000 privately owned clinics in Zambia. These are concentrated in urban areas along the line of rail. Most of these facilities operate with one or two doctors.

Community health

Apart from state health institutions providing health care, there are also trained community health workers (CHW's) with drug kits containing a limited number of drug items. These people operate at village level. Traditional birth attendants (TBA's) assist in deliveries of pregnant mothers. Some of these TBA's are trained in safe pregnancy delivery methods while others are yet to be trained. It is estimated that 60 percent of pregnant mothers deliver at home.

Traditional healers equally provide valuable health service to many patients in the communities seeking traditional medicine. Some of those healers are registered under the Ministry of Health. Faith healers also play a role in healing sick people in the communities. However, the survey had solicited for information on consultations to traditional healers and not faith healers. Traditional healers are those who provide herbs while faith healers merely pray for the sick.

Disease Pattern

Tropical diseases affecting the population are many. Some of the most prevalent diseases affecting the population include malaria, diarrhoea, malnutrition, pneumonia, anaemia, skin diseases, eye diseases, genito-urinary diseases, measles, tuberculosis and upper respiratory tract infections resulting into major admissions and deaths.

Central Government Expenditure on Health

Table 6 summarises central government expenditure for the year 1986-91. The allocation to the Ministry of Health had averaged about 6 percent during this period with the lowest figure of 4 percent in 1986 and the highest of about 8 percent in 1988.

An assessment of health expenditure by various components showed that current expenditures had a large percentage share at 42 percent in 1989, 44 percent in 1990 and 36 percent in 1991. Grants and other related payments had increased from 24.2 percent in 1989 to 31.1 percent in 1991. The proportion of salaries, wages and allowances rose by 8.5 percent between 1990 and 1991 while those for capital expenditure declined from 7.5 percent in 1990 to 5.3 percent in 1991.

Table 6: Health Expenditure, 1986 - 1991

Year	Total GRZ Expenditure (K'million)	Health Expenditure		Components of Health Expenditures. Percent			
		K'million	Percentage of total	Personal Emolum. (K'million)	Current expenditure (K'million)	Grants payments (K'million)	Capital expenditures (K'million)
1986	5383.6	223.4	4.1	38.4	26.8	27.0	7.8
1987	5837.5	352.0	6.0	26.7	37.7	30.4	5.2
1988	8359.3	648.1	7.8	26.8	41.2	26.4	5.4
1989	12376.4	875.1	7.1	27.0	41.7	24.2	7.0
1990	31381.6	1896.6	6.0	19.0	43.8	29.7	7.5
1991	84723.7	4485.1	5.3	27.5	36.0	31.1	5.3

Source: Financial Reports, Ministry of Finance (1986, 1987, 1988, 1989, 1990, 1991)

Table 7 shows central government expenditure to health institutions over the period 1986-91. It can be noted that the 6 major hospitals shown in the table account for almost 30 percent of total expenditure with the University Teaching Hospital (UTH) taking up more than half of this amount. The remaining funds were used to purchase essential drugs, laboratory materials and equipment as well as to rehabilitate existing health infrastructure by the Ministry Headquarters.

Table 7: Total Budget allocations to major hospitals and provinces, 1986-1992. Percent.

Name of institution	1986	1987	1988	1989	1990	1991
University Teaching Hospital	14.9	18.8	16.5	17.2	20.0	17.0
Kitwe Central Hospital	3.4	2.9	2.6	3.2	1.3	1.9
Ndola central hospital	4.7	3.8	3.1	3.8	1.9	2.4
Chainama Hills Hospital	1.9	1.5	1.0	1.8	1.3	1.2
Arthur Davison Hospital	1.4	1.1	1.3	1.2	0.9	0.9
Liteta Leprosarium	0.3	0.3	0.2	0.3	0.2	0.3
Sub-total	26.7	28.4	24.7	27.5	25.6	23.5
Provinces	34.0	27.3	27.5	35.9	25.9	24.3
Total Expenditure (K'Million)	223.4	352.0	648.1	875.1	1896.6	4485.1

Source: Financial Reports, Ministry of Finance (1986, 1987, 1988, 1989, 1990, 1991)

Health Personnel

There are various cadres of health personnel operating in hospitals and health centres throughout Zambia. About 600 trained doctors have been operating in government hospitals and another 300 doctors operate either in church or mining health institutions. The staffing level of doctors in government hospitals is below the established number of 959 doctors. Taking into account the population of Zambia, there was a ratio of one doctor to every 13,000 people. This would still be very high even if all the established posts would be filled.

There are various categories of nurses such as nursing officers, public health nurses, registered nurses and midwives, Zambia enrolled nurses (ZENs) and Zambia enrolled midwives, etc. In 1991, there were 9284 nurses working for government and missionary health institutions.

Clinical officers play a major role in health centres especially in health institutions operating without doctors. They perform a lot of tasks meant for doctors. There were 1458 clinical officers operating in missionary and government owned health institutions in 1991.

Other medical staff operating in health institutions include, health inspectors, health assistants, laboratory technicians, laboratory assistants, dental assistants, physiotherapists, X-ray technicians, pharmacists, dieticians and nutritionists.

Table 8: Health manpower in government and mission health institutions, 1991

Category of staff	Established posts	Filled posts	Vacant posts
Doctors	959	621	338
Dentists	56	25	31
Clinical officers	2022	1458	564
Nurses	5277	9284	-4007
Pharmacists	44	24	20
Health inspectors	80	92	-12
Health planners	2	2	-
Lab. technicians	na	85	na
Physiotherapists	na	40	na
Nutritionists	na	41	na
Health assistants	na	885	na
X-ray assistants	na	39	na
Pharmacy technician	na	87	na
Analytic chemists	7	3	5
Other staff	na	466	na

Na: Not available

Source: Ministry of Health, Statistics Unit

The Priority survey collected information on health consultations, types of health institutions consulted, type of health personnel consulted, cost of health consultation per person in the household and total household expenditure on medical care.

Education system in Zambia

Education has been provided by Government and Church missions and some parastatal organisations notably the ZCCM has overtime provided education largely for their employees. Private schools have evolved in the recent past mostly in urban areas.

The formal educational system of Zambia comprises three levels. The first level consists of seven years of primary education, divided into the first four years of lower and three years of upper primary schooling. Entry to the first grade is at age seven, but also older children can be enrolled.

The second level is secondary education, consisting of two years of junior and three years of senior education. Entry to secondary education is by examination conducted at the end of primary schooling. About 20 percent of Grade 7 candidates were able to proceed to secondary Grade 8 during the early 1980's. In 1989 about 27 percent of Grade 7 pupils were enrolled in secondary grade 8. This figure increased to slightly over 30 percent in 1990 (Ministry of Education, 1990).

The third level is post-secondary education which comprises university programmes and various technical and vocational programmes.

Primary Education

Primary education grew very fast in the first six years after Independence, and even in the mid-1970's the average annual growth of primary enrolment was above the population growth. However this growth declined sharply - almost by half - during 1974 and 1979. This reduction coincided with the period of rapid decline in copper revenues, the mainstay of Zambia's economy. In 1980's efforts were made to restore the growth rates to the ones observed in the 1960's and early 1970's. There has, however, in the recent years been some concern that the quantitative expansion within primary education since Independence has not been matched by qualitative aspects.Overcrowding in urban classrooms and lack of textbooks have been the concern of educationists and parents (Silanda, E.M, 1988).

Secondary Education

Expansion in secondary education has been largely financed by the government although missionaries played an important part in the expansion process. The role of private secondary schools is marginal however, growing in importance in large towns.

Secondary schools are not evenly distributed throughout the country. Secondary education has since its inception been more urban in its outlook and orientation, due to the fact that the expansion of secondary education was necessitated by the employment needs of a growing modern sector located mostly in urban areas. Consequently, most secondary schools are found in, or near towns and cities. However, with very few exceptions, there is at least one large secondary school in each district. (Silanda, 1988).

Higher Education

The expansion of secondary and post secondary education became a priority after Independence for two major reasons:

- To produce adequate secondary school students who could proceed to higher education and;
- To provide adequate educated persons to meet the manpower needs of the country.

Alongside the expansion of secondary and, university education, there was also an accelerated expansion of teacher training, technical and vocational education. The enrolment numbers for the various educational levels are shown in Table 9 below.

Higher education prior to Independence was almost non-existence in Zambia. At Independence there were less than a hundred nationals with university education and about one thousand Zambians with secondary education.

In 1966 the University of Zambia was established with initial enrolment of 312 students of whom 20 percent were women. During its first twenty one years of existence, the University had grown into a federal structure with constituent institutions in Lusaka and Kitwe. The first output comprised 106 graduates of whom 9 graduated in sciences and 97 in humanities (Kelly, M. J, 1991).

Table 9: Total Enrolment by Type of Educational Institution 1964 - 1991

Year	Primary Education	Secondary Education	Teacher Training	Technical Education	University Education
1964	378417	13853	NA	NA	NA
1970	694670	52472	2146	NA	1231
1975	872392	73049	3070	5421	2354
1980	1041938	91795	4445	5338	3425
1985	1378022	131397	4549	4692	4680
1989	1446847	161349	4628	3590	4683
1990	1486500	181814	NA	3345	4960
1991	1510337	195419	NA	3619	4983

NA = Not Available
Source: (a) Ministry of Education (1987)
(b) Country Profile (1992b)

Expenditure on Education

Although education is largely provided by the government at all levels, the private costs of education are considerably high. They comprise costs of attending, learning, school uniform, boarding costs and in some cases private tuition. All parastatal and privately owned schools charge school fees which are in some cases high and unaffordable by the poor segments of the population.

Government expenditure on education averaged 5.5 percent of the GDP in the period between 1977 and 1985. Since then the average has been 5.6 percent. Similarly, the proportion of government spending on education over the same period has fluctuated at around 13 percent of total government spending, with recurrent spending comprising about 14 percent of the total government budget. Four percent of the recurrent budget went to finance primary education, which comprises 88 percent of the enrolled pupils. This indicates that the expenditure per pupil is lower in the primary school than in other levels of education. In fact, expenditure per pupil increases by educational level (Silanda, 1988).

Economy

Zambia has a mixed economy consisting of a modern sector dominated by parastatal organisations while the private sector is predominant in construction and agriculture.

Copper is the country's main economic activity accounting for 95 percent of export earnings and contributing 45 percent of government revenue during the decade following attainment of political independence (1964 - 1975). This situation drastically changed due to decline in world copper prices in mid 1970's. Copper prices began rising in 1978 only to fall sharply again in 1981/82.

The fall in copper prices, coupled with rising oil prices, slowed the pace of industrialisation and heavy dependence on imports put the country's economy under serious pressure.

In 1989 GDP grew by only 0.1 percent as compared to 6.3 percent in 1988. Real output declined by an average of about 1.0 percent annually between 1989 and 1991, with the decline amounting to 1.8 percent on one hand. Real per capita gross domestic product, on the other hand, declined by an average of 1.6 percent per annum between 1984 and 1990.

Acute shortage of foreign exchange remained a major constraint in the development of the economy inspite attractive copper prices in 1989 mainly due to reduced volume of copper sales associated with difficulties in production and transportation. The development of non-trade exports remained below expectations.

This resulted in essential commodities and services such as health and education, being in short supply as inflation reached an unprecendeted level of over 100 percent in 1990 and 1991.

In an effort to halt the economic recession and make the economy vibrant and self sustaining, the government has embarked on the structural adjustment programme with assistance from the World Bank and the IMF which includes, among other things liberalisation of trade, prices and foreign exchange. The government is also in the process of privatising most of the parastatal companies and reforming the civil service.

Table 10: Selected socio-economic indicators

Item						
Population	**1969**	**1980**	**1990**			
	4.06	5.66	7.82			
Gross Domestic Product (GDP)	**1986**	**1987**	**1988**	**1989**	**1990**	**1991**
at current Prices (K'million)	12,963	19,779	30,021	60,025	113,341	203,920
at 1977 prices (K'million)	2,059	2,114	2,247	2,224	2,214	2,174
Per capita GDP						
at current prices (K)	1,865	2,721	3,987	7,695	14,531	25,426
at 1977 prices (K)	296	291	298	285	283	271
Real GDP Growth rate	**86/87**	**87/88**	**88/89**	**89/90**	**90/91**	
In percent	2.7	6.3	-1.0	-0.4	-1.8	
Sectoral contribution to GDP	1986	1987	1988	1989	1990	1991
Agricultural sector (1977 prices) K'million	373.8	365.6	436.2	424.5	386.7	406.7
Mining and quarrying K'million	176.5	184.2	160.4	175.6	162.7	165.5
Manufacturing K'million	425.3	462.9	547.0	544.1	586.7	524.3
Gross fixed capital formation						
at current prices (K'million)	1386	1931	2381	3643	15271	20292
at 1977 prices (K'million)	167	159	178	123	130	168
Increase in the index of consumer prices (percent)	54.8	47.0	54.0	128.3	109.6	93.4
Index of consumer prices (1985=100) (1975 weights)	154.8	227.6	350.6	800.3	1677.1	3243.0
Copper						
Production ('000' tonnes)	459.7	483.1	422.2	450.8	426.2	398.4
Export ('000' tonnes)	436.3	475.8	398.2	431.5	441.2	376.5
Price per ton (LME cash and settlement Price) (K)	10,700	16,172.5	21,559.3	3,8748.9	82,056.5	150,406.9
Index of Production (1980=100)						
Mineral production	85.6	83.6	80.6	82.6	79.0	72.0
Manufacturing	110.9	112.5	118.9	118.4	125.1	111.3
Electricity	106.4	91.3	90.7	73.1	84.3	94.2
International Trade	1985	1986	1987	1988	1989	1990
Value of imports (K'million)	2133	4448	6627	6898	12601	36554
Total exports (K'million)	1508.2	5366.5	8058.7	9786.2	18434.0	39143.0
Balance of trade (export surplus) (K'million)	-625	919	1431	2888	5834	2589

Source: CSO (1992b)

Agriculture

The Agriculture sector has a crucial role to play in the structural transformation of the economy. This sector of the economy has recently undergone major structural changes. In the past years the government controlled the marketing of the main agricultural produce and inputs. The new policy is that of government only regulating and not controlling the production and marketing of agricultural commodities.

The contribution of the Agriculture sector to Gross Domestic Product increased from 15.2 percent in 1980 to 18.7 percent in 1991 (at constant 1977 market prices). The contribution of agriculture to GDP at current prices increased from 14.2 percent to 15.7 percent during the same period, as the table below shows:-

Table 11: Percentage contribution of agriculture to total GDP

YEAR	Contribution of agriculture to total GDP (percent)	
	AT CURRENT PRICES	AT CONSTANT PRICES
1980	14.2	15.2
1981	15.9	15.5
1982	13.7	14.1
1983	14.2	15.6
1984	14.5	16.6
1985	13.1	16.8
1986	12.2	18.2
1987	11.0	17.3
1988	16.8	19.4
1989	17.6	19.1
1990	18.2	17.5
1991	15.7	18.7

SOURCE: CSO (1992b)

It can be seen that the Agriculture sector as a whole plays a very important role in the economy. Most of the production of food crops is done by subsistence or small scale farmers followed by medium scale and large scale (commercial) farmers except for wheat which is highly mechanized and is mainly produced by large scale farmers.

PART II

BACKGROUND TO THE SURVEY

Chapter 1 Survey Background

1.1 Introduction

The Zambia Social Dimensions of Adjustment Priority survey (PS) was a nationwide household survey carried out by the Central Statistical Office with funding provided by the Norwegian Government, through the World Bank.

The Social Dimensions of Adjustment (SDA) Project was launched in 1987 by the United Nations Development Program (UNDP) Regional Program for Africa, the African Development Bank, and the World Bank in collaboration with other multilateral and bilateral agencies. The SDA project's objective is to strengthen the capacity of Governments in the sub-saharan African Region to integrate social dimensions in the design of their structural adjustment programs. The World Bank is the executing agency for the project. A number of countries have already carried out SDA Priority Surveys.

The Priority survey in Zambia took place in October-November, 1991. It was the first of its kind to be undertaken in Zambia. The Priority surveys have initially been planned to be conducted annually until 1995. The 1991 survey will serve as a basis on which to compare changes over time.

1.2 Objectives of the Survey

The overriding aim of the Social Dimensions of Adjustment Priority Survey (PS) is to provide relevant statistical information on the socio-economic effects of structural adjustment policies being implemented by the Government, and in particular how such policies affect living standards at the household level.

The priority survey is a household based survey, but data was also collected at the individual level. The survey has two primary objectives. The first is to provide a quick identification of policy target groups. The second is to provide a mechanism, whereby key socio-economic variables can be easily and regularly produced to describe and monitor the well-being of different groups of households. The priority survey places emphasis on five basic needs indicators. These are education, health, nutrition, food expenditure and housing.

Structural adjustment programs involve the implementation of a series of policy measures designed to correct imbalances in the national economy and to promote a desirable or targeted economic growth. The type of structural adjustment programs that have been carried out in Zambia include:

- Introducing market foreign exchange rates
- Moving towards liberalising the market whose forces will determine prices of goods and services, rather than the Government controlling prices of goods and services
- Removal of subsidies
- The reduction of Government/Public expenditure.

These measures and other adjustments to the national economy have impacts on the Zambian society and the Priority survey is intended to highlight and monitor these impacts.

Structural adjustments involve both fiscal and monetary reforms which seek to redress imbalances in the economy. Fiscal policy includes such issues as reduction in Government expenditure and tax reform while monetary reforms involve such issues as reducing money supply and liberalizing the interest and foreign exchange rates.

In highlighting the social dimensions of adjustment attention is generally focused on the identification of the poor and most vulnerable groups in the population.

In this report vulnerability refers to the ability of persons or households to cope with change, particularly change as a result of structural adjustment. In this sense the vulnerable groups in society are not necessarily only the poor. For example when the Government decides to privatize its parastatal firms, everyone in those particular firms is at risk of losing a job and is therefore vulnerable. Issues pertaining to poverty and its incidence will be addressed in chapter 11 of this report.

The Priority survey provides a basis or a data base from which policy makers can monitor the social and economic development both in Zambia as a whole and in different socio-economic groups. As the PS will be carried out over a period of time, policy makers will be able to monitor how different groups in society are being affected by the various adjustment programmes.

1.3 Topics Covered by the Survey

The priority survey is a multi-disciplinary survey placing emphasis on questions associated with the well-being of individuals and households.

The topics covered include:

- Demographic characteristics
- Health care
- Education
- Economically active population
- Housing, Housing Facilities and Amenities
- Accessibility to facilities
- Migration
- Agriculture
- Non-Farm Enterprises
- Household Income
- Household Cash Expenditure
- Fixed & Movable Household Assets and Property Owned
- Anthropometry

For details of topics mentioned above refer to the questionnaire in the appendix.

1.4 Instruments Used in the Survey

Two basic instruments were used in collecting data during the survey. These are the listing form (see appendix) and the questionnaire. In addition the Standard Enumeration Area (SEA) maps, enumerators and supervisors instructions manual, salter scales, and length/height boards for measuring under 5 children were also used.

1.5 Coverage & Scope of the Survey

The survey was conducted on a nation-wide sample basis and covered both rural and urban areas of all the nine provinces in the country. Within this framework, the eligible household population consisted of all civilian households. Excluded from the survey were, institutional population in (hospitals, boarding schools, prisons, hotels, refugee camps, orphanages, etc) and diplomats accredited to Zambia in embassies and high commissions. However, private households living around these institutions were enumerated such as teachers whose houses are on school premises, doctors and other workers living on or around hospital premises.

1.6 Publicity

In order to gain maximum cooperation from the selected households the Central Statistical Office carried out a publicity campaign in connection with the Priority Survey. There were announcements put up on television, radio and in the newspapers. The publicity campaign was intended to improve cooperation from the respondents in the light of the on-going multi-party election campaigns.

Chapter 2 General Concepts and Definitions

Generally, the concepts and definitions used in the analysis of this report conform to the standard usage of household based surveys 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 within external walls or dividing walls which extend from the foundation to the roof.

  For purposes 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 or other essentials for living and they have only one person whom they all regard as the head of the household. Such people are called members of the household. In certain cases a household may consist of one member.

- *Usual Member of the Household*. In the priority survey the de jure approach was adopted for collecting data on household composition as opposed to the de facto approach which pertains to those household members present at the time of the survey. The de jure definition relies on a concept of usual residence.

  A usual member of a household was considered to be one who has been living with a household for at least six months.

  Newly married couples were regarded as usual members of the household even if one of them has 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 but normally live and eat there such as persons temporarily away on seasonal work, in hospital, away to give birth, visiting relatives or friends, 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 normally makes day-to-day decisions concerning the running of the household.

- *Socio-economic Groups*. Survey households were classified into socio-economic groups based on locality in the case of urban areas and on size of agricultural activities in the case of rural areas.

The analysis in this report uses seven socio-economic groups (SEG) as follows:-

- Rural Areas:
  - Small scale agricultural households
  - Medium scale rural 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 seven groups are mutually exclusive and hence any given household should belong to one and only one socio-economic group. (See chapter 3 for details of these strata).

It should be noted that in this report, figures or percentages may not add exactly to match their totals, or, in other words, the totals may not be the exact sum of their constituent items due to rounding. Also totals in one table may not necessarily add up to totals in another table due to the exclusion of not stated (non-responding) cases.

Chapter 3 Sampling Method

3.1 Sampling Description

A three - stage stratified household random sample method was used for the survey. The first stage constituted primary sampling units (PSUs) which were Census Supervisory Areas (CSAs), delineated for the 1990 Census of Population , Housing and Agriculture. Standard Enumeration Areas (SEAs) were second-stage sampling units, while households formed third-stage sampling units.

3.2 Sampling Frame

The sampling frame consisted of 4,144 CSAs and 12,999 SEAs.

3.3 Coverage

As mentioned earlier, the survey covered both urban and rural parts of Zambia in all the nine provinces. Approximately ten thousand households were canvassed.

3.4 Domains of Study and Data disagreggation

The domains of study for this survey are:

- Urban
- Rural
- Province

Separate estimates will be provided at National level for the above-mentioned categories. Although the district is the focus for rural development in the country, estimates at this level will not be reliable due to small sample size. Therefore, estimates at the district level will not be provided.

3.5 Sampling Unit and Unit of Analysis

The household forms the third stage of sampling and the unit of analysis.

3.6 Stratification

Urban/Rural categories constituted the primary strata, while provinces formed the secondary strata. Further stratification was done at SEA level. For urban areas residential area stratification was used as a proxy for income. Urban households were stratified into low, medium and high cost groupings.

A Standard Enumeration Area comprised of one and only one of these groupings. In case of a rural SEA stratification was based on Agricultural Production/Area under cultivation/livestock and poultry owned.

3.7 Sample Size

Five hundred CSAs were selected, out of which 250 CSAs were from the urban stratum and the remaining 250 from the rural stratum. In a rural stratum approximately 15 households were selected from each SEA while in the urban stratum exactly 25 households were selected from each SEA. From the rural stratum 3,750 households were selected and the remaining 6,250 were from urban stratum. Since urban SEAs are expected to be more heterogeneous in the characteristics of households than rural, a larger number of households was selected in urban SEAs. This procedure resulted in an overall sample of approximately 10,000 households. This sample size is considered adequate enough to provide reliable estimates.

The table below shows the distribution of the selected primary sampling units (SEAs).

Table 3.1: Summary of selected SEAS by urban and rural province

Province	Urban strata				Rural strata	Grand total
	Low cost	Medium cost	High cost	Total		
Central	9	5	2	16	28	44
Copperbelt	61	31	11	103	8	111
Eastern	4	2	2	8	49	57
Luapula	4	2	2	8	24	32
Lusaka	44	24	9	77	9	86
Northern	5	3	2	10	41	51
North-Western	2	2	2	6	19	25
Southern	8	5	2	15	42	57
Western	3	2	2	7	30	37
Total	140	76	34	250	250	500

However, due to logistical problems the actual number of SEAs enumerated in rural strata was 248 and 252 in urban. For details of the number of SEAs which were actually enumerated (see appendix 2, list of selected SEAs).

3.8 Sample Selection

Systematic sampling with probability proportional to measure of size (PPS) was used in selecting the sample of CSAs and SEAs. In selecting CSAs and SEAs the measure of size was the cartographic mapping population estimates. The 1990 population counts (Census figures) would have been the best measures of size. Unfortunately figures at SEA and CSA levels were not readily available at the time of our sample selection.

In every selected SEA, households were listed and each household was given a unique sampling serial number. Circular systematic sample of households was then selected from this list in each SEA.

3.9 Selection of Households

The method used for selecting sample households in the priority survey was as given below.

Urban SEAs

In the survey, the following criterion were used to stratify Standard Enumeration Areas:-

- Low cost area
- Medium cost area
- High cost area

Households in the urban areas were stratified according to the residential area in which they were located. The standard enumeration areas (SEAs) were preclassified into low, medium and high cost areas according to the main type of housing in the SEA. The classification of areas into low, medium, and high cost areas is based on the required housing standard as determined by the urban councils setting criteria for housing size and plot size. Low cost areas are SEAs with mainly shanty/ squatter type of housing and with very crowded plots. Medium cost areas are SEAs with higher quality housing of medium size and medium size plots. High cost areas are SEAs with bigger houses and bigger plots.
Urban SEAs were first stratified by low, medium, and high cost areas, then arranged by their size.

In each of the selected 250 urban SEAs 25 households were selected by using circular systematic sampling method. This method assumes that households are arranged in a circle and the following relationship applies (Graham K., 1983):

Let $N = nk$

where,

N is the total number of households listed in a stratum.

n is the sample size in an urban SEA and is equal to 25.

k is the sampling interval in a given SEA and is calculated as:

$k = N/n$

In Urban SEAs household sampling serial numbers were assigned in ascending order from the first household listed to the last (excluding refusals, non contacts, and vacants) starting with 1 in each SEA.

Steps:

- In urban areas N was the total number of households assigned sampling serial numbers in the SEA.
- The sampling interval, k, was computed using the following relationship:

  $k = N/n = N/25$ for urban households.
- The random start was obtained using a table of random numbers. This number was between 1 and N. The household whose sampling serial number corresponded to this random sample number was the first selected household.

- The required number of households per SEA were selected by adding k (sampling interval) to the sampling serial number of each selected household until the required "n" was achieved.

Rural SEAs

Formula procedures for urban SEAs also applied to the rural stratum. However, in each SEA, approximately 15 households were selected according to the following:-

- 7 were selected from a stratum of small scale agricultural households.
- 5 were selected from a stratum of medium scale agricultural households.
- In case of large scale agricultural households, all households in that SEA were selected (100%).
- 3 were selected from a stratum of non-agricultural households.

On the listing form information was obtained on whether or not a household was engaged in any agricultural activity. For agricultural households information was collected on total area under cropping, number and type of livestock and poultry owned. Using that information, households in rural SEAs were categorised into four strata as follows:

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

Table 3.2 shows the criteria used for stratification of rural households

Table 3.2 Criteria for stratification of rural households

Agricultural activity	Stratum			
	Small scale	Medium scale	Large scale	Non-agricultural
Area under cropping	Less than 5 ha	5 to 20 ha, inclusive	Over 20 ha	None
Livestock	Less than 5 exotic dairy cows	5 to 20 inclusive, exotic dairy cows	Over 20 exotic dairy cows	None
	No beef cattle	Up to 50 beef cattle	Over 50 beef cattle	None
	No exotic pigs	Up to 10 exotic pigs	Over 10 exotic pigs	None
Poultry	No broilers	Up to 6000 broilers	Over 6000 broilers	None
	No layers	Up to 1000 layers	Over 1000 layers	None
			Parent stock of poultry	

A household was stratified according to the highest value on each scale of farming activity. For example a household might be classified as a small scale in the crop area criterion yet rank as a medium scale in the livestock criterion. Such a household would fall under a medium scale stratum.

Replacing Selected Households

The following cases were replaced:

- Vacant households - a household that was listed and selected but fell vacant at enumeration time.
- New household - a new household moving into a dwelling after listing where a selected household lived.
- Non-contacts - households that could not be available for interview. For example, a household that was listed and selected in sample but went on vacation/holiday at enumeration time.
- Refusals - a household that refused to be enumerated.
- Dwelling not identified - a household not located because the location of the dwelling cannot be identified.
- Illness/Death - If any member or respondent in the household is critically ill or dies or if there is a funeral at the household.

Replacement was accomplished using circular systematic sampling by maintaining the same sampling interval.

3.10 Estimation Procedure

To estimate the total population values from sample values the following procedure has been used:-

Let Y_{ijklm} be an observation on variable Y for the m-th household in the l-th stratum, in the k-th SEA, in j-th CSA, in the i-th province.

Then the estimated total for the i-th province is

$$\hat{Y}_i = \sum_j \sum_k \sum_l W_{ijkl} \sum Y_{ijklm}$$

where,

W_{ijkl}

is the weighting factor and is defined as:-

$$W_{ijkl} = \frac{1}{P_{ijkl}}$$

The term P_{ijkl} is the probability of selecting J-th CSA multiplied by probability of selecting k-th SEA multiplied by probability of selecting a household in the l-th stratum.

Thus the National estimate is obtained as

$$\hat{Y} = \sum_{i=1}^{9} \hat{Y}_i$$

The above estimator is a variation of Horvitz-Thompson Estimator (Cochran W. G, 1977), to take into account the sampling structure for the survey.

For sampling errors see appendix 1.

Chapter 4 Field Survey Operations

4.1 Survey Organisation

The responsibilities of the Priority Survey Secretariat (see appendix 3) included the following:-

- To ensure effective planning and timely execution of the survey.
- Finalizing a country specific priority survey questionnaire.
- Preparing enumerators and supervisors manuals.
- Conducting and evaluating the pilot survey and adjusting the main survey accordingly.
- Training of field staff.
- Designing the sample and estimation procedures.
- Determining data collection mechanisms.
- Designing quality control instruments and procedures.
- Preparing materials, equipment, and other logistical issues for the field work.
- Overseeing the collection of data.
- Supervising data entry operators.
- Determining the software used in data processing.
- Preparing the tabulation plan and other required output.
- Writing data entry and tabulation computer programs.
- Editing computer output for possible errors.
- Analyzing the survey results.
- Writing this report.

4.2 Development of field instruments

The Priority survey final version of the questionnaire (see appendix 1) was based upon a prototype designed by the World Bank. The questionnaire was extensively modified to satisfy the needs of both the local and international users and to make it applicable to the local conditions.

A number of User-producer seminars were conducted to finalise the field instruments. The first one was in March, 1991 when a draft questionnaire was presented at Mulungushi International Conference Centre, Lusaka. The second User-producer seminar took place in June, 1991 in Siavonga.

4.3 Pretest

In April, 1991, pretesting of the Priority survey questionnaire was conducted in the rural and urban areas of Lusaka Province.

4.4 Pilot Survey

The questionnaire was then re-drafted taking into account the results of the pre-test and then presented to the second User-producer seminar in June, 1991 for discussion. After this an improved version of the questionnaire, listing form and survey manuals were drafted.
A pilot survey was then conducted to further develop the field instruments.
The training of master trainers, and Supervisors for the pilot survey took place in July, 1991.
After the pilot survey, the questionnaire, listing form, and enumerators manuals were further refined and a supervisors manual written in readiness for the main survey. Data from the pilot survey was not analysed because of time constraints and lack of computers at the time. However, it were used to update and test the data entry and editing computer programs that were to be used in the main survey.

4.5 Training of Field Staff

The training programme for the Priority Survey was done in phases and was conducted at different times for the various categories of field staff. In all there were three phases in the training programme. Phase I consisted of training of Trainers and Provincial Statistical Officers (PSOs). Phase II training of supervisors and phase three training of enumerators.

Workshop of Trainers and Provincial Statistical Officers

A total of 9 master trainers and 9 Provincial Statistical Officers were trained at the Copperbelt University in Kitwe in September, 1991, in the organisation and conduct of the survey. This lasted for 5 days.

Training of Supervisors

Master trainers together with Provincial Statistical Officers conducted the training of the 70 supervisors. Supervisors were essentially trained on how to implement the survey and handle survey instruments.

Training of Enumerators

As in the case of training of Supervisors, Master Trainers assisted by Provincial Statistical Officers conducted the training of a total of 320 enumerators in various training centres in the provinces. The main source document used for training was the enumerator's manual. The training lasted for seven days. Among many other things, enumerators were taught and provided with guidelines on how to conduct the survey.

4.6 Data Collection

The field work involved the listing of all households and buildings in selected SEA's followed by complete enumeration of selected households. The two stages are further discussed below.

Listing

The field operations started with the listing of households and buildings. Enumerators were required to list all buildings on the listing sheets. This ensured that no household was omitted within an SEA. For the households listed some information was collected, details of which are in Appendix 2 of this report. Listing of all households and buildings took an average of 5 days per SEA.

After the listing of households in an SEA the supervisor selected a sample of households on the listing form as discussed under Chapter 3.

Enumeration

Enumeration of the households followed immediately after the selection of sample households was accomplished. Cases of non-contact households, households that fell vacant after the listing operation, and refusals were reported. These were substituted accordingly.

Complete enumeration of one Standard Enumeration Area (SEA) took an average of five days. The process of listing and enumeration was comparatively quicker in urban areas than in rural areas mainly due to shorter distances between households in urban than in rural areas.

Most of the enumerators and supervisors worked in areas in which they were able to speak the local languages. This obviously had an advantage of ensuring maximum communication between the survey field staff and respondents in that questions had to be translated from English into local languages.

4.7 Data Processing and Analysis

Eighteen Data Entry Operators (two per province) were trained to facilitate capturing Priority survey data. For data entry the Integrated Micro Processing System (IMPS) was used. For tabulation and statistical analysis the Statistical Analysis System (SAS) software was used.

Data analysis was undertaken by subject matter specialists according to the various topics covered. Some members of the PS secretariat also took part as subject-matter specialists. A total of 8 persons took part in the data analysis and the secretariat put together this final report.

PART III

PRESENTATION OF RESULTS

Chapter 5 Demographic Characteristics

5.1 Coverage

Provision of information on demographic characteristics of the surveyed population is essential for the clear understanding of the implications of policy measures affecting them. In this chapter, background information which includes the following items is given:-

- age
- sex
- marital status
- socio-economic groups
- households
- household heads by gender, etc

5.2 Population size and Regional distribution

Results from the Priority Survey gave an estimated population of 7.9 million in 1991. The country is still generally sparsely populated with an overall population density of about 10.5 persons per square kilometre.

Table 5.1 shows that the population of Zambia still remains unevenly distributed across provinces. The Copperbelt and Lusaka Provinces have the largest proportions of population with 16 percent each. North-Western Province still has the lowest proportion with 5 percent.

Table 5.1: Percentage distribution of population, by Province, Zambia, 1991

Province	Percentage population distribution
Central	9
Copperbelt	16
Eastern	13
Luapula	9
Lusaka	16
Northern	12
North-Western	5
Southern	12
Western	8
Total	100
Size '000'	7896

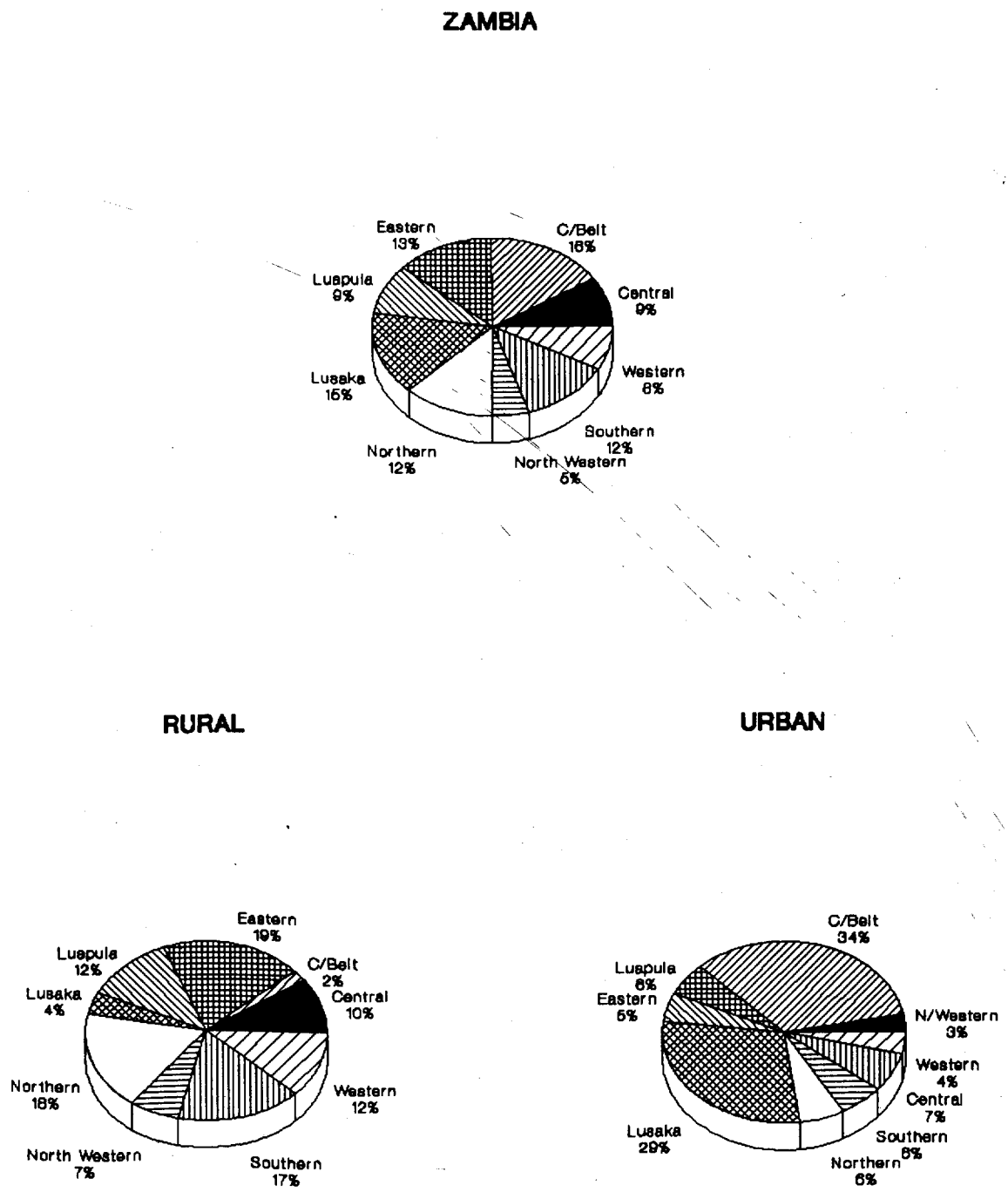
Table 5.2 shows that as of 1991, 46 percent of the population live in urban areas. The Demographic and Health survey had an estimated urban population of 49 percent. Differences in sampling procedures may account for this difference. The 1990 census gave a figure of 42 percent of the population living in urban areas.

Provincial variations do exist in the distribution of rural/urban population. Copperbelt and Lusaka Provinces have highest proportion of their population in urban areas accounting for 95 and 87 percent respectively. Eastern Province has the least with only 18 percent of the population living in urban areas. Other provinces with high proportions of urban population are Central province, 39 percent, Luapula and North-Western Provinces having 28 percent each.

Table 5.2: Percentage distribution of rural and urban population by province, 1991

Province	Percentage distribution of population			
	Size '000'	Total	Rural	Urban
Central	697	100	61	39
Copperbelt	1294	100	5	95
Eastern	994	100	82	18
Luapula	728	100	72	28
Lusaka	1222	100	13	87
Northern	972	100	78	22
N\Western	415	100	72	28
Southern	944	100	76	24
Western	630	100	79	21
Total size '000'	7896	100	54	46

Figure 5.1 Percentage distribution of population by province, 1991



5.3 Age and Sex Composition

Table 5.3 shows that almost half of the Zambian population is aged 14 years or below and almost 90 percent is aged less than 45 years. Hence the Zambian population is young. A more detailed age structure for males and females is shown in Table 5.4 and Figure 5.2.

Table 5.3: Percentage distribution of population by broad age groups and year

Country	Year	Age group		
		0-4	0-14	0-44
Zambia	1969[a]	19	46	86
	1980[b]	20	49	87
	1991	15	45	89
	1992[c]	17	47	88

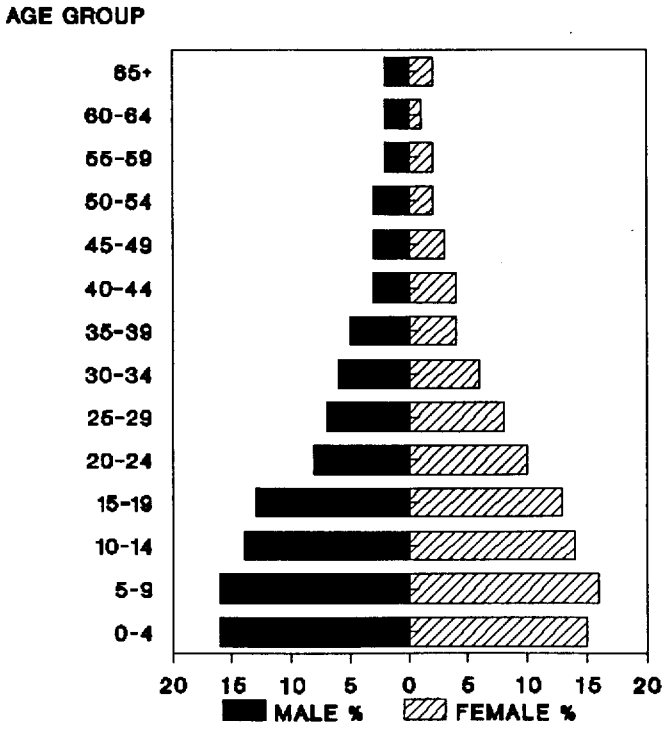
Sources:
a. CSO (1973)
b. CSO (1985b)
c. UNZA, CSO and MOH (1993): Demographic Health Survey 1992

The percentages obtained from the 1991 Priority Survey compare favourably with the 1969 and 1980 censuses as well as the Demographic and Health Survey.

Table 5.4: Percentage distribution of population by five year age groups, 1991

Age group	Percentages			Cumulative percent		
	Male	Female	Total	Male	Female	Total
0-4	15	15	15	15	15	15
5-9	16	16	16	31	31	31
10-14	14	14	14	45	45	45
15-19	13	13	13	58	58	58
20-24	9	10	9	67	68	67
25-29	7	8	8	74	76	75
30-34	6	6	6	80	82	81
35-39	5	4	5	85	86	86
40-44	3	4	4	88	90	89
45-49	3	3	3	91	93	92
50-54	3	2	3	94	96	95
55-59	2	2	2	96	97	97
60-64	2	1	1	98	98	98
65+	2	2	2	100	100	100
Total	100	100	100			
size '000'	3900	3996	7896			

Figure 5.2 Population pyramid of Zambia, 1991.



Sex Ratio:

The results from the Priority survey show some variations in sex ratios for rural and urban areas. The overall sex ratio for the PS tends to be consistent with the results of 1980 and 1990 censuses. The rural/urban differences in sex ratio should be taken with caution due to limitations associated with surveys.

Table 5.5: Sex ratios in rural and urban areas, Zambia, 1980 - 1992

Rural/ urban	National Censuses		PS 1991	DHS 1992[c]
	1980[a]	1990[b]		
Rural	91.5	94.1	99.9	93.6
Urban	102.6	100.4	95.7	99.5
Total	95.8	96.7	97.6	96.5

Source: (a) CSO (1985b)
(b) CSO (1990)
(c) UNZA CSO,MOH (1993): Demographic and Health Survey,1992.

5.4 Distribution of Population by Socio-Economic Groups

Almost half of Zambia's population (48 percent) live in small scale farming households, and 4 percent live in non-agricultural households. In urban areas, 25 percent of the population live in low cost areas 15 percent are in medium cost areas and 6 percent in high cost areas.

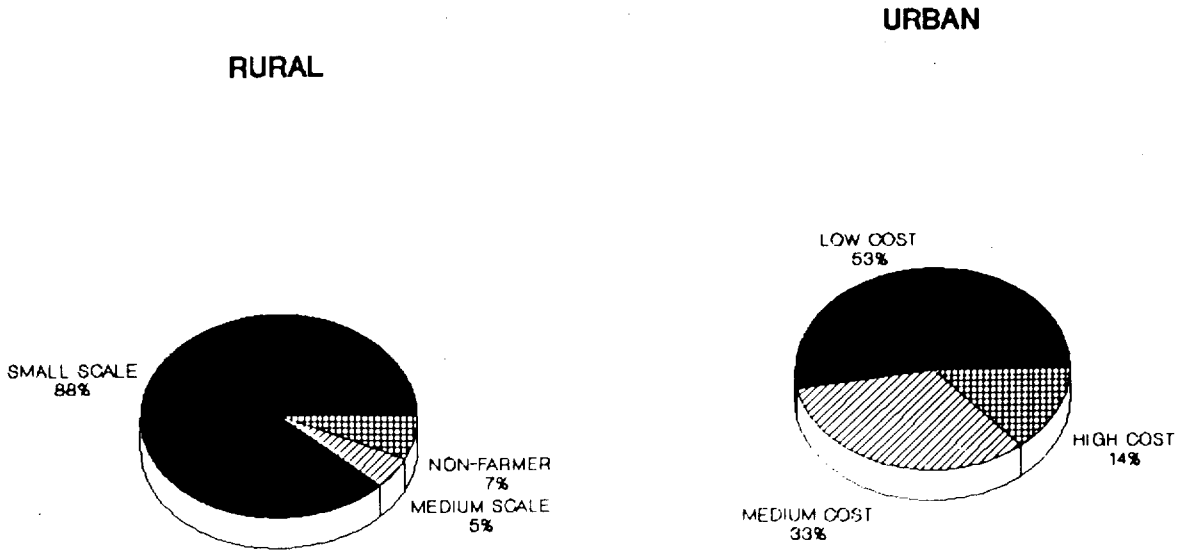
The percentage population distribution of the population by socio-economic groups showed that Eastern and Northern provinces had the largest proportion of the population living in small-scale farming households, 21 percent and 18 percent respectively. Lusaka and Copperbelt Provinces being highly urbanised had only 2 percent of the population in small-scale farming households. In the case of medium-scale farming households Southern Province had the highest proportion of the population living in those households (34 percent). Copperbelt, Luapula and North-Western Provinces had only 2 percent of the population in medium-scale farming households.

The percentage distribution of people living in low-cost urban area households show that Copperbelt province had the largest share (36 percent), followed by Lusaka province with 29 percent. As expected, North Western and Western provinces had the smallest share of the population in this socio-economic group. When looking at the medium-cost urban population, again Copperbelt and Lusaka provinces had the largest share. The same pattern applies to the population living in high-cost urban households.

Table 5.6: Percentage distribution of population by socio-economic groups and province, Zambia, 1991.

Socio-economic group		Province											Percentage distribution
		Size '000'	Total	Cen-tral	Copperbelt	Eas-tern	Lua-pula	Lu-saka	Nort-hern	North-Western	Sout-hern	Wes-tern	
Rural areas	Small-scale farmers	3761	100	10	2	21	12	2	18	7	16	12	48
	Medium-size farmers	206	100	14	2	14	2	10	17	2	34	5	3
	Large-scale farmers	14	100	15	1	6	-	3	-	-	75	1	1
	Non-farmers	285	100	8	3	4	19	25	15	10	8	9	4
	Total	4266	100	10	2	19	12	4	18	7	17	12	54
Urban areas	Low cost	1934	100	8	36	4	6	29	6	2	7	3	24
	Medium cost	1188	100	6	31	3	4	34	6	4	6	6	15
	High cost	508	100	10	30	14	7	18	7	8	5	3	6
	Total	3630	100	7	34	5	6	29	6	3	6	4	46
Total Zambia		7896	100	9	16	13	9	16	12	5	12	8	100

Figure 5.3 Percentage population distribution by socio-economic groups, Rural/Urban, Zambia 1991



5.5 Household Structure

Female Headed Households

Female headed households account for 20 percent of all Zambian households. In rural areas, female-headed households are more common where they constitute 23 percent as compared to 15 percent in urban areas.

The Eastern province has the largest share of female-headed households with 20 percent of the total, followed by Northern and Western provinces, with 14 and 12 percent respectively. Within rural Zambia, again Eastern province had the largest share of female-headed households at 26 percent. In urban areas, Copperbelt and Lusaka provinces had the largest share of about one fourth of all female-headed households each.

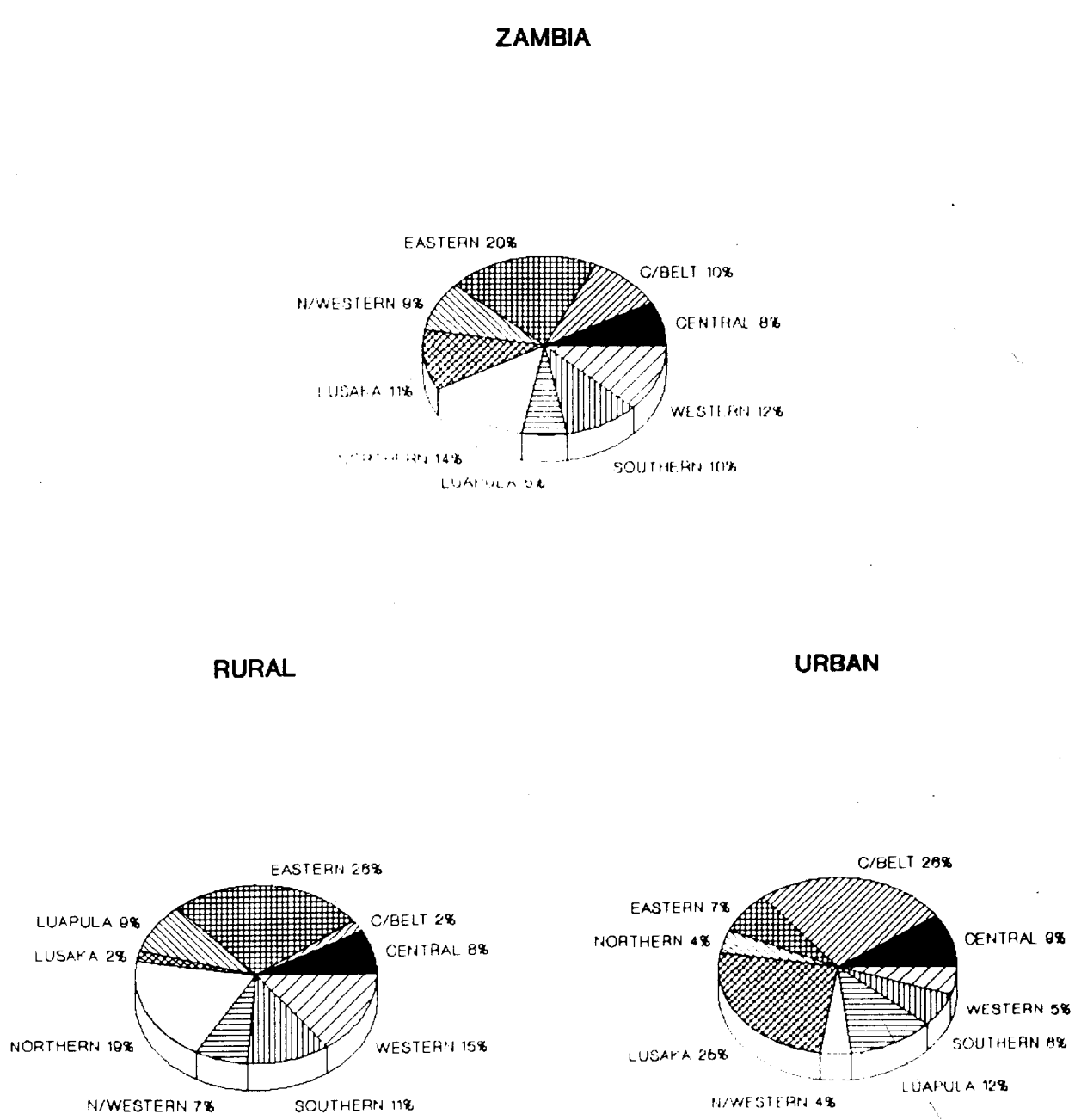
The highest proportion of female-headed households within the province is found in Eastern province, where almost 30 percent of the households are female-headed, followed by Western province with 26 percent and the Copperbelt has the least with 13 percent.

In the rural areas, the highest proportion of the households being female-headed were found in Copperbelt and Eastern provinces where around 30 percent of the households are female-headed. In the urban areas, Western province were found to have the largest proportion of the households being female-headed (24 percent), followed by Luapula and Eastern provinces, with 23 and 21 percent respectively.

Table 5.7: Percentage distribution of female headed households across and within provinces, rural/urban, 1991.

Province	Across			Within		
	Rural	Urban	Total	Rural	Urban	Total
Central	8	9	8	21	18	20
Copperbelt	2	25	10	32	12	13
Eastern	26	7	20	31	21	29
Luapula	9	11	10	15	23	18
Lusaka	2	24	11	12	15	15
Northern	19	4	14	24	11	22
North-Western	7	4	6	23	19	22
Southern	11	6	10	21	15	20
Western	15	5	12	26	24	26
Total	100	100	100	23	15	20
Size '000'	195	96	291			

Figure 5.4 Percentage distribution of female headed households by Province, Rural and Urban, Zambia, 1991



Variations do exist between socio-economic groups in rural areas. Small-scale farming and non-agricultural households which were female-headed accounted for 24 percent in each category, whereas in urban areas, no significant differences were found between socio-economic groups.

Table 5.8: Distribution of female headed households by socio-economic group, Zambia, 1991, percentage.

Socio-economic group		Percent female headed households
Total		100
Rural areas	Small-scale farmers	24
	Medium-scale farmers	7
	Large-scale farmers	-
	Non-agricultural	24
Urban areas	Low cost	15
	Medium cost	17
	High cost	14

Household Size

The average household size in Zambia is 5.4 persons. The household size varies between the provinces, with Southern province having the largest average household size of 6.6 persons. On the other hand, Luapula province has the smallest average household size (4.6 persons). Urban households are on the average larger than rural households, 5.8 persons as compared to 5.1 persons. This pattern holds for all the provinces, except for Central and Southern provinces, where households in the rural areas on the average tend to be larger than in the urban areas.

Household size by gender of head of household, show that male-headed households on the average are larger than female-headed households, 5.7 persons as compared to 4.1 persons. This pattern holds for all provinces.

Table 5.9: Household sizes by gender of household head and province, rural/urban, Zambia, 1991

Province	Gender of household head		Rural/urban		Total
	Male	Female	Rural	Urban	
Central	6.0	4.6	5.8	5.5	5.7
Copperbelt	6.0	5.0	4.8	5.9	5.8
Eastern	5.4	3.9	4.8	5.6	5.0
Luapula	4.8	3.7	4.6	4.7	4.6
Lusaka	5.9	4.8	5.4	5.8	5.8
Northern	5.5	4.0	4.9	6.5	5.2
North-Western	5.6	3.3	4.9	5.7	5.1
Southern	7.0	5.0	6.8	6.1	6.6
Western	5.0	3.2	4.3	6.3	4.6
Total	5.7	4.1	5.1	5.8	5.4
Size '000'	1171	291	837	625	1462

5.6 Marital Status

Most adult Zambians at the age of 30 years and above are married. At that age, 93 percent of the men and 96 percent of the women had experienced marriage. About 74 percent of the women were currently married at that age, 16 percent were divorced or separated, while 6 percent were widowed. For men the comparable figures were 86 percent married, 6 percent separated or divorced and 1 percent widowed.

Table 5.10: Percentage distribution of male population aged 12 years and above by marital status, 1991.

Age group	Marital status							
	Married	Separated	Divorced	Widowed	Never married	Not stated	Total	Size '000'
12-14	0	1	0	0	60	39	100	557
15-19	2	1	0	0	95	1	100	502
20-24	25	2	1	0	71	1	100	330
25-29	64	3	2	1	30	0	100	279
30-49	86	2	4	1	5	2	100	684
50+	86	3	4	6	1	1	100	335
Total	43	2	2	1	43	9	100	2692

According to survey results women get married at an earlier age than men. The high incidence of not stated cases in both male and female in the younger ages would be attributed to cultural and other factors and would need further investigation.

Table 5.11: Percentage distribution of female population aged 12 years and above by marital status. 1991

Age group	Marital status							
	Married	Separated	Divorced	Widowed	Never married	Not stated	Total	Size '000'
12-14	1	1	0	0	59	39	100	333
15-19	21	2	2	0	74	1	100	527
20-24	55	4	6	1	33	1	100	404
25-29	73	5	9	2	11	1	100	322
30-49	74	4	12	6	2	2	100	675
50+	50	3	12	33	1	2	100	268
Total	44	3	6	6	33	9	100	2534

Chapter 6 Health care

6.1 Coverage

The Priority survey collected data on the following aspects of health care:-

- Distance to health institutions
- Visit to health institutions
- Type of institution visited
- Type of health personnel consulted
- Expenditure on medication
- Source/treatment of drinking water.

This chapter presents some of the above findings.

6.2 Distance to health institutions

Distance to hospitals or health centres is helpful in evaluating the performance of health programmes in the country. The health policies aim at reaching the majority of people, hence health institution should be within or near to where the people reside. Generally people in rural areas travel long distances to reach the nearest health facility. The outreach health services of the Ministry of Health, Mission health institutions and Zambia Flying Doctor Service attempt to reach the remotest parts of the country.

Information contained in Table 6.1 shows that about 78 percent of the population in rural areas are within 15 kilometre radius of health institutions where the remaining 22 percent are outside. This result shows that there has been an improvement in health coverage when compared to findings of an independent investigation conducted by the Ministry of Health in 1984 which revealed that 70 percent of the rural population lived within a 15 km radius to a health facility and 5 percent were served with outreach services.

The urban population in contrast is better served with almost 100 percent living within 15 km radius. The majority of people in urban areas are within 5 km radius as compared to 42 percent in rural areas. Overall, 87 percent of Zambian households are found within 15 kilometres radius from a health institution.

Table 6.1 shows that in the rural areas, non-agricultural and small-scale farming households are better served with health facilities, with 48 and 42 percent respectively of the households living within 5 kilometres radius from a health institution. A substantial number of medium-scale farming households (47 percent) are found within 6-15 kilometres distance to a health facility. The percentage of small-scale farming households found within 6-15 kilometres distance is 37 percent, and the corresponding figure for non-agricultural households is 34 percent. The table also shows that 22 and 25 percent of small-scale and medium-scale rural households respectively are found more than 16 kilometres away from a health facility.

The accessibility in terms of distance to health institutions of the urban socio-economic groups is favourable with almost 90 percent in all categories living within 5 kilometre radius.

At provincial level the results indicate that Copperbelt and Lusaka provinces, being the most urbanised have 90 percent of their households within 5 kilometres from a health facility. More households in

Northern and Western provinces are, however, found beyond the 5 kilometres radius. It should be noted that the two provinces are the largest in the country. The result could suggest that health facilities in Northern and Western provinces are spread far apart. Nearly 30 percent of the households in those two provinces are found 16 kilometres or more away from a health institution.

Table 6.1: Percentage distribution of households by distance to health facility, place of residence, socio-economic group and province. 1991

		Distance to nearest health facility				
		0 - 5 km.	6 - 15 km.	16 km. or more	Total	No of households in '000's
All households		63	24	13	100	1 461
Place of residence	Rural	42	36	22	100	837
	Urban	92	8	-	100	624
Socio-economic group	Rural small-scale farmers	42	37	22	100	732
	Rural medium-scale farmers	28	47	25	100	24
	Rural large-scale farmers	17	19	64	100	2
	Rural non-agric. households	48	34	19	100	79
	Urban low-cost areas	92	8	-	100	346
	Urban medium-cost areas	91	9	1	100	191
	Urban high-cost areas	93	7	-	100	88
Province	Central	55	27	18	100	123
	Copperbelt	90	10	-	100	220
	Eastern	49	41	10	100	200
	Luapula	69	25	6	100	157
	Lusaka	89	9	2	100	212
	Northern	40	32	28	100	188
	North Western	66	19	14	100	81
	Southern	52	31	17	100	142
	Western	45	27	28	100	137

6.3 Health visits

Table 6.2 indicates that 13 percent of the Zambian population had visited a health institution in the three months period preceeding the survey. Of these, 75 percent and 12 percent went to government and private health facility respectively. Due to the selective nature of company owned health facilities, only 5 percent had visited one of those facilities. However, regardless of what groups are analysed, government health institutions had the highest proportion of consultations. The difference between males and females in recorded health visits was 2 percent, with females having the higher proportion of 15 percent. Government health institutions were most often visited by both sexes.

Table 6.2: Percentage distribution of proportion of population who visited a health institution, and by type of institution visited, sex, age, place of residence, and socio-economic group.

			Institution visited					
		Proportion who visited	Government owned	Mission owned	Company owned	Private	Total	Number of persons in '000's
All population		13	75	8	5	12	100	1 011
Sex	Male	13	74	7	5	14	100	469
	Female	15	75	8	5	12	100	542
Age group	0-4	24	78	7	5	10	100	261
	5-9	10	79	4	7	10	100	111
	10-14	8	80	6	5	9	100	77
	15-19	10	81	7	4	8	100	97
	20-24	14	75	9	4	12	100	100
	25-29	16	68	10	6	16	100	91
	30-34	15	69	8	6	17	100	66
	35-39	16	75	6	4	15	100	54
	40-44	14	64	12	7	17	100	36
	45-49	15	68	7	3	22	100	36
	50 and above	14	67	12	2	19	100	82
Place of residence	Rural	14	76	12	1	11	100	574
	Urban	13	73	2	11	14	100	438
Socio-economic group	Rural small-scale farmer	15	76	12	1	11	100	518
	Rural medium-scale farmers	13	65	23	-	12	100	25
	Rural large-scale farmers	12	71	13	-	16	100	2
	Rural non-agric. households	11	83	7	-	10	100	238
	Urban low-cost households	13	72	2	11	15	100	238
	Urban medium-cost households	12	76	1	12	11	100	123
	Urban high-cost households	16	72	2	6	20	100	76

Children below the age of 5 years had more visits to a health institution than other age groups (2 percent) while the age groups between 10 to 14 years had the least consultations (8 percent). Above the age of 20 years, age does not seem to matter when it comes to the frequency of health consultations. In all cases, government owned institutions had the highest proportions of visits.

During the 3 months period preceeding the survey, 14 percent of the population in rural areas had visited a health institution. There were no significant differences within the rural socio-economic groups. In urban areas, the population in high-cost residential areas had the highest proportion of people visiting a health institution during the relevant period (16 percent). Also, privately owned institutions were more often visited by persons coming from this socio-economic group. People living in medium-cost urban residential areas had consulted private health institutions less often than other urban socio-economic groups.

Table 6.3 shows that Northern and Luapula Provinces had the highest proportion of health visits to government owned health institutions (more than 80 percent each) followed by other rural provinces. The Copperbelt province had the lowest proportion of health visits to government facilities, mainly due to the availability of company owned health facilities. Highly urbanised provinces along the line of rail had a high proportion of visits to private health institutions in urban areas, as compared to rural areas within the province.

Table 6.3: Proportion of population who visited a health institution, by type of institution visited, province and rural/urban, 1991

		Proportion who visited health institutions	Institution visited: Gover-nment owned	Mission owned	Company owned	Private	Total	Number of persons in '000's
All population		13	75	8	5	12	100	1 011
Province	Central	14	69	10	5	16	100	98
	Rural	13	69	18	-	12	100	54
	Urban	17	70	1	10	19	100	44
	Copperbelt	11	60	3	26	11	100	128
	Rural	11	73	21	-	6	100	8
	Urban	11	59	2	27	12	100	120
	Eastern	21	77	9	-	14	100	204
	Rural	22	79	10	-	11	100	170
	Urban	19	71	1	-	28	100	34
	Luapula	13	81	8	4	7	100	92
	Rural	13	78	11	5	6	100	67
	Urban	13	91	-	-	9	100	25
	Lusaka	10	72	3	1	24	100	109
	Rural	7	69	7	-	24	100	10
	Urban	11	73	2	2	23	100	99
	Northern	13	89	4	1	6	100	118
	Rural	12	88	5	-	7	100	85
	Urban	16	92	3	2	3	100	33
	North-Western	17	79	16	-	5	100	67
	Rural	16	71	23	-	6	100	45
	Urban	20	96	3	-	1	100	22
	Southern	14	72	11	6	11	100	120
	Rural	13	73	14	1	12	100	86
	Urban	16	70	2	19	9	100	34
	Western	12	73	7	-	20	100	75
	Rural	10	63	10	-	27	100	49
	Urban	21	91	2	1	6	100	26

6.4 Type of Health personnel consulted

The respondents were asked whether they had consulted some of the following type of health personnel during the three months period prior to the survey:

- Traditional healer
- Doctor or clinical officer
- Midwife or nurse
- Other health personnel, including health assistants, health inspectors, social workers, nutritionists who might conduct their own health services.

Table 6.4: Percentage distribution of Health of personnel consulted by sex, age, place of residence and socio-economic group.

		Personnel consulted					
		Traditional healer	Doctor/clinical officer	Nurse/ midwife	Other	Total	Number of persons in '000's
All population		9	79	11	2	100	1 028
Sex	Male	9	80	9	2	100	477
	Female	9	77	12	1	100	551
Age group	0-4	6	76	16	2	100	264
	5-9	6	84	9	1	100	113
	10-14	6	81	10	3	100	78
	15-19	6	79	13	1	100	98
	20-24	10	77	11	2	100	100
	25-29	13	77	9	1	100	94
	30-34	11	79	8	3	100	68
	35-39	10	82	7	1	100	56
	40-44	13	83	4	1	100	38
	45-49	19	75	5	1	100	36
	50 and above	16	74	8	2	100	83
Place of residence	Rural	12	76	11	1	100	581
	Urban	6	81	11	2	100	448
Socio-economic group	Rural small-scale farmer	12	77	11	1	100	524
	Rural medium-scale farmer	12	75	9	5	100	26
	Rural large-scale farmer	6	76	8	10	100	2
	Non-agric. rural households	14	75	12	-	100	29
	Urban low-cost areas	7	77	13	3	100	244
	Urban medium-cost areas	5	89	6	1	100	127
	Urban high-cost areas	3	82	14	1	100	77

Table 6.4 shows that clinical officers and doctors are by far the health personnel most often visited. This was true for both sexes, all age group, place of residence and socio-economic groups. Out of the total population who had consulted health personnel in the relevant period, 9 percent consulted a traditional healer, 79 percent a clinical officer or doctor, while 11 percent had consulted a midwife or a nurse. Midwives and nurses are most often visited by children below the age of 5 years.

Within the socio-economic groups, traditional healers are more often consulted by people living in rural households than those living in urban areas. Within the urban areas, consultation of traditional healers decreases with increasing socio-economic status. Nurses and midwives are most often consulted by people living in urban low-cost and high-cost areas.

Table 6.5 shows that among the provinces, traditional healers are most often visited in Western province (18 percent) followed by Southern and Eastern with 13 percent and 12 percent respectively. Traditional healers are most seldom consulted in North-Western Province. Few people had also consulted traditional healers in Copperbelt, Lusaka and Luapula provinces. It might be that consultations to traditional healers were not easily reported to the interviewers by some of the respondents. Consultations to either medical doctors or clinical officers might have been viewed as more important to mention than visits to a traditional healer. Nurses/midwives were more often consulted in rural parts of Central, Southern, Northern and North-Western provinces.

Table 6.5: Percentage distribution of Health consultations by type of personnel consulted, province and place of residence, 1991.

		Personnel consulted					
		Traditional healer	Doctor/clinical officer	Nurse/ midwife	Other	Total	Number of persons in '000's
All population		9	79	11	2	100	1 028
Province	Central	8	74	17	1	100	99
	Rural	11	76	13	1	100	55
	Urban	5	72	22	1	100	44
	Copperbelt	5	77	16	3	100	131
	Rural	8	90	2	-	100	8
	Urban	5	76	17	3	100	123
	Eastern	12	81	6	1	100	207
	Rural	12	80	7	1	100	173
	Urban	11	86	2	2	100	34
	Luapula	8	83	9	1	100	92
	Rural	8	85	6	1	100	67
	Urban	9	76	15	-	100	25
	Lusaka	5	84	9	3	100	114
	Rural	6	92	1	2	100	10
	Urban	5	83	10	3	100	104
	Northern	8	78	13	-	100	118
	Rural	12	71	17	-	100	85
	Urban	-	96	4	-	100	33
	North-Western	2	83	12	3	100	68
	Rural	3	77	17	4	100	46
	Urban	1	95	2	2	100	22
	Southern	13	71	15	2	100	121
	Rural	13	68	17	2	100	87
	Urban	11	77	10	2	100	34
	Western	18	77	3	2	100	77
	Rural	24	69	4	3	100	49
	Urban	7	91	1	1	100	28

In urban areas, nurses/midwives were more often consulted in Central, Copperbelt and Luapula provinces with a range of 15 to 22 percent followed by Lusaka and Southern provinces, with 10 percent each. Consultations to traditional healers were substantial in the urban areas of Eastern and Southern provinces (11 percent each). Rural areas had high incidence of visits to traditional healers in Central, Northern and

Western provinces.

In the case of consultation to doctors/clinical officers, the differences between urban and rural areas were substantial in Northern, North-Western and Southern provinces, urban areas having the highest proportion of visits to these categories of health personnel of 25 percent, 22 percent and 18 percent respectively. The opposite pattern was observed in Copperbelt, Luapula and Lusaka provinces, where consultations to doctors/clinical officers were more common in rural than in urban areas.

6.5 Expenditure on medication

At the time when the survey was conducted the Ministry of Health had just introduced medical fees, in some health institutions. Hence, minor expenditures were incurred by households on medical care. Therefore, household expenditure on medical care only constituted 1 percent of total monthly household expenditure. (See also chapter 10)

Information on average cost per consultation during the last three months preceeding the survey showed that government owned health institutions charged very low fees, while the average cost of a visit to a private health institution was substantially high (see table 6.6).

The average cost per consultation to traditional healers were higher than the cost of visiting any other health personnel, an average of almost K500.

Table 6.6: Average cost per visit to different kinds of health institutions and health personnel.(Kwacha).

Health institutions	Kwacha
Government owned	33
Mission owned	54
Company owned	160
Private	643
Personnel consulted	**Kwacha**
Traditional healer	473
Doctor/clinical officer	87
Nurse/midwife	43
Other personnel	266

6.6 Source of drinking water

The quality of drinking water has an effect on the proliferation of water-borne diseases such as typhoid, cholera, dysentery, etc. Thus, information on source of drinking water is a useful indicator for assessing the status of the health of the population.

Table 6.7 shows the various sources of drinking water for the indicated areas and socio-economic groups. Overall, 23 percent of the Zambian households get their drinking water from a river or a lake, 12 percent from a protected well, 25 percent from an unprotected well, 19 percent from a public tap, while 19 percent get their drinking water from own tap. Other sources of drinking water include direct from boreholes and springs etc (3 percent of the households belong to this category).

There are, however, great variations in the sources of drinking water between rural and urban areas as shown in the table. In rural areas, over 70 percent of the households get their drinking water from a river or a lake or from an unprotected well, while in urban areas, more than 80 percent of the households get their drinking water from a public or own tap.

The pattern of source of drinking water by socio-economic group indicates that small-scale and medium-scale farming households get their drinking water mostly from river/lake and unprotected well (about 80 percent in each of the two socio-economic groups). The three urban socio-economic groups have public or own tap as their main sources of drinking water (ranging from 76 percent in low-cost areas to 87 percent in high-cost areas).

Variations do exist between provinces. As expected, Copperbelt and Lusaka provinces recorded high percentages of households getting water from own or public tap (more than 40 percent). Unprotected wells as a source of drinking water are most common in Central, North-Western and Western provinces, with percentages ranging from 42 percent in Central province to 52 percent in both North-Western and Western provinces.

Table 6.7: Percentage distribution of households by source of drinking water, place of residence, socio economic group and Province, 1991

		Source of drinking water							
		River /lake	Protec-ted well	Unprotected well	Public tap	Own tap	Other	Total	Numbe-r of persons in '000's
All households		23	12	25	19	19	3	100	1 472
Place of resi-dence	Rural	38	15	38	4	1	4	100	845
	Urban	2	7	7	40	43	1	100	627
Socio -eco-nomi c group	Rural small-scale farmer	39	15	39	2	-	5	100	739
	Rural medium-scale farmer	36	18	41	1	1	5	100	25
	Rural large-scale farmers	19	13	23	2	34	9	100	2
	Rural non-agric. households	38	13	29	14	4	2	100	80
	Urban low-cost areas	2	11	11	52	24	1	100	348
	Urban medium-cost areas	2	1	3	28	66	0	100	191
	Urban high-cost areas	5	4	4	20	67	0	100	88
Pro-vince	Central	13	14	42	15	14	1	100	124
	Copperbelt	3	12	10	28	46	1	100	222
	Eastern	25	28	29	7	4	7	100	201
	Luapula	55	9	17	14	5	-	100	158
	Lusaka	2	5	7	45	41	-	100	213
	Northern	57	3	22	9	9	-	100	193
	North-Western	19	9	52	8	10	2	100	82
	Southern	24	10	22	20	12	12	100	142
	Western	13	16	52	9	7	3	100	137

Luapula and Northern Provinces had the highest proportion of households having river or lake as their main source of drinking water with 55 and 57 percent respectively. In Eastern province, river or lake, protected well or unprotected well were equally common as the main source of drinking water.

6.7 Treatment of drinking water

Table 6.8 presents the percentages of households who treat their drinking water by either boiling or adding chemicals to it. It is evident from the table that only 16 percent of Zambian households treat their drinking water. Both rural and urban areas show small proportions, 10 and 24 percent in rural and urban areas respectively.

Drinking water treatment is most common among households in medium and high cost urban areas, and least common among rural small- scale farming households. It can also be observed that 17 percent of male headed households treat their drinking water as compared to 12 percent of female headed households.

Table 6.8: Percentage of households who treat their water by place of residence, socio-economic group, gender of head of household and province

		Percentage who treat water	Number of households in '000's
All households		16	1 460
Place of residence	Rural	10	836
	Urban	24	624
Socio-economic group	Rural small-scale farmers	9	731
	Rural medium-scale farmers	14	24
	Rural large-scale farmers	10	1
	Rural non-agric. households	11	78
	Urban low-cost areas	19	345
	Urban medium-cost areas	28	190
	Urban high-cost areas	34	87
Gender of head of household	Male	17	1 170
	Female	12	290
Province	Central	12	122
	Copperbelt	32	220
	Eastern	8	200
	Luapula	23	156
	Lusaka	17	212
	Northern	13	188
	North-Western	12	81
	Southern	10	142
	Western	4	137

Chapter 7 Education

7.1 Coverage

Statistical information on educational characteristics of the population provide an important background variable for the understanding of most population variables. Educational variables can be useful to explain differentials in fertility, mortality, nutrition and many others. This survey sought educational data for all persons aged 5 years and above. The information included the following:

- whether or not one has ever attended school
- whether the school attended/being attended is/was public or private school
- for those 30 years and below whether or not currently attending school
- the grade being done
- for those not currently attending school, the main reason for not attending (for those aged between 5 and 30 years)
- whether or not one was attending school last year and the grade attended last year
- the highest grade attained and year when this grade was obtained.

This section attempts to present and describe data on some aspects of the information obtained from the survey. The focus of analysis here is limited, however much more vigorous examination of data could be made in depth using the stored data.

7.2 School Attendance

Any person reporting to be attending school constituted school attendance. The attendance rate was computed as the proportion of those attending a specific grade in the appropriate age groups.
The legal age for a child to start school in Zambia is seven years. However older children not above 9 years at the beginning of school year may also enrol. The age groups used in subsequent presentation correspond to a given school level as illustrated below: Taking the entry age to grade 1 as 7 years, the age group used in the subsequent presentation correspond to a given educational level.

- primary lower grades, 1, 2, 3 and 4 correspond to pupils aged 7 to 10
- primary upper grades 5, 6 and 7 correspond to pupils aged 11 to 13
- secondary junior grades 8 and 9 correspond to pupil aged 14 and 15
- secondary senior grades 10, 11 and 12 correspond to pupils aged 16 to 18
- students above the age of 18 could be considered to be in higher institutions of learning.

It is clear from the onset that there will be striking age-grade mismatch in the education system. The age-grade mismatch occurs when a child's age does not correspond with the expected grade.For example children below 6 years and above 13 years attending primary school grades 1 to 7 may be considered to be outside the primary school age range 7 to 13 years. The proportion of these children will then constitute the age-grade mismatch factor.

The tables which follow 7.1 to 7.3 present data on school attendance by age-group. It must be understood that although the age groups used (7-13, 14-18 and 19-22), may seem to correspond with the respective educational levels (primary, secondary and higher), there may be mismatches between school levels and the age group considered appropriate. It often occurs that some pupils in the age group 14 to 18 years considered appropriate for secondary education may still be attending primary grades.

Table 7.1: School attendance rate by sex,age group and place of residence, 1991				
	Age-group			
	5-6	7-13	14-18	19-22
All children	10	70	57	18
Sex:				
Boys	8	70	66	27
Girls	11	70	50	10
Place of residence:				
Rural				
Boys	6	60	57	20
Girls	7	59	38	5
Urban				
Boys	12	82	75	33
Girls	18	82	61	14

Table 7.1 shows that 10 percent of Zambian children aged 5 to 6 years go to school, meanwhile 70 percent of children in primary school age (7 to 13 years) and 57 percent of children in secondary school age-group (14 to 18 years) go to school. As regards age-group 19 to 22 years, 18 percent of the population attends school.

According to the educational Act children below age of seven are not eligible for enrolment in primary school. Table 7.1 shows that 10 percent of children in this age-group are infact enrolled. The declining school attendance with increasing school age reflects the general Zambian educational pyramid with broadbase and sharp peak.

From table 7.2 which shows attendance rates by sex and socio-economic group,there are consistent and large sex differences in school attendance for education beyond primary level. The school attendance rate among children of primary school age is about the same for boys and girls. This holds for all the background variables used, except for the fact that boys aged 7 to 13 years in non-agricultural rural households have a much higher attendance rate than girls (72 percent as compared to 51 percent).
It can also be seen that girls usually start school at an earlier age than boys; the school attendance rate among 5 and 6 years old are generally higher among girls than among boys.

Children living in rural areas have in general a lower school attendance rate at any age than children in urban areas. Even in primary school age-groups, about 60 percent of the rural children go to school as compared to a little more than 80 percent of the urban children. In the secondary school age groups, 57 percent of rural boys attend school, as compared to 75 percent for urban boys. For girls, the comparable figures are 38 and 61 percent for rural and urban respectively.

Table 7.2: School attendance rate by sex, age group and socio-economic group

Socio-economic group	Age-group			
	5-6	7-13	14-18	19-22
Rural small-scale:				
Boys	6	59	57	20
Girls	5	59	37	5
Rural medium-scale:				
Boys	4	70	65	31
Girls	15	70	60	18
Rural large-scale:				
Boys	11	76	87	26
Girls	11	89	75	-
Rural non-agricultural households:				
Boys	6	72	54	8
Girls	14	51	32	5
Urban low-cost areas:				
Boys	7	76	69	26
Girls	12	76	54	10
Urban medium-cost areas:				
Boys	16	90	79	41
Girls	21	89	69	19
Urban high-cost areas:				
Boys	18	87	82	32
Girls	30	89	67	24

Within rural areas, children from small-scale farming households and children from non-agricultural households have the lowest school attendance rate at all ages. In the urban areas, school attendance rates are higher in medium and high-cost living areas than in low cost areas in all age-groups.

The school attendance rates shown in Table 7.3 show that there are differences between provinces at each school age-group. In the age-group 5 to 6 years, North-western province had the highest proportion of girls attending school followed by Northern province while the least proportions were found in Eastern, Southern and Western provinces. Generally, in the age-group 5 to 6 years, more girls are attending school than boys. The age-group corresponding to primary school cycle (7 to 13 years) reflects near equal participation between boys and girls across all the provinces. Where small differences in school attendance between boys and girls are observed, the girls tend to take up a higher rate in provinces other than Luapula, Lusaka and Northern provinces.

Table 7.3: School attendance rate by sex, age-group and province

Province	Age-group			
	5-6	7-13	14-18	19-22
Central				
Boys	4	75	64	24
Girls	9	77	43	8
Copperbelt				
Boys	10	83	75	31
Girls	15	83	58	11
Eastern				
Boys	5	52	48	25
Girls	7	52	39	8
Luapula				
Boys	5	69	67	29
Girls	10	63	55	5
Lusaka				
Boys	13	79	71	26
Girls	11	77	55	16
Northern				
Boys	10	68	66	25
Girls	16	62	43	9
N/Western				
Boys	11	67	69	38
Girls	18	77	56	10
Southern				
Boys	6	70	70	26
Girls	8	72	55	9
Western				
Boys	8	59	53	16
Girls	8	60	35	7

School attendance in the age-group corresponding to secondary and higher education are generally higher than would be expected. In the age-group 14 to 18 years for example, higher attendance rates above 60 percent for boys are recorded in all provinces except Eastern and Western Provinces. Even girls show higher attendance rates than would be the case. This observation should not be surprising as substantial number of pupils in the age-group 14 to 18 years may still be attending primary education. Similarly some of those in the age-group 19 to 22 years could still be in secondary education. The concept of age-grade mismatch described above is clearly strong in the Zambian school system. In order to explore further this factor a concept of Gross Attendance Rates is introduced below.

7.3 Gross Attendance Rates

The Gross Attendance Rate (GAR) relates the attendance at a given educational level or grade and the population whose age(s) correspond(s) to that level. For example the ratio expressed in percentage of the total attendance in grades 1 to 4 and the population aged 7 to 10 years gives the gross attendance rate for lower primary school grades 1 to 4. The data for various background variables and educational levels are shown in Tables 7.4 to 7.6. An examination of the data on these tables reflects higher rates than the ones presented earlier. This is attributed to a number of pupils who are attending a given educational level but whose ages are outside the age range for the level. Where percentages exceed 100 percent, that reflects high attendance of pupils over and below the corresponding school going age population.

Table 7.4: Gross Attendance Rates (Percent) by sex, rural/urban, Zambia, 1991

	School Attendance					
	Grade 1-4	Grade 5-7	Grade 1-7	Grade 8-9	Grade 10-12	Grade 8-12
All	98	94	97	53	16	31
Sex						
Male	103	101	102	57	21	36
Female	94	88	92	49	11	26
Residence						
Rural-Total	93	76	87	26	6	14
Male	100	82	93	31	8	18
Female	87	69	80	22	3	11
Urban-Total	104	113	108	81	27	49
Male	105	121	112	86	35	56
Female	103	105	104	77	19	42

Table 7.4 lends support that at every educational level gross attendance rates are higher for boys than girls. The sex difference in favour of boys increases drastically with increasing level of education. Rural/urban differences are also pronounced. At every educational level, gross attendance rates are higher in urban areas than in rural areas. However, the rates for urban girls are higher than for rural girls. This observation is more striking at senior secondary education where only 3 percent of the rural girls are enrolled as compared to 19 percent for urban girls.

Table 7.5 presents the gross attendance rates by province and educational level. There are observable differences between the provinces at all educational levels. At primary education level, a number of provinces have attained gross attendance rates of over 100 percent. This suggests that in these provinces universal primary education could have been achieved had it not been for age distortions.

Provinces exhibiting rates far below the national average for primary education are Eastern, Luapula, and Western. Various reasons could have attributed to these low rates, but two broad reasons could be considered, namely:

- Inadequate school places or
- Inadequate utilisation of available school places by the communities.

Generally, provinces with low primary gross attendance rates tend to have low secondary rates as well. Perhaps secondary education expansion depends on the available primary education within the province.

Table 7.5: Gross Attendance Rates by Province, Zambia, 1991

	School Attendance					
	Grade 1-4	Grade 5-7	Grade 1-7	Grade 8-9	Grade 10-12	Grade 8-12
Province						
Central	104	101	103	42	13	26
Copperbelt	112	114	113	62	21	38
Eastern	82	68	77	41	8	20
Luapula	100	72	89	55	10	31
Lusaka	91	113	101	62	28	42
Northern	101	86	95	48	14	27
N/western	108	103	106	59	17	35
Southern	104	96	101	53	13	29
Western	81	71	77	43	11	24

The gross attendance rates for the various educational levels and socio-economic groups are shown in Table 7.6. Care should be exercised with respect to large scale farmers. These were very few in the sample and could have a higher margin of error.

The school attendance by different age groups in the same grade or educational level not only have serious implication to learning process, but also reflect a backlog of pupils within appropriate age range not in school. In order to examine the proportions of pupils whose ages correspond to the appropriate educational level, the concept of net attendance rates is introduced below.

Table 7.6: Gross Attendance Rates (Percent) by Socio-economic group, Zambia, 1991

	School Attendance					
	Grade 1-4	Grade 5-7	Grade 1-7	Grade 8-9	Grade 10-12	Grade 8-12
Socio-economic group						
Small-scale farmers						
Total	93	73	86	25	4	13
Male	99	81	92	29	6	16
Female	87	65	79	21	3	10
Medium-scale farmers						
Total	105	115	109	37	12	23
Male	111	112	112	45	12	25
Female	98	118	106	28	13	20
Large-scale farmers						
Total	128	134	131	56	32	43
Male	147	76	108	31	104	63
Female	114	-	165	73	4	32
Non-agric households						
Total	93	70	84	35	19	24
Male	120	65	95	39	20	32
Female	71	76	72	31	4	13
Low cost - Total	99	107	102	66	16	37
Male	100	115	106	70	24	44
Female	97	99	98	63	10	31
Medium cost- Total	112	123	117	92	34	58
Male	115	129	121	101	41	66
Female	109	117	112	83	27	50
High cost - Total	107	111	109	109	45	70
Male	101	125	110	106	59	78
Female	114	100	107	112	32	62

7.4 Net Attendance Rates

The net attendance rate is the ratio of pupils whose age correspond with the school age population. It should be noted that this measure excludes those who are attending school but outside the age range corresponding to a given school level. The rates shown in Table 7.7 are much lower than the previous ones in table 7.4 suggesting that more school children are not in the appropriate age ranges. The net attendance rate is useful in assessing the absorption capacity of the school system.

Net attendance rates for primary school do not show any major differences by gender. Nearly 60 percent of both boys and girls in lower primary school are properly enrolled according to their ages. In the case of upper primary school, net attendance rates of 35 percent for boys and 40 percent for girls are recorded. At secondary school level, the rates are lower than 15 percent for both boys and girls, implying that very few pupils fall in rightful age range of being in a secondary school.

Generally, urban net attendance rates at both primary and secondary school levels are much higher than those for rural areas. At secondary school level, rural areas have very low net attendance rates. Similar pattern is exhibited by socio-economic groups. An assessment at provincial level reveals higher net attendance rates in North-western and Southern Provinces. Eastern Province has the least number of net attendance rates at all grades.

Table 7.7: Net Attendance Rates (Percent) by sex, rural/urban, Zambia, 1991

	School Attendance					
	Grade 1-4	Grade 5-7	Grade 1-7	Grade 8-9	Grade 10-12	Grade 8-12
All	58	38	68	12	6	20
Sex						
Male	57	35	68	11	6	21
Female	59	40	68	13	5	20
Residence						
Rural-Total	50	23	58	5	2	9
Male	49	21	59	5	2	10
Female	51	25	58	5	1	8
Urban-Total	69	52	80	20	10	33
Male	69	50	80	19	11	34
Female	70	55	79	22	9	32

The net attendance rates have been calculated for each grade 1 to 12 and presented graphically in Figures 7.1 to 7.3. The graphic presentation is made for rural and urban as well as for sex. Generally the net attendance rates decline with increasing grade. The decline is more rapid in rural areas as compared to urban areas where a smooth pattern is visible.

Table 7.8: Net Attendance Rates (Percent) by Province, Zambia, 1991

	School Attendance					
	Grade 1-4	Grade 5-7	Grade 1-7	Grade 8-9	Grade 10-12	Grade 8-12
Province						
Central	65	39	74	10	6	17
Copperbelt	71	48	80	11	7	24
Eastern	45	20	51	7	1	11
Luapula	54	31	65	14	3	23
Lusaka	63	56	76	20	13	28
Northern	55	86	95	48	14	27
N/western	108	103	106	59	17	35
Southern	104	96	101	53	13	29
Western	81	71	77	43	11	24

Figure 7.1 Grade Specific Net school attendance rates (National).

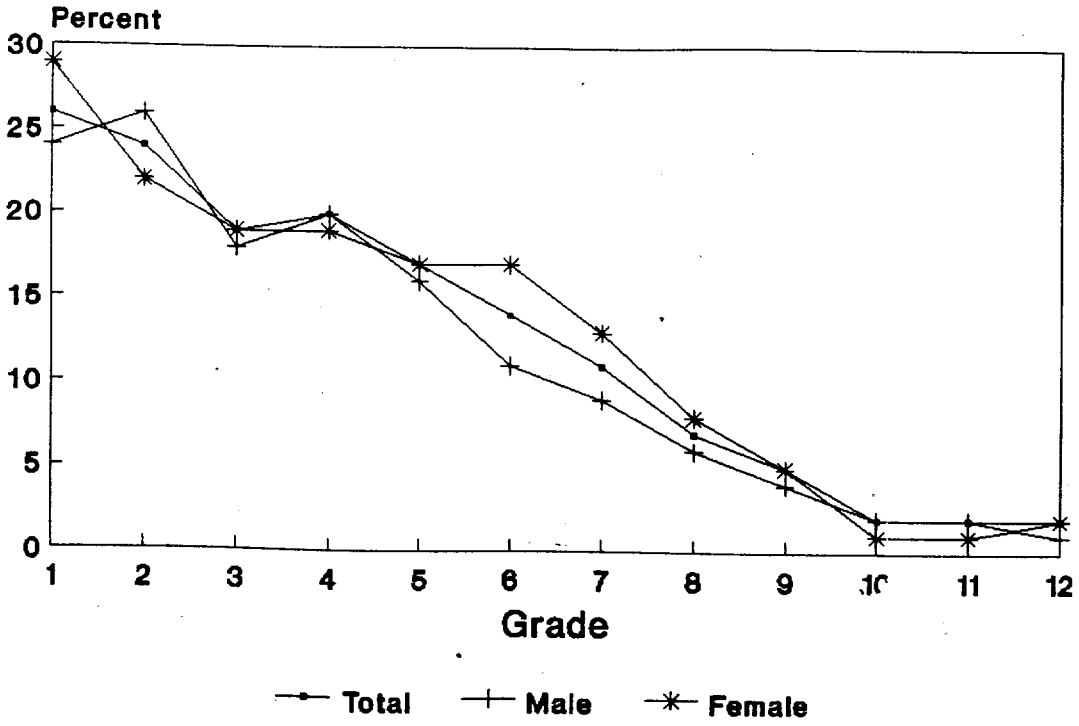


Figure 7.2 Grade Specific Net school attendance rates (Rural).

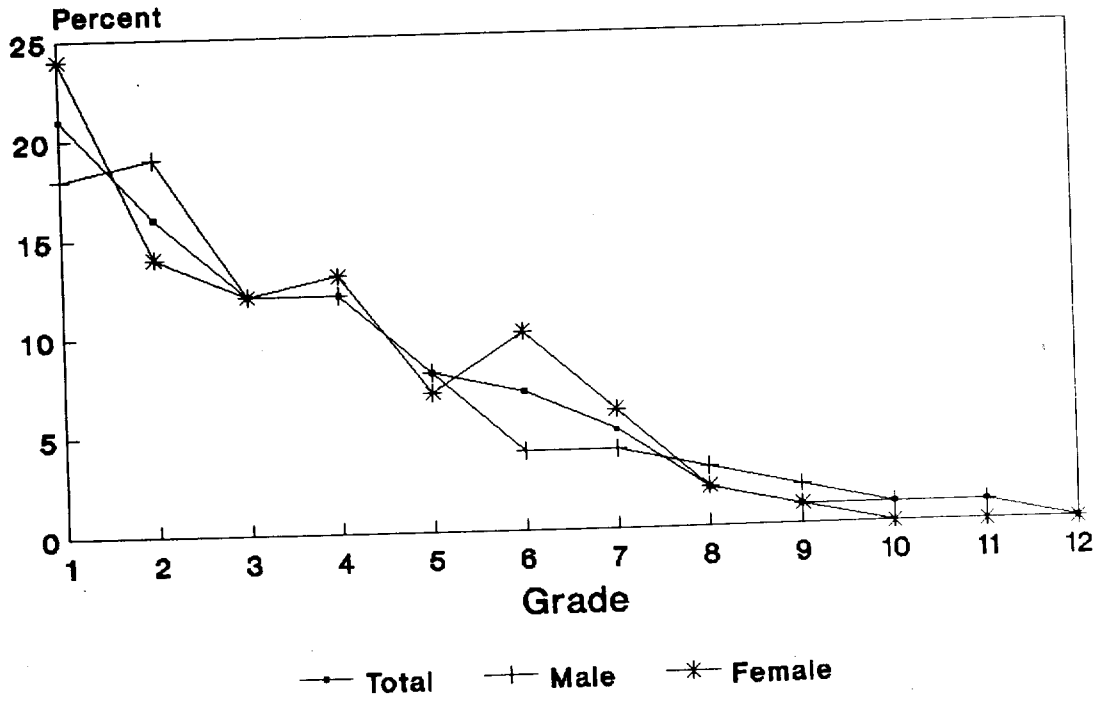


Figure 7.3 Grade Specific Net school attendance rates (Urban).

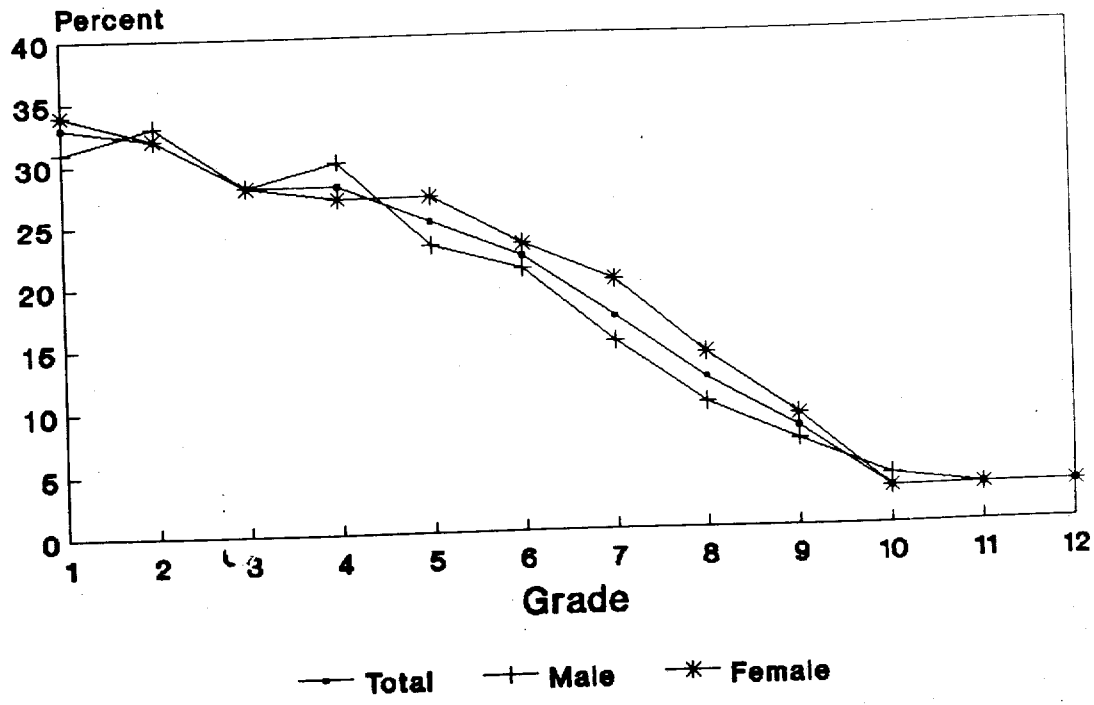


Table 7.9: Net Attendance Rates (Percent) by Socio-economic group, Zambia, 1991

	School Attendance Rates					
	Grade 1-4	Grade 5-7	Grade 1-7	Grade 8-9	Grade 10-12	Grade 8-12
Socio-economic group						
Small-scale farmers						
Total	49	22	58	4	1	8
Male	47	20	58	4	1	8
Female	51	24	58	5	1	7
Medium-scale farmers						
Total	57	35	69	6	5	13
Male	59	32	69	5	3	13
Female	56	38	69	8	7	13
Large-scale farmers						
Total	83	24	77	8	9	25
Male	77	28	72	-	21	14
Female	88	-	85	14	4	30
Non-agric households						
Total	51	30	60	15	10	16
Male	60	24	70	27	17	22
Female	43	38	50	2	1	8
Low cost - Total	63	45	74	14	5	24
Male	62	42	73	12	7	25
Female	63	48	74	15	3	23
Medium cost- Total	78	61	87	26	14	39
Male	77	58	88	23	13	38
Female	78	63	86	28	14	39
High cost - Total	74	59	83	33	19	47
Male	74	59	84	33	22	51
Female	75	58	82	32	17	44

7.5 The Highest level of Education in the population

Table 7.10 shows that about 20 percent of the adult Zambian population (aged 14 and above) have no formal education. A further 16 percent have completed lower primary education (grades 1 to 4) while another 37 percent have completed upper primary education (grades 5 to 7). In the population, 11 percent have completed junior secondary education (grades 8 to 9) while 14 percent have completed senior secondary education (grades 10 to 12). A little more than 1 percent of the population have some education above secondary level.

The discrepancy between junior and senior secondary school attainment could be attributed to changes in the duration of junior secondary education over time.

More women than men have no education at all, 28 percent as compared to 14 percent. However, the proportion who have completed either lower or upper primary education does not vary much by sex, while men more often than women have had at least some secondary education, 31 percent as compared to 20 percent.

Educational attainment also varies with age. The older the person, the more likely he is to have no or little formal education. For instance, the proportion without education varies from 12 percent in the youngest age-group (14 to 20 years of age) to 64 percent in the oldest age-group (60 years and above).

The already observed sex differences also seem to increase with age. The older the persons, the larger the sex differences in educational attainment. In the youngest age-group, the percentage with no education is 14 and 10 percent among women and men respectively, while the corresponding figures in the oldest age-group are 85 percent and 48 percent.

Table 7.10: Percentage distribution of population 14 years and above by highest level of education obtained by sex and age group.

	Highest level of education								
	None	Grade 1-4	Grade 5-7	Grade 8-9	Grade 10-12	A-level etc	Bachelor degree and above	Total	Total Population in '000's
All Population	21	16	37	11	14	1.0	0.2	100	4445
Sex									
Male	14	15	38	13	18	1.4	0.4	100	2189
Female	28	16	36	10	10	0.6	0.1	100	2256
Age									
14-20	12	17	50	16	5	0.0	0.0	100	1396
21-30	12	10	40	14	22	1.1	0.2	100	1249
31-45	22	14	32	7	23	2.1	0.6	100	1038
46-59	47	24	17	5	5	1.3	0.3	100	504
60+	64	21	11	2	2	0.3	0.1	100	258
Age and sex									
14-20									
Male	10	19	50	16	5	0.0	-	100	683
Female	14	16	50	16	5	0.1	0.0	100	714
21-30									
Male	7	8	39	16	28	1.1	0.3	100	570
Female	16	12	41	12	18	1.0	0.1	100	679
31-45									
Male	11	10	33	9	34	3.2	0.9	100	523
Female	33	18	30	6	11	0.9	0.3	100	515
46-59									
Male	30	26	25	8	8	2.1	0.6	100	264
Female	66	22	9	1	1	0.4	0.0	100	240
60+									
Male	48	28	17	3	2	0.5	0.1	100	149
Female	85	12	2	0	0	-	-	100	109

As could be expected, the educational attainment level is lower in rural than in urban areas. Almost one third of the rural population have no formal education as compared to 10 percent in urban areas. Also the proportions who have completed more than lower primary education are much lower in rural than in urban areas. It should be noted that people with high educational level of attainment tend to drift to urban areas.

Within the rural areas, the educational attainment is lowest among people living in small-scale farming households where 32 percent of them ave no formal education, while 11 percent have more than primary education.

Among the provinces, Eastern and Western provinces have the highest proportion of opulation with no education (about 40 percent), while Lusaka and Copperbelt provinces have the lowest proportion (about 10 percent). Accordingly, the proportion of the population with more than primary education is highest in Lusaka and Copperbelt, 43 percent and 38 percent respectively, while the comparable figures for Eastern and Western Provinces are 15 percent and 16 percent.

Table 7.11: Percentage distribution of population 14 years and above by highest educational level obtained, place of residence, socio-economic group and province.

	Highest educational level								
	None	Grade 1-4	Grade 5-7	Grade 8-9	Grade 10-12	A-level etc	Bachelor degree and above	Total	Total Population in '000's
All population	21	16	37	11	14	1.0	0.2	100	4445
Place of residence									
Rural	31	21	37	6	5	0.2	0.0	100	2382
Urban	10	9	37	17	24	1.9	0.5	100	2063
Socio-economic group									
Rural small scale farmers	32	22	36	6	4	0.1	0.0	100	2089
Rural medium scale farmers	20	17	47	10	6	0.2	0.1	100	112
Rural large scale farmers	9	9	35	21	20	4.7	0.4	100	10
Rural non-agric households	27	13	41	6	12	0.6	0.4	100	171
Urban low-cost areas	14	11	42	16	16	0.7	0.1	100	1104
Urban medium-cost areas	6	7	33	19	32	2.3	0.8	100	664
Urban high-cost areas	7	6	28	18	35	5.4	0.9	100	294
Province									
Central	21	15	41	9	12	1.6	0.2	100	404
Copperbelt	11	10	42	17	19	0.8	0.2	100	729
Eastern	38	20	27	8	6	0.7	0.1	100	569
Luapula	16	21	37	12	13	0.5	0.0	100	394
Lusaka	11	10	36	14	27	1.6	0.8	100	702
Northern	22	18	40	9	9	1.2	0.3	100	526
N/western	28	16	33	11	11	0.8	-	100	237
Southern	18	19	42	11	9	0.4	0.0	100	514
Western	37	17	30	7	9	1.0	-	100	369

Chapter 8 Labour force

8.1 Coverage, Concepts and Definitions

One of the many ways through which structural adjustment programmes affect households is the change that occur in employment markets. Different socio economic groups in society respond differently to conditions put up by the Government during the structural adjustment program.

In the Priority survey, information on employment collected included: Type of economic activities of household members (employed, unemployed, full-time students, full-time housewives/member or retired/very old), occupation, industry, employment status/sector and income for those who were working. Changes in employment status and type of economic activities over time is one way of assessing the impact of adjustment. This information was collected with reference to economic activities in the 12 months period prior to the survey, current economic activities, secondary jobs/businesses and previous jobs.

This chapter only deals with total employment. One of the limitations of this survey is that data on employment in the informal sector cannot be easily disaggregated because of the way the data were collected.

The economically active (labour force)

The Labour Force or sometimes referred to as the economically active population relates to all persons of either sex who supply the available labour for the production of economic goods and services during the time period of investigation and within specified age limits. The Labour Force plays a crucial role in production and economic development. The qualities of the Labour force are believed to be the most significant cause of differences in the levels of wealth and economic progress of nations (John. D. Durand 1973).

The definitions of the economically active population used in the Priority Survey are briefly discussed below.

The employed/working population

A person was defined as working if he/she performed some work or business for pay, profit or family gain. Payment of wage/profit etc. may either be in cash, in the form of goods or services or in any combination of these. This includes all persons who had a job/business and would normally have worked for pay or profit or return in kind but who were:

- on leave
- were temporarily prevented from working by illness, bad weather, industrial dispute such as strike or lock-out, lack of business, lack of raw materials, lack of finance, machinery breakdown etc.
- Subsistence farmers
- Unpaid family workers

Income was recorded for all working persons except for unpaid family workers and those subsistence farmers who consumed all their produce.

Currently Active:

The currently active population has in the past been considered by Central Statistical Office to comprise all persons aged 12 years and above who were "employed" and "unemployed" during the last week i.e. the week preceeding the date of enumeration. However, the Priority Survey collected data for persons aged 7 years and above to determine the impact of Social Adjustment Programme on child labour.

Currently Employed:

A person was classified as currently employed if he/she did any work for pay or profit during the week preceeding the date of enumeration.
Students, employees on paid study leave in-service and on-the-job trainees who did some kind of work during the reference week were regarded as working.

Usually Active:

This comprises all persons aged 7 years and above whose main activity status during most of the last 12 months i.e. the year preceeding the date of enumeration were "employed" or "unemployed".

Usually Employed:

A person was classified as usually employed if he/she did any work for pay or profit most of the time during the last 12 months.

Currently unemployed:

These comprised all persons aged 7 years and above who during the last week were:

- "without work" i.e. were not in employment and were:
- "available for work" i.e. during the reference period; and either:
- "seeking work" or looking for work or :
- "not seeking work" but available for work. These are persons who did not look for work in the reference period i.e. last week because of;
  - belief that work was not available;
  - lack of knowledge about where to find work;
  - temporary illness;
  - other similar reasons not in conflict with current availability.

Usually unemployed:

Those who in "most of last 12 months" had experienced the conditions mentioned for currently unemployed. The conditions to determine someone as being "usually unemployed" is the same as that of "currently unemployed". The difference lies only in the reference period. For currently unemployed the reference period is "the last week" while for usually unemployed the reference period is "most of last 12 months".

Employment status:

- Employers: These are persons who while working in their own business also employ other people to assist them and pay them wages or salaries in cash or in kind.
- Paid Employees: These are persons who work for others for wage or salary which may be paid to them in cash or kind or partly in cash and partly in kind. These were classified as Government, parastatal and private sector employees.

Parastatal sector refers to the quasi-government sector. These are firms with Government participation either as a minority or majority shareholder. They may be partially owned or controlled by government.

- Self-employed or Own Account Workers: These are persons who run their own business, workshop,farms etc, and do not employ others in their enterprises for wages/salaries. Ordinarily, such persons will have their own place of business and determine their own hours of work. They may use unpaid family workers.
- Unpaid family Workers: These are persons who normally assist in the family farm, business or enterprise but do not receive any pay or profit for the work performed.

Occupation means the type of work done by a person.

Industry refers to the type of activity, that is, the type of product/service rendered at the place of work.

Earnings and profit:

The concept of wage earnings, as applied in wage statistics relates to remuneration before tax and other deductions for the time worked accruing to the household or done together with remuneration for time not worked such as for annual vacation, other paid leave or holidays. Wage earnings exclude - employer's contributions in respect of the employees paid social security and schemes and also the benefits received by employees under these schemes. Earnings also exclude termination pay, remuneration in kind and income from other sources such as profits, bank interest, etc.

Profit means the amount of money earned by a person from his business after deduction of business expenses.

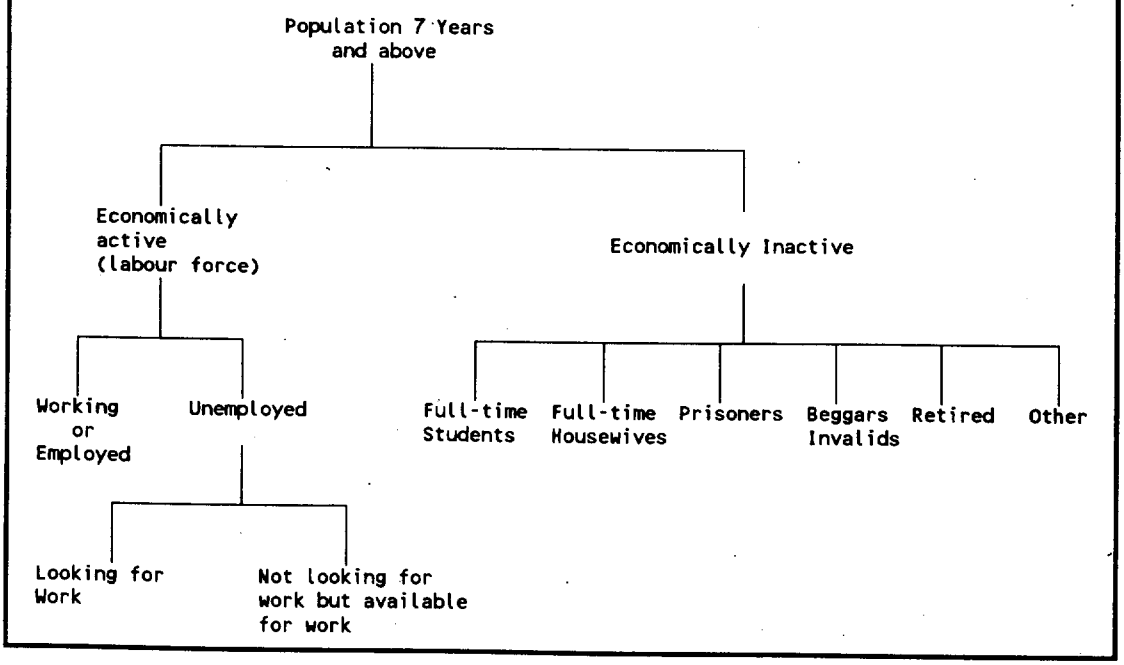
Not economically active population:

Population not economically active comprises all persons aged 7 and above of either sex who were neither employed nor unemployed during the reference period.

The inactive population include full-time students, full-time housewives, prisoners, beggars or vagrants, people who are retired and receive retirement benefits without engaging themselves in any job/business, the permanently disabled or invalids who due to their disability are unable to work and are not available for work, etc. Any other persons who are not working, not looking for work and not available for work are part of the inactive population.

The diagram below summarises the categories of the population aged 7 years and over as defined above.

Figure 8.1: Diagrammatic presentation of economic activity



8.2 Dimensions of the Labour Force

Size and Growth of the Labour Force

The Labour force participation (activity) rate is used to measure the relative size of the economically active population. The Crude labour force participation rate is the percentage of the total population that is in the labour force, while the Refined labour force participation rate is the percentage of the population aged 7 years and above that is in the labour force. Only the refined labour force participation rate is commented upon in this chapter.

Using the refined labour force participation rate, out of the total population aged 7 years and above of 6.2 million, 52 percent were currently economically active and 43 percent were inactive. The remaining 5 percent comprise the not stated cases (see tables 8.1, 8.2 and 8.3).

The age of entry into the Labour force of 7 years was chosen in order to assess the extent of child labour which could be rampant as a result of the negative effects of the structural adjustment programmes (see tables 8.3, 8.4, 8.5 and 8.6)

The usual refined labour force participation rates are higher for both males and females and in both urban and rural areas as compared to the current labour force participation rates (Table 8.6). This is as expected since usual activity refers to a longer reference period.

Table 8.1: Percentage distribution of population aged 7 years and above by age, residence and sex, 1991

	POPULATION AGED 7 YEARS AND ABOVE								
	TOTAL			RURAL			URBAN		
AGE GROUP	BOTH	MALE	FEMALE	BOTH	MALE	FEMALE	BOTH	MALE	FEMALE
Total Population	6162752	3040763	3121989	3297301	1609312	1687989	2865451	1431451	1434000
Total	100	100	100	100	100	100	100	100	100
7-11	19	19	19	20	20	19	19	19	19
12-19	24	24	24	23	24	22	25	24	27
20-24	12	11	13	11	10	11	13	12	15
25-29	10	9	10	9	8	10	10	10	11
30-34	7	8	8	7	7	7	8	8	8
35-39	6	6	6	6	6	5	7	7	6
40-44	5	4	5	4	4	5	5	5	4
45-49	4	4	4	4	4	5	4	5	3
50-54	3	3	3	4	4	4	2	3	2
55-59	2	3	2	3	3	3	1	2	1
60-64	2	2	1	3	3	2	1	1	1
65+	3	3	2	4	5	3	1	1	1
NOT STATED	3	3	3	3	3	3	3	3	3

Table 8.2: Percentage distribution of the current labour force by age, sex and residence, 1991

	LABOUR FORCE (AGED 7 YEARS AND ABOVE)								
	TOTAL			RURAL			URBAN		
AGE GROUP	BOTH	MALE	FEMALE	BOTH	MALE	FEMALE	BOTH	MALE	FEMALE
Total Labour force	3214986	1737990	1476996	2049758	1007116	1042642	1165228	730874	434354
Total	100	100	100	100	100	100	100	100	100
7-11	6	5	8	8	7	8	5	4	6
12-19	14	11	16	15	15	16	10	8	15
20-24	15	14	16	13	12	14	16	14	19
25-29	14	15	15	13	12	13	17	17	17
30-34	11	12	10	10	10	9	14	15	13
35-39	9	10	8	8	9	7	12	13	10
40-44	7	7	7	6	6	7	8	9	7
45-49	6	7	6	6	6	6	7	8	4
50-54	5	5	5	6	6	6	4	5	2
55-59	4	4	3	4	5	4	2	3	1
60-64	3	3	2	3	4	2	1	2	1
65+	3	4	3	4	5	3	1	1	1
NOT STATED	3	3	4	3	3	3	3	2	3

Table 8.3: Percentage distribution of current economic activity of population aged 7 years and above by age and sex, 1991

AGE GROUP	TOTAL LABOUR FORCE BOTH	MALE	FEMALE	THE EMPLOYED BOTH	MALE	FEMALE	THE UNEMPLOYED BOTH	MALE	FEMALE
Total number of persons	3214986	1737990	1476996	2519703	1410076	1109627	695283	327914	367369
Total	100	100	100	100	100	100	100	100	100
7-11	6	5	8	4	3	4	18	18	17
12-19	14	11	16	10	8	12	27	30	25
20-24	15	14	16	13	12	15	18	18	18
25-29	14	15	15	15	15	15	11	9	12
30-34	11	12	10	13	14	11	6	5	7
35-39	9	10	8	11	12	9	4	4	5
40-44	7	7	7	8	8	8	3	3	3
45-49	6	7	6	7	8	7	3	3	3
50-54	5	5	5	6	6	6	3	3	3
55-59	4	4	3	4	4	4	1	2	1
60-64	3	3	2	3	4	2	1	1	0
65+	3	4	3	4	4	3	1	1	1
NOT STATED	3	3	4	2	2	3	5	5	5

Table 8.3: (Continued)

AGE GROUP	INACTIVE BOTH	MALE	FEMALE	NOT STATED BOTH	MALE	FEMALE
Total number of persons	2667867	1172994	1494873	279899	129779	150120
Total	100	100	100	100	100	100
7-11	33	37	30	33	36	31
12-19	36	41	32	31	33	30
20-24	9	8	10	10	10	10
25-29	5	3	7	6	5	6
30-34	3	1	5	3	2	4
35-39	2	1	3	5	3	7
40-44	2	1	2	1	1	2
45-49	1	1	2	3	4	3
50-54	1	1	1	1	1	1
55-59	1	1	1	1	0	1
60-64	1	1	1	1	1	1
65+	2	2	2	2	2	2
NOT STATED	3	4	3	3	3	3

Table 8.4 shows that of the male population aged 7 years and above, 57 percent were currently in Labour force whereas among the females aged 7 years and above 47 percent were currently active.
The refined labour force participation rates are higher in rural (62 percent) than in urban areas (41 percent).
Females have a significantly higher labour force participation rate in rural areas than in urban areas (62 percent as compared to 30 percent). This suggests more females rural areas could be engaged in agricultural activity.

A crude measure of the burden of those who produce no income upon the shoulders of income producers is given by the Economic dependency ratio (U.N. 1968). This is defined as the number of persons not in the labour force per 100 of the Labour force. From table 8.4 shows that the Economic dependency ratio for Zambia is 145.6 percent. Considering the labour force aged 12 years and above, the dependency ratio has risen from 143.7 percent in 1986 to 163.6 percent in 1991 (CSO, computed from the 1986 Labour force and 1991 Priority survey results).

In 1986, the total current labour force aged 12 years and above was 2.7 million as compared to about 3 million in 1991, giving an average exponential annual rate of growth of about 2.1 percent.

Table 8.4: Summary of Main Labour Force indicators based on Current Activity, 1991.

	Total			Rural			Urban		
	Both sexes	Male	Female	Both sexes	Male	female	Both sexes	Male	female
Total population (In thousands)	7896	3900	3996	3630	1814	1816	4266	2086	2180
Population 7 years and above (In thousands)	6162	3041	3121	3297	1609	1688	2865	1431	1434
Labour force (In thousands)	3215	1738	1477	2050	1007	1043	1165	731	434
Employment rate	78	81	75	86	86	86	66	75	50
Unemployment rate	22	19	25	14	14	14	34	25	50
Percent of population 7 years and above	78	78	78	91	89	93	67	69	66
Labour force as a percentage of the population 7 years and above	52	57	47	62	63	62	41	51	30
Economic dependency ratio	145.6	124.4	170.5	77.1	80.1	74.1	266.2	185.4	402.3

However the male labour force grew from 1.4 million in 1986 to 1.6 million in 1991, an annual avera rate of growth of about 2.7 percent, while that of females grew from 1.3 million to 1.4 million an annual growth rate of 1.5 percent (CSO, computed from the 1986 Labour force and 1991 Priority survey results).
This high growth of the labour force is against a background of reduced employment opportunities in the formal sector.

However the informal sector has tended to absorb some of this surplus labour supply but the number of unemployed has also risen tremendously over the years especially among the youth. The decline in the growth rate of the real gross domestic product over the period indicates that the economy is not expanding adequately to absorb the large numbers of the unemployed. This has led to high unemployment especially in urban areas because of rural to urban migration and redundancies /retrenchments due to the economic adjustment programme which have worsened the unemployment situation.

Age and sex, specific activity rates

The age and sex specific activity rates (Table 8.5) show that labour force participation rates are high from age 25 to 64 and declines thereafter. The male activity rates are higher than that of females at almost all age groups. The activity rates are lowest from age 7 to 11 for both males and females as most children at these ages are inactive. i.e are either in school or not available for work for other reasons.
However, the activity rates by age and sex also show a reasonable proportion of young children aged 7 to 11 in the labour force, that is 18 percent (17 percent among males and 18 percent among females).

The female labour force participation rates are lower at the main child bearing ages (from ages 12 to 40), than at ages 40 to 59.

The graph (see fig 8.2) depicts the peak and low ages of economic activity. The graphs show peak economic activity for males at ages 40 to 44 of 93 percent and for females at age group 50 to 54 of 78 percent. Marriage and maternal responsibilities for females could have contributed to pushing the age of maximum economic activity upwards (U.N. 1968).

However, in rural areas the female activity rates are higher than in urban areas because of agricultural activity at almost all age groups. (See Figures 8.3 and 8.4).

Table 8.5: Current Labour Force Participation Rates by Age, Sex and Residence. 1991

Age Group	Current Participation Rates								
	Total			Rural			Urban		
	Both	Male	Female	Both	Male	Female	Both	Male	Female
Total	52	57	47	62	62	61	40	51	30
7-11	18	17	18	24	23	26	10	10	9
12-19	29	28	30	41	38	44	16	16	17
20-24	62	68	58	78	78	77	48	57	39
25-29	75	87	64	84	89	80	65	84	47
30-34	78	92	64	88	94	83	69	91	46
35-39	79	92	65	87	90	83	72	93	48
40-44	82	93	72	89	93	86	75	94	52
45-49	80	90	70	85	89	81	75	91	47
50-54	85	91	78	90	92	88	75	90	47
55-59	79	87	69	85	90	80	63	80	38
60-64	76	84	65	82	89	72	57	69	32
65+	64	69	58	70	74	64	42	51	29

Table 8.6: Usual Labour Force Participation Rates by Age, Sex and Residence, 1991

Age Group	Usual Participation Rates								
	Total			Rural			Urban		
	Both	Male	Female	Both	Male	Female	Both	Male	Female
Total	53	59	47	64	64	63	41	53	29
7-11	17	16	18	26	24	28	7	7	7
12-19	28	25	32	41	35	47	15	14	16
20-24	66	74	59	81	83	78	52	66	41
25-29	76	94	60	84	95	76	67	93	43
30-34	80	97	63	89	97	82	71	96	45
35-39	80	95	64	90	95	84	71	95	44
40-44	84	97	73	93	96	91	74	98	46
45-49	82	93	70	86	92	81	76	94	46
50-54	87	96	77	91	97	87	78	95	45
55-59	84	91	74	91	95	87	65	83	38
60-64	84	93	71	89	97	80	65	82	29
65+	70	75	64	75	79	70	49	60	32

Figure 8.2 Current Activity Rates by age group and sex (Zambia)

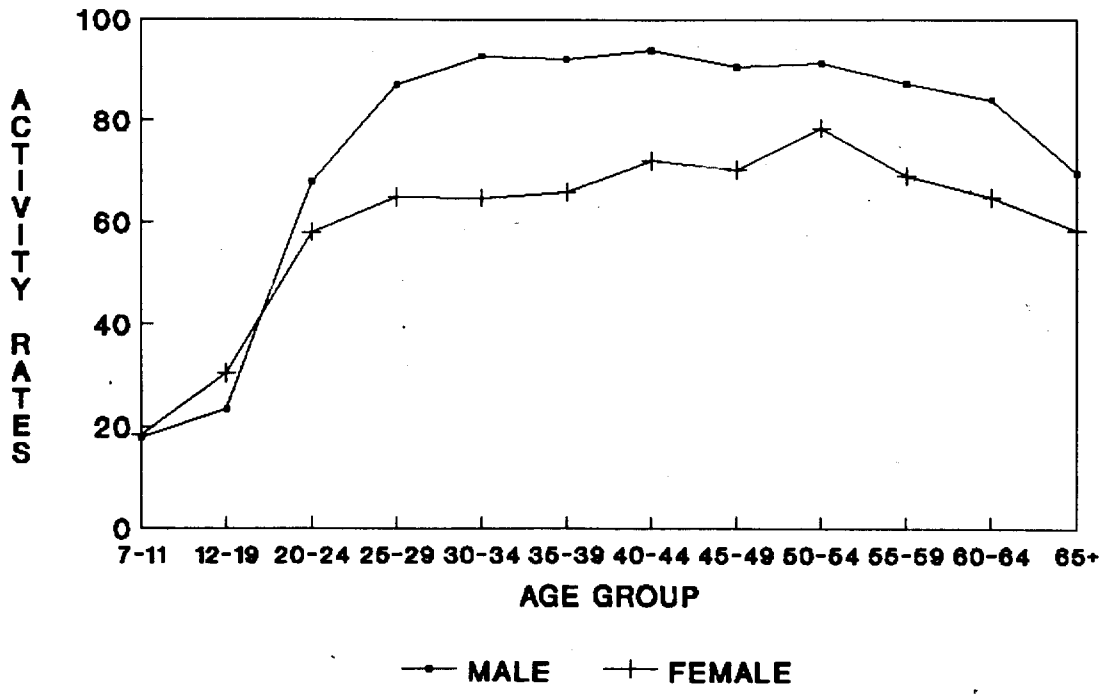


Figure 8.3 Current Activity Rates by sex (Rural areas only)

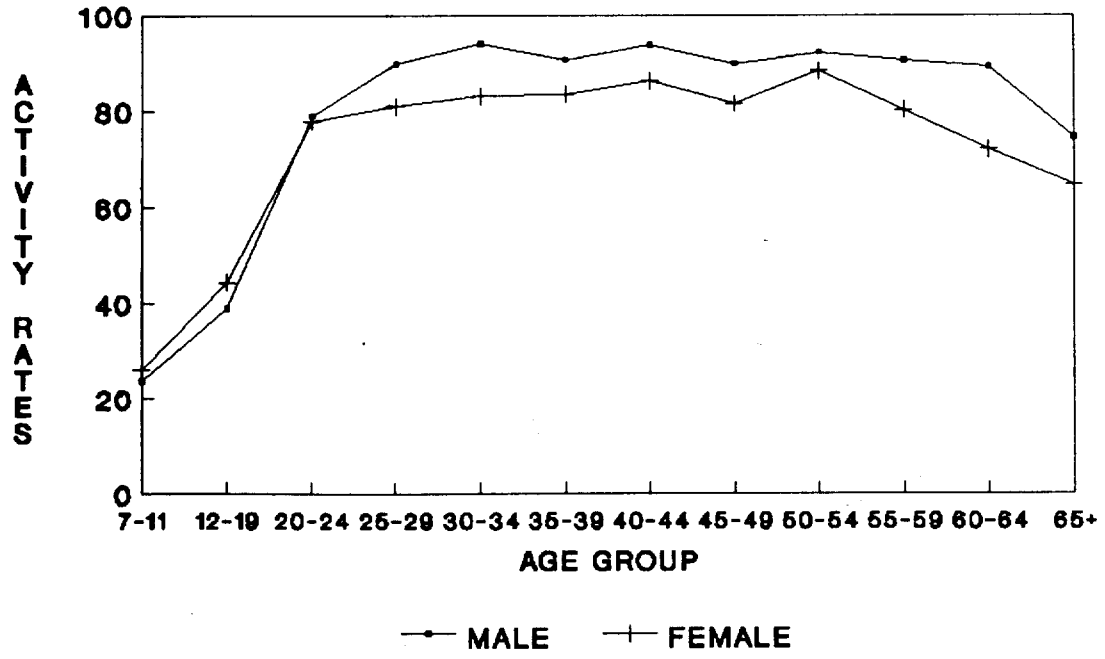
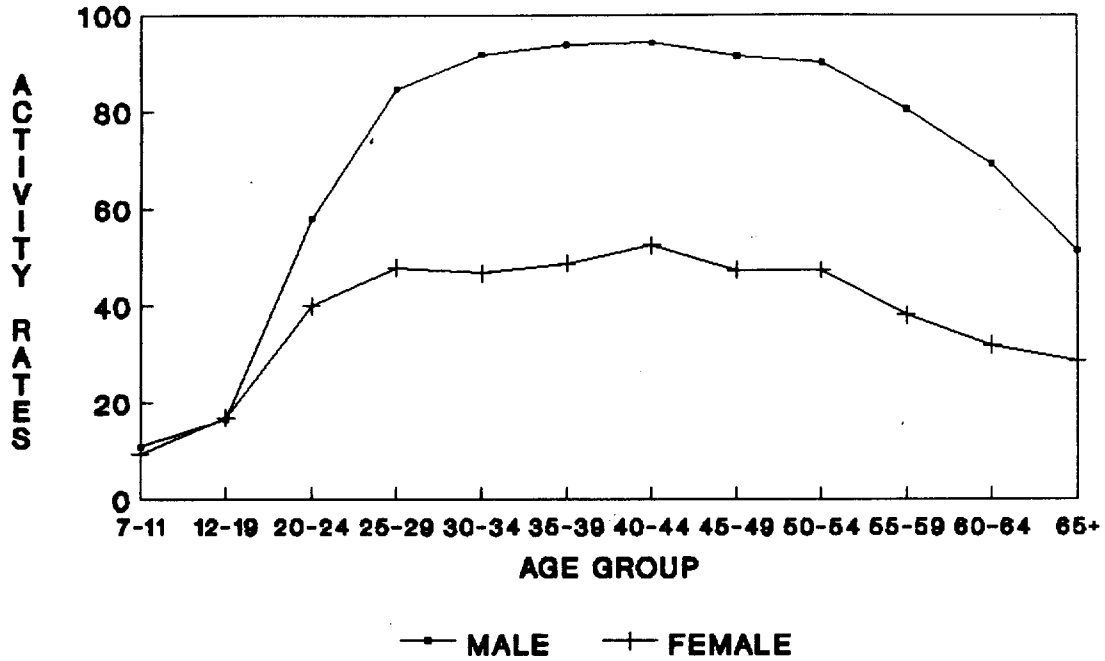


Figure 8.4 Current Activity Rates by sex (Urban areas only)



8.3 The currently employed labour force

The employment rate is the percentage of the labour force that are employed (see also Shrylock and Siegel, 1976). Out of a currently economically active population of 3.2 million, 78 percent were currently employed. Among these, 56 percent were males and 44 percent were females (see tables 8.3 and 8.4).

Out of the total rural labour force of about 2 million, 86 percent were currently employed. Among these, 49 percent were males and 51 percent were females. This contrasts sharply with urban areas where out of a total urban current labour force of 1.2 million, 66 percent were currently employed. Among these 72 percent were males and 28 percent were females.

Out of the total working population 4 percent are children aged 7 to 11 years old. There is also a substantial proportion of children aged 12 to 19 years (10 percent) among the employed labour force. Most of these children are engaged in agricultural and trade activities.
Most of the rural work force is employed in agriculture (see table 8.7). The significantly higher employment rates among females in rural areas than in urban areas (86 percent as compared to 50 percent from table 8.4), can be explained by the fact that subsistence and unpaid family work in farming communities is very high among females in rural areas.

The currently employed by industry

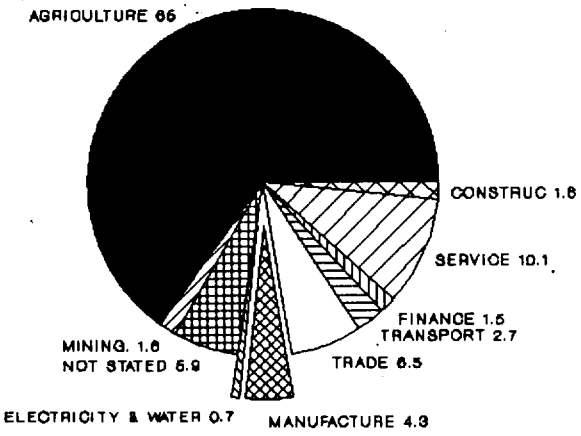
The percentage distribution of the employed labour force by industry shows that the majority of the work force i.e. 65 percent, are engaged in agricultural activity, followed by community, social and personal services (10 percent) and wholesale and retail trade (6 percent) (see Table 8.7).

Table 8.7: Percentage distribution of currently employed aged 7 years and above by industry, sex and residence, 1991

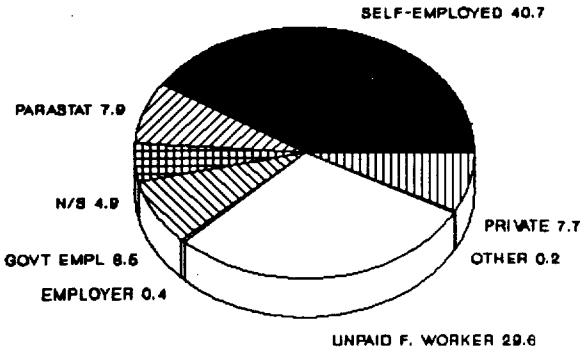
	Percentage Of Employees								
	Total			Rural			Urban		
Industry	Both	Male	Female	Both	Male	Female	Both	Male	Female
Total number of workers	2519703	1410076	1109627	1753823	862829	890994	765880	547247	218633
Total	100	100	100	100	100	100	100	100	100
Agriculture, forestry, and fisheries	65	57	76	89	87	90	11	9	15
Mining and quarrying	2	3	0	0	0	0	5	7	1
Manufacturing	4	6	3	1	1	1	12	13	9
Electricity, Gas, and water	1	1	0	0	1	-	1	2	1
Construction	2	3	0	1	1	0	4	5	1
Trade (Wholesale and Retail distribution)	7	6	7	2	2	2	17	13	25
Transport and Communications	3	5	1	0	1	0	8	11	2
Finance, Insurance and Real estate	2	2	1	0	0	0	5	5	6
Community, Social, and Personal services	10	13	7	3	4	2	26	26	28
Not Stated	6	6	6	4	3	4	11	10	14

Figure 8.5 Percent currently employed by industry, employment status and occupation

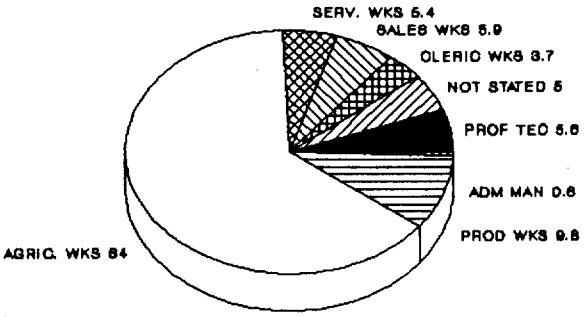
INDUSTRY



EMPLOYMENT STATUS



OCCUPATION



KEY OF OCCUPATIONS

SERV.WKS = Service workers
SALES.WKS = Sales workers
CLERIC.WKS = Clerical workers
PROF TEC = Professional and technical workers
ADM. MAN = Administration and managerial workers
PROD. WKS = Production and related workers

Table 8.7 shows that out of the total working male labour force 57 percent are in agricultural activities as compared to 76 percent of the total female working labour force, showing that agricultural activities are dominated by females.

In the urban areas only 11 percent of the total working population is engaged in agriculture as compared to 89 percent in rural areas. Community, social and personal service industry accounts for 26 percent of the employed population in the urban areas, followed by wholesale and retail trade which employs 17 percent. Among females this proportion is even higher at 25 percent.

The currently employed by occupation

Table 8.8 shows that 64 percent of the total working population are engaged in agricultural occupations, followed by 10 percent in production,transport equipment and related work. The table showing occupation by age-group (Table 8.9) indicates a substantial percentage of children engaged as sales and agricultural workers.

The currently employed by employment status

Analysis of working labour force by employment status (Table 8.10), shows that the largest percentage were self-employed workers (41 percent), unpaid family workers (30 percent) and then Government employees (9 percent).

Table 8.8: Percentage distribution of currently employed aged 7 years and above by occupation, sex and residence, 1991

Occupation	Percentage Of Current Employed								
	Total			Rural			Urban		
	Both	Male	Female	Both	Male	Female	Both	Male	Female
Total number of workers	2519703	1410076	1109627	1753823	862829	890994	765880	547247	218633
Total	100	100	100	100	100	100	100	100	100
Professional, Technical and Related workers	6	7	4	2	3	1	14	14	16
Administrative and managerial workers	1	1	0	0	0	0	2	2	1
Clerical and Related workers	4	4	4	0	0	0	12	9	17
Sales workers	6	5	7	2	1	2	16	12	26
Service workers	5	8	2	2	3	1	14	16	8
Agriculture, Animal husbandry, forestry, fisheries workers	64	55	75	89	86	91	8	6	13
Production and Related workers Transport equipment workers	10	16	3	3	4	1	26	33	9
Not stated	5	5	6	3	3	4	9	8	10

Table 8.9: Percentage distribution of currently employed aged 7 years and above by age, sex and occupation, 1991

Occupation	Total of currently employed			Total			Age group 7 - 11		
	Both	Male	Female	Both	Male	Female	Both	Male	Female
Total number currently employed	2519703	1410076	1109627	100	100	100	3.7	3.1	4.5
Professional, Technical and Related workers	142293	97685	44608	100	100	100	0.0	0.0	0.0
Administrative and Managerial workers	14074	12413	1661	100	100	100	0.0	0.0	0.0
Clerical and Related workers	93675	53973	39702	100	100	100	0.3	0.3	0.3
Sales workers	148388	75362	73026	100	100	100	2.0	1.2	2.8
Service workers	135212	113033	22179	100	100	100	1.2	0.3	5.9
Agriculture, forestry, fisheries workers	1612254	775739	836515	100	100	100	5.1	5.2	5.1
Production and Related workers	248158	216742	31416	100	100	100	0.8	0.4	3.8
Not stated	125649	65129	60520	100	100	100	3.2	2.5	3.9

Table 8.9: Percentage distribution of currently employed aged 7 years and above by age, sex and occupation (cont'd)

Occupation	12 - 19			20 - 29			30 - 59		
	Both	Male	Female	Both	Male	Female	Both	Male	Female
Total	9.9	7.9	12.4	28.2	26.9	29.9	48.9	52.2	44.8
Professional, Technical and Related workers	1.0	1.0	0.9	29.0	26.0	35.6	67.8	70.7	61.6
Administrative and managerial workers	0.0	0.0	0.0	6.8	6.1	11.5	86.3	86.5	85.3
Clerical and Related workers	1.7	0.9	2.7	33.7	29.4	39.5	63.2	68.1	56.6
Sales workers	3.9	3.7	4.2	34.7	36.8	32.5	54.6	53.6	55.6
Service workers	4.6	1.4	20.6	28.6	27.4	0.3	60.8	66.0	34.4
Agriculture, forestry and fisheries workers	13.3	12.3	14.3	26.9	25.4	28.4	42.5	42.6	42.4
Production and Related workers	0.3	1.9	5.4	30.9	29.7	0.4	61.3	0.6	46.4
Not stated	10.3	8.9	11.7	29.5	28.1	31.1	51.0	54.7	47.5

Table 8.9: Percentage distribution of currently employed aged 7 years and above by age, sex and occupation (Cont,d)

Occupation	60+			Not Stated		
	Both	Male	Female	Both	Male	Female
Total	6.8	7.8	5.6	2.4	2.1	2.8
Professional, Technical and related workers	1.4	1.9	0.5	0.7	0.4	1.3
Administrative and managerial workers	5.3	6.0	0.0	1.5	1.3	3.2
Clerical and Related workers	0.7	0.8	0.6	0.4	0.5	0.2
Sales workers	2.7	3.4	2.0	2.0	1.2	2.9
Service workers	2.9	3.5	0.0	1.9	1.4	4.6
Agriculture, forestry and fisheries workers	9.1	11.6	6.8	3.0	2.9	3.1
Production and Related workers	3.5	3.5	3.5	1.2	1.1	1.8
Not stated	4.1	4.2	4.1	1.8	1.6	2.0

Table 8.10: Percentage distribution of currently employed aged 7 years and above by employment status, sex and residence, 1991

Employment Status	Percent Employed								
	Total			Rural			Urban		
	Both	Male	Female	Both	Male	Female	Both	Male	Female
Total number currently employed	2519703	1410076	1109627	1753823	862829	890994	765880	547247	218633
Total	100	100	100	100	100	100	100	100	100
Self-Employed	41	44	37	49	60	37	23	18	35
Government Employee	9	11	5	2	4	1	23	23	22
Parastatal Employee	8	12	2	2	3	0	23	27	10
Private Sector Employee	8	11	4	2	4	1	20	22	15
Employer	0	0	1	1	0	1	0	0	0
Unpaid Family Worker	30	17	46	41	26	56	3	1	8
Other	0	0	0	0	0	0	1	1	1
Not Stated	5	5	6	4	3	4	8	7	10

Table 8.11: Percentage distribution of currently employed aged 7 years and above by employment status and industry, 1991

Industry	Employment Status								
	Total number currently employed	Self-employed	Government employee	Parastatal employee	Private sector employee	Employer	Unpaid family worker	Other	Not stated
Total number of currently employed	2519703	1025769	215116	198763	193548	10354	745342	6088	124723
Total	100	100	100	100	100	100	100	100	100
Agriculture	65	80	8	8	19	63	97	5	13
Mining	2	0	1	16	2	0	0	3	1
Manufacturing	4	4	4	15	14	8	0	4	2
Electricity, Gas and water	1	0	2	5	1	0	0	0	1
Construction	2	1	3	5	8	9	0	8	0
Wholesale and Retail trade	7	10	3	8	14	10	1	1	2
Land, water, air transport	3	1	4	18	9	3	0	3	0
Finance, Insurance..	2	1	3	7	5	1	0	2	1
Community, social and personal service	10	2	68	14	22	1	1	60	4
Not stated	6	2	5	4	6	6	1	16	76

Cross tabulating industry by employment status (Table 8.11) shows that 80 percent of the self-employed are engaged in agriculture and 10 percent are engaged in wholesale and retail trade. The majority (97 percent) of the unpaid family workers are also in the agricultural sector while 1 percent are in trading activities.

The currently employed by proportion having secondary jobs/businesses

The acquiring of secondary jobs has become very common among both paid employees and self-employed workers especially since late 1985, when inflation started rising at high levels and real wages started falling significantly with the onset of the foreign exchange auctioning system. This consequently could have led to workers supplementing their earnings from main jobs with secondary job/business earnings.

Out of the total working labour force, 9 percent reported to have secondary jobs/businesses in addition to their main jobs/businesses. This was more common among male workers (10 percent) than among female workers (8 percent). See Table 8.12.

Table 8.12: Percentage of workers with secondary jobs by Industry of main job and sex, 1991

INDUSTRY	SEX		
	Both	Male	Female
Total	9	10	8
Agriculture	10	12	8
Mining	2	2	0
Manufacturing	7	7	10
Electricity, Gas and water	27	28	0
Construction	8	8	6
Wholesale and Retail trade	8	8	8
Land, water, air Transport	7	8	2
Finance, Insurance..	4	5	4
Community, social and personal service	8	8	8
Not stated	7	6	9

Table 8.13: Percentage of workers with secondary jobs by occupation of main job and sex, 1991

OCCUPATION	SEX		
	Both	Male	Female
Total	9	10	8
Professional, Technical and Related workers	10	10	9
Administrative and managerial workers	7	7	10
Clerical and Related workers	2	3	1
Sales workers	7	7	7
Service workers	10	11	1
Agriculture, forestry, fisheries workers	10	12	8
Production and Related workers	9	9	14
Not stated	8	4	13

An analysis of those who had secondary jobs by industry of main job, table 8.12 shows that a substantial proportion of workers in the electricity and agriculture industries had secondary jobs/businesses, 27 percent and 10 percent respectively.

Analysis of those with secondary jobs by occupation reveals higher proportions among the agriculture workers, the professional technical and related workers, the service workers and the production workers, about 10 percent in each group. All these groups apart from the professional workers have lower average incomes than the rest (see table 8.19) from their main jobs. This might be a clear reason why they may have higher incidence of secondary jobs. While for professional workers, their easier access to the labour market may explain the relatively large proportion having secondary jobs.

Table 8.14: Percentage of workers with secondary job by employment status of main job and sex,1991

EMPLOYMENT STATUS	SEX		
	Both	Male	Female
Total	9	10	8
Self-Employed	14	10	9
Government Employee	9	9	7
Parastatal Employee	8	8	4
Private Sector Employee	6	7	4
Employer	7	11	4
Unpaid Family Worker	5	4	5
Other	2	2	0
Not Stated	6	4	8

Table 8.15: Percentage of workers with secondary jobs by earnings from main job and sex, 1991

EARNINGS FROM MAIN JOB	SEX		
	Both	Male	Female
Total	9	10	8
None	2	2	2
Less than 1000	14	14	13
1000-5000	11	10	11
5001-10000	9	10	7
10001-15000	7	8	4
15001-20000	6	4	13
20001++	7	8	5
Not stated	19	16	21

When analysing secondary jobs by employment status of main job, table 8.14, it can be noticed that the self-employed have the highest proportion (14 percent), followed by Government employees (9 Percent). Among the paid employees (i.e. Government, parastatal and private sector employees), the Government employees have the highest proportion of secondary job holders.

Table 8.15, showing secondary job holders by earnings from main job actually confirms the statement that the lower the earnings from main job the higher the proportion of the workers having secondary job. The highest proportion of secondary job holders were found among those who were earning below K1,000 a month (14 percent).

8.4 Earnings

Earnings of paid employees

Analysis of the current paid employees by earnings from main job (see tables 8.16 and 8.17), shows that the majority of paid employees (56 percent) earned between K1,000 and K5,000 per month. The overall average earnings for all paid employees was K7,677.

Earnings of paid employees by industry

From tables 8.16 and 8.17 one notices that the finance, insurance and real estate business employees seemed to have the biggest proportion (23 percent) of their workers' earnings in the higher income bracket of over K10,000 per month. These employees also had the highest average monthly earning of K16,145.

Table 8.16: Percentage distribution of earnings groups in Kwacha of paid employees by industry and sex, 1991

Industry		Total number of paid employees	Earnings Group (K)								
			Total	None	Less than 1000	1000 to 5000	5001 to 10000	10001 to 15000	15001 to 20000	20001 and over	Not stated
TOTAL	Both sexes	607427	100	0.4	3.5	55.5	23.7	5.0	1.4	2.8	7.6
	Male	485954	100	0.4	3.3	57.1	22.8	4.6	1.3	2.9	8.5
	Female	121473	100	0.5	4.5	49.3	27.2	7.0	1.7	2.1	7.7
Agriculture	Both sexes	70345	100	0.9	9.3	60.6	13.4	1.8	1.6	2.6	9.7
	Male	59856	100	0.2	9.1	63.3	13.1	1.8	1.8	3.1	7.7
	Female	10489	100	5.3	10.3	45.5	15.1	1.9	0.8	0.0	21.1
Mining	Both sexes	37412	100	0.0	4.5	44.3	18.4	1.3	0.3	1.6	0.3
	Male	35648	100	0.0	1.5	44.9	17.1	1.4	0.3	1.7	33.2
	Female	1764	100	0.0	0.0	33.7	44.3	0.0	0.0	0.0	22.0
Manufacturing	Both sexes	64616	100	0.3	1.5	61.5	20.6	3.4	2.3	3.2	7.2
	Male	55207	100	0.4	1.7	63.8	19.6	2.3	1.2	3.6	7.4
	Female	9409	100	0.0	0.0	47.7	26.8	9.7	9.0	0.8	5.9
Electricity	Both sexes	15348	100	0.0	1.6	37.0	50.7	4.7	1.6	2.0	2.4
	Male	14703	100	0.0	1.7	35.9	52.4	4.5	1.6	2.1	1.8
	Female	645	100	0.0	0.0	63.1	13.0	9.5	0.0	0.0	14.4
Construction	Both sexes	30560	100	1.6	4.8	64.8	19.2	1.9	0.9	1.5	5.3
	Male	29496	100	1.6	5.0	64.9	18.5	1.9	0.9	1.6	5.4
	Female	1064	100	0.0	0.0	59.1	37.6	0.0	0.0	0.0	3.3
Trade	Both sexes	50261	100	0.7	6.4	60.4	16.4	4.2	0.5	2.7	8.8
	Male	37109	100	0.9	5.5	60.4	18.3	5.1	0.4	3.2	6.3
	Female	13152	100	0.0	8.8	60.5	10.9	1.6	0.7	1.4	16.1
Transport	Both sexes	62066	100	0.0	1.4	50.6	33.7	5.7	1.6	2.4	4.5
	Male	57295	100	0.0	1.5	52.4	32.5	5.5	1.8	1.9	4.4
	Female	4771	100	0.0	0.0	29.4	48.7	7.9	0.0	8.4	5.5
Finance	Both sexes	30017	100	-	1.0	34.9	36.7	16.2	4.1	3.2	3.8
	Male	20698	100	-	1.2	34.2	34.6	16.8	4.9	3.7	4.6
	Female	9319	100	-	0.5	36.4	41.4	15.1	2.3	2.1	2.2
Service	Both sexes	216793	100	0.2	2.7	56.7	25.6	6.1	1.2	2.9	4.6
	Male	15893	100	0.2	2.4	59.1	24.2	5.2	1.1	3.2	4.5
	Female	64900	100	0.0	3.7	51.0	28.9	8.1	1.3	2.3	4.8
Not Stated	Both Sexes	30009	100	1.1	4.8	59.1	17.1	5.2	0.0	4.9	7.8
	Male	24049	100	1.4	2.8	60.6	15.7	6.1	0.0	5.2	8.1
	Female	5960	100	0.0	12.6	51.8	22.5	1.6	0.0	3.6	6.9

Table 8.17: Average monthly earnings in Kwacha of current paid employees by Industry and sex, 1991

** Number of paid employees by average monthly earnings

Industry	Both sexes		Male		Female	
	Number of paid employees	Average(K)	Number of paid employees	Average(K)	Number of paid employees	Average(K)
Total	561014	7677	448923	7684	112091	7651
Agricult-ure, forestry and fishing	63519	5697	55242	6057	8277	3294
Mining and quarrying	25199	10113	23823	10319	1376	6544
Manufactu-ring	59986	7257	51131	7360	8855	6664
Electricity,Gas and water	14983	10289	14431	10519	552	4278
Constructi-on	28934	5299	27905	5330	1029	4471
Trade (wholesale and retail distribution-n)	45815	6624	34780	6953	11035	5588
Transport and Communi-cations	59255	7995	54747	7207	4508	17558
Finance, Insurance and other business	28867	16145	19755	19072	9112	9801
Communit-y, social and personal services	206802	7151	145005	7163	61797	7123
Not stated	27654	8146	22104	6344	5550	15319

** Excluding income not stated cases.

The electricity industry had 51 percent of its paid employees earning between K5,000 and K10,000 per month, and the average was K10,289.

The agriculture industry has the largest proportion of its workers in the low wage groups, and their average wage was only K5,697 per month with males having a higher average of K6,057 as compared to females with only K3,294.

Earnings of paid employees by occupation

Administrative and managerial workers had the highest proportion (23 percent) of its paid employees in the high earning brackets of over K10,000 per month, with an average monthly earning of K16,697. Professional, technical and related workers had an average monthly earning of K10,044. Agricultural workers were among the lowest paid group with 79 percent of the workers earning K5,000 and below. Their average monthly earning was also low at K4,400 (see tables 8.18 and 8.19).

Table 8.18: Percentage distribution of Earnings groups in Kwacha of paid employees by occupation and sex, 1991

Occupation		Total number of paid employees	Earnings Group(K) Total	None	Less than 1000	1000 to 5000	5001 to 10000	10001 to 15000	15001 to 20000	20001 and over	Not stated
Total	Both sexes	607427	100	0.4	3.5	55.5	23.7	5.0	1.4	2.8	7.6
	Male	485954	100	0.4	3.3	57.1	22.8	4.6	1.3	2.9	8.5
	Female	121473	100	0.5	4.5	49.3	27.2	7.0	1.7	2.1	7.7
Professional, Technical and Related workers	Both sexes	123826	100	0.3	1.5	44.1	31.2	10.6	2.8	4.4	5.1
	Male	83870	100	0.4	1.7	42.8	29.5	11.3	2.4	6.1	5.8
	Female	39956	100	0.0	1.1	46.9	34.9	9.2	3.4	0.8	3.6
Administrative, and managerial workers	Both sexes	13021	100	0.0	3.3	29.5	37.8	11.3	4.2	7.2	6.7
	Male	11613	100	0.0	3.7	27.2	38.3	10.8	4.7	7.7	7.6
	Female	1408	100	0.0	0.0	47.9	34.1	14.8	0.0	3.1	0.0
Clerical and Related workers	Both sexes	86187	100	0.0	1.3	42.7	37.9	8.8	1.4	1.9	5.9
	Male	4982	100	0.4	1.6	44.8	36.1	8.3	1.8	1.9	5.5
	Female	37005	100	0.0	0.9	39.8	40.2	9.6	0.9	2.1	6.5
Sales workers	Both sexe	34401	100	0.9	2.7	54.2	23.2	3.2	3.6	5.3	6.8
	Male	26030	100	1.3	0.9	51.3	27.2	2.7	4.4	6.3	5.9
	Female	8371	100	0.0	8.4	63.5	10.7	4.6	0.9	2.4	9.5
Service workers	Both sexes	118270	100	0.1	5.6	65.9	16.7	2.8	0.9	2.2	5.6
	Male	101128	100	0.1	4.0	66.7	19.0	2.8	0.4	1.6	4.9
	Female	17142	100	0.0	15.1	61.8	4.3	2.5	1.5	5.7	9.2
Agriculture, forestry and fisheries workers	Both sexes	42138	100	2.1	13.4	63.3	7.6	0.3	0.0	1.6	11.7
	Male	36294	100	0.9	13.8	66.7	8.6	0.3	0.0	1.9	7.7
	Female	5844	100	9.5	10.3	41.9	1.7	0.0	0.0	0.0	36.6
Production and Related workers	Both sexes	171927	100	0.4	2.5	62.5	19.3	1.9	0.5	2.1	10.8
	Male	163707	100	0.4	2.4	62.5	19.4	1.9	0.5	2.1	10.9
	Female	8220	100	0.0	5.8	63.3	18.0	2.3	0.0	2.1	8.4
Not Stated	Both sexes	17657	100	0.6	2.7	63.9	19.0	3.3	0.0	1.3	9.3
	Male	14130	100	0.7	1.5	64.4	19.4	3.4	0.0	1.3	9.2
	Female	3527	100	0.0	7.8	61.6	17.4	2.7	0.0	1.3	9.2

Table 8.19: Average monthly earnings (in Kwacha) of paid employees by occupation and sex, 1991

** Number of paid employees by average monthly earnings (in Kwacha)

Occupation	Number of paid employees	Both sexes average(K)	Number of paid employees	Male average(K)	Number of paid employees	Female average(K)
Total	776092	7677	494904	7684	281188	7651
Professional, and Related workers	11110	11044	8738	13009	2372	7012
Administrative managerial and Related workers	792	16597	694	16705	98	15768
Clerical and Related workers	3756	8303	3017	7053	739	9981
Sales workers	97357	10037	43212	10572	54145	8306
Service workers	5477	5800	4257	5689	1220	6482
Agricultural, Animal husbandry and forestry workers and fishermen	584224	4400	387067	4711	197157	1585
Production and Related workers	60530	5993	41275	6049	19255	4923
Not stated	12846	11903	6644	17568	6202	5835

** Excluding earnings Not stated cases.

Earnings of paid employees by employment status

Analysis of paid employees by employment status and earnings group (Table 8.20 and Table 8.21) reveals that parastatal employees had the biggest proportion of their employees in the higher earning brackets of above K10,000, that is 37 percent as compared to 34 percent in the Government sector and 17 percent in the private sector.

Table 8.20: Percentage distribution of paid employees by employment status, sex and earning group (in Kwacha), 1991

Employment Status		Total number of paid employees	Monthly Earnings Group in Kwacha of paid employees: Total	None	Less Than 1000	1000 to 5000	5001 to 10000	10001 to 15000	15001 to 20000	20001 and over	Not stated
Total	Both	607427	100	0	4	56	24	5	1	3	8
	Male	485954	100	0	3	57	23	5	1	3	9
	Female	121473	100	1	5	49	27	7	2	2	8
Government	Both	215116	100	5	0	1	56	27	6	1	2
	Male	158017	100	5	0	1	58	26	6	1	3
	Female	57099	100	6	0	1	51	31	8	3	1
Parastatal	Both	198763	100	11	0	2	47	30	6	1	3
	Male	173442	100	10	0	2	48	30	5	1	3
	Female	25321	100	11	1	1	38	35	10	2	2
Private	Both	193548	100	7	1	8	64	13	3	1	4
	Male	154495	100	7	0	7	67	12	2	2	4
	Female	39053	100	8	1	12	54	18	4	0	4

Table 8.21: Average Monthly Earnings in Kwacha of current paid employees by employment status and sex, 1991

Employment Status	Both Sexes: Number of paid employees	Both Sexes: Average(K)	Male: Number of paid employees	Male: Average(K)	Female: Number of paid employees	Female: Average(K)
	** Average Monthly Earnings(in Kwacha)					
Total	561014	7677	448923	7684	112091	7651
Government Employee	203919	7337	150234	7174	53685	7793
Parastatal Employee	177199	9013	154641	9146	22558	8101
Private Sector employee	179896	6746	144048	6645	35848	7154

** Excluding earnings not stated cases

Parastatal employees also had the highest average monthly earnings (K9,013) followed by Government employees at (K7,337) and then the private sector with a monthly average earning of K6,746. The reason why the private sector have the lowest average monthly earnings is mainly because of the large numbers of labourers or general workers who get very low salaries and also the large numbers of small business which pay very low wages to their workers. This more than make up for the fact that salaries in some branches and occupations of the private sector are very high.

Earnings (average monthly profit) of employers and self-employed persons

Analysis of the earnings (average monthly profits) of employers and self-employed persons reveals that 19 percent earn between K1,000 and K5,000 per month. However, 39 percent of the females in those groups earn less than K1,000 per month. The overall average monthly profit of employers and self-employed workers was K5,610 (see Tables 8.22, 8.23, 8.24 and 8.25).

Table 8.22: Percentage distribution of Employers and Self-Employed by monthly earnings group (in Kwacha), occupation and sex, 1991

Occupation		Total number of workers	Monthly earnings (Profit) groups(in Kwacha) of Employers and self-employed								
			Total	None	Less than 1000	1000 to 5000	5001 to 10000	10001 to 15000	15001 to 20000	20001 and over	Not stated
Total	Both	1036123	100	5.9	38.2	19.2	5.3	1.9	1.2	3.1	25.1
	Male	624666	100	4.1	39.4	22.3	6.4	2.1	1.4	3.5	20.8
	Female	411457	100	8.7	36.4	14.6	3.6	1.5	0.9	2.5	31.7
Professional, Technical and Related workers	Both	12055	100	1.3	18.9	38.3	23.8	2.7	3.0	4.1	7.8
	Male	9446	100	1.7	22.2	32.2	26.7	2.1	2.3	5.3	7.5
	Female	2609	100	0.0	7.1	60.4	13.3	4.6	5.6	0.0	9.1
Administrative and managerial workers	Both	792	100	0.0	0.0	0.0	52.5	0.0	17.0	30.4	0.0
	Male	694	100	0.0	0.0	0.0	45.8	0.0	19.5	34.7	0.0
	Female	98	100	0.0	0.0	0.0	100	0.0	0.0	0.0	0.0
Clerical and Related workers	Both	4032	100	0.0	0.6	56.8	24.0	3.7	4.7	3.2	6.8
	Male	3293	100	0.0	0.0	55.2	26.7	0.0	5.8	3.9	8.4
	Female	739	100	0.0	3.5	63.9	12.3	20.3	0.0	0.0	0.0
Sales workers	Both	103289	100	0.3	8.2	41.5	16.9	7.8	4.9	14.7	5.7
	Male	46245	100	0.0	4.7	35.7	20.9	8.4	5.4	18.3	6.6
	Female	57044	100	0.5	10.9	46.2	13.7	7.2	4.4	11.9	5.1
Service workers	Both	6130	100	13.3	3.0	38.2	23.3	3.4	0.0	8.1	10.7
	Male	4440	100	9.2	4.2	40.9	27.7	4.7	0.0	9.2	4.1
	Female	1690	100	24.1	0.0	31.2	11.9	0.0	0.0	4.9	27.8
Agriculture, forestry and fisheries workers	Both	829134	100	7.3	44.7	13.7	2.3	0.8	0.6	1.1	29.5
	Male	507345	100	4.9	46.3	18.7	3.3	1.1	0.7	1.3	23.7
	Female	321789	100	10.9	42.1	5.8	0.9	0.3	0.4	0.8	38.7
Production and Related workers	Both	65722	100	0.7	15.4	42.3	17.5	6.0	2.7	7.6	7.9
	Male	45577	100	1.0	11.1	39.8	17.9	7.5	3.8	9.5	9.4
	Female	20145	100	0.0	25.1	47.9	16.3	2.8	0.4	3.1	4.4
Not Stated	Both	14969	100	0.0	28.8	37.6	5.9	0.9	3.0	9.5	14.2
	Male	7626	100	0.0	22.4	37.5	8.7	0.0	5.9	12.6	12.9
	Female	7343	100	0.0	35.5	37.6	3.0	2.0	0.0	6.3	15.5

Table 8.23: Average monthly profit(in Kwacha) of Employers and Self-Employed by occupation and sex, 1991

Occupation	** Average monthly profit of Employers and Self-Employed					
	Both Sexes		Male		Female	
	Number of workers	Average(K)	Number of workers	Average(K)	Number of workers	Average(K)
Total (N)	776092	5610	494904	6270	281188	4449
Professional, and Related workers	11110	7334	8738	7928	2372	5145
Administrative managerial and Related workers	792	29692	694	32694	98	8434
Clerical and Related workers	3756	13887	3017	15948	739	5472
Sales workers	97357	16573	43212	22763	54145	11633
Service workers	5477	9848	4257	11212	1220	5089
Agricultural, Animal husbandry and forestry workers and fishermen	584224	2968	387067	3277	197157	2361
Production and Related workers	60530	10614	41275	13233	19255	4999
Not Stated	12846	11903	6644	17568	6202	5835

** Excluding earnings Not stated cases

Table 8.24: Percent distribution of Employers and Self-Employed by monthly earnings (Profit), in Kwacha and sex, 1991

Employment Status	Total number of workers		Monthly earnings (Profit) groups in Kwacha of Employers and Self-employed								
			Total	None	Less than 1000	1000 to 5000	5001 to 10000	10001 to 15000	15001 to 20000	20001 and over	Not stated
Total	Both	1036123	100	5.9	38.2	19.2	5.3	1.9	1.2	3.1	25.1
	Male	624666	100	4.1	39.4	22.3	6.4	2.1	1.4	3.4	20.8
	Female	411457	100	8.7	36.4	14.6	3.6	1.5	1.0	2.5	31.7
Self-Employed	Both	1025769	100	5.9	38.5	19.3	5.3	1.9	1.2	3.1	24.8
	Male	620149	100	4.1	39.7	22.3	6.4	2.1	1.3	3.4	20.7
	Female	405620	100	8.7	36.8	14.7	3.7	1.5	1.0	2.5	30.9
Employer	Both	10354	100	10.0	2.7	13.2	7.3	2.3	2.8	5.4	56.2
	Male	4517	100	9.0	0.4	25.8	14.8	5.3	6.4	10.3	27.9
	Female	5837	100	10.8	4.4	3.5	1.6	0.0	0.0	1.6	78.2

Table 8.25: Average monthly profit of Employers, Self-Employed and Other workers (Unspecified) by sex, 1991

** Average monthly earnings in Kwacha

Employment Status	Both Sexes		Male		Female	
	Number of workers	Average(K)	Number of workers	Average(K)	Number of workers	Average(K)
Total (Employers and Self-Employed)	776092	5610	494904	6270	281188	4449
Self-Employed	771561	5526	491648	6135	279913	4456
Employer	4531	19955	3256	26673	1275	2799
Total (Other)	3985	4390	2813	4047	1172	5213
Other	3985	4390	2813	4047	1172	5213

** Excluding earnings not stated cases

8.5 The currently unemployed labour force

One of the most significant variables in a nation's economic and social framework of policies is unemployment. The aim of every government is to keep unemployment to the minimum possible levels. Given the way in which unemployment is measured and defined, however, a zero rate of unemployment is conceptually impossible (Herbert. S. Parnes, 1984). The Unemployment rate is the number of unemployed relative to the size of the labour force expressed as a percentage.

Unemployment in Zambia has risen from 13 percent in 1986 to 20 percent in 1991, considering those aged 12 years and above. When considering the labour force from age 7 years and over the 1991 unemployment rate is 22 percent.

The currently unemployed by age group, sex and residence (rural/urban)

In order to measure unemployment, the age-sex specific current unemployment rates are used. These are the percentage of unemployed of the current labour force in each age and sex group. These rates can also be area or residence specific (by rural/urban).

Table 8.26: Current unemployment rates by age, sex and residence, 1991

Current unemployment rates									
	Total			Rural			Urban		
Age group	Both	Male	Female	Both	Male	Female	Both	Male	Female
Total	22	19	25	14	14	15	34	25	50
7-11	57	58	56	46	46	47	87	88	84
12-19	44	47	40	29	35	23	82	72	83
20-24	27	26	29	13	16	10	50	47	62
25-29	16	12	22	9	8	10	26	16	43
30-34	11	7	16	6	3	8	17	11	30
35-39	10	7	16	7	4	9	15	9	27
40-44	9	7	10	4	3	5	15	11	23
45-49	9	7	12	7	4	9	13	10	22
50-54	11	10	13	10	9	10	14	11	26
55-59	8	8	9	6	6	7	15	14	20
60-64	5	5	5	4	5	4	11	10	16
65+	8	6	11	7	4	10	16	15	17

Figure 8.6 Current unemployment rates by age and sex (Total Zambia)

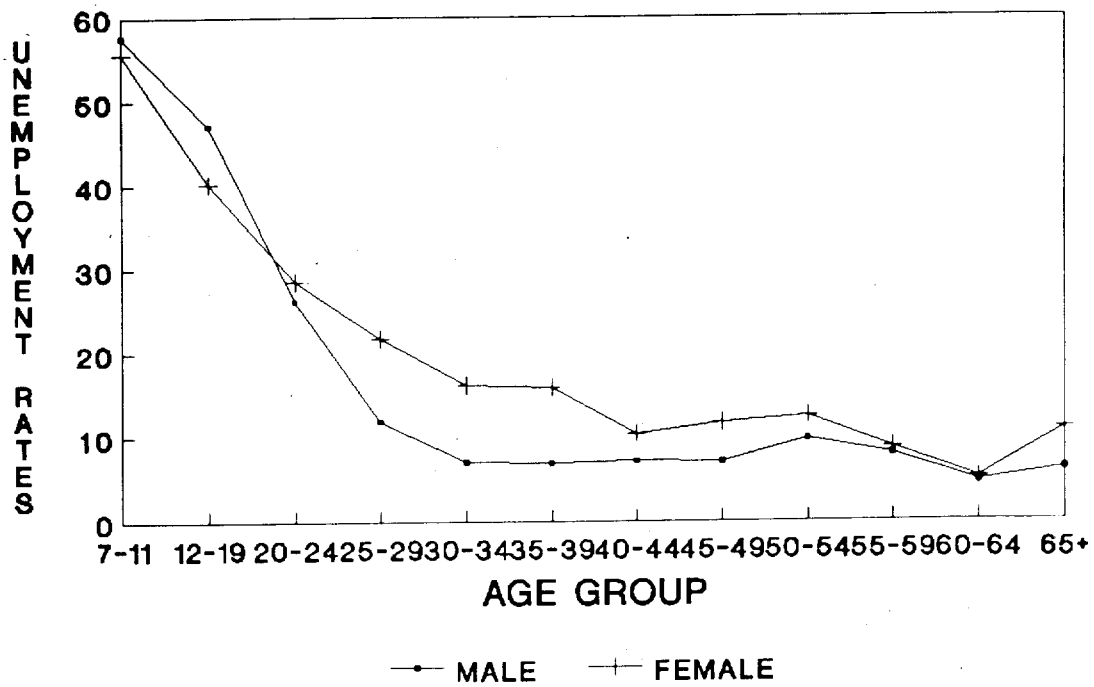


Figure 8.7 Current Unemployment Rates by age, Rural, Urban

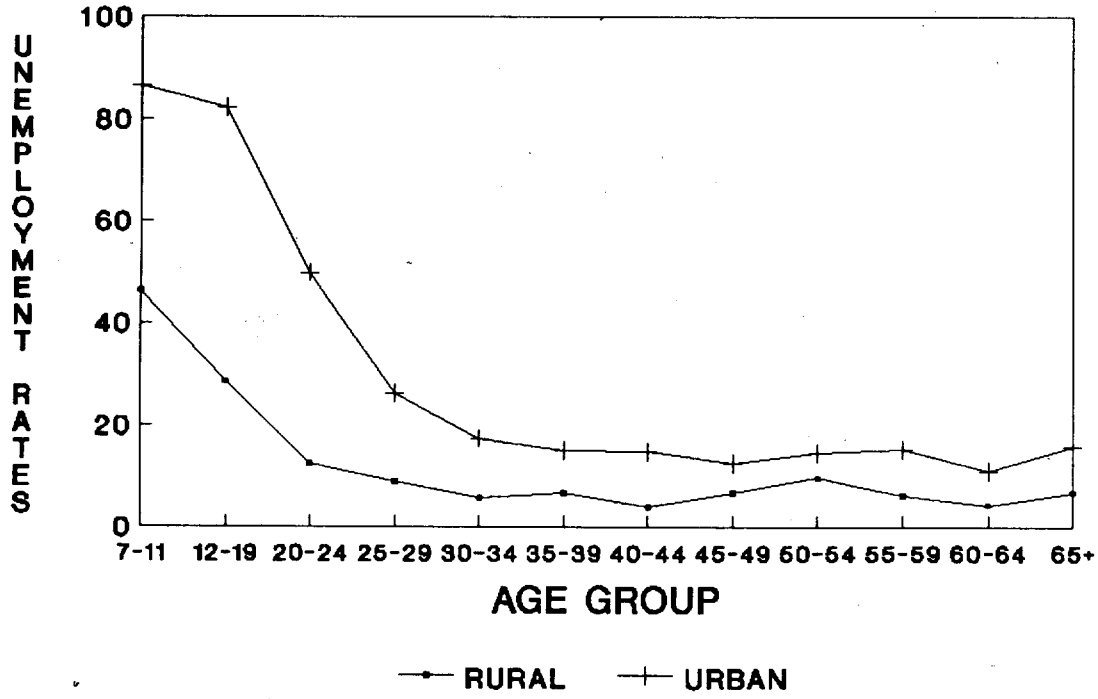


Figure 8.8 Current Unemployment Rates by age and sex (Rural areas)

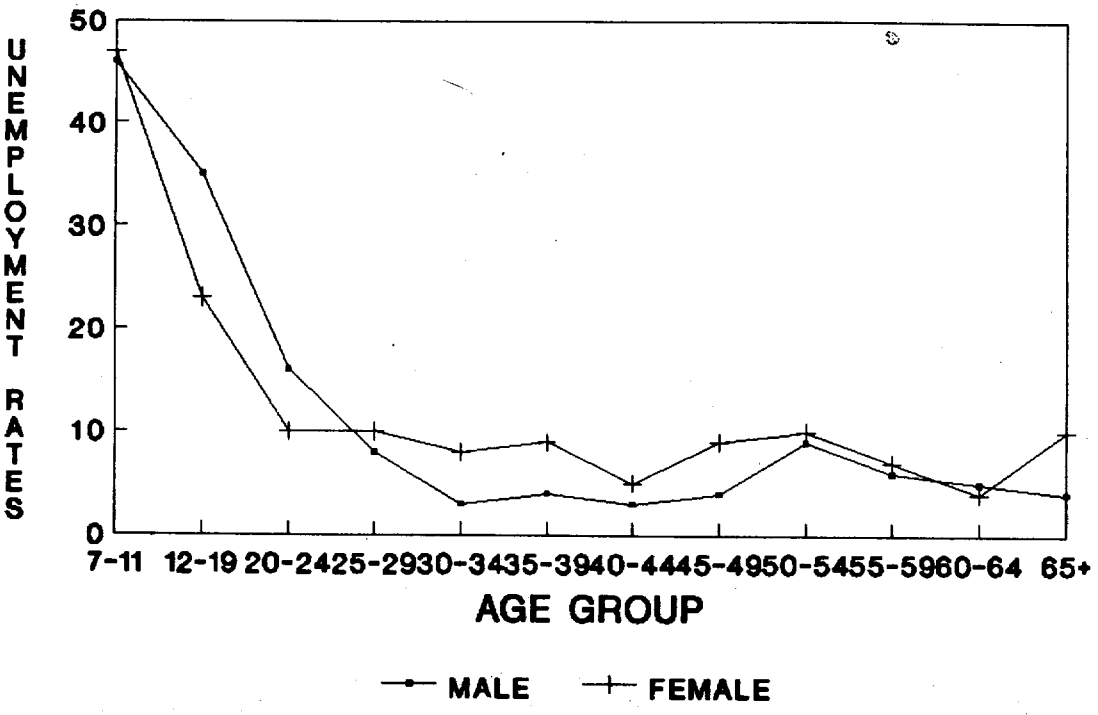
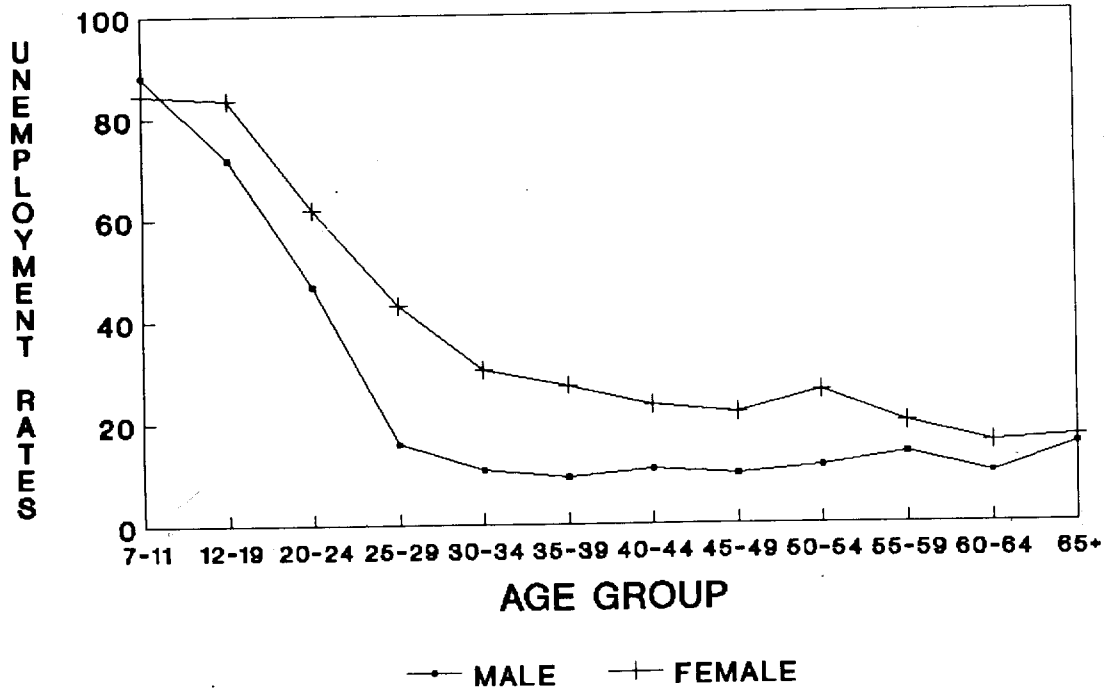


Figure 8.9 Current Unemployment Rates by age and sex (Urban areas)



Analysis of unemployment rates table 8.26 shows a total current unemployment rate of 22 percent. Females have a higher unemployment rate, 25 percent as compared to males who have an unemployment rate of 19 percent. Cultural and other social factors also contribute to this pattern.

The urban areas have much higher unemployment rates than in rural areas both among males and females (34 percent as compared to 14 percent respectively) in rural areas. The table also shows that 25 percent of the male labour force in urban areas are unemployed as compared to 14 percent in rural areas. Further, 50 percent of the female labour force in urban areas are unemployed, as compared to 15 percent in rural areas. This pattern may be explained mainly by rural-urban migration among the working age population (7 to 64 years old) in search of job opportunities in urban areas. Those job opportunities have, however, become very limited. Even though the informal non-agricultural sector in urban areas like street vending has tended to absorb a considerable number of the otherwise unemployed youths and women there is still a large number of unemployed in urban areas as compared to rural.

In rural areas the unemployment rate is much lower because most of the economically active population are engaged in agricultural activity where opportunities are abundant and easier to get than non-agricultural jobs/businesses in urban areas.

Table 8.26 shows very high unemployment rates in young age groups from ages 7 to 25, more so in urban areas (see Figures 8.6 to 8.9).

The currently unemployed by age, sex and educational level

Tables 8.27 and 8.28 show unemployment by educational level. From the tables, it can be seen that most of the unemployed (51 percent) have some primary education, while 19 percent of the unemployed reported that they had no education. A large numb[illegible] of the female unemployed (22 percent) had no education as compared to 15 percent of the [illegible]le counterparts. A very small proportion of those with university degrees reported to be unempl[illegible]ed.

Table 8.27: Percentage distribution of currently unemployed by sex and level of education completed, 1991

Totals	Total number of unemployed	Total	None	Grade 1-7	Grade 8-9	Grade 10-12	'A' Level	Degree	Not stated
Total	695283	100	19	51	12	12	0	0	6
Males	327914	100	15	53	11	13	0	0	6
Females	367369	100	22	49	12	12	0	0	5

Table 8.28: Percentage distribution of the currently unemployed by age and education level completed (Total), 1991

Age Group	Total number of unemployed	Total	None	Grade 1-7	Grade 8-9	Grade 10-12	'A' Level	Degree	Not stated
Total	695283	100	19.0	51.1	11.6	12.2	0.3	0.1	5.7
7-11	122022	100	34.5	47.5	0.0	0.0	0.0	0.0	18.0
12-19	191140	100	13.7	68.3	12.6	3.9	0.0	0.0	1.5
20-24	125668	100	7.0	43.3	23.9	23.4	0.3	0.0	2.0
25-29	74487	100	7.1	44.1	16.6	28.0	0.9	0.0	3.2
30-34	39459	100	11.5	48.7	6.7	26.7	1.6	0.2	4.6
35-39	30965	100	18.7	44.5	10.1	21.2	0.2	0.2	5.1
40-44	19465	100	29.3	39.4	7.7	16.6	0.4	0.0	6.5
45-49	18366	100	38.5	40.4	10.8	7.5	0.0	0.0	2.8
50-54	18417	100	41.9	36.9	2.7	5.0	0.7	0.0	12.8
55-59	9092	100	54.9	32.9	3.9	3.1	2.3	0.0	2.9
60-64	4412	100	48.0	42.7	0.0	0.0	0.0	0.0	9.2
65+	8184	100	6.7	31.9	1.6	0.0	0.0	0.0	0.0
Not stated	33606	100	19.0	51.1	11.6	12.2	0.3	0.0	5.8

From table 8.28 one can notice that the majority of the unemployed had grade 1 to 7 level of education and were in the young age groups 12 to 19 years of age. This is partly as a result of the high drop out rates at Grade 7 which throw most of the youths out of school and in search of jobs.

Table 8.29: Percentage distribution of currently unemployed who had a previous job by reason fo leaving last job, 1991

Reason for leaving last job		Total	Self-employed	Government employee	Parastatal employee	Private sector employee	Unpaid family worker	Other	Not stated
Total number of unemployed	Both	300675	32353	81672	73958	104334	282	4312	3764
	Male	257739	24079	72961	69086	86118	203	2732	2580
	Female	42936	8274	8711	4892	18216	79	1580	1184
Total	Both	100	100	100	100	100	100	100	100
	Male	100	100	100	100	100	100	100	100
	Female	100	100	100	100	100	100	100	100
Low/wage salary	Both	24.4	11.2	20.4	24.9	32.2	23.8	2.3	24.9
	Male	25.2	13.2	20.2	24.6	33.6	33.0	1.8	36.3
	Female	19.9	5.4	22.0	29.7	25.6	0.0	3.2	0.0
Lost job	Both	15.9	3.6	16.4	17.6	18.2	21.6	10.4	19.2
	Male	17.2	3.9	17.8	18.5	19.5	30.0	13.8	13.8
	Female	8.2	2.8	4.6	5.6	11.9	0.0	4.6	30.9
Enterprise closed	Both	10.9	17.7	2.6	10.1	15.8	0.0	18.9	11.0
	Male	11.1	18.6	2.6	10.3	16.8	0.0	19.3	5.4
	Female	10.2	15.0	2.4	8.2	10.8	0.0	18.1	23.2
Other	Both	48.4	67.5	60.6	47.3	33.8	54.6	68.4	20.0
	Male	46.3	64.3	59.4	46.7	30.0	36.9	65.0	21.9
	Female	60.9	76.8	70.9	56.5	51.7	100	74.1	15.9
Not stated	Both	0.3	0.0	0.0	0.0	0.0	0.0	0.0	24.9
	Male	0.2	0.0	0.0	0.0	0.0	0.0	0.0	22.6
	Female	0.8	0.0	0.0	0.0	0.0	0.0	0.0	29.9

The currently unemployed who had worked previously by reason for leaving last job

Table 8.29 shows the currently unemployed who ever worked by reason for leaving last job. Most of these had worked in private sector jobs (35 percent) followed by those who had worked in Government (27 percent). Low wage/salary (24 percent), followed by lost job (20 percent) constituted the major specified reasons for leaving. Among those who left Government employment, the major reason given was low wage/salary (20 percent) followed by lost job (16 percent). The results in the table indicate that low wage/salary and loss of job are the main reasons for leaving last employment.

However, among those who had worked as private sector employees and those who were self-employed in their last job, closure of enterprise constituted a substantial 16 and 18 percent respectively of the unemployed who gave it as the main reason for leaving last employment.

Chapter 9 Household income and assets

9.1 Coverage

Income has a central position in the analysis of social welfare and living conditions of households particularly during periods of structural adjustment. Consumption of goods and services is mainly determined by the sum of earned income, transfer payments received, remittances received and incomes from ownership of capital goods,etc. The amount of real income determines the purchasing power of an individual or household. Household income is a good indicator of households' welfare.

Household income was derived by summing up incomes from all sources accruing to household members aged 7 years and above in a given time period. The Priority Survey collected income data which included the following items:

- Income from job/business of last 12 months prior to the survey,
- income from current job/business
- income from any other sources such as current secondary jobs/businesses, pensions, interest on savings, remittances received, rent income, and any other sources.

The Priority Survey collected income data from own-account workers, government, parastatal, and private sector employees and Employers. The income collected was gross pay including regular allowances but before deductions, for persons in regular/formal employment. For persons running their own businesses or farmers, income recorded was that accruing to the household after deducting business expenses and investments. The Priority Survey did not collect data on own-produce consumed and imputed rent although it is very common for rural households to depend almost entirely on their own production of food items.

9.2 Distribution of household income

Table 9.1 and Figure 9.1 present data on households by place of residence and monthly income groups. The average monthly income for a Zambian household is K6,690. This is equivalent to $133.80 as of the ruling rate at the time of the survey. One third of the households have a monthly household income of less than K1,000, a little more than a third have between K1,000 and K5,000, about 16 percent had monthly income of K5,000 to K10,000, while about 15 percent of the households have a monthly income of more than K10,000. There is a wide disparity in the average monthly household income between the urban household with K10,738 and K3,634 for rural households. The data depicts that in rural Zambia most households were in the less than K1,000 per month income range, (49 percent) followed by the K1,000-K5,000 income range (36 percent). In urban Zambia most households were in the income group of K1,000 - K5,000 per month (37 percent) followed by the K5,000 - K10,000 per month income category (26 percent). More than 25 percent of the urban households have a monthly income of more than K10,000 per month as compared to 7 percent of rural households.

It can be deduced from these figures that urban households were much better off in monetary terms than the rural households. It should be recalled that own produce consumed was not collected in rural areas. This aspect may depict rural households to be much worse off than they really are.

Table 9.1: Percentage distribution of households by monthly income group and residence, 1991

Residence	Income Group (Kwacha) Less than 1000	1000-5000	5001-10000	10001-15000	15001-20000	20000 and above	Total	Mean income	* Number of households
Rural	49	36	8	3	1	3	100	3634	826882
Urban	10	37	26	11	5	11	100	10738	623977
All Zambia	33	36	16	6	3	6	100	6690	1450859

* Excludes Not stated cases

Figure 9.1 Percent distribution of households by monthly income groups and residence

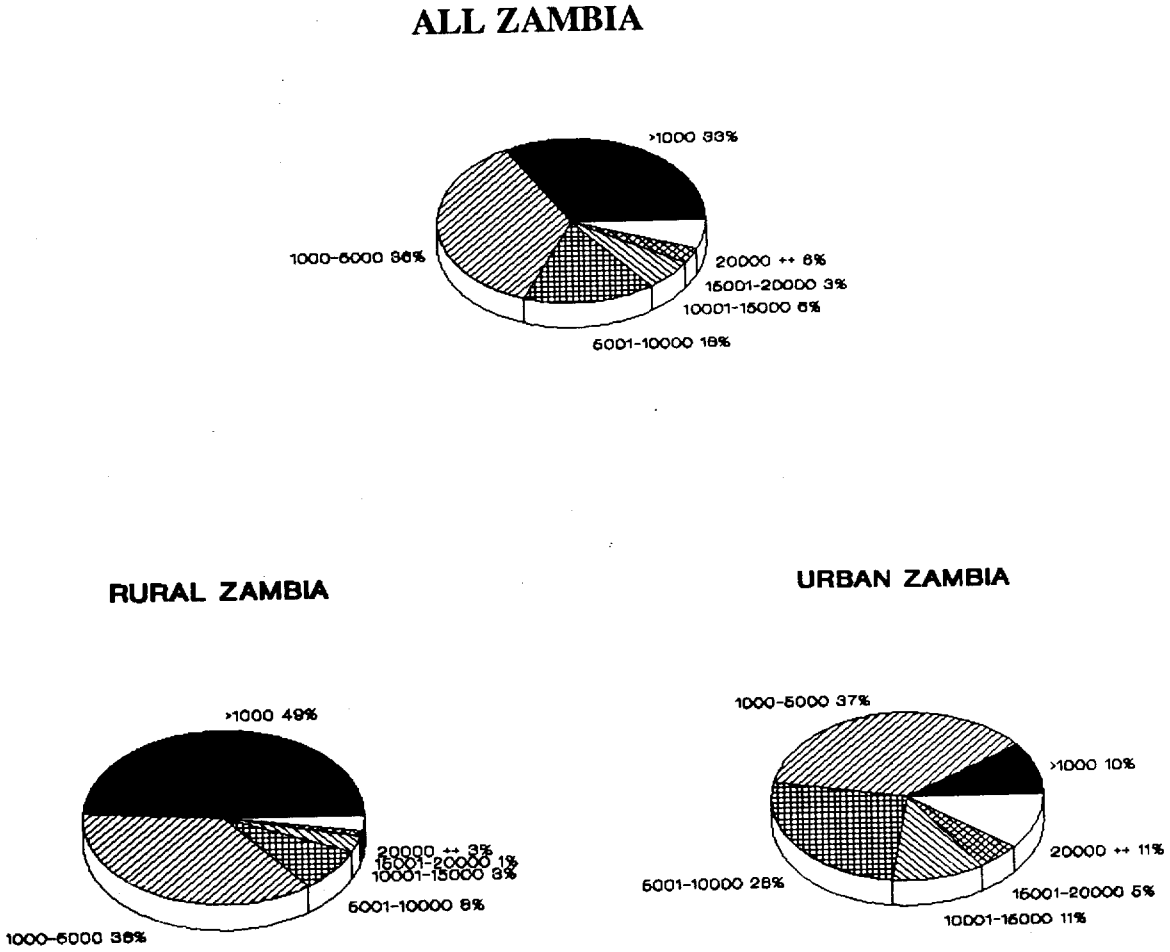


Table 9.2: Percentage distribution of households by monthly income group and Gender of head of household, 1991

Gender of head	Income Group (Kwacha) Less than 1000	1000-5000	5001-10000	10001-15000	15001-20000	20000 and above	Total	Mean income	* Number of households
Male head	27	39	17	7	3	7	100	7250	1163908
Female head	54	26	11	4	2	4	100	4417	286951
All Zambia	33	36	16	6	3	6	100	6690	1450859

* Excluding households whose incomes were not stated

Figure 9.2 Percentage distribution of households by monthly income groups and gender of head of household

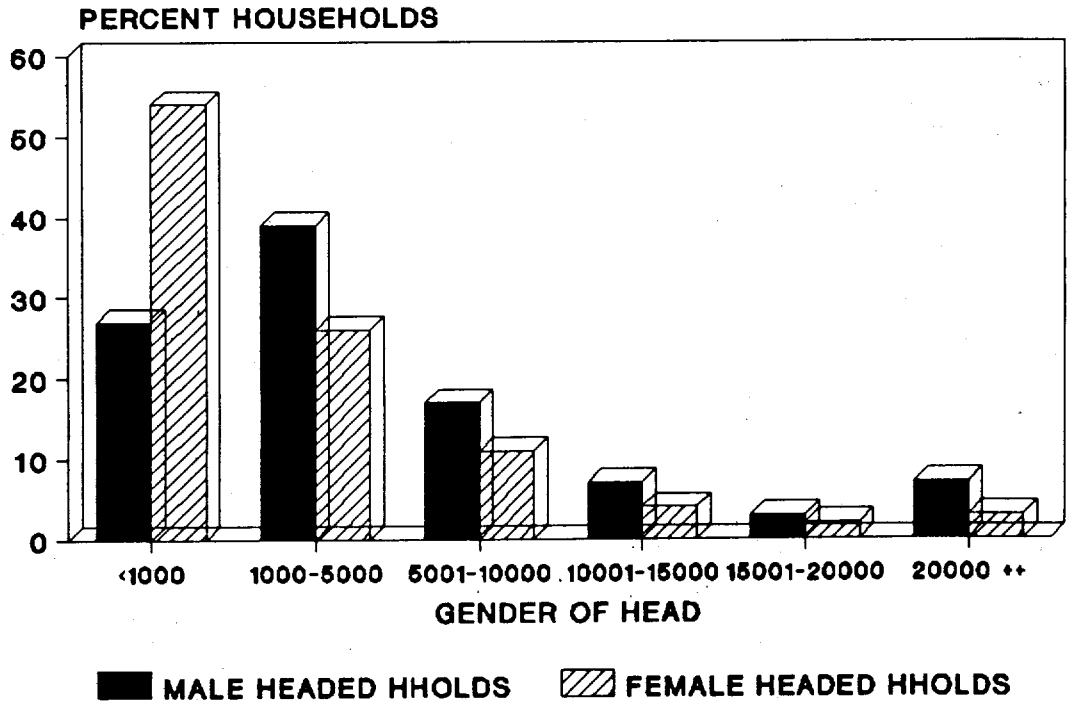


Table 9.2 and Figure 9.2 show that more than half of the female headed households were in the income range of less than K1,000 per month whereas only slightly over a quarter of male headed households were in the same income range. It can also be noticed that male-headed households have on the average a higher monthly income than female-headed households, K7,250 compared to K4,417.

Household income by province

Table 9.3 presents data on households by province, residence and monthly income groupings. The data in the table shows that the average monthly household income ranged between K14,500 in Lusaka province and K3,000 in Western province.

Almost 60 percent of the households in Western province had a monthly household income of less than K1,000. When examined in detail the data in table 9.3 show that in both rural and urban areas the four provinces along the old main line of rail (Central, Copperbelt, Lusaka and Southern provinces) had households with higher incomes than those not along the main line of rail (Eastern, Luapula, Northern, N/Western, and Western Provinces). The four provinces along the line of rail had more households in the highest income range of K20,001 and over than the other five provinces who are off the main line of rail.

Table 9.3 shows that among the rural areas, rural Copperbelt has the highest monthly average household income of about K12,300 followed by Lusaka rural with an average monthly household income of about K10,253. The rural areas in North Western province have an average of less than K1,800. Lusaka and Copperbelt provinces are the two provinces in Zambia where a lot of industrial and commercial activities take place and therefore generally have higher incomes than the other provinces.

Table 9.3: Percentage distribution of households by monthly income groups and Residence, 1991

Province and residence	Income Group (Kwacha) Less than 1000	1000-5000	5001-10000	10001-15000	15001-20000	20000 and above	Total	Mean income	* Number of households
Central	21	43	19	7	3	7	100	7071	122394
Rural	31	44	12	4	3	6	100	5871	73797
Urban	6	42	28	12	4	8	100	8894	48597
C/Belt	17	40	23	9	3	8	100	9216	220290
Rural	32	42	8	3	2	14	100	12307	14370
Urban	15	40	25	9	4	7	100	9000	205920
Eastern	50	33	9	3	1	4	100	3561	199829
Rural	56	31	6	2	1	3	100	2764	167622
Urban	15	44	20	9	5	7	100	7708	32207
Luapula	38	39	14	5	1	4	100	5076	156871
Rural	43	40	9	4	1	3	100	3588	113282
Urban	24	34	27	6	1	8	100	8943	43589
Lusaka	4	35	25	12	8	17	100	14535	211729
Rural	20	49	20	0	4	7	100	10253	29522
Urban	2	32	26	14	8	18	100	15229	182207
Northern	47	37	10	3	1	2	100	3374	187276
Rural	56	37	4	1	0	1	100	2152	154539
Urban	2	39	36	8	7	7	100	9142	32737
N/west	43	38	9	6	1	3	100	3371	78517
Rural	56	37	2	4	0	1	100	1764	58060
Urban	8	39	28	12	3	10	100	7934	20457
Southern	32	36	17	6	2	6	100	6581	141200
Rural	37	38	14	5	2	4	100	5163	103862
Urban	18	30	28	10	4	11	100	10528	37338
Western	58	27	8	3	2	3	100	3003	132753
Rural	65	25	5	1	1	3	100	2247	111828
Urban	15	39	24	14	3	4	100	7045	20925
All Zambia	33	36	16	6	3	6		6690	1450859

** Excluding households whose incomes were not stated*

9.3 Income distribution by socio-economic groups

Table 9.4 cross tabulates households monthly incomes by socio-economic groups. The socio economic groups are explained in detail in chapter 3 of this report. The table shows that rural small scale farming households were mostly in the income range of less than K1,000 per month (52 percent). These households also had a very low average monthly income amounting to about K2,900. Medium scale farming households were mostly in the K1,000-K5,000 per month income range (38 percent) with also a higher average monthly income of about K13,800. The large scale farming households were mostly in the highest income range of K20,000+ per month (61 percent).
The large scale farmers had an average household monthly income of more than three times that of medium scale and of more than sixteen times that of small scale farmers. Non-agricultural households were mostly in the K1,000-K5,000 per month income range (48 percent).

Table 9.4 shows that in the urban areas of Zambia the households in all the three socio-economic groups were mostly in the income range of K1,000-K5000 per month. Households living in low-cost areas have the lowest average income (about K9,500 per month) while those living in high-cost areas have the highest average household income (about K12,800 per month).

Table 9.4: Percentage distribution of households by income groups and Socio-economic groups, 1991

	Income Group (Kwacha)								
Socio-economic group	Less than 1000	1000-5000	5001-10000	10001-15000	15001-20000	20000 and above	Total	Mean income	* Number of households
Rural Areas									
Rural small scale farmers	52	34	7	3	1	3	100	2902	723396
Rural medium scale farmers	20	38	15	6	4	17	100	13848	24421
Rural large scale farmers	-	8	9	21	-	61	100	46930	1535
Rural non-agric hholds	33	48	12	1	2	4	100	6388	77530
Urban Areas									
Urban low cost	11	42	25	9	4	9	100	9579	345684
Urban medium cost	11	31	29	12	5	12	100	11901	190868
Urban high cost	8	31	25	13	9	15	100	12786	87425
All Zambia	33	36	16	6	3	6	100	6690	1450859

* Excluding the households which did not state their incomes

Income distribution by household size

Table 9.5 tabulates households by income groups and household size. As the household size increases, the mean income tends to increase too. This aspect could be attributed to the notion that larger households tend to have more income earners than smaller households. Further, the table shows that households of ten members or more had the highest average monthly household income of about K12,600. The same table shows a bigger proportion of households in the highest income range of K20,000 and above as the household size becomes larger.

Table 9.5: Percentage distribution of households by monthly income groupings and household size, 1991

	Income Group (Kwacha)							
Hhold size	Less than 1000	1000-5000	5001-10000	10001-15000	15001-20000	20000 and above	Mean income (Kwacha)	* Number of households
1-2	49	34	10	2	1	3	3594	247014
3-4	38	39	12	4	2	4	5302	394110
5-6	30	40	17	5	2	5	6110	343805
7-9	24	34	20	10	4	8	8716	322641
10+	15	31	21	12	5	16	12671	143289
All Zambia	33	36	16	6	3	6	6690	1450859

* Excluding households whose incomes were not stated

9.4 Household income disparity

In analysing an income distribution it is important to highlight inequalities arising in various population segments. The Lorenz curve provides a useful visual aid to show how uneven the income distribution is. The summary measure derived from this curve is called Gini coefficient. Both the Lorenz curves and Gini coefficients are used to measure how inequitably income is distributed across households.

LORENZ CURVE:

The data displayed in table 9.6 have been used to draw the Lorenz curves used to derive the Gini coefficient. In drawing the Lorenz curve, the cumulative percentage of households for each income group is plotted against the cumulative percentage income share received by that income group.

The 45° line represents a line of equal distribution. The further the curve is away from this line, the more uneven the income is distributed. If the curve is to coincide with this line, the households would have the same income.

From Figures 9.3, 9.4 and 9.5 it is apparent that there are glaring income inequalities in Zambia. This is more pronounced in Rural (Figure 9.4) than in urban areas (Figure 9.5).

GINI COEFFICIENT:

A summary measure of how uneven the incomes are spread is called the Gini Coefficient. This is defined as the ratio of the area between the line of equal distribution and the curve to the total area under the equality line.

The formula for the Gini Coefficient is:-

$$\text{GINI COEFFICIENT} = \frac{A}{A+b}$$

$$= 1-\Sigma_{i=1}^{n} (X_{i+1} - X_i) (Y_{i+1} + Y_i)$$

Where X_i = cumulative proportion of households up to and including income group i.

and Y_i = cumulative share of income up to and including income group i.

By definition $X_0 = Y_0=0$ and $X_{n+1} = Y_{n+1} = 1$

The Gini Coefficient ranges between zero and one inclusive; with a zero representing complete income equality, and a one representing complete income inequality (Green G, et al, 1992).

Using the above relationship, from the data in table 9.6, the Gini Coefficients are computed as 0.68 for Zambia. This supports the notion that income distributions in Zambia are highly unequal with large disparities between rural and urban areas of 0.72 and 0.57 respectively.

Basically due to heterogeneity in the case of urban areas, it is generally expected that the Gini coefficient for the urban would be higher than the one for the rural part. One of the overriding reasons for the above finding may be the inclusion of large scale farming households in the rural part covered in the survey, whose incomes were very high when compared to those of most of the other rural households. Invariably this has also affected the Gini coefficient computed for all Zambia.

Perhaps an analysis of large scale farming households might shed more light on this. Another reason for the very high Gini ratio in rural Zambia may be that data on 'own produce consumed', which forms part of 'income in kind' or imputed income and which has a high significant effect on the 'rural households' economy was not collected.

The Gini Coefficient shows that the income distribution in Zambia is highly skewed. It can be seen from table 9.6 that at national level almost 70 percent of households shared among themselves about 16 percent of total income. This contrasts sharply with about 10 percent of the households sharing amongst themselves over half of total income.

In rural Zambia about 49 percent of households with the lowest total incomes had a share of total rural income of only about 5 percent, while the 3 per cent with highest incomes had about 43 percent of total incomes. In urban Zambia the distribution of income is more evenly spread than in rural Zambia but still highly skewed. Table 9.6 shows that the lowest 48 percent of the households in the urban part of Zambia earned about 11 percent, while the highest 11 percent of households had about 51 percent of total urban incomes.

Figure 9.3 Lorenz Curve All Zambia

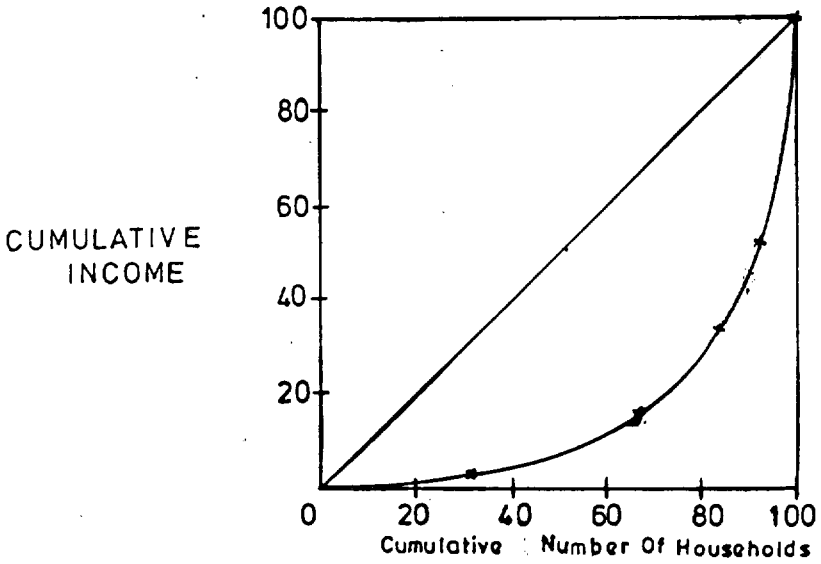


Figure 9.4 Lorenz Curve Rural Zambia

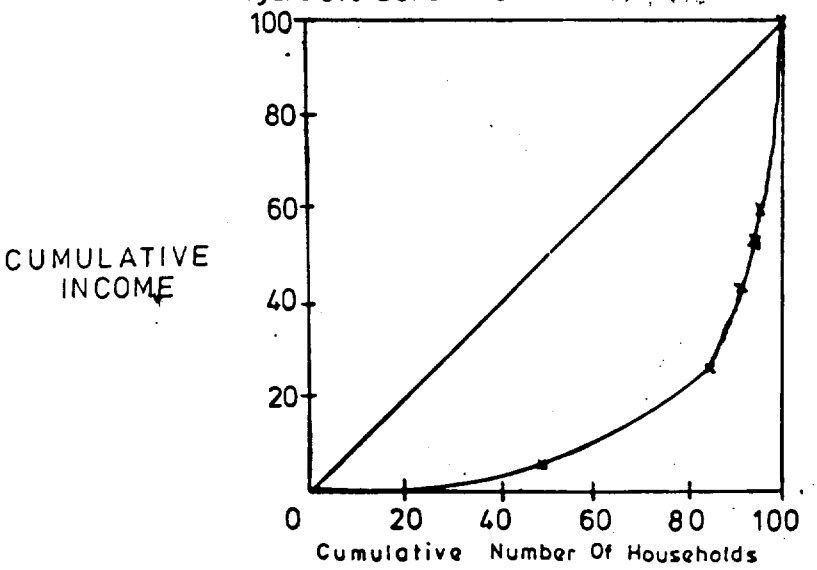


Figure 9.5 Lorenz Curve Urban Zambia

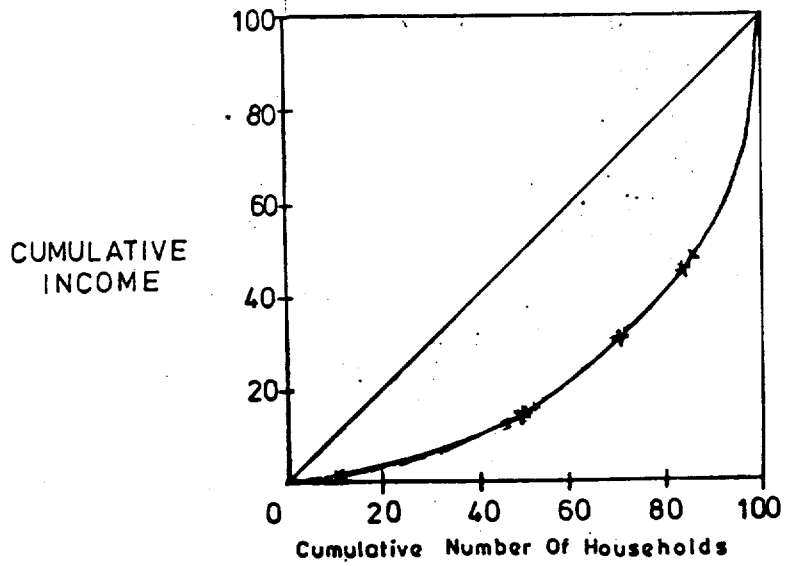
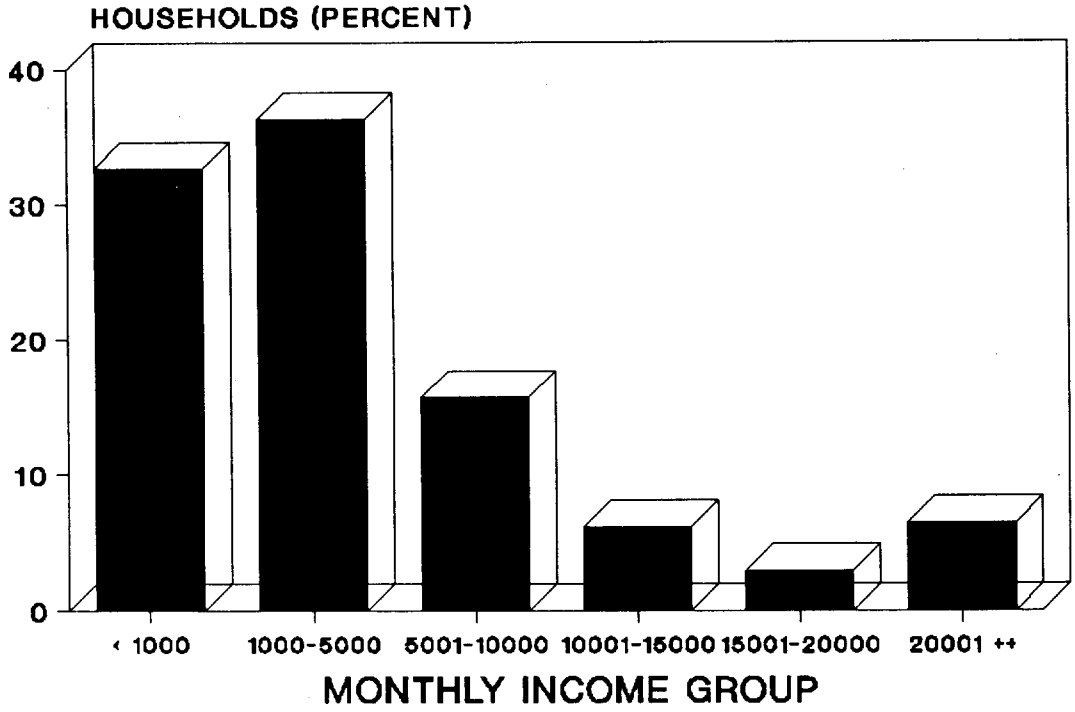


Table 9.6: Percentage distribution of households by income group for rural and urban, 1991

Income Group (Kwacha)	Percentage of Households	Percent Share of total household income	Cumulative percentage distribution of households	Cumulative percentage distribution of income
Less than 1000	32.6	1.6	32.6	1.6
1000-5000	36.3	14.6	68.9	16.2
5001-10000	15.7	16.9	84.6	33.1
10001-15000	6.1	11.2	90.7	44.3
15001-20000	2.9	7.2	93.6	51.5
20000 and above	6.4	48.5	100.0	100.0
All	100.0	100.0		
RURAL AREAS				
Less than 1000	49.3	4.5	49.3	4.5
1000-5000	35.8	22.4	85.1	26.9
5001-10000	7.9	15.8	93.0	42.7
10001-15000	2.7	8.7	95.7	51.4
15001-20000	1.1	5.2	96.8	56.6
20001 and above	3.2	43.4	100.0	100.0
All	100.0	100.0		
URBAN AREAS				
Less than 1000	10.5	0.3	10.5	0.3
1000-5000	37.0	11.1	47.5	11.4
5001-10000	26.1	17.4	73.6	28.8
10001-15000	10.7	12.2	84.3	41.0
15001-20000	5.0	8.2	89.3	49.2
20000 and above	10.7	50.8	100.0	100.0
All	100	100		

The analysis in table 9.4 is further graphed below to show how skewed the income distribution is in Zambia.

Figure 9.6 Percentage distribution of households by monthly income group all Zambia



9.5 Household assets

In the survey, households were asked whether or not they owned particular assets which were in a working condition as at the survey date. The proportion of households who said that they owned at least one of each type of asset are shown in table 9.7 below.

Table 9.7: Percentage of households by type of assets owned, rural and urban, 1991

Types of Assets	All Zambia	Rural	Urban
Total	100	100	100
Radio	39	23	61
Bicycle	18	22	12
Plough	12	17	4
Television	7	1	16
Fridge	7	1	16
Crop Sprayer	5	7	2
Car/van/truck	3	1	5
Fishing Boat	2	3	1
Hammer Mill	1	2	0
Handgrinding Mill	1	1	1
Tractor	0	0	0
Motorcycle	0	0	0
Total Number of households in '000's	1462	837	625

As can be seen from table 9.7, very few Zambians own cars, fishing boats, hammermills, handgrinding mills, tractors, and motorcycles. More households own radios (39 percent) than any other asset. More urban than rural households own radios (61 and 23 percent respectively). More households in rural areas own ploughs, crop sprayers and bicycles than those in urban. A small proportion of rural households own television sets and fridges as compared to urban.

Tables 9.8, 9.9 and 9.10 show the percent of households owning the different types of assets by Province, socio-economic groups and gender of head of household respectively. The data in table 9.8 shows that Lusaka and Copperbelt provinces have the highest proportion of households who own radios. The more urbanized provinces of Lusaka and Copperbelt have the least proportions of households who own bicycles than the more rural provinces with Eastern Province, which has the only bicycle plant in Zambia, having the highest proportion. Lusaka Province has the highest proportion of households who own TVs and fridges. Central and Southern provinces lead in ownership of crop sprayers. Southern province leads in the proportion of households with ploughs (43 percent) followed by Central (25 percent). Southern province also leads in the proportion of households who own hammer mills (10 percent) and handgrinding mills (2 percent). Luapula and North/western provinces lead in ownership of fishboats, 5 and 7 percent respectively. The rest of the assets are hardly owned by Zambians.

Table 9.8: Percentage distribution of households owning different types of Assets by Province, 1991

Types of Assets	All Zambia	Cent	C/belt	East	Luap	Lsk	North	N/west	Southern	West
Total	100	100	100	100	100	100	100	100	100	100
Radio	39	42	52	29	32	68	27	31	37	17
Bicycle	18	25	10	31	12	10	23	25	23	6
Plough	12	25	2	15	1	5	2	4	43	21
TV	7	6	10	3	2	24	2	4	4	3
Fridge	7	6	10	3	3	22	3	5	5	3
Crop Sprayer	5	14	2	8	1	3	2	2	16	2
Car/van/truck	3	3	3	1	1	9	1	2	3	1
Fishing boat	2	0	0	0	5	1	1	7	2	2
Hammer mill	1	1	0	0	0	1	0	0	10	0
Hand grinding mill	1	1	1	1	1	0	0	1	2	1
Tractor	0	1	0	0	0	1	0	1	1	0
Motorcycle	0	0	0	0	0	1	0	0	2	0
Number of households in '000'	1462	123	220	200	157	212	188	81	142	137

Table 9.9: Percentage distribution of households owning different types of assets by Socio-economic group, 1991

Types of Assets	Socio-economic group							
		Rural Areas				Urban Areas		
	All Zambia	Small scale farming h/holds	Medium scale farming h/holds	Large scale farming h/holds	Non-agric h/holds	Low cost areas	Medi-um cost areas	High cost areas
Total	100	100	100	100	100	100	100	100
Radio	39	21	47	81	26	52	73	70
Bicycle	18	22	47	58	10	12	12	16
Plough	12	17	56	95	6	3	5	6
TV	7	0	3	40	2	6	28	34
Fridge	7	21	93	40	3	6	26	37
Crop Sprayer	5	7	29	84	2	1	3	5
Car/van/truck	3	1	6	54	1	3	6	14
Fishing boat	2	2	2	18	5	0	1	1
Hammer mill	1	2	9	27	1	0	1	1
Hand grinding mill	1	1	3	41	0	0	1	2
Tractor	0	0	3	71	1	0	1	1
Motor-cycle	0	0	1	38	0	0	1	1
Number of household-ds in '000's	1462	123	220	200	157	212	188	81

When analysed by socio-economic groups the data in table 9.9 shows that in rural areas large scale farming households have the biggest proportion of those who own each of the assets. Notable is that 95 percent of large scale farming households own ploughs, 84 percent of them own crop sprayers, and 71 percent of them own tractors. In the urban areas households in the high cost areas have the highest proportion of those who own each of the asset except for radio where households in the medium cost areas have the highest proportion.

When analysed by gender of household head the data in table 9.10 shows that almost half of the male headed households own radios whereas less than one fifth of the female headed households own radios. The proportion of male headed households owning TVs and fridges almost equals that of female headed households. This could be explained by the fact that more urban than rural households own TVs and fridges, and that female headed households in urban areas have more access and capability to buy durable household goods than rural female headed households. The rest of the assets are owned more by male headed than by female headed households.

Table 9.10: Percentage distribution of households owning different types of assets by Gender of head of households, 1991

Types of Assets	All Zambia	Male Headed Household	Female Headed Household
Total	100	100	100
Radio	39	43	19
Bicycle	18	21	5
Plough	12	14	4
Television	7	8	5
Fridge	7	8	5
Crop sprayer	5	6	2
Car/van/truck	3	3	1
Fishing boat	2	2	0
Hammer mill	1	1	1
Handgrinding mill	1	1	0
Tractor	0	0	0
Motorcycle	0	1	0
Number of households in '000's	1462	837	625

Chapter 10 Household expenditure

10.1 Coverage

The survey collected data on household consumption expenditure on various items. In broader terms household consumption expenditure items collected in the survey were:

- Education expenses: These included school fees, uniforms, school contribution, private tuition, books and stationery expenditures during the past school year.
- Medical Expenses during the past three months were recorded on medicines, consultation and hospital fees.
- Housing expenses included rent, water, electricity, candle, paraffin, charcoal, firewood etc during the past month.
- Remittances in cash and in kind in the past month.
- Transport expenses included travelling to and from a work place and/or school.
- Food expenditure on maize meal during the past month and for various food items during the past two weeks.
- Clothing and footwear.

All the above consumption expenditure items were converted to a one month equivalent and aggregated to obtain a household monthly consumption expenditure. It should be noted that expenditure data on own produce consumed as well as imputed rent was not collected during the survey.

10.2 The overall consumption pattern

The results from the survey as shown in table 10.1 indicate that national monthly consumption expenditure per household averaged K5,042. This figure is further decomposed to K9,251 and K1,920 for urban and rural households respectively. These results suggest that on the average urban household consumption expenditure was over fourfold than that of a rural household. Since the consumption of own produce was not included, the overall household consumption pattern may in some cases be underestimated.

The household expenditure on the various items collected in the survey are shown in table 10.2 and summarised in Figure 10.1.

The bulk of the national consumption expenditure comprised food items which accounted for 58 percent. The urban households recorded much higher expenditure on food (60 percent) than the rural households which spent 54 percent. The results for the various categories of household consumption expenditure are summarised in the diagrams below.

Maize is Zambia's staple food and is grown throughout the country.
The proportion of expenditure on maize meal accounted for 12 percent of the total food expenditure at national level. In urban areas expenditure on maize meal as proportion of total food expenditure accounted for 8 percent as compared to 4 percent in rural areas.

In Kwacha terms, average monthly household expenditure on maize meal was K180 and K554 for

rural and urban households respectively. At national level this averaged K340 per household per month.

Urban households constituted 43 percent of the total households and accounted for 78 percent of the total monthly expenditure as against 57 percent rural households which took up 22 percent of the total monthly household expenditure.

Table 10.1: Average monthly household expenditure (kwacha), October 1991

		Average monthly expenditure (kwacha) on:						
Place of residence	Total	Food	Clothing	Transport	Remittances	Education	Medical care	Housing
Rural	1920	1037	307	173	115	58	19	211
Urban	9251	5551	648	555	370	276	93	1758
National	5042	2924	454	353	252	151	51	857

Rural households on the average spent K1,037 per month on food, followed by K307 (16 percent) on clothing and housing K211 as compared to K5,551 average monthly expenditure on food, housing K1,758 and clothing K648 for urban households.

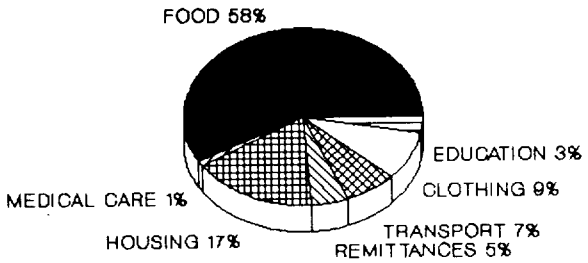
Housing data (which excluded imputed rent), indicated a different pattern of expenditure between rural and urban households. In rural households, expenditure on housing took up 11 percent of the total monthly expenditure, as against 19 percent in urban households. On the whole expenditure on housing averaged K211 and K1,758 for rural and urban households respectively per month (see table 10.2 and figure 10.1)

Table 10.2: Percentage share of household expenditure on different items. Rural and urban households: October, 1991

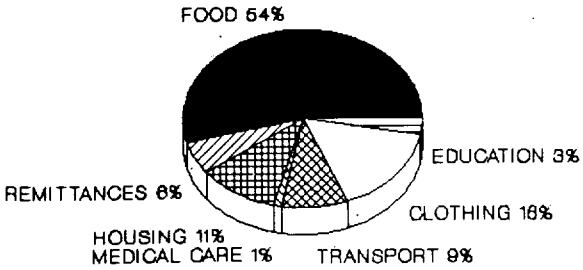
Item of expenditure	National	Rural	Urban
Food	58	54	60
Housing	17	11	19
Clothing	9	16	7
Transport	7	9	6
Remittances	5	6	4
Education	3	3	3
Medical care	1	1	1
Total	100	100	100

Figure 10.1 Percentage monthly household consumption expenditure National, Rural and Urban Oct, 1991

NATIONAL



RURAL



URBAN

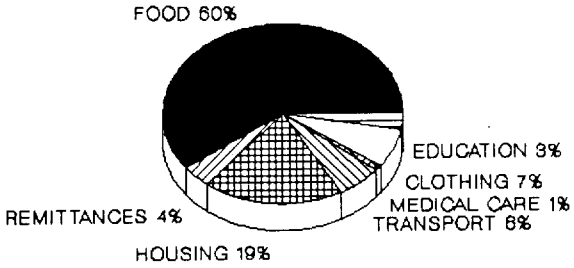


Table 10.3: Percentage share of household expenditure on different items by province, Rural and urban.

Province	Area	Expenditures on: Food	Housing	Clothing	Transport	Remittances	Education	Medical care	Total
Central	Rural	53	6	20	15	3	2	1	100
	Urban	65	11	9	4	6	2	2	100
Copperbelt	Rural	62	10	11	10	4	2	2	100
	Urban	65	16	7	6	3	2	1	100
Eastern	Rural	45	8	25	9	9	2	2	100
	Urban	56	16	11	6	8	2	2	100
Luapula	Rural	59	12	15	8	4	2	1	100
	Urban	62	13	14	3	3	3	1	100
Lusaka	Rural	62	12	7	10	2	5	1	100
	Urban	55	24	6	7	5	2	1	100
Northern	Rural	60	11	13	8	6	2	1	100
	Urban	66	11	8	7	5	2	1	100
North-Western	Rural	53	15	22	5	3	3	1	100
	Urban	58	17	9	5	7	3	0	100
Southern	Rural	42	15	14	11	10	6	2	100
	Urban	61	19	10	4	2	3	0	100
Western	Rural	54	11	16	9	6	3	1	100
	Urban	67	12	8	4	7	2	1	100
Total	Rural	54	11	16	9	6	3	3	100
	Urban	60	19	7	6	4	3	1	100

10.3 Expenditure on housing

At national level proportion of expenditure on rent was highest,(25 percent), followed by charcoal (14 percent) and paraffin (10 percent). The least expenditure went to firewood and candles.

The proportion of expenditure on housing indicated that urban households spent a higher proportion on rent (28 percent) as against 7 percent for rural households. Household proportional expenditure on paraffin was higher in rural (40 percent) than urban households (5 percent). Urban households spent slightly over two times more on charcoal as a source of fuel (15 percent) as against 7 percent for rural households.

The "other" category of housing expenditure was not specified at the time of the survey. This would probably include items such as maintenance, structures not finished but still in the construction process, etc. However, this category of housing expenditure would need further investigation.

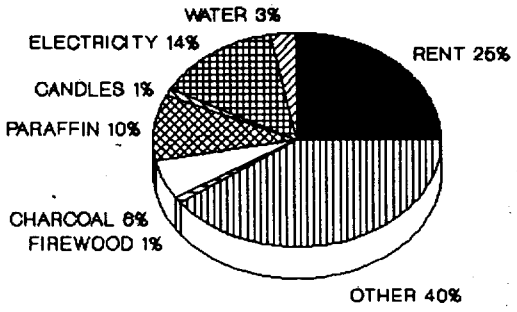
The data on household expenditure on the various items associated with housing are presented in table 10.4 and figure 10.2 below.

Table 10.4: Percentage household expenditure on housing by province, Rural and urban, 1991

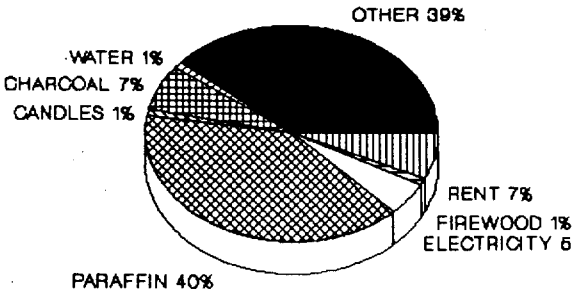
Province	Place of residence	Expenditures on: Rent	Water	Electricity	Candles	Paraffin	Charcoal	Firewood	Other	Total
Central	Rural	5	1	1	1	45	3	2	43	100
	Urban	21	4	2	1	10	29	4	18	100
Copperbelt	Rural	1	22	5	1	27	23	1	12	100
	Urban	9	2	4	1	7	27	1	38	100
Eastern	Rural	9	0	1	1	43	3	1	42	100
	Urban	51	4	4	3	8	14	3	12	100
Luapula	Rural	13	0	0	1	43	28	12	14	100
	Urban	17	4	6	5	15	35	0	18	100
Lusaka	Rural	16	1	30	3	17	13	2	18	100
	Urban	37	6	7	1	5	11	1	34	100
Northern	Rural	10	0	0	1	41	4	1	44	100
	Urban	29	2	8	4	9	26	2	18	100
North-Western	Rural	1	1	0	1	28	4	1	65	100
	Urban	4	0	2	0	1	5	1	86	100
Southern	Rural	5	0	5	0	47	1	1	40	100
	Urban	18	2	4	1	5	11	8	6	100
Western	Rural	2	0	0	0	27	0	2	68	100
	Urban	15	2	4	1	5	8	9	57	100
Total	Rural	7	1	5	1	40	7	1	39	100
	Urban	28	3	6	1	5	15	2	40	100
All Zambia		25	3	6	1	10	14	1	40	100

Figure 10.2 Percentage expenditure on housing by National, Rural and Urban Oct, 1991

NATIONAL



RURAL



URBAN

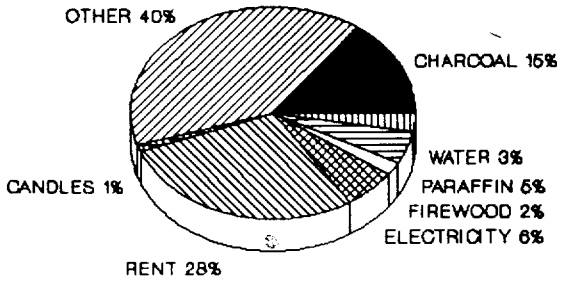


Table 10.5: Percentage of household expenditure on different items by socio economic group and gender of head of household. Rural areas

Socio.economic group		Expenditures on: Food	Housing	Clothing	Transport	Remittances	Education	Medical care	Total
Small-scale farmers		54	10	18	9	5	3	1	100
	Male-headed	53	10	18	10	5	3	1	100
	Female-headed	58	9	16	7	6	3	1	100
Medium-scale farmers		45	7	17	12	13	4	2	100
	Male-headed	45	7	17	12	13	4	2	100
	Female-headed	56	9	14	10	9	2	1	100
Large-scale farmers		25	33	6	10	14	9	3	100
	Male-headed	25	33	6	10	14	9	3	100
	Female-headed	-	-	-	-	-	-	-	-
Non-agric. households		62	12	9	10	4	3	1	100
	Male-headed	61	12	9	10	4	3	1	100
	Female-headed	70	11	11	6	1	1	1	100
Total rural		54	11	16	9	6	3	1	100
	Male-headed	53	11	15	10	5	3	1	100
	Female-headed	60	9	15	7	5	3	1	100

Table 10.6: Percentage of household expenditure on different items by socio economic group and gender of head of household. Urban areas

Socio-economic group		Expenditures on: Food	Housing	Clothing	Transport	Remittances	Education	Medical care	Total
Low-cost area		64	17	8	6	4	2	1	100
	Male-headed	63	17	8	6	4	2	1	100
	Female-headed	66	16	8	6	2	2	1	100
Medium-cost areas		56	23	7	6	5	2	1	100
	Male-headed	57	22	7	6	5	2	1	100
	Female headed	55	23	6	7	6	2	1	100
High-cost areas		58	17	8	7	6	3	2	100
	Male-headed	58	17	8	7	5	3	2	100
	Female headed	58	13	9	3	13	3	1	100
Total urban		60	19	7	6	4	3	1	100
	Male-headed	60	19	8	6	4	3	1	100
	Female headed	60	19	7	6	5	2	1	100

As can be seen from table 10.5, the highest proportion of expenditure on food was incurred by non-agricultural households (62 percent). Within this socio-economic group the female headed household spent 70 percent on food as compared to 61 for male headed households. Small-scale and medium scale agricultural households spend substantial proportion on food items. In contrast large scale households tend to spend more on housing followed by remittances.

By their very nature non-agricultural households in rural areas have largely to purchase their own food in contrast to the agricultural households. Table 10.6 shows that urban low-cost households had the highest proportion of expenditure going to food (64 percent). There was minimal difference in the expenditure patterns on food between high cost and medium cost households.

The low proportions of expenditure going to medical care and education could be attributed to the fact that these services were mostly provided free at the time of the survey.

The proportion of expenditure incurred by both male headed and female headed urban low cost households was more or less the same for all items. The same pattern also characterised the medium cost households. However, in the high cost female headed households expenditure on remittances were three times more than their male counterparts. but more or less the same on other items.

On the whole urban households with both male and female heads devoted almost equal proportions of household expenditure to all items, the highest being on food, then housing, clothing, transport and medical care being the least.

Table 10.7: Percentage monthly household expenditure by household size, item, total, rural and urban, 1991

	Expenditure on:							
Total House-hold size	Food	Housing	Clothing	Transport	Remittance	Education	Medical care	Total
1-3	57	19	9	6	7	1	1	100
3-4	58	18	10	6	5	1	1	100
5-6	59	17	10	7	7	3	1	100
7-9	58	17	9	7	5	3	2	100
10+	59	15	9	8	4	3	1	100
All Zambia	58	17	9	7	5	3	1	100
RURAL AREAS								
1-2	59	10	15	7	7	1	1	100
3-4	54	12	17	9	5	2	1	100
5-6	55	10	16	8	6	3	2	100
7-9	53	9	17	9	6	4	2	100
10+	48	11	14	13	6	7	1	100
All Rural	54	11	16	9	6	3	1	100
URBAN AREAS								
1-2	56	22	7	6	7	1	1	100
3-4	60	20	8	5	5	1	1	100
5-6	60	19	6	4	2	1	1	100
7-9	59	19	7	7	4	3	1	100
10+	62	17	7	6	3	4	1	100
All Urban	60	19	7	6	4	3	1	100

10.4 Expenditure by household size

The general pattern across all household sizes was typically the same as already described. Food took up the highest proportion of expenditure, followed by housing, clothing, transport, remittances, education and medical care in urban households. Rural households spent more on food, followed by clothing, housing, transport, remittances, education and medical care. However, the proportion of expenditure spent on education seemed to indicate that this increased with household size in both rural and urban households.

10.5 Expenditure by household monthly income

From tables 10.8 and 10.9, it is evident that the proportion of expenditure on food was higher in the low income categories in both rural and urban households, and seemed to diminish with higher income. However, expenditure on housing and transport seemed to increase with higher incomes in urban households, whereas in rural households this pattern only characterised transport expenditures.

Table 10.8: Monthly household expenditures on different items by household income. All Zambia

	Expenditures on:							
Monthly income (K)	Food	Housing	Clothing	Transport	Remittances	Education	Medical care	Total
Less than 1000	60	12	14	8	4	0	2	100
1000-5000	61	15	10	6	4	3	1	100
5001-10000	61	17	9	6	3	3	1	100
100001-15000	57	18	9	6	6	3	1	100
150001-20000	56	20	8	7	6	2	1	100
200001 +	53	20	8	9	6	3	1	100
All Zambia	58	17	9	7	5	3	1	100

Table 10.9: Monthly household expenditures on different items by household income, Rural and Urban

RURAL AREAS

	Expenditures on:							
Monthly income (K)	Food	Housing	Clothing	Transport	Remittances	Education	Medical care	Total
Less than 1000	57	10	16	9	4	3	1	100
1000-50001	55	10	17	9	5	3	1	100
50001-10000	56	9	17	9	5	3	1	100
100001-15000	43	14	18	8	12	4	1	100
150001-20000	55	8	13	14	5	4	1	100
200001+	44	13	13	16	8	5	1	100
All Rural	54	11	16	9	6	3	1	100
URBAN AREAS								
Less than 1000	66	16	8	3	4	3	0	100
1000-5000	64	17	7	5	4	2	1	100
5001-10000	61	18	8	5	4	3	1	100
10001-15000	58	20	8	6	6	1	1	100
15001-20000	56	21	8	6	5	3	1	100
20000+	54	21	7	8	6	3	1	100
All Urban	60	19	7	6	4	3	1	100

Chapter 11 Poverty

11.1 Coverage, Concepts and Definitions

The results of Priority Survey allow for the analysis of poverty related issues. All persons and households in Zambia are classified as either non-poor, moderately poor, or extremely poor based upon the total income accruing to a household in which they are members. This is done by fixing a poverty line within the population which distinguishes the poor from the non-poor. Furthermore, in the poor category, a further distinction is made between the moderate and extremely poor.

In this report, a poverty line is defined as the level of income or expenditure which separates the poor and the non-poor individuals as well as households at the time of the survey. There are several methods used in determining poverty line. In this report, the absolute approach was adopted.

Absolute measures of poverty assume that poverty exists when individuals or households are not able to acquire a specific level of consumption. Levels of consumption often used are those covering both food and other basic needs, such as a given quality of housing, sanitation, and water supply, etc. It is difficult to base the poverty line on all the basic necessities of life. Therefore the food basket approach, which calculates the cost of acquiring basic food items that provide basic minimum calorie requirements for an individual or household was used. The poverty line used in this analysis is derived from studies conducted by Prices and incomes Commission.

In this report, three indices are applied to describe the incidence and intensity of poverty as developed by Foster, Greer and Thorbecke, 1984. These are as follows:-

P0 indicates the proportion of the population below the predetermined poverty line. The higher the index, the greater the proportion of individuals or households below the poverty line.

P1 indicates the intensity of poverty, that is the average gap between the income of a poor individual or household and the poverty line. The higher the index number the greater the poverty gap.

P2 weighs the poverty of the poorest individuals more heavily than those slightly below the poverty line. This is done by squaring the gap between their incomes and the poverty line in order to increase the weight of the poorest individual in the overall poverty measure.

The general formula for the above indices is:-

$$P_x = \frac{1}{N} \sum_{i=1}^{n} \left(\frac{Z-Y_i}{Z}\right)^x$$

where; N = the total number of individuals in the group of interest.

Z = the poverty line.

n = the number of individuals below the poverty line.

Y_i = income of the household in which individuals live.

x = parameter that has taken the values 0, 1, 2.

$Z-Y_i$ = the gap between the poverty line and the income for each poor individual.

The indices are then derived as follows:-

$$P0 = \frac{n}{N}$$

$$P1 = \frac{1}{N} \sum_{i=1}^{n} \frac{(Z-Y_i)}{Z}$$

$$P2 = \frac{1}{N} \sum_{i=1}^{n} \frac{(Z-Y_i)^2}{Z}$$

The analysis in this section uses household income as a basis for levels and magnitude of poverty in Zambia. The ability of households to purchase goods and services from the market depends on their income from all sources, and of prices of goods and services.

In Zambia urban households mostly depend on cash income for their livelihood. Rural households depend on own production of food but use cash income to purchase other goods and services. This point has to be taken into consideration when interpreting the data in this chapter, because the survey collected data only on cash income and expenditure.

To analyse poverty based on either income or expenditure requires taking into consideration households size and composition which is accounted for by use of adult equivalent scales. This means assigning a weight to each member of a household according to their age and sex. Female adults are assigned a smaller weight than male adults and non-adults having a smaller weight than adults.

In this report the male adult equivalent scales have been derived from the Food and Nutrition Commission and are shown below.

Table 11.1: Age, Male Adult Equivalent scale

Age	Adult Equivalent scale
Child 0 years	0
Child 1 - 3 years	0.36
Child 4 - 6 years	0.62
Child 7 - 9 years	0.78
Child 10 - 12 years	0.95
Adult female (13 + years)	0.76
Adult male (13 + years)	1

The adult equivalent scales are based on a monthly cost to meet food requirements for a male adult equivalent unit.

The poverty line used in this report is fixed at K1,380 per adult equivalent unit per month. This amount is obtained from a survey conducted by Prices and Incomes Commission/National Food and Nutrition Commission which was close to the Priority survey data collection period. The cost of a basket for an adult male equivalent person worked out to be K961 per month at the prices of October/November 1991. The K1,380 was arrived at by dividing K961 by 70 percent which is the average percentage households expenditure on food. This factor does not take into account some other basic necessities of life such as clothing, shelter, etc.

The tables presented in this section were compiled as follows:

(a) Each member of every household in the survey was allocated an adult equivalent scale (unit or weight) according to their age and sex. The contention is that it costs less to meet food calorie requirements for children than for adults. Food requirements for female adults are substantially lower than those for male adults.

(b) In each household, the adult equivalent scales for each household member were added up to find the households total adult equivalents.

(c) The monthly household income for each household was then divided by the household total adult equivalent scale to get the monthly household income per adult equivalent.

(d) The number of persons below the poverty line was then computed, that is the monthly household income per adult male equivalent for each person that was below K1380.

(e) Further, the three indices explained above (P0, P1, and P2) were then computed.

11.2 Incidence of Poverty

Table 11.2 show the proportions of poor and non-poor persons in the nine provinces of Zambia. Persons above the poverty line are those whose equivalent incomes are above K1,380 per month. The moderately poor are those persons whose adult equivalent incomes are below K1,380 but above K961 per month. The extremely poor are those persons whose equivalent incomes are below K961 per month.

Incidence of poverty within and between provinces

Table 11.2 and Figure 11.1 show that in Zambia as a whole, 29 percent of all people are non-poor (above the poverty line), 10 percent are moderately poor, while 61 percent are extremely poor. In rural areas, 78 percent are extremely poor as compared to 44 percent in urban areas. Only 15 percent are above the poverty line (non-poor) in rural areas as compared to 45 percent in urban areas.

An examination of the within province poverty distribution, shows that Lusaka province has the highest proportion of non-poor persons (57 percent) followed by Copperbelt with 35 percent. Northern and Western provinces have the highest proportion of extremely poor persons, almost 80 percent, while on the contrary, Lusaka province has the lowest proportion of extremely poor, 29 percent.

Table 11.2 also shows the levels of poverty within provinces broken down by rural and urban areas. In the rural areas of Central province, 24 percent of the persons are non-poor, 8 percent are moderately poor and 68 percent are extremely poor. In the urban areas of the same province, 42 percent of the population are non-poor, 20 percent are moderately poor, while 39 percent are extremely poor.

When analysed further, table 11.2 shows the same order of poverty incidences in all the nine provinces; the portion of non-poor population is much higher in urban than in rural areas in each province. Lusaka province has the highest proportion of non-poor urban population, 60 percent. Lusaka province again has the highest proportion of non-poor population in rural areas, 37 percent.

The urban areas within each province exhibit consistently higher proportion of moderately poor people than the rural areas, while the reverse is true for the extremely poor. The proportion extremely poor is higher in rural than in urban areas within each province, with Northern province having the highest incidence of extremely poor people in the rural areas, 90 percent.

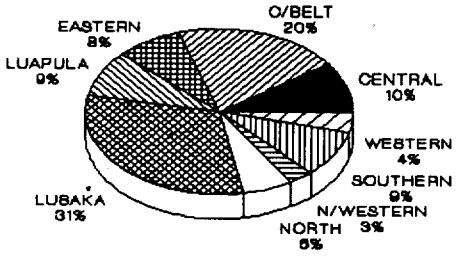
This combination of urban areas having the higher proportions of non-poor and moderately poor on one hand rural areas having higher proportions of extremely poor on the others, lends support to the conclusion that rural areas could be worse off in terms of income than urban areas.

Table 11.2: Incidence of poverty in provinces by level of poverty and residence (Rural/Urban)

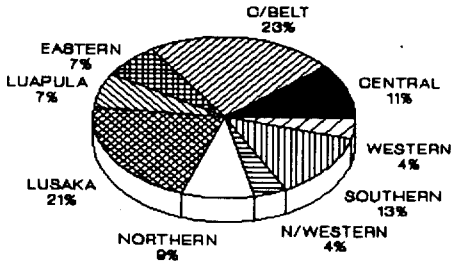
Province and Residence		Above poverty line	Moderately poor	Extremely poor	Total Percent	Number of Persons
Central		31	13	57	100	697040
	Rural	24	8	68	100	427373
	Urban	42	20	39	100	269667
Copperbelt		35	14	51	100	1293929
	Rural	26	9	65	100	68725
	Urban	36	14	50	100	1225204
Eastern		19	6	75	100	994149
	Rural	15	5	81	100	814024
	Urban	41	10	49	100	180125
Luapula		27	8	65	100	727682
	Rural	20	8	72	100	523719
	Urban	45	8	47	100	203963
Lusaka		57	13	29	100	1221867
	Rural	37	7	56	100	106588
	Urban	60	14	25	100	1059279
Northern		14	8	79	100	972055
	Rural	7	3	90	100	758739
	Urban	37	24	39	100	213316
N/western		18	7	74	100	415005
	Rural	8	6	86	100	296686
	Urban	45	10	44	100	118319
Southern		22	11	66	100	944357
	Rural	17	10	72	100	716801
	Urban	38	15	47	100	227556
Western		15	6	79	100	629809
	Rural	11	4	86	100	497107
	Urban	33	13	54	100	132702
All Zambia		29	10	61	100	7895893
	Rural	15	6	78	100	4265762
	Urban	45	14	44	100	3630131

Figure 11.1 Incidence of poverty by Province and level of poverty (Percent)

NON-POOR



MODERATELY POOR



EXTREMELY POOR

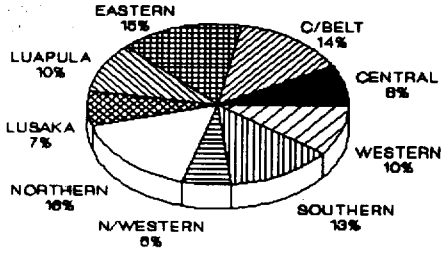


Table 11.3 shows the magnitude of poor and non-poor persons between provinces, or the contribution of poverty by each province to total national poverty. Of all the persons classified as non-poor in Zambia, almost one third live in Lusaka province, while one fifth live in Copperbelt province. Thus, the two provinces together account for half the non-poor population in Zambia. In addition, the two provinces account for 44 percent of all the moderately poor persons in the country. Considering the extremely poor persons, the highest proportions are found in Northern province followed by Eastern, Copperbelt and Southern provinces. These provinces account for almost 60 percent of all extremely poor persons in Zambia.

Table 11.3: Incidence of poverty by province and level of poverty (Percent)			
Province	Above poverty line	Moderately poor	Extremely poor
Central	10	11	8
Copperbelt	20	23	14
Eastern	8	7	15
Luapula	9	7	10
Lusaka	31	21	7
Northern	6	9	16
N/western	3	4	6
Southern	9	13	13
Western	4	4	10
Total	100	100	100
Number of Persons	2276179	789499	4830215

Incidence of poverty by socio-economic group, gender of head of household and household size

Table 11.4 indicates levels of poverty by socio-economic groups. Among the rural socio-economic groups, large-scale farming households have the highest proportion of non-poor persons (69 percent) and small-scale farming households have the least 13 percent. In the urban socio-economic groups, high cost residential area households have the highest proportion of persons who are non-poor 56 percent as against 41 percent for low cost areas.

Table 11.4: Incidence of poverty by socio-economic groups					
Socio-economic group	Above poverty line	Moderately poor	Extremely poor	Total percent	Number of persons
Rural small scale farmers	13	6	81	100	3757473
Rural medium scale farmers	32	10	58	100	205615
Rural large scale farmers	69	2	28	100	17447
Rural non-agricultural households	30	11	59	100	285227
Urban low-cost areas	41	15	44	100	1934217
Urban medium-cost areas	46	14	40	100	1187993
Urban high-cost areas	56	13	31	100	507921
All Zambia	29	10	61	100	7895893

Table 11.5 shows the incidence of poverty among persons according to the gender of head of household and household size. The proportion of non-poor persons is higher in male-headed than in female-headed households, 30 and 23 percent respectively. There is also a higher proportion of moderately poor persons in male-headed households than in female-headed households. The percentage of persons extremely poor is high in female headed households (70 percent) than the male headed households (60 percent).

When analysed according to household size, table 11.5 shows that larger households have smaller proportions of non-poor persons and larger proportions of moderately and extremely poor persons.

Table 11.5: Incidence of poverty by gender of head of households and household size

Gender of head	Above poverty line	Moderately poor	Extremely poor	Total	Number of Persons
Male headed	30	11	60	100	6707765
Female headed	23	7	70	100	1188128
Household size					
1 Person	37	9	54	100	94425
2-3 Persons	34	8	58	100	896837
4-5 Persons	31	9	60	100	1700487
6-9 Persons	27	11	63	100	3514925
10 + + Persons	28	11	61	100	1689219
All	29	10	61	100	7895893

Excluding income not stated cases.

Table 11.6 shows poverty at the household level, as opposed to the previous tables which were based on individuals. The method used to arrive at the results in this table is, however the same as was used for tables 11.1 to 11.5. The total household income was divided by the total adult equivalent income scale for that household. Then the number of households with adult equivalent incomes below the two poverty lines were described as poor.

Table 11.6 also shows that on a national basis, 31 percent of all Zambian households are non-poor, 9 percent are moderately and 60 percent are extremely poor. Considering age of head of households, households where the head of the household is aged between 20 and 29 years have the highest proportion of non-poor households (40 percent) and the lowest proportion of extremely poor households (49 percent). On the contrary, households in which the head of household is 50 years and above have the highest proportion of extremely poor households, 76 percent, and the lowest proportion of non-poor households, 17 percent.

The female-headed households have higher proportion of extremely poor households, 70 percent as against 57 percent for male headed households.

Table 11.6: Percentage distribution of Households poverty level, age and gender of household head and size of household

	Non poor	Moderately poor	Extremely poor	Total	Number of households
All households	31	9	60	100	1457684
Age of household head					
13-19	25	13	62	100	9265
20-29	40	11	49	100	296511
30-39	38	10	51	100	430074
40-49	29	10	61	100	311443
50 ++	17	7	76	100	410391
Gender of head of household					
Male headed	32	10	57	100	1167839
Female headed	23	7	70	100	289845
Household size					
1 Person	37	9	54	100	94425
2-3 Persons	34	8	57	100	352510
4-5 Persons	31	9	60	100	379504
6-9 Persons	27	11	63	100	488111
10 ++ Persons	28	11	61	100	143134

Excluding income not stated cases.

Table 11.7 shows the distribution of poverty levels by socio-economic group and province. Among the socio-economic groups large-scale farming households have the highest proportion of non-poor households, 77 percent, and the lowest proportion of extremely poor households, 20 percent. The small-scale farming households are the worst off with the lowest proportion of non-poor households, 13 percent, and the highest proportion of extremely poor households, 81 percent.

At the provincial level, Lusaka province has the highest proportion of non-poor households, 62 percent, and the lowest proportion of extremely poor households, 26 percent. Copperbelt province then comes next. Western and Northern provinces are worst off with the lowest proportion of non-poor households, 15 percent each, and the highest proportion of extremely poor households, 80 percent and 77 percent respectively.

There is a higher incidence of poverty among rural households compared to urban households, 15 percent of the rural households are non-poor as compared to more than half of the urban households. 78 percent of rural households are extremely poor, whereas only 36 percent of the urban households are in the same category.

Table 11.7: Percentage distribution of households poverty level by socio-economic group and province

Socio-economic group	Not poor	Moderately poor	Extremely poor	Total	Number of Households
Small scale farmers	13	6	81	100	729201
Medium scale farmers	31	10	60	100	24584
Large scale farmers	77	3	20	100	1535
Non-agricultural households	30	13	58	100	78806
Low-cost areas	48	14	38	100	344994
Medium-cost areas	52	13	35	100	190956
High-cost areas	61	12	27	100	87608
Province					
Central	34	14	53	100	122641
Copperbelt	41	14	45	100	220459
Eastern	19	5	76	100	200212
Luapula	28	10	62	100	153114
Lusaka	62	12	26	100	212112
Northern	15	7	77	100	188121
N/western	19	8	73	100	81293
Southern	26	10	64	100	142490
Western	15	5	80	100	137242
Residence					
Rural	15	7	78	100	834126
Urban	51	13	36	100	623558

Excluding income not stated.

11.3 Intensity of Poverty

Table 11.8 shows the intensity of poverty in each of the nine provinces of Zambia. The table only includes persons who have been identified as poor. As explained earlier, P0 shows the proportion of poor persons in each province. Thus P0, is the sum of the proportions of moderately and extremely poor persons identified in table 11.2. The lower the P0, the less the poverty.

The index P1 shows the intensity of poverty in each province, showing how far away from the poverty line the poor persons are on the average. The higher the P1 index, the larger the average

distance between the poor persons equivalent income and the poverty line. The smaller the P1 index value, the smaller the gap whereas, P2 is the square of the poverty gap which is the distance between the poverty line and their equivalent income. This means that the further away a person is from the poverty line, the higher the value of the P2 index. Again, the smaller the P2 index value, the less the intensity of poverty.

On the national basis, the P0 index value is 0.712, which means that more than two thirds of the Zambian population is poor. On the provincial level, the highest proportion of poor people are found in Northern province with a P0 index value of 0.863. Lusaka province has the lowest PO index value, 0.426.

The other two indices, P1 and P2, show as mentioned, the intensity or depth of poverty. Although Northern province has the highest incidence of poverty, the intensity of poverty is highest in Western province, with a PI index value of 0.665. Lusaka province has both the lowest prevalence and intensity of poverty, the P1 index value being 0.205.

In terms of the P2 index, the table shows that Western province has the highest index value while Lusaka province has the lowest. This means that Lusaka province has the smallest number of people in the lowest income brackets, while Western province has the highest number of people in those income brackets.

Table 11.8: Poverty indices by province

Province	P0	P1	P2	Number of Persons
Central	0.694	0.424	0.314	697040
Copperbelt	0.647	0.374	0.275	1293929
Eastern	0.807	0.618	0.520	994149
Luapula	0.730	0.525	0.430	727682
Lusaka	0.426	0.205	0.130	1221867
Northern	0.863	0.622	0.502	972055
N/western	0.816	0.603	0.501	415005
Southern	0.775	0.528	0.426	944357
Western	0.848	0.665	0.574	629809
All Zambia	0.712	0.481	0.383	7895893

Chapter 12 Household amenities and facilities

12.1 Coverage

This chapter presents results on housing facilities and amenities, covering the following indicators at household level:-

- Tenancy status of housing unit.
- Type of lighting used
- Type of cooking fuel used
- Type of toilet facility used
- Household garbage disposal.
- Proximity to foodmarket, post office, public transport, health centre, primary and secondary schools.

Results are presented as aggregates at national level, for rural and urban areas and at provincial level. Further aggregated presentation of results has taken into account the various socio-economic groupings and gender of household head

12.2 Type of tenancy

From table 12.1, it is noticeable that 65 percent of Zambian households occupy their own dwellings, while 25 percent are renting and 8 percent have free housing. Only 1 percent of Zambian households occupy dwellings other than those mentioned in the table.

An overwhelming proportion (91 percent) of rural households occupy their own dwellings as compared to 32 percent of urban households. Renting is more predominant (55 percent) in urban areas than in rural areas (3 percent).

Within rural areas only the non-agricultural households differ from other socio-economic groups, by having a lower proportion of home-ownership. As regards urban areas almost half the households in the low cost areas rent their dwellings and about 40 percent own a home. For both medium and high cost urban areas home-ownership is not common, accounting for 19 percent.

Renting of homes is common among households living in both urban medium cost areas (68 percent) and urban high cost areas (55 percent). It can also be observed that almost one fourth of households living in the urban high cost areas live in dwellings that are apparently provided in some form of free arrangement.

It is observed from the table that home-ownership is more common among female headed households (76 percent) than among male-headed households (63 percent).

Home-ownership is most prevalent in the most rural provinces and least prevalent in Copperbelt and Lusaka, which are the most highly urbanised provinces. It should however, be noted that the quality of housing had not been taken into account during 1991 Priority Survey. Quality of housing is an important issue and requires further investigation from other sources of data.

Table 12.1: Percentage distribution of households by type of tenancy, place of residence, socioeconomic group, gender of head of household and province

		Type of tenancy					
		Owned	Rented	Free	Other	Total	Number of households in'000's
All households		65	25	8	1	100	146
Place of residence	Rural	91	3	6	1	100	86
	Urban	32	55	10	3	100	624
Socioeconomic group	Rural small-scale farmers	93	2	5	0	100	731
	Rural medium-scale farmers	98	2	1	-	100	25
	Rural large-scale farmers	99	-	1	-	100	2
	Rural non-agric. households	64	11	22	3	100	79
	Urban low-cost areas	41	49	8	1	100	346
	Urban medium-cost areas	19	68	10	3	100	191
	Urban high-cost areas	19	55	20	6	100	8
Gender of head of household	Male	63	27	8	2	100	1 169
	Female	76	17	6	1	100	291
Province	Central	72	18	9	1	100	123
	Copperbelt	29	54	13	4	100	220
	Eastern	87	8	4	0	100	200
	Luapula	78	14	7	0	100	157
	Lusaka	31	58	10	1	100	212
	Northern	82	10	5	2	100	187
	North-Western	76	12	9	3	100	81
	Southern	72	19	9	0	100	142
	Western	87	7	5	0	100	137

12.3 Lighting

Table 12.2 shows that the most common source of lighting energy among Zambian households is paraffin which accounts for slightly over two thirds of the households. A little less than 20 percent of the households rely on electricity, while 13 percent on other forms of lighting energy not specified.

Table 12.2: Percentage distribution of households by type of lighting,place of residence, socio-economic group, gender of head of household and province

		Type of lighting					
		Paraffin	Electricity	Candle	Other	Total	Number of households in '000's
All households		68	18	1	13	100	1 459
Place of residence	Rural	76	2	0	22	100	834
	Urban	58	39	2	0	100	625
Socio-economic group	Rural small-scale farmers	76	2	0	22	100	730
	Rural medium-scale farmers	84	4	0	12	100	25
	Rural large-scale farmers	47	48	2	3	100	2
	Rural non-agric. households	74	7	1	19	100	78
	Urban low-cost areas	77	20	3	0	100	346
	Urban medium-cost areas	34	64	1	0	100	191
	Urban high-cost areas	33	64	2	1	100	88
Gender of head of household	Male	68	20	1	10	100	1 169
	Female	66	12	1	21	100	290
Province	Central	80	17	1	2	100	123
	Copperbelt	63	35	1	1	100	220
	Eastern	77	5	1	17	100	200
	Luapula	81	8	0	11	100	157
	Lusaka	55	40	4	1	100	212
	Northern	79	10	0	11	100	186
	North-Western	60	16	0	23	100	81
	Southern	74	13	1	11	100	142
	Western	40	8	1	52	100	137

The use of paraffin is predominant for both rural and urban areas of Zambia, accounting for 76 percent of rural and 58 percent of urban households. Only 2 percent of rural households and 39 percent of urban households use electricity for lighting. Within urban areas, the proportions of households using electricity are higher in the medium and high cost areas accounting for 64 percent each as compared to 20 percent for low cost areas.

Note that the use of various sources of lighting, exhibits some large variations across provinces. It can be seen that the use of electricity as a source of lighting is mostly common in Lusaka and Copperbelt. The use of candle as a source of lighting is not common in all the provinces. It is striking to also note that in Western Province 52 percent of the households use other forms of lighting not specified. This striking result for Western province needs further investigation.

12.4 Type of cooking fuel

It is evident from table 12.3 that slightly more than half the Zambian households use collected wood while 28 percent use charcoal as a form of cooking fuel. Electricity is used by only 11 percent of the Zambian households.

In rural areas, 90 percent of the households collect wood for their cooking, whereas in urban areas 56 percent of the households use charcoal and just over one fourth of the urban households use electricity. In urban low-cost areas the use of charcoal for cooking is quite common, while the use of electricity for cooking is most common among households in medium and high cost areas (46 percent and 48 percent respectively).

Female-headed households more often than male-headed households collect wood for their cooking (69 percent as compared to 54 percent).

Lusaka and Copperbelt provinces have large proportions of households using electricity and charcoal, whereas Northern, Western and Eastern provinces have high proportions of households using collected wood for cooking.

Table 12.3: Percentage distribution of households by type of cooking fuel, place of residence, socio-economic group, gender of head of household and province

		Type of cooking fuel					
		Collected wood	Purchased firewood	Charcoal	Electricity	Total	Number of households in '000's
All households		57	4	28	11	100	1 460
Place of residence	Rural	90	2	6	0	100	836
	Urban	11	6	56	26	100	624
Socio-economic group	Rural small-scale farmers	93	2	5	0	100	731
	Rural medium-scale farmers	97	1	1	1	100	24
	Rural large-scale farmers	61	0	0	39	100	1
	Rural non-agric. households	70	4	18	3	100	78
	Low-cost urban areas	11	7	72	9	100	345
	Urban medium-cost areas	12	5	36	46	100	190
	Urban high-cost areas	11	4	36	48	100	87
Gender of head of household	Male	54	4	30	12	100	1 170
	Female	69	4	18	8	100	290
Province	Central	59	3	27	10	100	122
	Copperbelt	11	2	67	20	100	220
	Eastern	89	4	4	3	100	200
	Luapula	50	4	41	2	100	156
	Lusaka	13	3	49	33	100	212
	Northern	85	1	9	4	100	188
	North-Western	77	2	15	6	100	81
	Southern	77	8	9	6	100	142
	Western	83	8	2	4	100	137

12.5 Type of toilet facility

Table 12.4 shows that pit latrine toilet facility is used by half of the Zambian households, while a flush toilet is used by about one fourth of the households. Also about one fourth of the households do not use any of the toilet facilities specified.

Table 12.4: Percentage distribution of households by type of Toilet facility, socio-economic group, gender of head of household and province, 1991

		Type of toilet facility				
		Flush toilet	Pit latrine	Other	Total	Number of households in '000's
All households		24	50	26	100	1 461
Place of residence	Rural	6	50	44	100	836
	Urban	47	49	2	100	624
Socio-economic group	Rural small-scale farmers	6	49	45	100	732
	Rural medium-scale farmers	7	55	37	100	25
	Rural large-scale farmers	39	36	25	100	2
	Rural non-agric. households	7	57	36	100	78
	Urban low-cost areas	26	69	2	100	346
	Urban medium-cost areas	74	24	2	100	191
	Urban high-cost areas	71	26	1	100	88
Gender of head of household	Male	25	50	24	100	1 170
	Female	17	49	33	100	290
Province	Central	18	57	25	100	123
	Copperbelt	52	43	2	100	220
	Eastern	8	46	46	100	200
	Luapula	17	69	13	100	157
	Lusaka	43	54	3	100	212
	Northern	15	74	11	100	188
	North-Western	20	66	13	100	81
	Southern	14	23	62	100	142
	Western	8	16	75	100	137

The use of a pit latrine is equally common in both rural and urban areas, about half of the households. A large proportion, 47 percent, of the urban households use a flush toilet as opposed to only 6 percent of the rural households. In urban areas, households residing in medium and high cost areas have the highest proportion of flush toilets (74 and 71 percent respectively). Rural small-scale farming households most often use some other form of toilet facility than those specified as

compared to the other socio-economic groups.

12.6 Garbage disposal

A small proportion (8 percent) of Zambian households have their garbage collected from their homes. About half of the households dump their garbage, whilst 40 percent use a pit.

Table 12.5: Percentage distribution of households by type of garbage disposal, place of residence, socio-economic group, gender of head of household and province, 1991

		Type of garbage disposal				
		Collected	Pit	Dumping	Total	Number of households in '000's
All households		8	40	52	100	1 453
Place of residence	Rural	2	35	63	100	829
	Urban	15	48	37	100	624
Socio-economic group	Rural small-scale farmers	2	34	63	100	726
	Rural medium-scale farmers	2	42	56	100	25
	Rural large-scale farmers	0	53	47	100	2
	Rural non-agric. households	1	34	65	100	76
	Urban low-cost areas	12	47	41	100	346
	Urban medium-cost areas	15	49	36	100	191
	Urban high-cost areas	24	51	25	100	88
Gender of head of household	Male	8	42	50	100	1 165
	Female	5	34	61	100	288
Province	Central	4	51	45	100	123
	Copperbelt	23	47	30	100	220
	Eastern	2	26	72	100	200
	Luapula	11	53	36	100	157
	Lusaka	8	40	52	100	212
	Northern	3	58	38	100	183
	North-Western	4	50	45	100	80
	Southern	2	24	73	100	142
	Western	1	14	84	100	137

Dumping the garbage is by far the most common method of garbage disposal among rural households. As regards urban households dumping is common in low cost areas while pit method is most common among households in both medium and high cost areas, with 49 and 51 percent respectively.

12.7 Household Proximity to various facilities

Table 12.6 provides results on average distance to various facilities while Figures 12.1 and 12.2 give visual presentation.

Table 12.6: Percentage distribution of households proximity to various facilities in rural and urban households, 1991

		Distance to facility			
		0-5 km	6-15 km	16 km and more	Total
Food market	All households	61	18	22	100
	Rural	32	30	38	100
	Urban	98	2	0	100
Post office	All households	52	23	25	100
	Rural	25	31	44	100
	Urban	87	12	1	100
Primary school	All households	90	8	2	100
	Rural	83	14	3	100
	Urban	99	1	0	100
Secondary school	All households	50	21	29	100
	Rural	25	31	44	100
	Urban	87	12	1	100
Public transportation	All households	71	17	12	100
	Rural	50	28	21	100
	Urban	97	3	0	100
Hospital/health centre	All households	64	24	12	100
	Rural	42	37	21	100
	Urban	92	8	0	100

Food Market. Most of Zambian households are within a vicinity of 5km from a food market (61 percent). A further 18 percent live between 6km and 15km from this facility. Almost one fourth's of households live at a distance of 16km or more.

There are large disparities between rural and urban households as regards distance to this facility. It can be noticed that 98 percent of urban households are within a distance of 5 km while only 32 percent of rural households are within this distance with 38 percent of rural households living at a distance of 16km or more. A small proportion of urban household is at a distance of more than 5km.

Post Office. Fifty-two percent of Zambian households are within a proxy of 5km from the post office, with 23 percent living within a distance of between 6 and 15 km from this facility. One quarter of Zambian households live at a distance of 16km or more. In urban areas, almost 90 percent of the households live within 5 km from the post office, whereas in rural areas only 25 percent of households live within this distance. Almost 50 percent of rural households live at a distance of 16km or more from this facility.

Primary School. It can be seen from the same table that 90 percent of Zambian households live within 5 km from a primary school. A small proportion (2 percent) of households is at a distance of 16km or more from this facility.

It is noticeable that 99 percent of urban households are within a vicinity of 5 km from a primary school, while 83 percent of rural households are within this distance from this facility. In rural areas 3 percent of households live at a distance of 16km or more from a primary school.

Secondary School. In all, 50 percent of households live within 5km from a secondary school. There is a large disparity between rural and urban areas. It is observed that 87 percent of urban as compared to 25 percent of rural households live within the 5km distance. The proportion of rural households living far away from a secondary school is much higher than urban with 44 and 1 percent for rural and urban households respectively.

Hospital/ Health Centre. Results in table 12.7 show that 64 percent of Zambian households are in a vicinity of less than 5 km from a hospital/health centre, 24 percent live between 6-15 km, while 12 percent are at a distance of 16km or more from this facility. Very few urban households live within more than 6km from this facility, while 37% of rural households live within a distance of more than 6km.

Figure 12.1 Access to facilities (Rural)

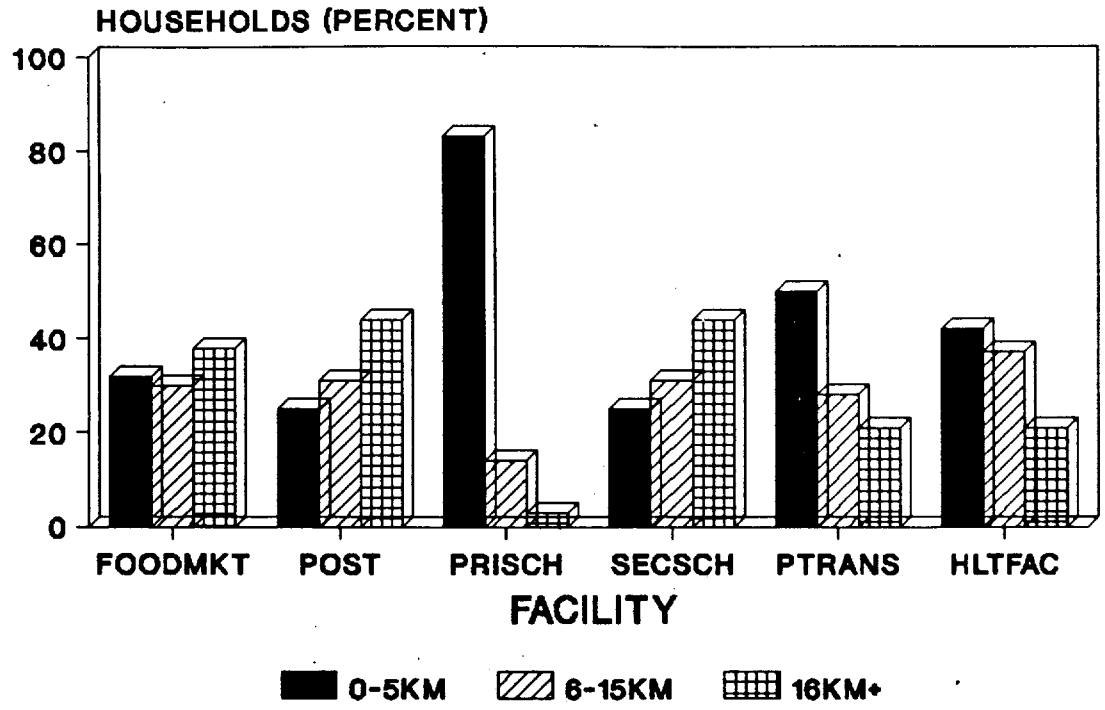
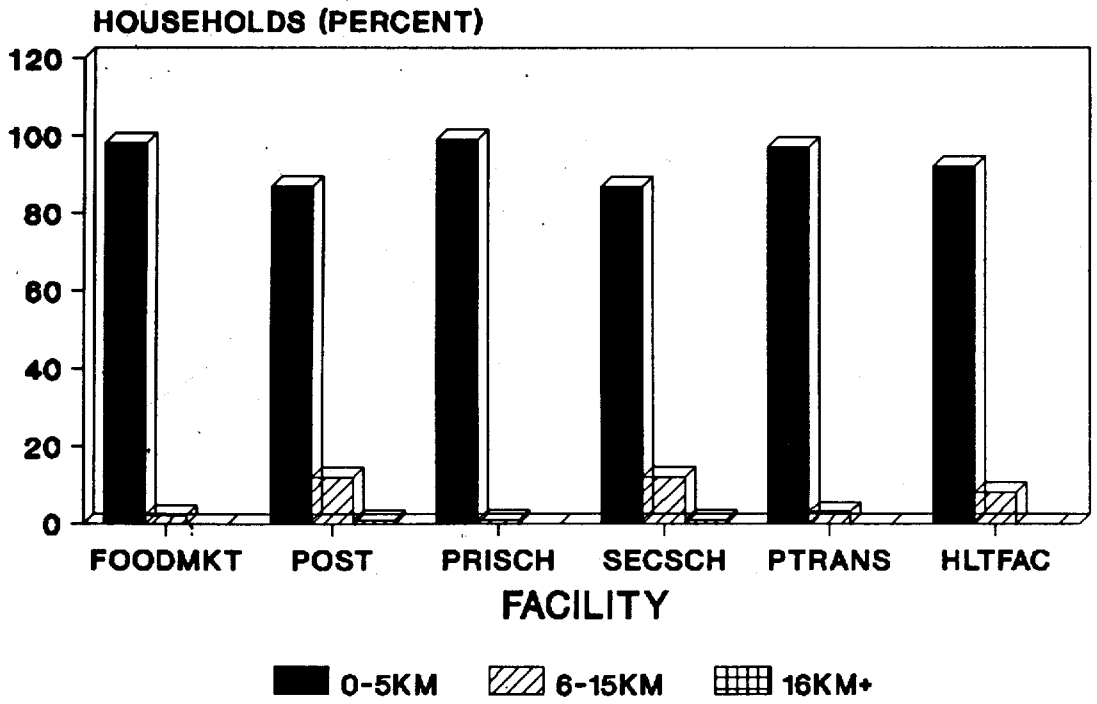


Figure 12.2 Access to facilities (Urban)



Chapter 13 Agriculture

13.1 Coverage

An agricultural household was defined as one where at least one of its members was engaged in either growing of crops, owning of livestock and/or poultry, or any combination of these activities.

- Crops included hybrid maize, cassava, local maize and vegetables
- Livestock included cattle, sheep, goats, and pigs regardless of type or age.
- Poultry included chickens, ducks and other poultry regardless of type or age.

The survey also collected information on production and sales of some selected crops.

13.2 Agricultural households

The Priority survey collected data on agricultural activities whether operated by the household members or operated by others on their behalf. However, the survey did not collect institutional type of agricultural activities as it was household based.

The results presented here relate to the October, 1990 to September, 1991 agricultural season.

Table 13.1 shows that 62 percent of all households in Zambia are engaged in agricultural activities. Among the rural households 89 percent are engaged in agricultural activity as compared to only 25 percent in urban areas.

From the table it can be computed that Eastern province has the highest proportion of households engaged in agriculture (88 percent), while Lusaka province has the lowest (11 percent).

When broken down by rural-urban areas within the provinces, the data shows that Eastern province has the highest proportion of households engaged in agriculture in the rural areas (96 percent) and Lusaka has the least (51 percent). In the urban areas, Northern province has the highest proportion of households engaged in agriculture (63 percent) and Lusaka province has the least (4 percent).

Table 13.1: Proportion of households engaged in agricultural activities by residence, province and gender of head of household

Residence, Province, Gender of head	Agricultural households as percent of total	Total households
Total Zambia	62	1,461,329
Rural	89	836,687
Urban	25	624,642
Province		
Central	66	122,641
Rural	91	73,797
Urban	29	48,844
Copperbelt	29	220,409
Rural	80	14,370
Urban	25	206,039
Eastern	88	200,212
Rural	96	168,005
Urban	44	32,207
Luapula	72	157,082
Rural	84	113,282
Urban	42	43,800
Lusaka	11	212,112
Rural	51	29,905
Urban	4	182,207
Northern	84	188,121
Rural	89	155,384
Urban	63	32,737
N/western	80	81,293
Rural	93	60,748
Urban	42	20,545
Southern	76	142,217
Rural	92	104,879
Urban	31	37,338
Western	82	137,242
Rural	90	116,317
Urban	40	20,925

Figure 13.1 Proportion of agricultural and non-agricultural households by rural and urban

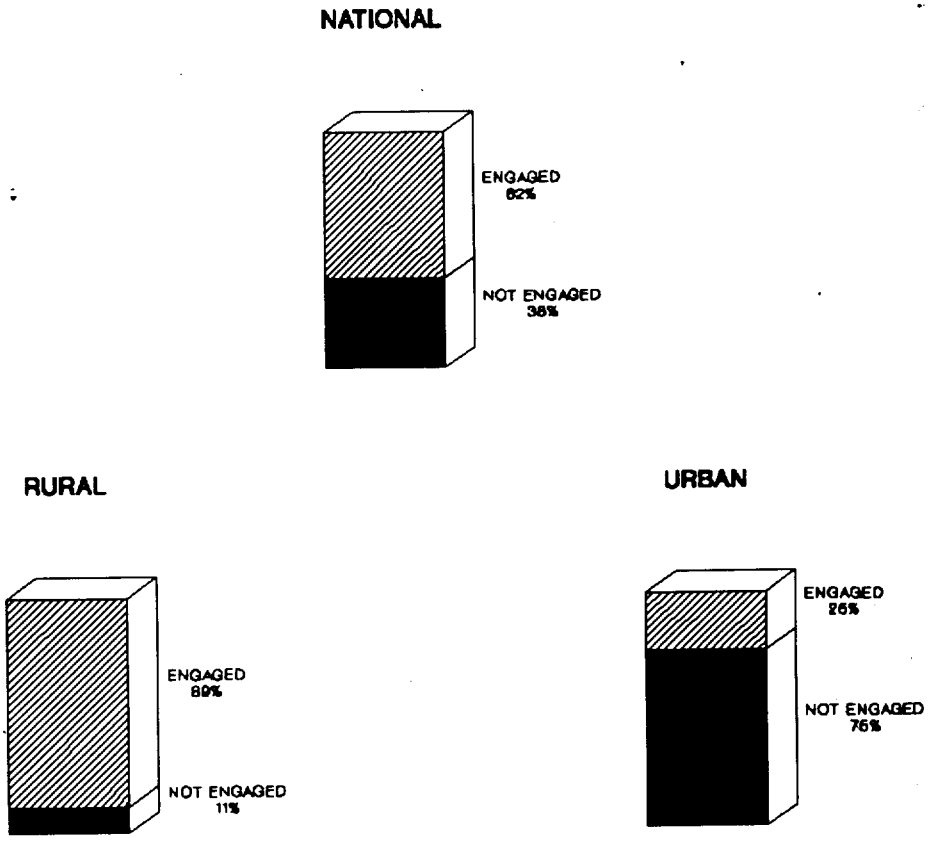
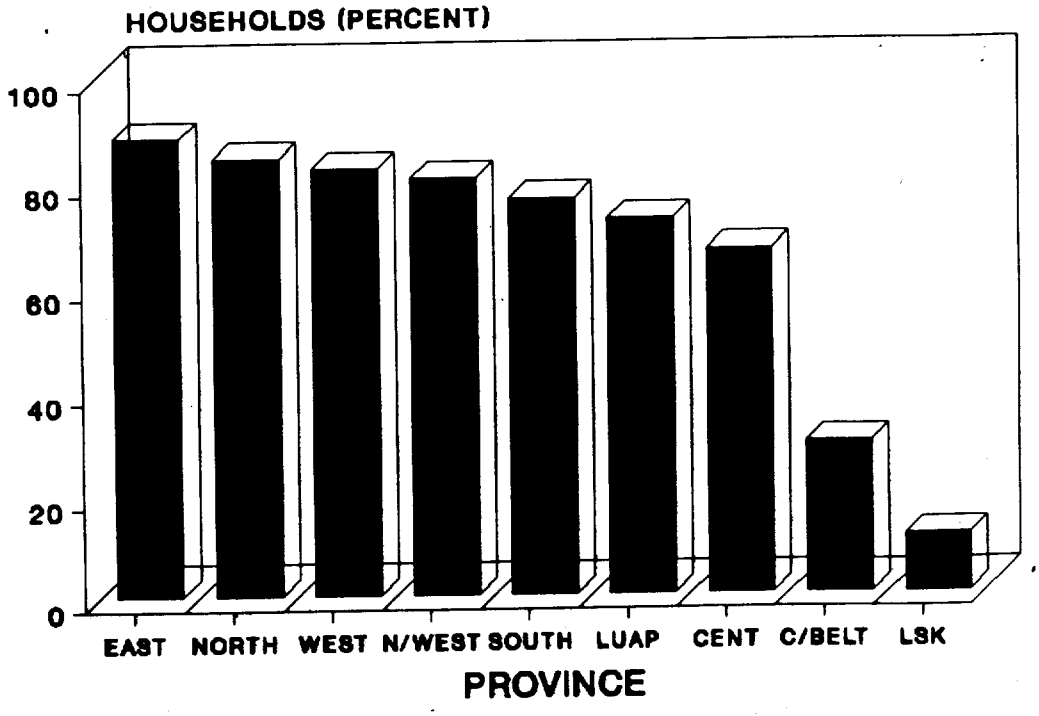


Figure 13.2 Proportion of agricultural households by Province



13.3 Production

Tables 13.2 and 13.3 and Figures 13.3, 13.4, 13.5 and 13.6 display data on households who planted hybrid maize, local maize and cassava during the 1990/91 agriculture season by residence, province, gender of head of household and socio-economic groups.

Table 13.2 shows that Southern province had the highest hybrid maize production of 39 percent of total, followed by Central, Eastern and Northern provinces with 18 percent, 16 percent and 10 percent respectively. Eastern province had the highest local maize production (60 percent of total), followed by Southern, Central and Northern provinces (11 percent, 9 percent and 5 percent of total respectively).

Hybrid maize was defined as maize produced from commercial seed and is usually high yielding, early maturing or disease resisting like Pioneer, MM604, MM10, etc, while local maize was defined as traditional breed usually replanted from own produce.

When hybrid and local maize is combined Eastern province had the highest maize production followed by Southern and Central provinces.

About 9 million (90kg) bags of hybrid maize, 4 million (90kg) bags of local maize and 2 million (90kg) bags of cassava are estimated to have been produced by households during the 1990/91 agriculture season.

The crop forecast for hybrid and local maize production was estimated at 16 million (90kg) bags by the annual CSO agriculture crop forecasting survey for the same season (CSO, 1992). The Priority survey's estimate for the same season is about 13 million (90kg) bags. The difference could be attributed to institutional farms' production which were not covered in the Priority survey.

The rural areas of Zambia in total, accounted for 86 percent of total hybrid maize production and 90 percent of local maize production. The urban based households yielded 14 percent of total hybrid maize production and 10 percent of total local maize production.

Table 13.2: Production of hybrid maize, local maize and cassava by Residence and Province

Residence Province,	Hybrid maize		Local maize		Cassava	
	Production(90 kg Bag)	Proportion of total production	Production (90kg Bag)	Proportion of total production	Production (90kg Bag)	Proportion of total production
All Zambia	8 525 553	100	4 218 000	100	2 063 698	100
Reside						
All Rural	7 324 997	86	3 815 316	90	2 025 454	98
All Urban	1 200 556	14	402 684	10	38 244	2
Central	1 521 639	18	366 360	9	10 449	1
Rural	1 283 948	15	295 371	7	9 644	0
Urban	237 691	3	70 989	2	805	0
C/belt	226 802	3	152 131	4	10 905	1
Rural	31 287	0	36 404	1	6 386	0
Urban	195 515	2	115 727	3	4 519	0
Eastern	1 398 779	16	2 535 638	60	1 251	0
Rural	1 343 795	16	2 381 281	56	483	0
Urban	54 984	1	154 357	4	768	0
Luapula	434 534	5	39 194	1	636 060	31
Rural	322 671	4	36 075	1	620 617	30
Urban	111 863	1	3 119	0	15 443	1
Lusaka	435 181	5	88 124	2	1 302	0
Rural	159 612	2	77 891	2	0	0
Urban	275 569	3	10 233	0	1 302	0
Northern	857 704	10	197 372	5	944 120	46
Rural	708 570	8	166 307	4	938 894	45
Urban	149 134	2	31 065	1	5 226	0
N/west	161 841	2	161 671	4	297 866	14
Rural	77 267	1	155 202	4	289 746	14
Urban	84 574	1	6 469	0	8 120	0
Southern	3 314 135	39	482 545	11	1 428	0
Rural	3 237 764	38	477 571	11	1 428	0
Urban	76 371	1	4 974	0	0	0
Western	174 938	2	194 965	5	160 317	8
Rural	160 083	2	189 214	4	158 256	8
Urban	14 855	0	5 751	0	2 061	0

Table 13.3 presents data on maize and cassava production by gender of head of household and socio-economic group. From the table it can be seen that 96 percent of total hybrid maize and 81 percent of local maize was produced by male headed households.

Small scale farming households ranked first in both hybrid and local maize production accounting for 47 and 83 percent for the respective crops. Large scale farmers accounted for a quarter of total hybrid maize production and less than 1 percent of local maize. The three urban socio-economic groups together accounted for 14 and 10 percent of total hybrid maize and local maize production respectively.

Male headed households accounted for 83 percent of total cassava production while female headed households accounted for about 17 percent. Small scale farming households accounted for 90 percent of total cassava production while the rest of the socio-economic groups accounted for only 10 percent. Large scale farming households hardly produced any cassava.

Table 13.3: Production of hybrid maize, local maize and cassava by gender of head of household and socio-economic group

	Hybrid maize		Local maize		Cassava	
	Production (90kg Bag)	Proportion of total production (Percent)	Production (90kg Bag)	Proportion of total production (Percent)	Production (90kg Bag)	Proportion of total production (Percent)
Gender of head of household						
Male headed	8 160 941	96	3 398 776	81	1 712 050	83
Female headed	364 612	4	819 224	19	351 648	17
Socio-economic group						
Small scale farming	3 996 096	47	3 497 681	83	1 854 429	90
Medium scale farming	1 230 369	14	272 493	6	147 220	7
Large scale farming	2 090 832	25	18 646	-	243	-
Non-agric hhold	7 700	-	26 496	1	23 562	1
Low cost areas	652 931	8	259 846	6	10 274	-
Medium cost areas	270 990	3	119 922	3	10 608	1
High cost areas	276 635	3	22 916	1	17 362	1

Figure 13.3 Production of maize by Province
(Hybrid and Local maize combined)

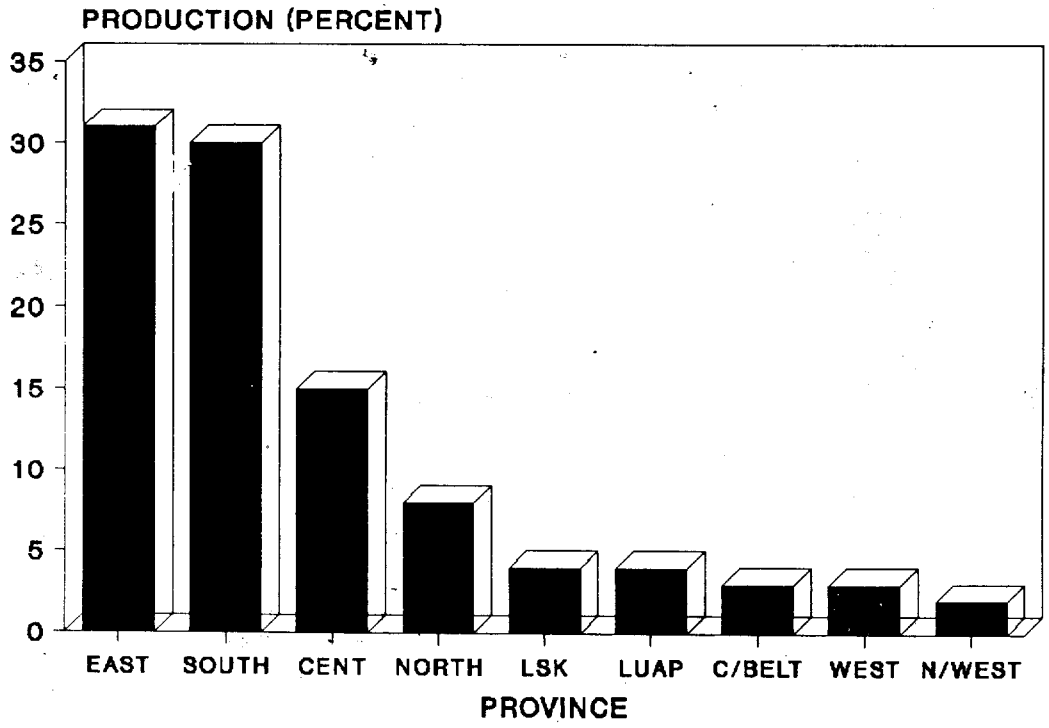


Figure 13.4 Production of Hybrid maize by Province

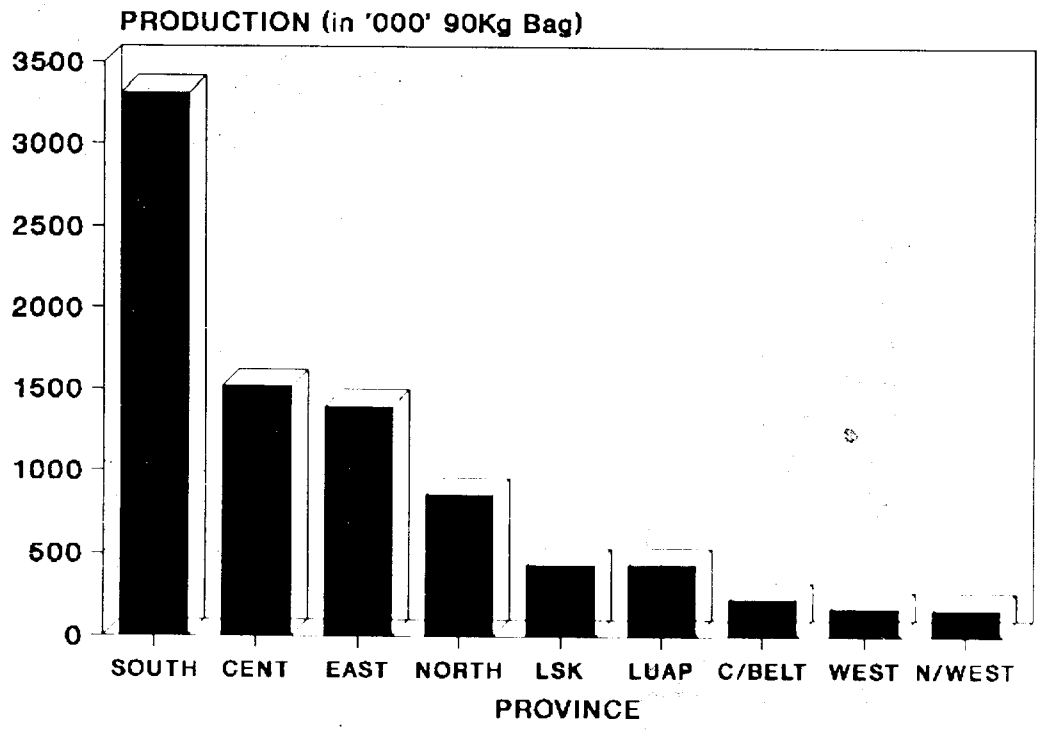


Figure 13.5 Production of Local maize by Province

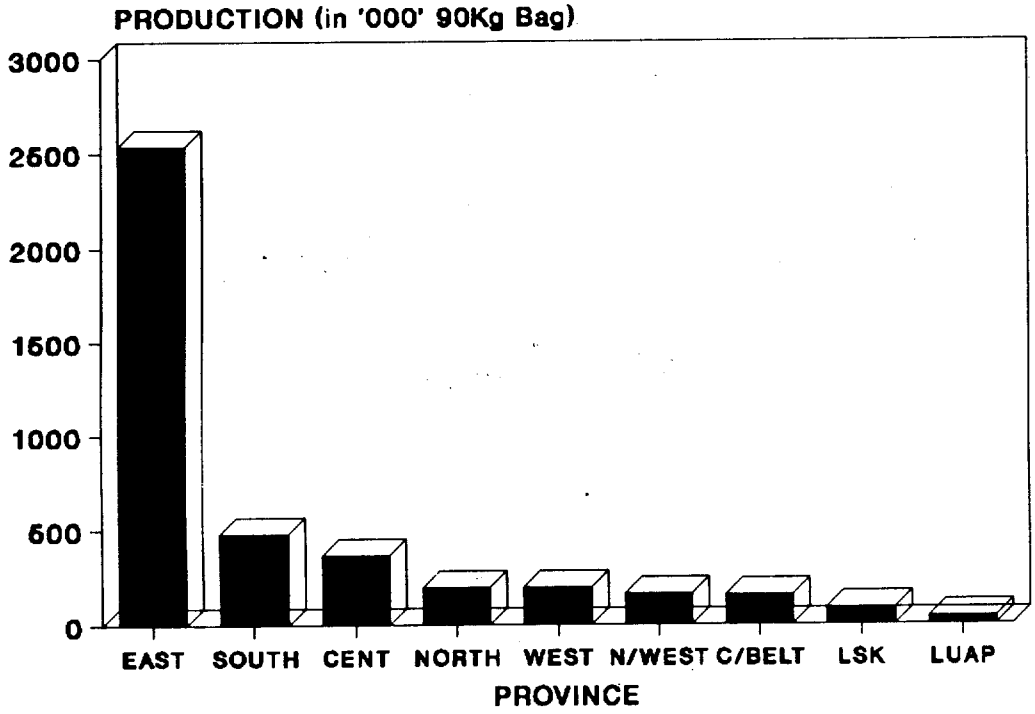
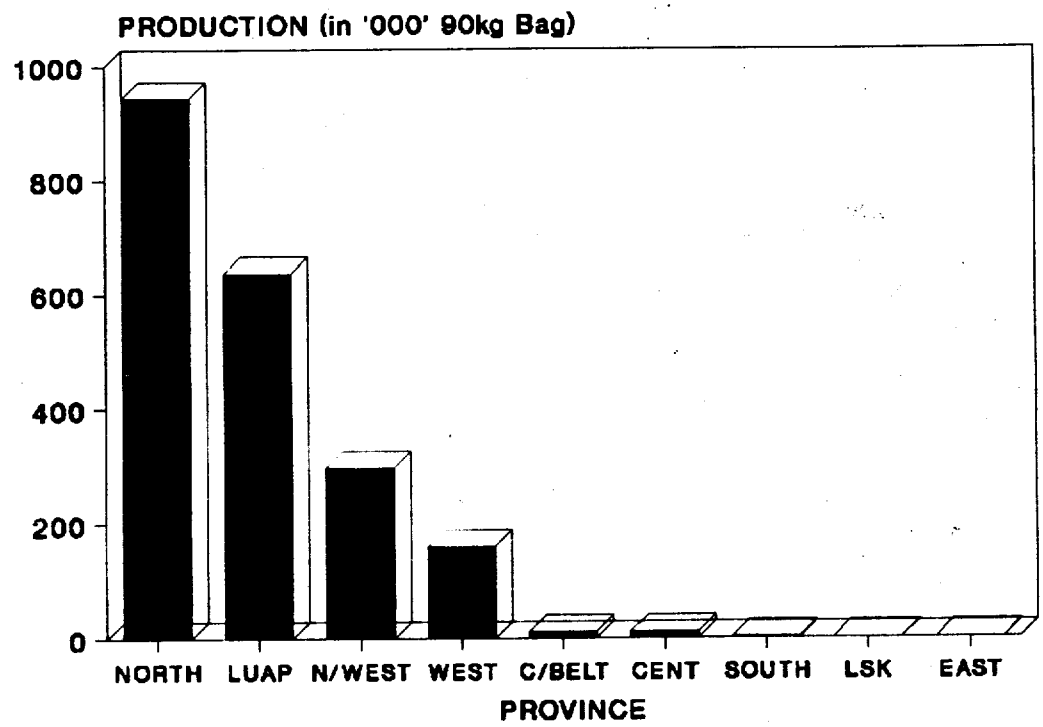


Figure 13.6 Production of Cassava by Province



The main maize growing provinces are Eastern, Southern, Central and Northern. Table 13.4 shows the percentage distribution by province

Table 13.4: Percentage share of total maize production by Province

Province	Percentage share
Eastern	31
Southern	30
Central	15
Northern	8
Lusaka	4
Luapula	4
Copperbelt	3
Western	3
North-western	2
Total	100

The four main maize producing provinces accounted for 84 percent of the estimated total maize production for the 1990/91 season. Eastern and Southern provinces alone accounted for about 61 percent of the total production.

Cassava is mostly grown in Northern, Luapula, North-western and Western provinces accounting for 46, 31, 14 and 8 percent respectively. An estimated 2 million (90kg) bags of cassava flour were reported to have been produced in the 1990/91 agriculture season of which 90 percent was grown by small-scale farming households.

A small proportion of the rural households who did not fulfil the criterion of being included in agricultural households strata at listing stage reported some little agricultural activities at enumeration stage. Thus the socio-economic group 'non-agricultural households' has a very small proportion of hybrid maize, local maize, cassava, livestock and poultry production.

Tables 13.5 and 13.6 and subsequent Figures display data on the number of livestock and poultry owned by households. The data excluded livestock and poultry owned by institutions.

Cattle

About 3 million cattle of all types are estimated to have been owned by households as at the survey period of which 87 percent are owned by rural households

Southern province ranks first in terms of ownership of cattle by province and accounts for 46 percent of total cattle owned, followed by Western province (16 percent). Luapula is the least with only 1 percent.

Male headed households own 92 percent of total cattle as against 8 percent for female headed households.

Most cattle are owned by small scale farmers which account for 60 percent of total cattle owned, followed by large scale farmers (16 percent) and medium scale farmers (10 percent). The rest of the socio-economic groups own only about 14 percent.

Goats

An estimated 1 million goats of all types were owned by households in Zambia, of which 90 percent were owned by rural households.
The distribution of goats by province ranged between 30 percent in southern and 3 percent in Western province.

Male headed households own 86 percent of total goats as against 14 percent for female headed households.

Table 13.5: Livestock and Poultry owned by Residence and Province

Reside, Province	Livestock				Poultry		
	Cattle	Goat	Pigs	Sheep	Chicken	Duck	other Poultry
Residence							
Rural	87	90	87	84	84	50	59
Urban	13	10	13	16	16	50	41
Total	100	100	100	100	100	100	100
Central	10	10	5	0	11	15	4
C/Belt	3	4	4	3	7	14	33
Eastern	11	26	51	16	13	7	18
Luapula	1	5	2	8	6	20	1
Lusaka	4	5	4	3	8	5	5
Northern	6	9	12	16	15	22	4
N/west	3	8	3	8	5	4	1
Southern	46	30	16	46	30	9	33
Western	16	3		0	5	4	1
Total	100	100	0	100	100	100	100

Small scale farmers own 80 percent of total goats while medium and large scale farming households account for 8 percent and 1 percent respectively.

Pigs

An estimated 600,000 pigs were owned by households. Of which 87 percent were owned by rural households and 13 percent by urban households.

Distribution of ownership of pigs by province ranged between 51 percent in Eastern to only 2 percent in Luapula province.

Male headed households accounted for 85 percent of total pigs owned as compared to 15 percent for female headed households.

Within the socio-economic groups, the bulk of pigs (78 percent) are owned by small scale farming households.

Sheep

Sheep are not as widely reared in Zambia as the other three types of livestock. An estimated 161,000 sheep were owned by households, of which 84 percent were owned by households in rural areas.

The largest sheep population was recorded by households in Southern province (46 percent) followed by Eastern province and Northern province with 16 percent each. The rest of the six provinces (Luapula, North-western, Copperbelt, Lusaka, Central and Western) accounted for 22 percent of total sheep owned.

Male headed households accounted for 98 percent of sheep while female headed households only owned 2 percent of total sheep.

Small scale farming households accounted for 62 percent of total sheep. Medium and large scale farming households 3 and 19 percent respectively.

Chickens

Chicken is the single most important type of poultry produced in Zambia over the years. An estimated 11 million chickens were owned by households at the survey period of which 84 percent were owned by rural households.

Southern province had by far the highest proportion of households who owned chickens (30 percent) followed by Northern province (15 percent), Eastern province (13 percent) and Central province (11 percent). The rest of the five provinces accounted for the remaining 31 percent of total chicken owned.

Male headed households accounted for 87 percent of total chickens owned while female headed households accounted for the remaining 13 percent.

Small scale farming households accounted for 59 percent of total chickens owned while medium and large scale farming households only accounted for 5 percent and 18 percent respectively. The rest of the socio-economic groups accounted for 18 percent of total chickens owned.

Ducks

Ducks are also produced throughout the country but in relatively much smaller numbers than chickens. An estimated 500,000 ducks were owned by households as at the survey date. Of which were equally shared between rural and urban households.

The provincial distribution of ducks ranged between 22 percent in Northern and 4 percent each in Western and North-Western provinces.

Male headed households accounted for 92 percent of total ducks owned.

Small scale farmers accounted for 43 percent of total ducks owned while medium and large scale farming households accounted for 5 and 2 percent respectively. There was a very substantial amount of ducks owned by two urban socio-economic groups 31 percent in low-cost housing areas and 14 percent in the medium-cost housing areas while households in high cost areas accounted for 5 percent of total ducks owned.

Other poultry

Other poultry included guinea fowls, pigeons, geese, turkeys and rabbits. These types of poultry are raised in all parts of the country at varying scales.

An estimated 1 million other poultry were owned by households at the survey period. Rural households accounted for 59 percent with 41 percent in urban areas. For detailed information see Table 13.6

Table 13.6: Livestock and Poultry owned by Gender of head of household and Socio-economic group

Gender of head of household	Livestock				Poultry		
	Cattle	Goat	Pigs	Sheep	Chicken	Duck	other Poultry
Male headed	92	86	85	98	87	92	95
Female headed	8	14	15	2	13	8	5
Total	100	100	100	100	100	100	100
Socio-economic group							
Small scale farmers	60	80	78	62	59	43	47
Medium scale farmers	10	8	8	3	5	5	9
Large scale farmers	16	0	0	19	18	2	2
Non-agric households	1	2	1	0	2	0	0
Low cost areas	6	4	7	2	7	31	36
Medium cost areas	4	4	3	2	6	14	4
High cost areas	3	2	3	12	3	5	2
	100	100	100	100	100	100	100
(N) Total L/stock/poultry ('000')	2712	1197	642	161	10931	481	

Figure 13.7 Cattle owned by Province

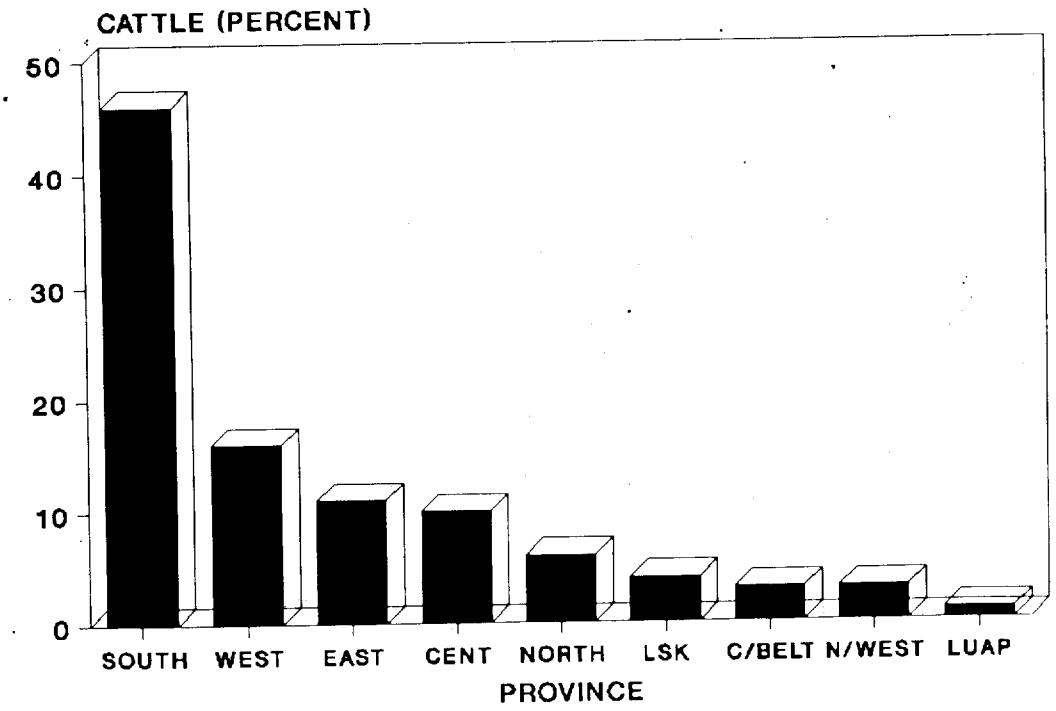


Figure 13.8 Goats owned by Province

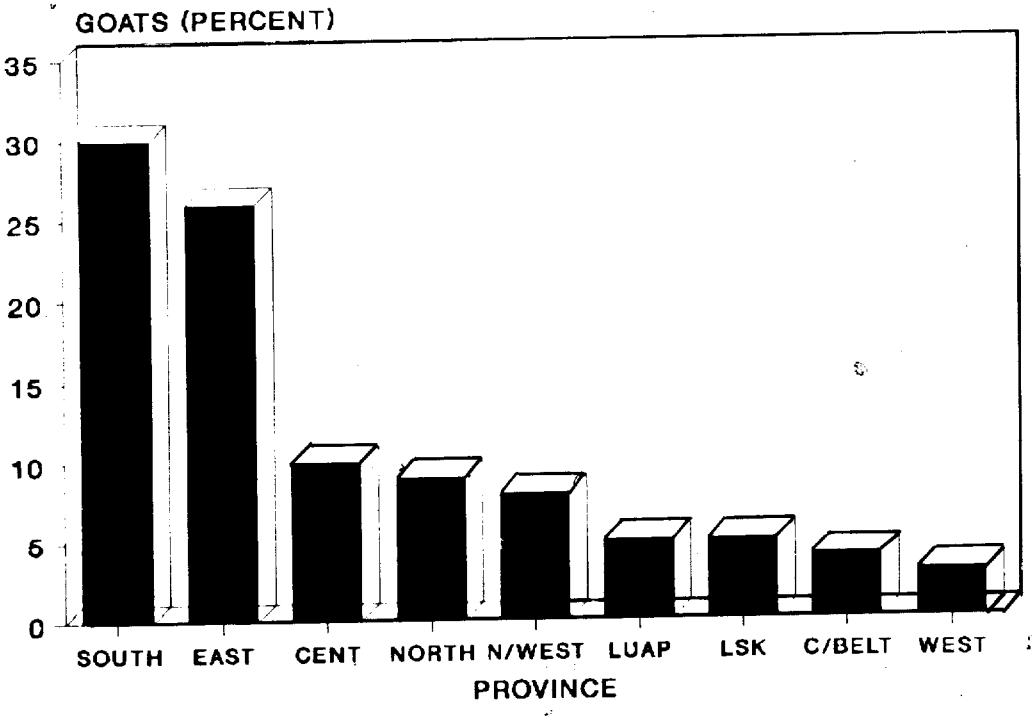


Figure 13.9 Pigs owned by Province

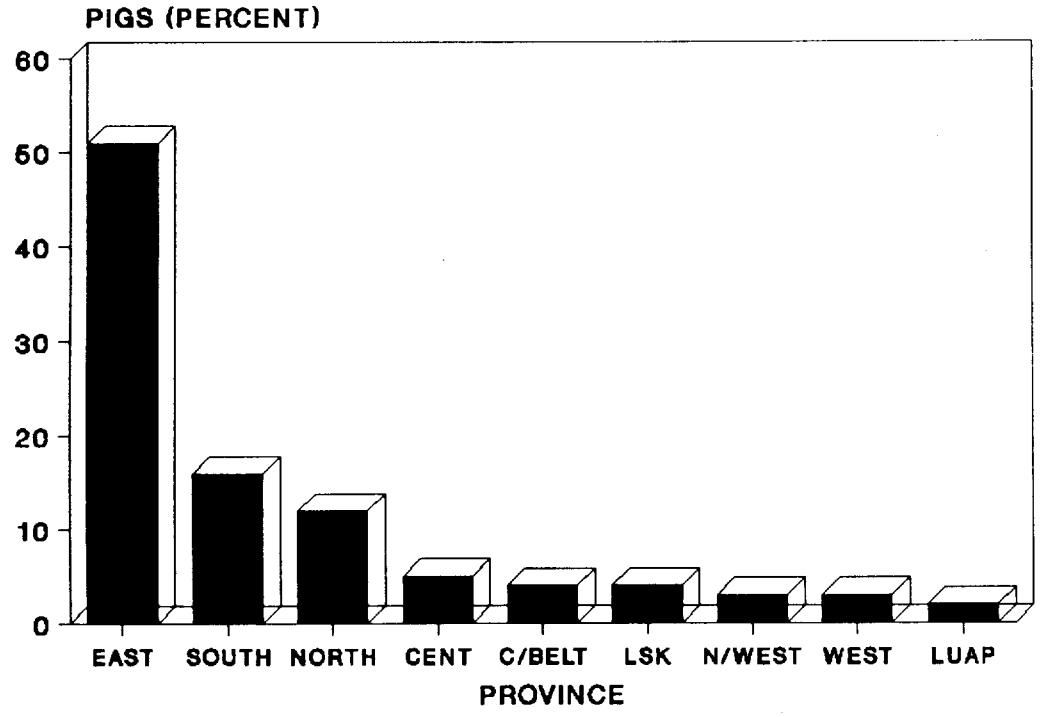


Figure 13.10 Sheep owned by Province

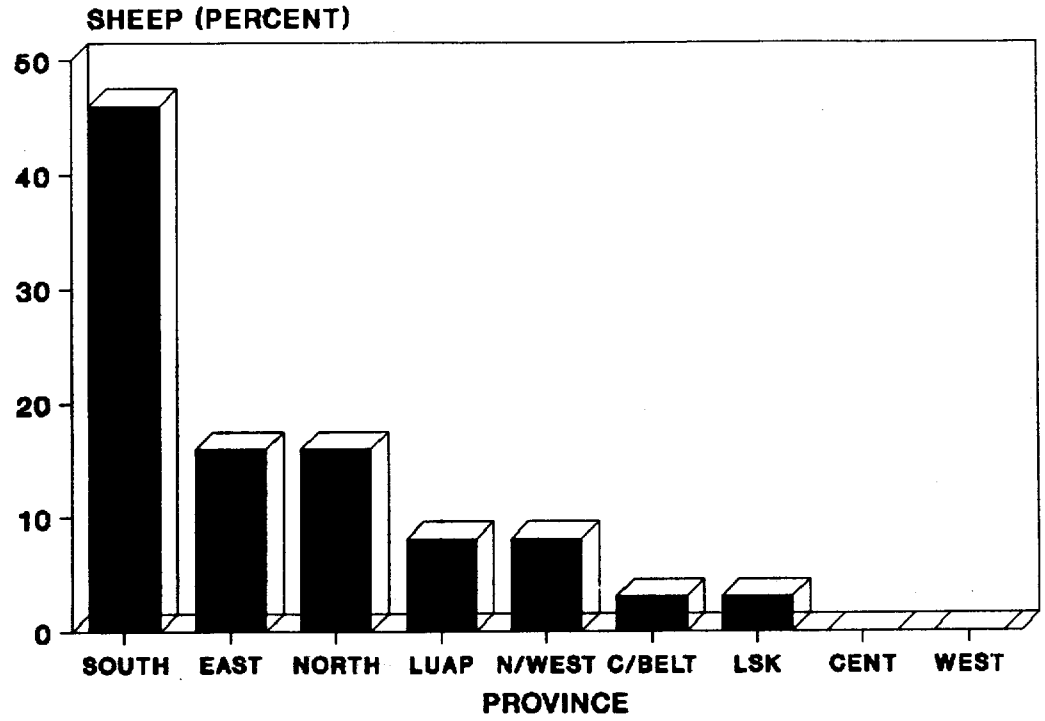


Figure 13.11 Chickens owned by Province

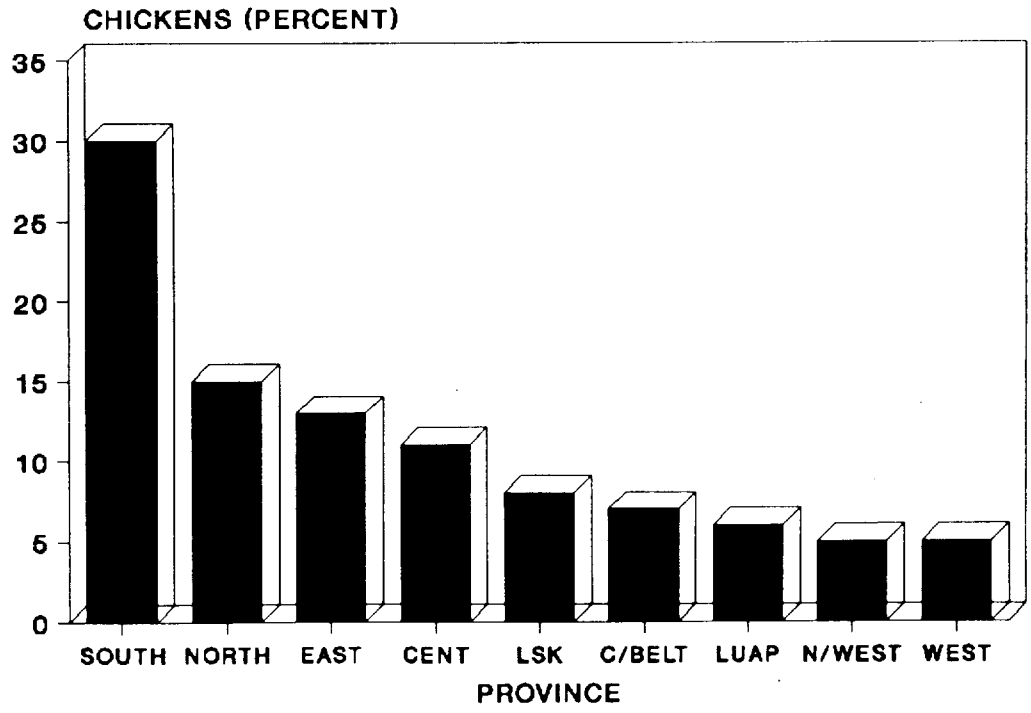
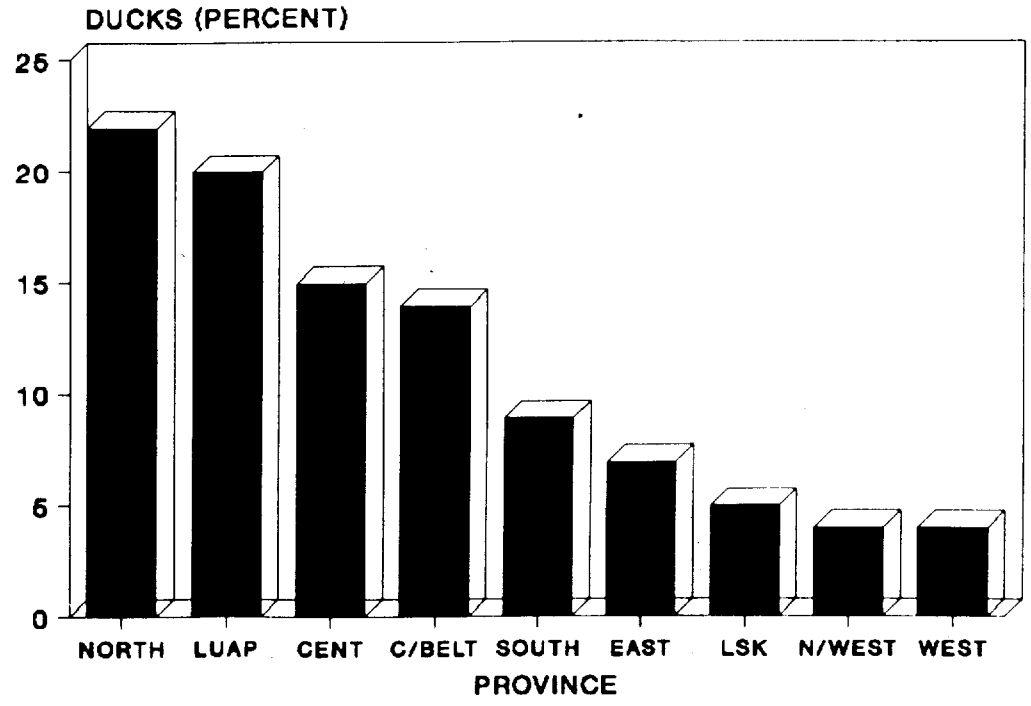


Figure 13.12 Ducks owned by Province



Chapter 14 Anthropometry

14.1 Coverage, Concepts and Definitions

The Priority Survey collected data on actual age, sex, weight and length of children aged 3 to 59 months. These data allow for the calculation of indicators of the children's nutritional status. The calculated indicators are important because children's nutritional status influences their susceptibility to disease and premature death. The indicators are also useful when analysis is done by socio-economic groups.

The main objective of this chapter is to show the scope and prevalence of nutritional status of children below the age of five in Zambia based on the results of the Priority Survey. All children in the surveyed households aged 3 to 59 months had their length and weight measured except for crippled children.

The weights for the children surveyed were measured using salter hanging scales with 25 kilogram maximum and 100 gram increments. For the length, locally constructed measuring boards were used. The length boards callibarated in meters, centimetres and milimeters, hence the length was obtained to the nearest 0.1 cm.

The age, sex, weights and lengths collected from the survey for the under-five children were used to construct indicators of stunting, wasting and under-nutrition, which are briefly described in this section.

As recommended by the World Health Organisation (WHO), the nutritional status of the children below five years in the survey were compared with an international reference population defined by the United States National Center for Health Statistics (NCHS)- and accepted by the U.S. Center for Disease Control (CDC). The data from the reference population of children was developed to facilitate analysis of data from developing countries. The use of this reference population is based on the finding that well-nourished young children of all population groups follow very similar growth pattern, and that the variation in height and weight in a population approximates a normal distribution. Each of the three nutritional status indicators described below are therefore expressed in standard measure (z-scores) which are deviation scores from the mean of the reference population. The reference population then serves as a point of comparison, both between groups and overtime.

Stunting

Stunting takes into account height-for-age of a child. The height-for-age index is an indicator of linear growth retardation. Children whose height-for-age is below minus two standard deviations (-2SD) from the mean of the reference population are considered short for their age, stunted and are chronically undernourished. Stunting reflects the failure of receiving adequate nutrition over a long period of time, and is also affected by recurrent and chronic illness. Height-for-age, therefore, represents a measure of the long-term effects of under-nutrition in a population, and it does not vary according to seasonal variations in the amount of food available. Hence, this measure is not affected by the seasor which data are collected. Furthermore, stunted children are not immediately visible in a popu . A stunted three-year-old child might very well look like a well-fed- two-year-old. The weight-for-height ind body mass in relation to body length, is an indicator of current tional status in the period immediately preceeding the data-collection and is briefly described below.

Wasting

This is a weight-for-height index and relates body mass to the body length. This indicator describes the current nutritional status in the period immediately preceeding the data collection.
Children whose z-scores are below minus two standard deviations (-2DSD) from the mean of the reference population are considered thin, or wasted. Wasting may be caused by recent episodes of illness causing loss of weight but it may also indicate the onset of more permanent under-nutrition which may also reflect acute food shortage.

Under-nutrition

Weight-for-age is a composite index of height-for-age and weight-for-height. It takes into account both acute and chronic under-nutrition. It is a useful tool in clinical settings for continuous assessment of nutritional progress and growth. The measure does not, however, distinguish whether the underweight is chronic or acute. Children whose weight-for-age is below minus two standard deviation (-2SD) from the mean of the reference population are classified as underweight.

The three indicators of malnutrition stated above were calculated using the ANTHRO software program developed by the US center for Disease Control in Atlanta, Georgia. Extreme anthropometric values of greater than plus or minus 6 z-scores for height-for-age and weight-for-age, and 4 z-scores for weight-for-height, were excluded from the analysis. As a result 1,443 (or 20 percent) out of 7,120 of the survey children were excluded from the analysis.

14.2 Mean weights and heights

Table 14.1 presents the mean weight and heights for the survey children and the reference children. Looking at both the Zambian and reference children data shows that the weights and heights for Zambian girls and boys are lower at all ages but the difference becomes more significant as age increases.

When compared to the reference population, it turn out that both Zambian boys and girls weigh less and are shorter than the reference population in all age groups except for 3-6 months.

For instance, Zambian boys aged 19 to 24 months weigh on the average about 1 kilogram less than the boys in the reference population. The differences in the mean weights and heights between the Zambian and reference children increases as age increases. For example, in the age group 37-59 months a Zambian boy on the average weighs more than two kilograms less and almost 8 cm shorter than the reference boy. The same pattern applies to girls also.

Table 14.1: Mean weights and heights of children by age groups and gender. Zambia children and Reference Population (Percent)

Age Group (months	Weight (kg)					
	Zambian children				Reference children	
	Male	Number	Female	Number	Male	Female
3-6	7.0	203	6.5	233	7.0	6.3
7-12	8.4	424	8.1	378	9.3	8.7
13-18	9.5	346	9.1	316	11.0	10.3
19-24	10.8	440	10.4	432	12.1	11.4
25-36	12.3	645	12.0	681	13.6	13.1
37-59	14.5	783	14.1	796	16.7	15.9
All children	11.4	2841	11.1	2836		
	Height (cms)					
	Zambia children				Reference children	
	Male	Number	Female	Number	Male	Female
3-6	63	203	62	233	64.6	62.9
7-12	70	424	69	378	72.9	71.1
13-18	75	346	74	316	79.9	78.3
19-24	81	440	80	432	85.1	83.9
25-36	86	645	85	681	90.8	89.8
37-59	95	783	95	796	102.8	101.5
All children	82	2841	82	2836		

14.3 Incidence of malnutrition

Tables 14.2 and 14.3 present the incidence and levels of the three indicators of the nutritional status of children. That is the prevalence of stunting, under-nutrition, and wasting at national level, by residence, age of children, gender of children, gender of head of household, province, household size, and highest level of mother's education.

Chronic malnutrition, i.e. stunting is a very serious problem throughout the country. Under-nutrition is less prevalent and wasting is the least prevalent form of malnutrition in Zambia.

At the national level 39 percent of the children are stunted, 22 percent under-nourished and 6 percent wasted. When broken down by rural and urban areas the prevalence of stunting and wasting is more rife in rural than in urban areas, 46 percent and 25 percent compared to 35 percent and 20 percent respectively. The incidence of wasting is higher in urban areas than in rural areas, 7 percent and 5 percent respectively.

When analysed by age, the prevalence of stunting is lowest at the early age of 3 to 6 months, and increases with increased age, peaks at age 25-36 months and declines at age 37-59 months. Under-nutrition is very low at the age of 3 to 6 months (3 percent) as compared to over 20 percent for the older age group. The age 3 - 6 months is the time mothers are most likely to breastfeed their

children and the low incidence of under-nutrition can be attributed to the notion that the prevalence of breast-feeding significantly reduces malnutrition in the youngest age groups. The prevalence of wasting is lowest in the age group 3-6 months (5 percent), increases as the age increases, peaks at 19-24 months (10 percent), and declines to 4 percent at the age group 37-59 months.

Table 14.2: Incidence of stunting, under-nutrition and wasting by place of residence and province

	Stunted	Under-nutrition	Wasted	(n) Sample Children
All Zambia	39	22	6	5,677
All Rural	46	25	5	1,980
All Urban	35	20	7	3,697
Province and Residence				
Central	45	21	4	590
Rural	56	22	3	311
Urban	32	21	5	279
Copperbelt	37	21	6	1,737
Rural	36	21	4	56
Urban	37	21	6	1,681
Eastern	45	23	5	299
Rural	48	23	4	250
Urban	33	24	10	49
Luapula	44	28	9	176
Rural	41	29	6	111
Urban	49	26	12	65
Lusaka	35	19	9	1,101
Rural	34	23	9	65
Urban	35	19	9	1,036
Northern	54	33	8	517
Rural	60	35	7	347
Urban	42	28	10	170
N/western	26	17	12	145
Rural	32	23	10	81
Urban	17	9	14	64
Southern	32	18	6	780
Rural	36	21	7	569
Urban	20	11	4	211
Western	36	21	1	332
Rural	41	27	1	190
Urban	29	13	1	142

Table 14.3 shows that Gender differences in all the 3 indicators are apparent. Males are significantly worse off for all the indicators of nutritional status. Forty one percent of boys are stunted as compared to 36 percent of girls, 23 percent of boys are under-nourished as compared to 19 percent of girls, and 8 percent of boys are wasted as compared to 5 percent for girls.

Children in female headed households are somewhat more exposed to malnutrition than children in male-headed. There are 43 percent stunted children in the female headed households as compared to 38 percent for male headed households, 25 percent under-nourished as compared to 21 percent, and 7 percent as compared to 6 percent.

Children in smaller sized households are on the average more likely to be stunted, under-nourished, and wasted than children in bigger sized households. The opposite should really be expected as smaller sized households should be less constrained in terms of availability of nutritious food. The results could be explained by the notion that as the household size increases there are more members of the households related to the children who help in looking after them. Whereas small sized households may depend solely on maids and nannies to care for young children.

Children of educated mothers are on the average less likely to be stunted, under-nourished, or wasted than children of less educated mothers. As the data depicts, children born of mothers with no formal education are more likely to be stunted (44 percent), under-nourished (28 percent) and wasted (6 percent) as compared to 30 percent, 18 percent, and 7 percent respectively for children of mothers with secondary school education (Grade 8-12). The sample here does not add up to the total sample because some under-five children's mothers were not members of the same households. Caution must be taken when interpreting data on children of mothers of degree level of education and higher because of the small sample size.

The prevalence of chronic malnutrition is highest in Northern, Central, and Eastern provinces (54, 45 and 45 percent respectively), and lowest in North-Western and Southern provinces (26 and 32 percent respectively). Northern province has highest prevalence of under-nutrition (33 percent) and North-Western has the least prevalence (17 percent). North-Western province has the highest prevalence of wasting (12 percent) and Western province the least (1 percent).

Rural-urban comparisons within provinces do not show a similar pattern of incidences of malnutrition. Central, Eastern, Northern, North-Western, Southern and Western provinces have a higher prevalence of stunting in rural areas than in urban areas of their respective provinces. Copperbelt, Luapula and Lusaka provinces have a higher prevalence of stunting in urban than in rural areas. Northern has the highest prevalence of stunting in rural areas (60 percent) and Luapula has the highest prevalence in urban areas (49 percent).

Central, Luapula, Lusaka, Northern, N/Western, Southern, and Western provinces have high prevalence of under-nutrition in their rural areas than in their urban areas. Eastern province has a higher prevalence of under-nutrition in its urban areas than in the its rural areas. Copperbelt has the same prevalence of under-nutrition in both its rural and urban areas (21 percent).

Central, Copperbelt, Eastern, Luapula, Northern and N/Western provinces have lower prevalences of wasting in their rural areas than in their urban areas as against Southern province which has a higher prevalence of wasting in its rural than in its urban areas. Lusaka and Western provinces have the same level of prevalence of wasting in both their rural and urban areas,

The analysis made above is further graphed below in Figures 14.1 to 14.4 in order to present a pictorial view of the three indicators of the nutritional status of children aged between 3 and 59 months.

Table 14.3: Incidence of stunting, under-nutrition and wasting by gender of head of household, households size, and educational level of mother.

	Stunted	Under-nutrition	Wasted	(n) Sample Children
Gender of head of household				
Male headed	38	21	6	5,096
Female headed	43	25	7	581
Household size				
2-3	45	26	7	368
4-5	40	22	6	1,311
6-7	37	23	7	1,412
8-9	37	19	6	1,175
10++	38	20	6	1,411
Highest level of education of mother				
None	44	28	6	869
Grade 1-7	41	22	6	3,024
Grade 8-12	30	18	7	1,480
'A' Level and College	39	20	13	56
Degree and higher	0	0	0	2
Gender of child				
Males	41	24	8	2,841
Females	36	19	5	2,836
Age of Children (months)				
3-6	17	3	5	436
7-12	32	23	8	802
13-18	40	28	9	662
19-24	38	24	10	872
25-36	44	23	5	1,326
37-59	43	21	4	1,579

Figure 14.1 Incidence of stunting, under-nutrition, and wasting by Province, (Percent within each Province)

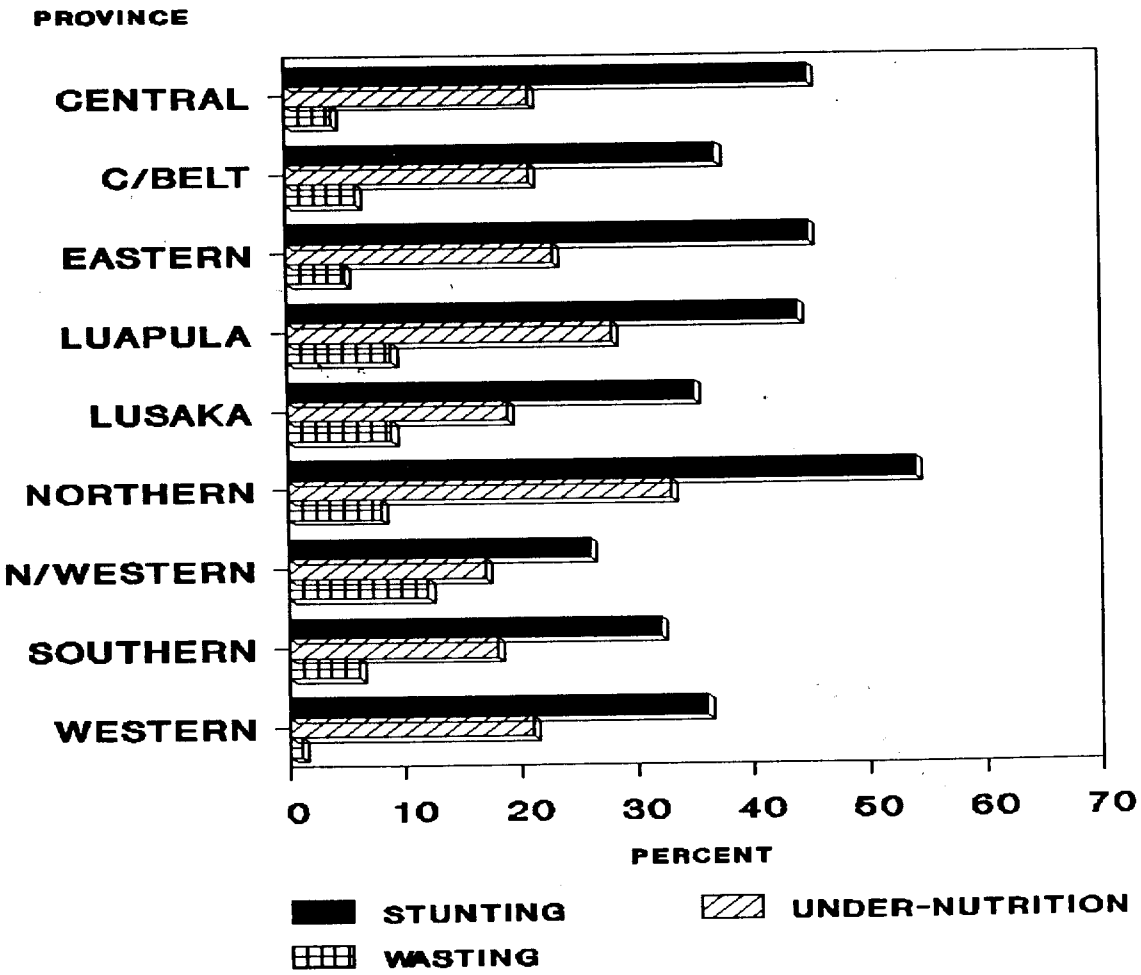


Figure 14.2 Incidence of stunting, under-nutrition, and wasting by residence

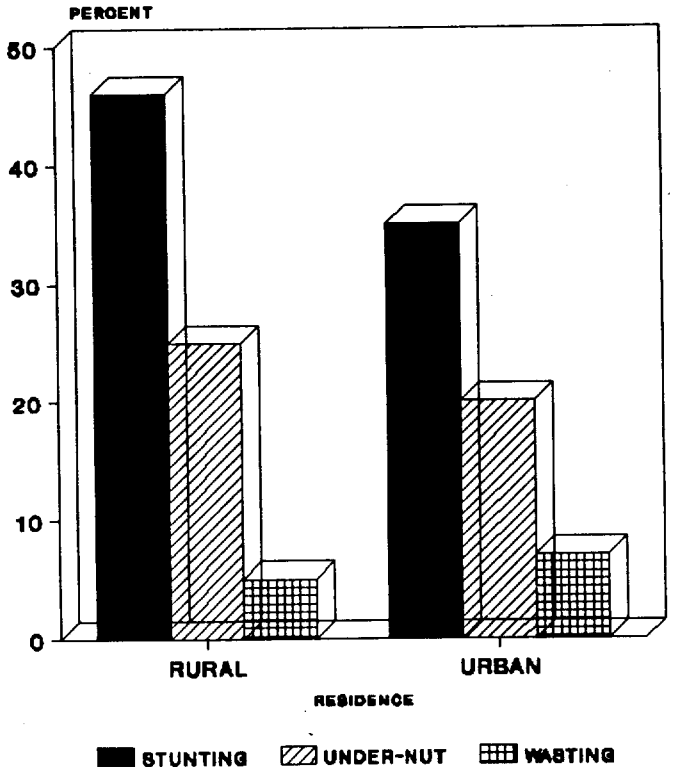


Figure 14.3 Incidence of stunting, under-nutrition, and wasting by Gender of head

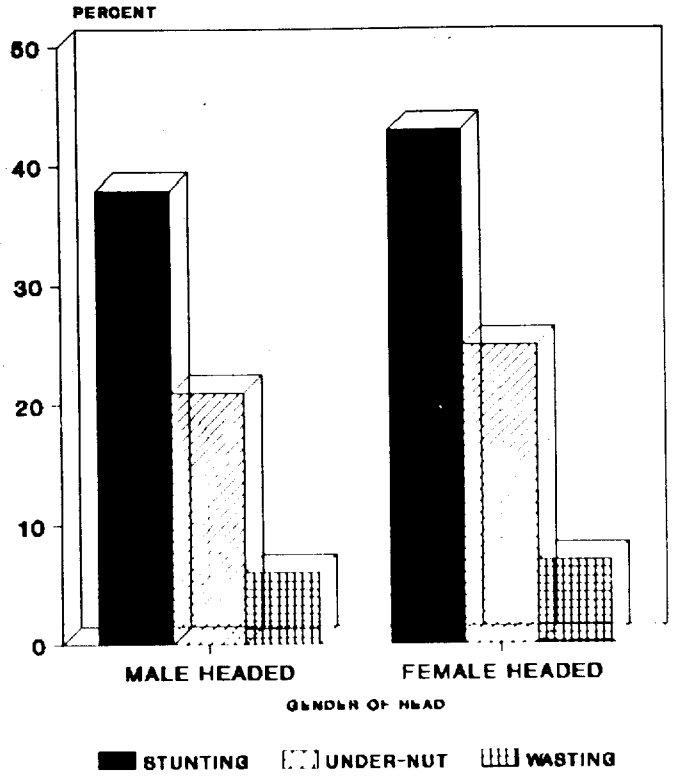
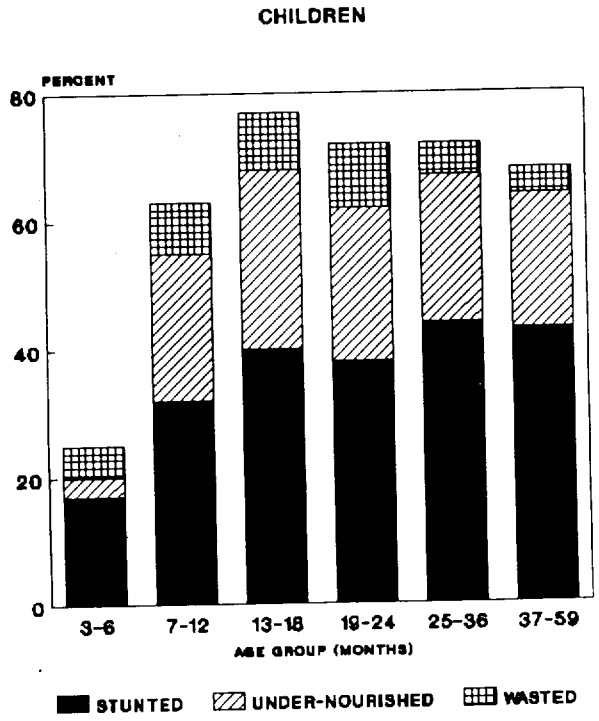


Figure 14.4 Incidence of stunting, under-nutrition, and wasting by age of children



APPENDICES

Appendix 1: List Of Selected Variables For Sampling Errors

SHORT VARIABLE NAME	LONG VARIABLE NAME	ESTIMATES
POP	Estimated Population	Number
INCOME	Average monthly Household Income	Number
EXPENDIT	Average monthly Household Expenditure	Number
EXCLOTH	Household Expenditure on Clothing	Percentage
EXEDUC	Household Expenditure on Education	Percentage
EXEFOOD	Household Expenditure on Food	Percentage
EXHOUSE	Household Expenditure on Housing	Percentage
EXEMEDIC	Household Expendjture on Medical Care	Percentage
EXEPEREMM	Household Expenditure on Remittances	Percentage
EXTRANS	Household Expenditure on Transport	Percentage
TSTU	Total number of children stunted	Number
TNUT	Total number of children undernourished	Number
TWAST	Total number of children wasted	Proportion
PSTU	Proportional number of children stunted	Proportion
PNUT	Proportional number of children undernourished	Proportion
PWAST	Proportional of children wasted	Proportion
HYBRID	Total Hybrid Maize production	Number
LOCAL	Total Local Maize production	Number

LIST OF SOCIO-ECONOMIC GROUPING VARIABLES

SHORT VARIABLE NAME	LONG VARIABLE NAME
SSF	Small Scale Farming Stratum
MSF	Medium scale Farming Stratum
LSF	Large scale Farming Stratum
NAG	Non - Agricultural Farming Stratum
LC	Low Cost Area
MC	Medium Cost Area
HC	High Cost Area

This Appendix provides sampling errors which have been presented in terms of :-

- Standard errors of estimates (S.E.)
- Coefficient of variation (C.V.)
- Design effect (DEFF)
- 95 percent confidence interval.

These have been calculated for selected analysis variables but not for classifying variables.

Sampling errors arise because observations are made on a sample rather than the whole population. Fortunately, sampling errors can be statistically evaluated and controlled. A sampling error is usually measured in terms of the standard error for an estimate in question.

A standard error is defined as the square root of the variance of the statistic under consideration. Standard errors are used to construct confidence intervals in which true values are expected to be with a certain probability. Confidence intervals presented in this Appendix are based on 95 percent confidence level.

On the other hand, non-sampling errors are non-systematic errors which arise from different sources such as:-

- Failure to understand a question by either an interviewer or a respondent.
- Failure to locate a household etc.

Non-sampling errors are difficult to evaluate. However, they can be minimized by implementing the follow

- Using tested survey instruments
- Doing better cartographic work
- Having effective training and supervision at all levels.
- Effecting good operational controls, including fl source documents etc.

It should be noted that sampling errors have been presented in a standard form.

A computer package called PC CARP, which has the capability of handling complex sampling designs, like the designs used in this survey, was used to calculate sampling errors presented in this Appendix. The package was developed by IOWA State University Statistical Laboratory.

ALL ZAMBIA

Variable	Estimate	S.E	C.V	DEFF	Confidence interval LOWER BOUND	UPPER BOUND
POP	7.77165D+06	1.81372D+05	2.3338D-02	1.5797D+01	7.41616D+06	8.12714D+06
CENTRAL PROVINCE						
POP	7.00024D+05	4.32106D+04	6.1727D-02	9.4097D+00	6.15331D+05	7.84717D+05
COPPERBELT PROVINCE						
POP	1.31158D+06	4.07396D+04	3.1061D-02	9.9402D+00	1.23173D+06	1.39143D+06
EASTERN PROVINCE						
POP	9.97376D+05	6.42096D+04	6.4378D-02	1.1884D+01	8.71525D+05	1.12323D+06
LUAPULA PROVINCE						
POP	6.08650D+05	5.44334D+04	8.9433D-02	1.6561D+01	5.01961D+05	7.15339D+05
LUSAKA PROVINCE						
POP	1.20659D+06	1.09536D+05	9.0782D-02	5.7297D+01	9.91899D+05	1.42128D+06
NORTHERN PROVINCE						
POP	9.50216D+05	6.73981D+04	7.0929D-02	1.3834D+01	8.18116D+05	1.08232D+06
NORTH/WESTERN PROVINCE						
POP	4.16854D+05	2.74715D+04	6.5902D-02	4.9909D+00	3.63010D+05	4.70698D+05
SOUTHERN PROVINCE						
POP	9.48919D+05	6.23109D+04	6.5665D-02	1.0393D+01	8.26790D+05	1.07105D+06
WESTERN PROVINCE						
POP	6.31432D+05	3.32387D+04	5.2640D-02	4.2063D+00	5.66284D+05	6.96580D+05

CENTRAL PROVINCE

INCOME	7.06338D+03	6.87522D+02	9.7336D-02	1.9835D+00	5.71584D+03	8.41092D+03

COPPERBELT PROVINCE

INCOME	9.20728D+03	7.26681D+02	7.8925D-02	3.3852D+00	7.78299D+03	1.06316D-04

EASTERN PROVINCE

INCOME	3.55745D+03	5.55027D+02	1.5602D-01	4.4804D+00	2.46960D+03	4.64530D+03

LUAPULA PROVINCE

INCOME	5.53773D+03	1.16457D+03	2.1030D-01	3.9492D+00	3.25517D+03	7.82029D+03

LUSAKA PROVINCE

INCOME	1.46991D+04	9.00416D+02	6.1256D-02	3.0011D+00	1.29343D+04	1.64639D+04

NORTHERN PROVINCE

INCOME	3.42431D+03	4.85640D+02	1.4182D-01	2.5426D+00	2.47246D+03	4.3761D+03

NORTHWESTERN PROVINCE

INCOME	3.26074D+03	7.08027D+02	2.1714D-01	6.6908D+00	1.87301D+03	4.64847D+03

SOUTHERN PROVINCE

INCOME	6.52996D+03	6.99216D+02	1.0708D-01	2.0901D+00	5.15950D+03	7.90042D+03

WESTERN PROVINCE

INCOME	2.90787D+03	4.54482D+02	1.5629D-01	2.5105D+00	2.01709D+03	3.79865D-03

ALL ZAMBIA

Variable	Estimate	S.E	C.V.	DEFF	CONFIDENCE INTERVAL Lower Bound	Upper Bound
EXCLOTH	9.37839D-02	3.41711D-03	3.6436D-02	4.4062D+00	8.70864D-02	1.00481D-01
EXEDUC	2.25201D-02	1.32413D-03	5.8798D-02	5.1162D+00	1.99248D-02	2.51154D-02
EXFOOD	5.84886D-01	1.02763D-02	1.7570D-02	6.9179D+00	5.64744D-01	6.05028D-01
EXHOUSE	1.71565D-01	1.14350D-02	6.6651D-02	1.2360D+01	1.49152D-01	1.93978D-01
EXMEDIC	1.16490D-02	6.96774D-04	5.9814D-02	1.8745D+00	1.02833D-02	1.30147D-02
EXPEREMM	4.79731D-02	3.43959D-03	7.1698D-02	3.2984D+00	4.12315D-02	5.47147D-02
EXTRANS	6.76234D-02	2.86438D-03	4.2358D-02	1.5742D+00	6.20092D-02	7.32376D-02

RURAL

Variable	Estimate	S.E	C.V	DEFF	CONFIDENCE INTERVAL Lower Bound	Upper Bound
EXCLOTH	1.61943D-01	8.25051D-03	5.0947D-02	3.6357D+00	1.45772D-01	1.78114D-01
EXDUC	2.92662D-02	3.80000D-03	1.2984D-01	5.5801D+00	2.18182D-02	3.67142D-02
EXFOOD	5.37261D-01	1.48231D-02	2.7590D-02	3.8822D+00	5.08208D-01	5.66314D-01
EXHOUSE	1.05344D-01	8.74664D-03	8.3030D-02	2.9102D+00	8.82005D-02	1.22487D-01
EXMEDIC	1.26157D-02	1.16792D-03	9.2577D-02	2.0405D+00	1.03266D-02	1.49048D-02
EXPREMM	5.87820D-02	6.85800D-03	1.1667D-01	2.6957D+00	4.53403D-02	7.22237D-02
EXTRANS	9.47877D-02	8.74124D-03	9.2219D-02	2.6105D+00	7.76545D-02	1.11921D-01

URBAN

Variable	Estimate	S.E	C.V	DEFF	CONFIDENCE INTERVAL Lower Bound	Upper Bound
EXCLOTH	7.48915D-02	2.90622D-03	3.8806D-02	3.1480D+00	6.91953D-02	8.05877D-02
EXEDUC	2.06502D-02	1.20075D-03	5.8147D-02	4.0668D+00	1.82967D-02	2.30037D-02
EXFOOD	5.98086D-01	1.32353D-02	2.2129D-02	8.4308D+00	5.72145D-01	6.24027D-01
EXHOUSE	1.89920D-01	1.32815D-02	6.9932D-02	1.2130D+01	1.63888D-01	2.15952D-01
EXMEDIC	1.13811D-02	8.29315D-04	7.2868D-02	1.8500D+00	9.75564D-03	1.30066D-02
EXPREMM	4.49770D-02	4.11191D-03	9.1422D-02	3.7546D+00	3.69177D-02	5.30363D-02
EXTRNS	6.00940D-02	2.45101D-03	4.0786D-02	9.6906D-01	5.52900D-02	6.48980D-02

ALL ZAMBIA

Variable	Estimate	S.E	C.V.	DEFF	CONFIDENCE INTERVAL Lower Bound	Upper Bound
EXCLOTH	9.37839D-02	3.41711D-03	3.6436D-02	4.4062D+00	8.70864D-02	1.00481D-01
EXEDUC	2.25201D-02	1.32413D-03	5.8798D-02	5.1162D+00	1.99248D-02	2.51154D-02
EXFOOD	5.84886D-01	1.02763D-02	1.7570D-02	6.9179D+00	5.64744D-01	6.05028D-01
EXHOUSE	1.71565D-01	1.14350D-02	6.6651D-02	1.2360D+01	1.49152D-01	1.93978D-01
EXMEDIC	1.16490D-02	6.96774D-04	5.9814D-02	1.8745D+00	1.02833D-02	1.30147D-02
EXPEREMM	4.79731D-02	3.43959D-03	7.1698D-02	3.2984D+00	4.12315D-02	5.47147D-02
EXTRANS	6.76234D-02	2.86438D-03	4.2358D-02	1.5742D+00	6.20092D-02	7.32376D-02

RURAL

Variable	Estimate	S.E	C.V	DEFF	Confidence Interval Lower Bound	upper Bound
EXCLOTH	1.61943D-01	8.25051D-03	5.0947D-02	3.6357D+00	1.45772-01	1.78114D-01
EXDUC	2.92662D-02	3.80000D-03	1.2984D-01	5.5801D+00	2.18182-02	3.67142D-02
EXFOOD	5.37261D-01	1.48231D-02	2.7590D-02	3.8822D+00	5.08208-01	5.66314D-01
EXHOUSE	1.05344D-01	8.74664D-03	8.3030D-02	2.9102D+00	8.82005-02	1.22487D-01
EXMEDIC	1.26157D-02	1.16792D-03	9.2577D-02	2.0405D+00	1.03266-02	1.49048D-02
EXPREMM	5.87820D-02	6.85800D-03	1.1667D-01	2.6957D+00	4.53403-02	7.22237D-02
EXTRANS	9.47877D-02	8.74124D-03	9.2219D-02	2.6105D+00	7.76545-02	1.11921D-02

Variable	Estimate	S.E	C.V	DEFF	Confidence Interval Lower Bound	Upper Bound
EXCLOTH	7.48915D-02	2.90622D-03	3.88060-02	3.1480D+00	6.91953-02	8.05877D-02
EXEDUC	2.06502D-02	1.20075D-03	5.8147D-02	4.0668D+00	1.82967-02	2.30037D-02
EXFOOD	5.98086D-01	1.32353D-02	2.2129D-02	8.4308D+00	5.72145D 01	6.24027D 01
EXHOUSE	1.89920D-01	1.32815D-02	6.9932D-02	1.2130D+01	1.63888D 01	2.15952D 01
EXMEDIC	1.13811D-02	8.29315D-04	7.2868D-02	1.8500D+00	9.75564D-03	1.30066D 02
EXPREMM	4.49770D-02	4.11191D-03	9.1422D-02	3.7546D+00	3.69177D-02	5.30363D-02
EXTRNS	6.00940D-02	2.45101D-03	4.0786D-02	9.6906D-01	5.52900D-02	6.48980D 02
				SSE		
EXPENDIT	1.69588D-01	1.67296D-02	9.8649D-02	1.1025D+01	1.36798D 01	2.02378D-01
				MSE		
EXPEN IT	1.47365D-02	2.34992D-03	1.5946D-01	1.4798D+00	1.01307D-02	1.93423D-02

				LSF		
EXPENDIT	3.87086D-03	2.43873D-03	6.3002D-01	2.2475D+00	9.09051D-04	8.65078D-03
				NAG		
EXPENDIT	2.88302D-02	7.52485D-03	2.6101D-01	1.1484D+01	1.40815D-02	4.35789D-02
				LC		
EXPENDIT	3.37113D-01	3.38015-02	1.0027D-01	1.8031D+01	2.70862D-01	4.00364D-01
				MC		
EXPENDIT	2.95877D-01	4.81801D-02	1.6284D-01	2.9202D+01	2.01444D-01	3.90310D-01
				HC		
EXPENDIT	1.4998D-01	2.95330D-02	1.9691D-01	1.4599D+01	9.20993D-02	2.07869D-01

ALL ZAMBIA

Variable	Estimate	S.E	C.V	DEFF	Confidence Interval Lower Bound	Confidence Interval Upper Bound
				SSF		
EXPENDIT	1.71289D+03	1.01343D+02	5.9165D-02	5.3922D+00	1.51426D+03	1.91152D+03
				MSF		
EXPENDIT	4.40426D+03	3.97368D+02	9.0224D-02	7.1482D-01	3.62542D+03	5.18310D+03
				LSF		
EXPENDIT	1.85107D+04	5.98607D+03	3.2338D-01	1.2775D+00	6.77800D+03	3.02434D+04
				NAG		
EXPENDIT	2.70176D+03	4.15779D+02	1.5389D-01	5.8071D+00	1.88683D+03	3.51669D+03
				LC		
EXPENDIT	7.17763D+03	2.78178D+02	3.8756D-02	4.9593D+00	6.63240D+03	7.72286D+03
				MC		
EXPENDIT	1.14168D+04	1.28419D+03	1.1248D-01	1.8954D+01	8.89979D+03	1.39338D+04
				HC		
EXPENDIT	1.25869D+04	1.12686+03	8.9526D-02	4.8411D+00	1.03783D+04	1.47955D+04
				SSF		
INCOME	2.86887D+03	1.89075D+02	6.5906D-02	3.1911D+00	2.49828D+03	3.23946D+03
				MSF		
INCOME	1.37559D+04	1.96185D+03	1.4262D-01	8.5933D-01	9.91067D+03	1.76011D+04
				LSF		
INCOME	4.69047D+04	7.33296D+03	1.5634D-01	3.4814D-01	3.25321D+04	6.12773D+04
				NAG		
INCOME	6.28558D+03	1.57397D+03	2.5041D-01	2.8504D+00	3.20006D+03	9.37056D+03
				LC		
INCOME	9.56936D+03	5.62850D+02	5.8818D-02	2.2737D+00	8.46617D+03	1.06725D+04
				MC		
INCOME	1.18995D+04	1.15192D+03	9.6804D-02	4.2763D+00	9.64174D+03	1.41573D+04
				HC		
INCOME	1.27473D+04	1.01316D+03	7.9480D-02	1.6623D+00	1.07616D+04	1.47331D+04

Variable	Estimate	S.E	C.V	DEFF	Confidence Interval Lower Bound	Confidence Interval Upper Bound
TSTU	2.18900D+03	7.31721D+01	3.3427D-02	3.9803D+00	2.04558D+03	2.33242D+03
TNUT	1.22400D+03	4.20392D+01	3.4346D-02	1.8404D+00	1.14160D+03	1.30640D+03
TWAST	3.64000D+02	2.43182D+01	6.6808D-02	1.7357D+00	3.16336D+02	4.11664D+02
PSTU	3.85591D-01	1.00690D-02	2.6113D-02	2.4290D+00	3.65856D-01	4.05326D-01
PNUT	2.15607D-01	6.15938D-03	2.8568D-02	1.2733D+00	2.03535D-01	2.27679D-01
PWAST	6.41184D-02	4.18859D-03	6.5326D-02	1.6595D+00	5.59088D-02	7.23280D-02

TOTAL PRODUCTION

ALL ZAMBIA

Variable	Estimate	S.E	C.V	DEFF	Confidence Interval Lower Bound	Confidence Interval Upper Bound
CENTRAL PROVINCE						
HYBRID	1.52978D+06	4.20778D+05	2.7506D-01	2.4060D+00	7.05055D+05	2.35405D+06
LOCAL	3.67968D+05	7.98163D+04	2.1691D-01	1.2493D+00	2.11528D+05	5.24407D+05
COPPERBELT PROVINCE						
HYBRID	4.47766D+06	2.93992D+06	6.5657D-01	1.3531D+00	-1.284581D+06	1.023991D+07
LOCAL	1.52249D+05	2.35952D+04	1.5498D-01	2.0358D+00	1.06002D+05	1.98496D+05
EASTERN PROVINCE						
HYBRID	2.75443D+06	1.38153D+06	5.0157D-01	6.1038D-01	4.66312D+04	5.46223D+06
LOCAL	2.54030D+06	2.32103D+05	9.1368D-02	5.5132D+00	2.08538D+06	2.99522D+06
LUAPULA PROVINCE						
HYBRID	4.36432D+05	2.40390D+05	5.5081D-01	1.6441D+00	-3.47324D+04	9.07596D+05
LOCAL	3.92910D+04	1.3290D+04	3.3827D-01	3.1736D+00	1.32408D+04	6.53412D+04
LUSAKA PROVINCE						
HYBRID	4.37179D+05	1.59277D+05	3.6433D-01	8.8093D-01	1.24996D+05	7.49362D+05
LOCAL	8.82170D+04	4.83983D+04	5.4863D-01	5.6823D+00	-6.64367D+03	1.83078D+05
NORTHERN PROVINCE						
HYBRID	2.62202D+06	1.83159D+06	6.9854D-01	4.3361D-01	-9.67896D+05	6.21194D+06
LOCAL	1.96895D+05	4.61105D+04	2.3419D-01	4.9029D+00	1.06518D+05	2.87272D+05
NORTH/WESTERN PROVINCE						
HYBRID	1.62557D+05	8.64735D+04	5.3196D-01	1.2842D+00	- 6.93204D+04	3.32046D+05
LOCAL	1.61942D+05	3.40477D+04	2.1025D-01	3.8877D+00	9.52085D+04	2.28675D+05
SOUTHERN PROVINCE						
HYBRID	3.33680D+06	1.89414D+06	5.6765D-01	2.2326D+00	-3.75714D+05	7.04931D+06
LOCAL	4.83677D+05	8.97875D+04	1.8564D-01	3.0826D+00	3.07694D+05	6.59661D+05
WESTERN PROVINCE						
HYBRID	1.75098D+05	1.27502D+05	7.2818D-01	4.3531D+00	-7.48059D+04	4.25002D+05
LOCAL	1.95293D+05	3.10404D+04	1.5894D-01	3.8810D+00	1.34454D+05	2.56132D+05

Appendix 2: Listing Form and Questionnaire

HOUSEHOLD LISTING FORM

PRIORITY SURVEY

STRICTLY CONFIDENTIAL

CENTRAL STATISTICAL OFFICE
P.O. BOX 31908
LUSAKA.

SUMMARY:

NAME OF LOCALITY/VILLAGE	BUILDING NUMBER	
	FROM	TO

SURVEY BUILDING NUMBER	HOUSING UNIT NUMBER	HOUSEHOLD NUMBER	NAME OF HEAD OF HOUSEHOLD	SEX OF HEAD OF HOUSEHOLD MALE(M)..1 FEMALE...2 (F)	NUMBER OF HOUSEHOLD MEMBERS			WAS ANY MEMBER OF THIS HOUSEHOL-D ENGAGED IN ANY AGRICULT-URAL ACTIVITY FOR THIS HOUSEHOL-D SINCE 1ST OCTOBER, 1990 YES...1 NO...2 >> 24	WHAT WAS THE TOTAL SIZE OF CULTIVATED AREA UNDER CROP LAST AGRICULTURA-L SEASON		
					BOTH	M	F		HECTARE	ACRE	LIMA
1	2	3	4	5	6	7	8	9	10	11	12

Listing Form Continued

PAGE ☐☐ OF ☐☐

CSA NO. ☐☐☐ SEA NO. ☐

DOES ANY MEMBER OF HOUSEHOLD OWN ANY LIVESTOCK? YES...1 NO...2 >> POULTRY COLUMN							DOES ANY MEMBER OF THE HOUSEHOLD OWN ANY POULTRY? YES..1 NO..2 >> 24				WHAT IS THE TOTAL HOUSEHOLD INCOME FROM ALL SOURCES PER MONTH?	SAMPLING SERIAL NUMBER			
LIVESTOCK							POULTRY								
CURRENT NUMBER OWNED							CURRENT NUMBER OWNED								
CATTLE			GOATS	SHEEP	PIGS		CHICKENS			DUC -KS					
BEEF	DAIRY	OTHER			EXOTIC	OTHER	BROI LER	LAY ER	OTHER			1	2	3	4
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28

STRICTLY CONFIDENTIAL

CENTRAL STATISTICAL OFFICE,
P.O. BOX 31908,
LUSAKA.

QUESTIONNAIRE SERIAL NO:

REPUBLIC OF ZAMBIA

FORM | S | D | A | S | 0 | 0 | 0 | 2 |

QUESTIONNAIRE NO. [ ][ ] OF [ ][ ]

THE SOCIAL DIMENSIONS OF ADJUSTMENT SURVEY (1991)

QUESTIONNAIRE IDENTIFICATION	
1. PROVINCE NAME	[ ]
2. DISTRICT NAME	[ ][ ]
3. CSA NUMBER	[ ][ ][ ]
4. RURAL..1 URBAN..2	[ ]
5. SEA NUMBER	[ ]
6. SURVEY BUILDING NUMBER (SBN)	[ ][ ][ ]
7. HOUSING UNIT NUMBER (HUN)	[ ][ ]
8. HOUSEHOLD NUMBER (HHN)	[ ]
OTHER IDENTIFICATION	
9. VILLAGE/LOCALITY NAME	
10. CHIEF'S AREA	[ ][ ][ ]
11. WARD	[ ][ ]
12. SELECTED HOUSEHOLD NAME OF THE HEAD _____ RESIDENTIAL ADDRESS _____ SERIAL NO. OF HOUSEHOLD -------	
13. NUMBER OF VISITS	
14. INTERVIEW STATUS ACCEPTED INTERVIEW.....1 >> SECTION 00 DIFFERENT HOUSEHOLD.....2 >> 15 DWELLING NOT FOUND.....3 ILLNESS/DEATH.....4 REFUSAL.....5 OTHER, SPECIFY .....6 _____ >> NEXT SELECTED HOUSEHOLD	[ ]
15. HOUSEHOLD TO BE INTERVIEWED NAME OF THE HEAD _____ RESIDENTIAL ADDRESS _____	
DATA COLLECTION: Interviewer..... Date ..... Supervisor..... Checking date.....	

SECTION 0: HEAD OF HOUSEHOLD (PERSON RESPONSIBLE FOR MAIN DECISIONS)

SEC-ID | 0 | 0 |

No.	QUESTIONS	CATEGORIES AND CODES	SKIP TO	
1.	Nationality of the Head of household	ZAMBIAN..1 NON ZAMBIAN..2		☐
*2.	Is the head of the household present or absent?	PRESENT..... 1 ABSENT..... 2	>> 5	☐
3.	How long has he/she been away?	NO TIME AWAY ..... 1 LESS THAN 1 WEEK ....2 1 WEEK TO 1 MONTH ...3 BETWEEN 1 MONTH AND 3 MONTHS .....4 OVER 3 MONTHS 5		☐
*4.	In this person's absence, who is responsible for main decisions? Name _____	INSERT SERIAL NUMBER OF HOUSEHOLD MEMBER AFTER COMPLETING SECTION 01		☐☐
*5.	PERSON INTERVIEWED Name of person interviewed Name _____	INSERT SERIAL NUMBER OF HOUSEHOLD MEMBER AFTER COMPLETING SECTION 01		☐☐

HOUSEHOLD ROSTER

SEC ID 0 1 SERIAL NUMBER OF HOUSEHOLD MEMBERS	*1 LIST SERIALLY NAMES OF HOUSEHOLD MEMBERS WHO NORMALLY LIVE AND EAT TOGETHER, STARTING WITH THE HEAD
0 1	
2	
3	
4	
5	
6	
7	
8	
9	
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	
0	

FOR ALL PERSONS

*2	*3	4	*5	6	*7	8	9	10
Residence status USUAL MEMBER PRESENT......1 USUAL MEMBER ABSENT.......2 VISITOR.....3>>NEXT PERSON	Relationship with the head of household HEAD...........1 SPOUSE.........2 OWN CHILD......3 STEP CHILD.....4 BROTHER/ SISTER.........5 OTHER RELATIVE.6 OTHER..........7	Sex MALE...1 FEMALE.2	How old is .... now? YEARS .... 1 MONTHS ... 2 RECORD AGE IN MONTHS FOR THOSE 0 TO 60 MONTHS OLD. THE REST RECORD IN COMPLETED YEARS	Marital status FOR THOSE 12 YEARS AND OVER MARRIED...1 SEPARATED.2 DIVORCED..3 WIDOWED...4 NEVER MARRIED...5	Has .... had a health consul-tation in the last 3 months? YES.1 NO..2 >>11	Who was the last person consultated? TRADITIONAL HEALER.........1 CLINICAL OFFICER/DOCTOR.2 MIDWIFE/NURSE..3 OTHER..........4	What type of health institution did ... go to? GOVERNMENT.1 MISSIONS...2 INDUSTRIAL.3 PRIVATE....4	How much did .... pay for the last consul-tation including treatment? KWACHA

EDUCATION FOR THOSE 5 YEARS AND ABOVE

11	12	*13	*14	15	16	*17	*18	19
Has ... ever attended school? YES .. 1 NO ... 2 >> NEXT PERSON	Is the school ... are attending or the last school ... attended a private or a public one PUBLIC....1 PRIVATE...2	IF OVER 30 YEARS >> 18 Is ... currently attending school? YES..1 NO...2 >>15	What grade is ... currently attending? ENTER CODE >> 16	What is the main reason for not attending school now? WORKING............1 EXPENSIVE..........2 TOO FAR............3 NOT SELECTED/ FAILED.............4 OTHER (Specify)....5	Was ... attending school last year? YES..1 NO...2 >>18	What grade was ... attending last year? ENTER CODE	What is/was the highest grade attained? ENTER CODE	Which year was this highest grade attained? ENTER YEAR

SECTION 2A: ECONOMIC ACTIVITY FOR HOUSEHOLD MEMBERS 7 YEARS AND ABOVE

ACTIVITY LAST 12 MONTHS

SEC-ID. 2 1 SERIAL NO.	Most of the last 12 months were you.... WORKING....1 NOT WORKING BUT LOOKING FOR WORK..2 NOT WORKING & NOT LOOKING FOR WORK BUT AVAILABLE FOR WORK.3 FULL-TIME STUDENT..4 FULL-TIME HOUSEWIFE...5 >> 7 RETIRED, VERY OLD...6 OTHER(SPECIFY)..7	What type of job were you doing most of the last 12 months? SPECIFY ABOVE THE BOX BELOW	What kind of Service/Product was carried out at your work place? SPECIFY ABOVE THE BOX BELOW	What is your employment status? SELF EMPLOYED...1 GOVT EMPLOYEE...2 PARASTATAL EMPLOYEE.....3 PRIVATE SECTOR EMPLOYEE.....4 EMPLOYER.....5 UNPAID FAMILY WORKER.....6 OTHER.....7	What were your earnings from this work including regular allowances and other income from the main Job/Business? AMOUNT PER UNIT	UNIT: DAY..1 WK...2 MTH..3 YR...4	How many years in this job? ENTER NUMBER OF YEARS
	1	2	3	4	5	6	6.1

CURRENT MAIN JOB

Has... worked during last 7 days? YES..1 >> 10 NO...2	Has... been looking for work during the last 7 days? YES...1 >> 24 NO....2	If not looking for work is ..... available for work? YES...1 >> 24 NO.2>>24	What is your current main job? SPECIFY IN THE SPACE PROVIDED	Is this the same job/business you were doing most of the last 12 months? YES..1>>17 NO....2	What type of product/service is produced in this main job? SPECIFY IN THE SPACE PROVIDED	How many yrs in this job? ENTER NUMBER OF YEARS	Wh t is your employment status? SELF-EMPLD..1 GVT-EMPLYE..2 PARA.EMPLYE.3 PRVT.SEC.EMP.4 EMPLOYER.....5 UNPAID FAMILY WORKER.......6 OTHER........7	How much is earned from this job AMOUNT PER UNIT	UNIT: DAY.1 WK..2 MON.3 YR..4
7	8	9	10	11	12	13	14	15	16

SECONDARY JOB							PREVIOUS MAIN JOB			
Do you also have a seconda -ry job ? YES...1 NO....2 >> 24	What is your mn Secondary job? SPECIFY IN THE SPACE PROVIDED	What type of product or service is produced in this job? SPECIFY IN THE SPACE PROVIDED	What is your emplo yment statu s? SEE CODES IN COL. 14	How much is earned from this job? AMOUNT PER UNIT	UNIT: DAY.1 WK..2 MON.3 YR..4	How many years in this job?	Did... have a previo us job ? YES..1 NO...2 >> 28	What was you r previous main job? SPECIFY IN THE SPACE PROVIDED	What was your emp. stat us? SEE COL. 14	What was the reason for leaving this job? LOW WAGE...1 LOST JOB...2 ENTERPRISE CLOSED.....3 OTHER(SPECIF Y).....4
17	18	19	20	21	22	23	24	25	26	27

SECTION 2B: OTHER SOURCES OF HOUSEHOLD INCOME. QUESTION TO BE ASKED TO ALL HOUSEHOLD MEMBERS 7 YEARS AND ABOVE:

How much income did ..... receive during the last 12 months from the following sources?

SEC ID 2 2	SALE OF LIVESTOCK AND POULTRY, LIVESTOCK AND POULTRY PRODUCTS	SALE OF HYBRID MAIZE	SALE OF OTHER FOOD CROPS	SALE OF NON-FOOD CROPS	OTHER FARMING INCOME (INCLUDING INCOME FROM FISH FARMING)	
SERIAL NUMBERS	1	*2	3	4	*5	

FISHING	OTHER NON-FARM ENTERPRISES	RENT RECEIVED (EXCLUDING RENT FROM LEASE OF AGRICULTURAL LAND)	REMITTANCES TO THE HOUSEHOLD (1) PAID IN CASH + (2) PAID IN KIND CONVERTED TO CASH	TRANSFER PAYMENTS TO THE HOUSEHOLD (PENSIONS, SCHOLAR-SHIPS, INSURANCE ETC) PAID IN CASH	OTHER SOURCES (1) PAID IN CASH + (2) PAID IN KIND CONVERTED TO CASH
*6	*7	*8	*9	10	*11

SECTION 3A: HOUSING AND FACILITIES, HOUSING AMENITIES

SEC-ID [3][1]

NUMBER	QUESTIONS	CATEGORIES AND CODES	
1.	Did this household exist 12 months ago?	YES..... 1 NO..... 2	☐
2.	How Long has this household been living in this dwelling?	NUMBER OF MONTHS NUMBER OF YEARS	☐☐ ☐☐
3.	On what basis does the household occupy the dwelling, now? ... and 12 months ago	OWNED..... 1 RENTED ..... 2 FREE OF CHARGE..... 3 OTHER..... 4 N/A..... 5	NOW ☐ 12 MONTHS AGO ☐
4.	What is the main source of drinking water, now? ... and 12 months ago	RIVER, LAKE..... 1 PROTECTED WELL..... 2 UNPROTECTED WELL..... 3 PUBLIC TAP..... 4 OWN TAP..... 5 OTHER..... 6 N/A..... 7	NOW ☐ 12 MONTHS AGO ☐
5.	Does the household treat/boil drinking water now ... and 12 months ago	YES..... 1 NO..... 2 N/A.....3	NOW ☐ 12 MONTHS AGO ☐
6.	What is the main source of energy for lighting now? ... and 12 months ago?	KEROSINE..... 1 ELECTRICITY..... 2 CANDLE..... 3 OTHER..... 4 N/A..... 5	NOW ☐ 12 MONTHS AGO ☐
7.	What is the main type of cooking fuel, now? ... and 12 months ago?	COLLECTED FIREWOOD..... 1 PURCHASED FIREWOOD..... 2 CHARCOAL..... 3 KEROSINE..... 4 GAS..... 5 ELECTRICITY..... 6 CROP/LIVESTOCK RESIDUES.7 OTHER..... 8 N/A..... 9	NOW ☐ 12 MONTHS AGO ☐
8.	What is main toilet facility now? ... and 12 months ago	FLUSH TOILET.....1 PIT LATRINE .....2 BUCKET ..... 3 AQUA PRIVY. .....4 OTHER.....5 N/A.....6	NOW ☐ 12 MONTHS AGO ☐
9.	What is the main method of garbage/sewage disposal now? ... and 12 months ago	REFUSE COLLECTION..... 1 PIT..... 2 DUMPING..... 3 N/A.....4	NOW ☐ 12 MONTHS AGO ☐

SECTION 3B: ACCESS TO FACILITIES. ASK QUESTION 1-4 FOR EACH FACILITY

SEC-ID 3 2

NO.	QUESTIONS	CATEGORIES AND CODES	SKIP TO	FACILITIES A FOOD MARKET	B POST OFFICE	C PRIMARY SCHOOL	D SECONDARY SCHOOL	E HEALTH CEN CLINIC/ HOSPITAL	F BUS STATIO BOAT SERV/ TAXI SERV.	G SOURCE- DRINKING WATER
				34 [1]	[2]	[3]	[4]	[5]	[6]	[7]
1. *	How far is the nearest ..... facility?	DISTANCE KM IF LESS THAN A KILOMETRE ENTER 00		35 36 [ ][ ]	[ ][ ]	[ ][ ]	[ ][ ]	[ ][ ]	[ ][ ]	[ ][ ]
2.	Does any member of the household use this facility now?	YES..1 NO...2	>> 4	37 [ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[8]
3.	What is the main reason for not using this facility? WHEN ANSWERED, CONTINUE FROM QUESTION 1 i.e. next facility	EXPENSIVE... 1 TOO FAR..... 2 POOR QUALITY SERVICE..... 3 FACILITY DOES NOT OFFER FULL SERVICE.....4 OTHER.....5 NOT RELEVANT.6	>>1	38 [ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[8]
4.	What is the usual mode of transport used by the household to reach this facility now? ..... and 12 months ago? WHEN ANSWERED CONTINUE FROM QUESTION 1 i.e. next facility	FOOT..... 1 BICYCLE..... 2 MOTORCYCLE.. 3 OWN VEHICLE. 4 PUBLIC TRANS.5 PROVIDED BY EMPLOYER.... 6 WATER TRANSPORT....7 OTHER.....8 N/A.....88	>>1	39 40 [ ][ ] 41 42 [ ][ ]	[ ][ ] [ ][ ]	[ ][ ] [ ][ ]	[ ][ ] [ ][ ]	[ ][ ] [ ][ ]	[ ][ ] [ ][ ]	[8][8] [8][8]

SECTION 4: MIGRATION

SEC-ID | 0 | 4 |

NO.	QUESTIONS	CATEGORIES AND CODES	SKIP TO	
*1. *p342X	Where was the household residing 12 months ago?	SAME DWELLING, LOCALITY/VILLAGE/ TOWN ..... 1 DIFFERENT DWELLING, SAME LOCALITY/ VILLAGE/TOWN ..... 2 DIFFERENT DWELLING, DIFFERENT LOCALITY/VILLAGE/TOWN.....3 DIFFERENT DISTRICT ..... 4 FOREIGN COUNTRY ..... 5 HOUSEHOLD DID NOT EXIST 12 MONTHS AGO 6	>>4 >>2 >> 3 >> 4	
*2.	Was this different locality/district situated in a rural or urban area?	RURAL..... 1 URBAN..... 2		
3.	What was the main reason for migration?	JOB OPPORTUNITY..... 1 TRANSFER OF HEAD OF HOUSEHOLD.... 2 RESETTLEMENT..... 3 ACQUIRED OWN ACCOMMODATION ..... 4 OTHER (SPECIFY)..... 5		
4.	Have any members of your household been away for more than 6 months to look for, or take a job in the last 12 months?	YES..... 1 NO..... 2	>>Sect.5A	
5.	How many males were away in total?	NUMBER. 00 FOR NONE		
6.	How many females were away in total?	NUMBER. 00 FOR NONE		
7.	Was the household head one of these?	YES..... 1 NO..... 2		
8.	Was the spouse referred to in section 1 one of these people?	YES..... 1 NO..... 2		

SECTION 5A: AGRICULTURE, HOLDING

SEC-ID | 5 | 1 |

NO.	QUESTION	CATEGORIES AND CODES	SKIP TO	
*1.	Does any member of the household engage in any agricultural activity for this Household?	YES..... 1 NO..... 2	>>SECT. 6A	
*2.	What is the total size of the holding?	SIZE GIVEN IN HECTARE,ACRE OR LIMA		HA. ____.__ ACRE ____.__ LIMA ____
*3.	What was the total area under crop during the 1990/91 crop season?	SIZE GIVEN IN HECTARE,ACRE OR LIMA		HA. ____.__ ACRE ____.__ LIMA ____

SECTION 5B: AGRICULTURE, CROP PRODUCTION

SEC-ID | 5 | 2 |

NO.	QUESTION	CATEGORIES AND CODES	SKIP TO	
1.1	HYBRID MAIZE Did any member of the household plant any hybrid maize for grain during the 1990/91 season	YES..... 1 NO..... 2	>> 2.1	☐
1.2 *	Which members of the household planted hybrid maize during this season?	FILL IN CODES, YES..... 1 NO..... 2 FOR DIFFERENT HOUSEHOLD MEMBERS		HEAD ☐ SPOUSE ☐ OTHER ☐
1.3	Did you harvest any hybrid maize from the area planted?	YES..... 1 NO..... 2	>> 2.1	☐
1.4	How many 90 kg bags of hybrid maize did you harvest?	NUMBER OF 90 KG BAGS		☐☐☐☐☐☐
1.5	How many 90 kg bags of hybrid maize did you sell?	NUMBER OF 90 KG BAGS 000000 FOR NONE		☐☐☐☐☐☐
NO.	QUESTION	CATEGORIES AND CODES	SKIP TO	
2.1	LOCAL MAIZE Did any member of the household plant any local maize for grain during the 1990/91 season	YES..... 1 NO..... 2	>> 3.1	☐
2.2 *	Which members of the household planted local maize during this season?	FILL IN CODES, YES..... 1 NO..... 2 FOR DIFFERENT HOUSEHOLD MEMBERS		HEAD ☐ SPOUSE ☐ OTHER ☐
2.3	Did you harvest any local maize from the area planted?	YES..... 1 NO..... 2	>> 3.1	☐
2.4	How many 90 kg bags of local maize did you harvest?	NUMBER OF 90 KG BAGS		☐☐☐☐☐☐
2.5	How many 90 kg bags of local maize did you sell?	NUMBER OF 90 KG BAGS 000000 FOR NONE		☐☐☐☐☐☐
3.1	CASSAVA Did any member of the household have cassava under production during the 1990/91 season	YES..... 1 NO..... 2	>> Sect.5C	☐
3.2 *	Which members of the household had cassava under production during this season?	FILL IN CODES, YES..... 1 NO..... 2 FOR DIFFERENT HOUSEHOLD MEMBERS		HEAD ☐ SPOUSE ☐ OTHER ☐
3.3	Did you harvest any cassava from the area under production since 1st October 1990?	YES..... 1 NO..... 2	>> Sect.5C	☐
3.4	How many 90 kg bags of cassava flour did you harvest?	NUMBER OF 90 KG BAGS		☐☐☐☐☐☐

3.5	How many 90 kg bags of cassava flour did you sell?	NUMBER OF 90 KG BAGS 000000 FOR NONE		

SECTION 5C: AGRICULTURE, VEGETABLES

SEC-ID 5 3

1.	Did any member of the household plant any vegetables during the 1990/91 season?	YES..... 1 NO..... 2	>> SECT.5D	
*2.	Which members of the household planted vegetables during this season?	FILL IN CODES, YES..... 1 NO..... 2 FOR DIFFERENT HOUSEHOLD MEMBERS		HEAD SPOUSE OTHER
3.	Did you harvest any vegetables from the area planted?	YES..... 1 NO..... 2	>> SECT.5D	
4.	How much vegetables did you harvest? (SPECIFY TYPE OF VEGETABLES AND UNIT)	1. --------- 2. --------- 3. --------- 4. ---------		1. 2. 3. 4.
5.	How much vegetables did you sell? (SPECIFY TYPE OF VEGETABLES AND UNIT)	1. --------- 2. --------- 3. --------- 4. ---------		1. 2. 3. 4.

SECTION 5D LIVESTOCK AND POULTRY

SEC-ID 5 4

	QUESTION	CATEGORIES AND CODES	SKIP TO	
1.1	LIVESTOCK Does any member of the household own cattle of any kind?	YES..... 1 NO..... 2	>> 1.3	
1.2	What is the total number of cattle you own today?	NUMBER OF CATTLE		
1.3	Does any member of the household own any goats?	YES..... 1 NO..... 2	>> 1.5	
1.4	What is the total number of goats you own today?	NUMBER OF GOATS		
1.5	Does any member of the household own any sheep?	YES..... 1 NO..... 2	>> 1.7	
1.6	What is the total number of sheep you own today?	NUMBER OF SHEEP		
1.7	Does any member of the household own other livestock?	YES..... 1 NO..... 2	>> 2.1	
1.8	What is the total number of other livestock owned today?	NUMBER OF OTHER LIVESTOCK		

NO.	QUESTION	CATEGORIES AND CODES	SKIP TO	
2.1	Does any member of the household own any chicken?	YES..... 1 NO..... 2	>> 2.3	
2.2	What is the total number of chicken you own today?	NUMBER OF CHICKEN		
2.3	Does any member of the household own any ducks?	YES..... 1 NO..... 2	>> 2.5	
2.4	What is the total number of ducks you own today?	NUMBER OF DUCKS		
2.5	Does any member of the household own any other poultry?	YES..... 1 NO..... 2	>> SECT.6A	
2.6	What is the total number of other poultry you own today?	NUMBER OF OTHER POULTRY		

SECTION 6A NON-FARM ENTERPRISE, GENERAL INFORMATION

SEC-ID | 6 | 1 |

NO.	QUESTIONS	CATEGORIES AND CODES	SKIP TO	
1	Did any member of the household operate any non-farm enterprise during the last 12 months	YES..... 1 NO..... 2	>>Sect.7	
*2	List the three most important non-farm enterprise activities in terms of their contribution to household income. 1. _____ 2. _____ 3. _____	 TO BE CODED IN OFFICE TO BE CODED IN OFFICE TO BE CODED IN OFFICE		
3	How much income did the household receive during the last 12 months from these three enterprises?	ENTERPRISE NO. 1 ENTERPRISE NO. 2 ENTERPRISE NO. 3		
4	Has any enterprise other than those listed above closed down in the last 12 months?	YES..... 1 NO..... 2	>>Sect6B	
5	What was the main reason for closing down? IF MORE THAN ONE ENTERPRISE IS CLOSED DOWN, ASK QUESTION 5 AND 6 FOR THE BIGGEST ONE.	LACK OF BUSINESS...1 LACK OF CREDIT.....2 LACK OF RAW MATERIALS.....3 HIGH COST OF PRODUCTION.....4 OTHER(SPECIFY).....5		
*6	What was the main activity of this enterprise? 4. _____	 TO BE CODED IN OFFICE		

SECTION 6B: ENTERPRISE DETAILS. ASK QUESTION 1-11 FOR EACH ENTERPRISE MENTIONED IN SECTION 6A, QUESTION 2. IF NONE, SKIP TO SECTION 7.

SEC-ID | 6 | 2 |

ENTERPRISES

NO.	QUESTIONS	CATEGORIES AND CODES	SKIP TO	1st ENTERPRISE	2nd ENTERPRISE	3rd ENTERPRISE
				1	2	3
1	ENTERPRISE	TO BE CODED IN OFFICE				
2	Serial number of household member responsible for this enterprise	SERIAL NO OF HOUSE-HOLD MEMBER FROM SECTION 01				
3	Did this enterprise start operating during the last 12 months?	YES..... 1 NO..... 2	>> 5			
4	How many years has this enterprise been in operation?	ENTER NUMBER OF YEARS				
5	How many months has this enterprise been in operation during the last 12 months?	ENTER NUMBER OF MONTHS				
6	Is this enterprise still operating?	YES..... 1 NO..... 2	>> 8			
7	How many employees are working in this enterprise now?	ENTER NUMBER OF EMPLOYEES				
8	How many employees were working in this enterprise 12 months ago	ENTER NUMBER OF EMPLOYEES				
*9	Is/was any equipment used for this enterprise?	YES..... 1 NO..... 2				
*10	Has new equipment been bought in the last 12 months	YES..... 1 NO..... 2				
*11	Has any equipment been sold in the last 12 months	YES..... 1 NO..... 2				

SECTION 7: HOUSEHOLD EXPENSES
(INCLUDE REMITTANCES FROM OUTSIDE FOR PURPOSES BELOW IF RECORDED IN SECTION 2B).

SEC-ID | 0 | 7 |

NO.	QUESTIONS	CATEGORIES AND CODES	
*1.	EDUCATION EXPENSES How much was spent on the following during the past school year? .. School fees including exam fees	GIVE THE AMOUNTS IN KWACHA. 000000 FOR NONE	01
	.. School uniforms		02
	.. Contribution to school/PTA		03
	.. Private tuition		04
*2.	How much was spent on books and stationery during the past school year?		05
*3.	MEDICAL EXPENSES How much was spent on the following during the past 3 months on... .. Medicines?		06
	.. Fees to Doctor/Health Assistant/Midwife/Nurse/ Traditional Healer?		07
	.. Payments to hospital/health center?		08
4.	CLOTHING AND FOOTWEAR How much was spent on clothing and footwear, excluding school uniforms during the past 3 months		09
5.	HOUSING How much was spent during the past 1 month on .. .. Rent	GIVE THE AMOUNTS IN KWACHA. 000000 FOR NONE	10
	.. Water		11
	.. Electricity		12
	.. Candle		13
	.. Paraffin		14
	.. Charcoal		15
	.. Firewood		16
	.. Other housing expenses		17

NO.	QUESTIONS	CATEGORIES AND CODES	
*6.	REMITTANCES How much was spent on cash remittances during the past month?		[ ][ ][ ][ ][.][ ] 18
	How much of this money was paid to urban and to rural areas?	GIVE THE PORTION FOR URBAN AND RURAL IN PERCENT.	% URBAN [ ][ ] 19 % RURAL [ ][ ] 20
*7.	What is the cash value of remittances paid in kind during the past month?	GIVE THE AMOUNTS IN KWACHA. 000000 FOR NONE	[ ][ ][ ][ ][ ][ ] 21
	How much of this was paid to urban and to rural areas?	GIVE THE PORTION FOR URBAN AND RURAL IN PERCENT.	% URBAN [.][ ] 22 % RURAL [ ][ ] 23
*8.	TRANSPORT How much was spent on transport during the past 1 month? .. To and from work	GIVE THE AMOUNTS IN KWACHA. 000000 FOR NONE	[ ][ ][ ][ ][ ][ ] 24
	.. To and from school		[ ][ ][ ][ ][ ][ ] 25
	.. Other kinds of transport		[ ][ ][ ][ ][ ][ ] 26
9.	FOOD How much was spent on maize meal last month?	GIVE THE AMOUNTS IN KWACHA 000000 FOR NONE	[ ][ ][ ][ ][ ][ ] 27
	How much was spent on the following kinds of food during the last 2 weeks: .. Rice		[ ][ ][ ][ ][ ][ ] 28
	.. Bread/buns/fritters		[ ][ ][ ][ ][ ][ ] 29
	.. Kapenta		[ ][ ][ ][ ][ ][ ] 30
	.. Beans		[ ][ ][ ][ ][ ][ ] 31
	.. Vegetables		[ ][ ][ ][ ][ ][ ] 32
	.. Fish		[ ][ ][ ][ ][ ][ ] 33
	.. Sugar		[ ][ ][ ][ ][ ][ ] 34
	.. Salt		[ ][ ][ ][ ][ ][ ] 35
	.. Cooking oil		[ ][ ][ ][ ][ ][ ] 36
	.. Eggs		[ ][ ][ ][ ][ ][ ] 37

NO.	QUESTIONS	CATEGORIES AND CODES	
	.. Potatoes (Irish and Sweet)		3 8
	.. Cassava		3 9
	.. Milk		4 0
	.. Tea/coffee		4 1
	.. Bananas		4 2
	.. Oranges		4 3
	.. Meat		4 4
	.. Chicken		4 5

SECTION 8A: FIXED HOUSEHOLD PROPERTIES AND ASSETS

SEC-ID 8 1

	QUESTION	CATEGORIES AND CODES	SKIP TO	
1.	Does any member of the household own any dwellings or property now?	YES..... 1 NO..... 2	>> 4	
*2.	What type of buildings does the household own?	FILL IN CODES YES..... 1 NO..... 2 FOR DIFFERENT KIND OF BUILDINGS		RESIDENTIAL COMMERCIAL INDUSTRIAL
3.	How many properties does the household own all together	NUMBER OF PROPERTIES		
4.	Twelve months ago, did any member of the household own any properties?	YES..... 1 NO..... 2	>> 6	
5.	How many properties were owned in all 12 months ago?	NUMBER OF PROPERTIES		
6.	Does any member of the household own title deed to land now?	YES..... 1 NO..... 2	>> SEC.8B	
7.	How has the size of the landholding changed during the last 12 months?	INCREASED..... 1 SAME..... 2 DECREASED..... 3		

SECTION 8B: OTHER HOUSEHOLD PROPERTY. ASK QUESTION A AND B FOR EACH HOUSEHOLD ASSET

SEC-ID | 8 | 2 |

NO.	QUESTION A	CATEGORIES AND CODES	QUESTION B CATEGORIES AND CODES
	Does the household own V	YES..... 1 NO..... 2	Has the number of this asset decreased, increased or stayed the same the last 12 months? DECREASED..... 1 STAYED THE SAME ..... 2 INCREASED..... 3 NOT OWNED 12 MONTHS AGO..... 4
1.	.. Plough	0 1 --->	
2.	.. Crop sprayer	0 2 --->	
3.	.. Fishing boat	0 3 --->	
4.	.. Bicycle	0 4 --->	
5.	.. Motorcycle	0 5 --->	
6.	.. Car/van/truck	0 6 --->	
7.	.. Tractor	0 7 --->	
8.	.. Handgrinding mill	0 8 --->	
9.	.. Hammer mill	0 9 --->	
10.	.. TV	1 0 --->	
11.	.. Radio	1 1 --->	
12.	.. Refrigerator	1 2 --->	
13.	.. Canoe	1 3 -->	
14.	.. Fishing net	1 4 --->	

SECTION 9. ANTHROPOMETRY. TO BE COMPLETED FOR CHILDREN 3 MONTHS TO 60 MONTHS OLD.

SEC-ID | 0 | 9 |

NO.	QUESTION	CATEGORIES AND CODES	SKIP TO	IF MORE THAN FIVE, USE A FRESH QUESTIONNAIRE, NUMBER IT ON THE FIRST PAGE AND USE THE SAME IDENTIFICATION PARTICULARS AS ON THIS ONE.				
*1.	SERIAL NUMBER FOR HOUSEHOLD MEMBERS 5 YEARS OR YOUNGER (FROM SECTION 1)							
*2.	SERIAL NUMBER FOR THE CHILD'S NATURAL MOTHER (FROM SECTION 1)							
3.	AGE GIVEN IN MONTHS	MONTHS						
4.	Has the child visited under 5 clinic during the last month?	YES.....1 NO.....2	>> 6					
5.	Why has the child not visited under 5 clinic?	ABSENCE.....1 ILLNESS.....2 REFUSAL.....3 OTHER SPECIFY 4						
6.	WEIGHT	NEAREST 0.1 KG		.	.	.	.	.
*7.	HEIGHT	CM						
*8.	Who usually cares for the child in the absence of parents	NURSERY SCHOOL/ PRESCHOOL... 1 NANNY.....2 OLDER SISTER/ BROTHER.....3 OTHER RELATIVES....4 NEIGHBOUR....5 NONE.....6						

Appendix 3: List Of SEAS That were Enumerate

SUMMARY OF SELECTED SEAS BY URBAN AND RURAL STRATA AND PROVINCE

PROVINCE	U R B A N S E A S			TOTAL URBAN (A)	RURAL SEAS (B)	GRAND TOTAL (A+B)
	LOW COST	MEDIUM COST	HIGH COST			
CENTRAL	9	5	2	16	28	44
C\BELT	62	31	11	104	7	111
EASTERN	4	2	2	8	49	57
LUAPULA	4	2	2	8	24	32
LUSAKA	44	24	9	77	9	86
NORTHERN	5	3	2	10	41	51
N\WESTERN	2	3	2	7	18	25
SOUTHERN	8	5	2	15	42	57
WESTERN	3	3	1	7	30	37
ALL PROVINCES	141	78	33	252	248	500

DETAILED LIST OF SEAS BY PROVINCE:

CENTRAL PROVINCE

URBAN SEAS:-

LOW COST SEAS

DISTRICT	CSA	SEA
Kabwe Urban	004	2
Kabwe Urban	011	3
Kabwe Urban	016	3
Kabwe Urban	020	3
Kabwe Urban	029	2
Kabwe Urban	044	4
Kabwe Urban	053	1
Kabwe Urban	058	2
Serenje	042	4
TOTAL SEAS		9

MEDIUM COST SEAS

DISTRICT	CSA	SEA
Kabwe Rural	109	3
Kabwe Urban	023	2
Kabwe Urban	032	1
Kabwe Urban	039	3
Mkushi	010	3
TOTAL SEAS		5

HIGH COST SEAS

DISTRICT	CSA	SEA
Kabwe Rural	016	1
Kabwe Urban	035	2
TOTAL SEAS		2

RURAL SEAS:-

DISTRICT	CSA	SEA
Kabwe Rural	018	3
Kabwe Rural	031	3
Kabwe Rural	042	1
Kabwe Rural	056	2
Kabwe Rural	067	2
Kabwe Rural	078	2
Kabwe Rural	089	1
Kabwe Rural	101	2
Kabwe Rural	111	2
Kabwe Rural	123	2
Kabwe Rural	134	4
Mkushi	003	2
Mkushi	014	2
Mkushi	026	3
Mkushi	036	3
Mkushi	048	4
Mkushi	059	1
Mumbwa	010	3
Mumbwa	023	2
Mumbwa	036	3
Mumbwa	045	3
Mumbwa	056	3
Mumbwa	068	2
Serenje	006	2
Serenje	016	2
Serenje	025	2
Serenje	035	2
Serenje	048	3
TOTAL SEAS		28

GRAND TOTAL (CENTRAL PROVINCE):-

9 LOW COST SEAS
5 MEDIUM COST SEAS
2 HIGH COST SEAS
28 RURAL SEAS

44 SEAS

COPPERBELT PROVINCE:

URBAN SEAS:-

LOW COST SEAS:

DISTRICT	CSA	SEA
Ndola Urban	018	1
Ndola Urban	020	2
Ndola Urban	032	4
Ndola Urban	036	3
Ndola Urban	040	2
Ndola Urban	043	2
Ndola Urban	046	1
Ndola Urban	048	2
Ndola Urban	059	1
Ndola Urban	067	3
Ndola Urban	069	5
Ndola Urban	072	3
Ndola Urban	084	3
Ndola Urban	112	1
Ndola Urban	115	3
Ndola Urban	118	3
Mufulira	003	3
Mufulira	006	3
Mufulira	020	3
Mufulira	024	1
Mufulira	043	4
Mufulira	046	2
Mufulira	048	4
Mufulira	051	3
Mufulira	056	3
Mufulira	059	2
Kitwe	007	2
Kitwe	011	1
Kitwe	013	1
Kitwe	027	4
Kitwe	050	2
Kitwe	053	1
Kitwe	071	2
Kitwe	084	4
Kitwe	092	2
Kitwe	094	2
Kitwe	097	2
Kitwe	100	1
Kitwe	102	5
Kitwe	110	1
Kitwe	112	2
Chililabombwe	007	3
Chililabombwe	011	4
Chililabombwe	014	3
Chililabombwe	017	2
Chililabombwe	019	3
Chililabombwe	022	2
Chingola	018	1
Chingola	021	1
Chingola	042	1
Chingola	049	4
Chingola	053	1
Chingola	055	3
Chingola	061	5
Luanshya	008	1
Luanshya	017	1
Kalulushi	008	1
Kalulushi	013	2
Kalulushi	014	2
Kalulushi	023	4
Kalulushi	025	4
Kalulushi	027	5
TOTAL	SEAS	62

MEDIUM COST SEAS

DISTRICT	CSA	SEA
Chingola	030	1
Chingola	034	1
Chingola	039	3
Chingola	057	3
Kalulushi	011	4
Kitwe	032	3
Kitwe	040	3
Kitwe	044	3
Kitwe	055	3
Kitwe	060	4
Kitwe	081	2
Kitwe	090	1
Kitwe	109	1
Luanshya	024	2
Luanshya	030	3
Luanshya	035	4
Luanshya	047	2
Luanshya	053	1
Mufulira	012	1
Mufulira	033	2
Mufulira	039	2
Mufulira	054	2
Ndola Urban	021	3
Ndola Urban	026	3
Ndola Urban	037	2
Ndola Urban	078	1
Ndola Urban	083	2
Ndola Urban	094	1
Ndola Urban	099	1
Ndola Urban	104	1
Ndola Urban	109	2
TOTAL	SEAS	31

HIGH COST SEAS

DISTRICT	CSA	SEA
Chililabombwe	026	4
Luanshya	041	3
Kalulushi	022	2
Mufulira	032	4
Ndola Urban	055	1
Ndola Urban	066	1
Kitwe	004	3
Kitwe	030	3
Kitwe	066	3
Kitwe	074	2
Kitwe	079	2
TOTAL	SEAS	11

RURAL SEAS

Ndola Rural	005	3
Ndola Rural	030	4
Ndola Rural	053	3
Ndola Rural	078	3
Ndola Rural	091	5
Kitwe Urban	014	2
Luanshya	009	3
TOTAL	SEAS	7

GRAND TOTAL (COPPERBELT)

62 LOW COST SEAS 11 HIGH COST SEAS 111 SEAS
31 MEDIUM COST SEAS 7 RURAL SEA ========

EASTERN PROVINCE:

URBAN SEAS:-

LOW COST SEAS

DISTRICT	CSA	SEA
Chipata	145	3
Chipata	155	1
Chipata	162	2
Petauke	077	1
TOTAL	SEAS	4

MEDIUM COST SEAS

Chama	016	4
Lundazi	037	3
TOTAL	SEAS	2

HIGH COST SEAS

Chipata	146	2
Chipata	151	2
TOTAL	SEAS	2

GRAND TOTAL (EASTERN PROVINCE):

4 LOW COST SEAS
2 MEDIUM COST SEAS
2 HIGH COST SEAS
49 RURAL SEAS

57 SEAS

RURAL SEAS

DISTRICT	CSA	SEA
Chipata	010	4
Chipata	013	3
Chipata	016	3
Chipata	024	3
Chipata	036	1
Chipata	049	3
Chipata	060	4
Chipata	073	3
Chipata	085	3
Chipata	097	4
Chipata	108	2
Chipata	121	3
Chipata	132	3
Petauke	001	2
Petauke	011	1
Petauke	017	3
Petauke	028	4
Petauke	043	3
Petauke	054	1
Petauke	067	2
Petauke	092	3
Petauke	106	3
Petauke	120	3
Petauke	134	1
Petauke	147	2
Petauke	158	1
Petauke	166	2
Chadiza	004	1
Chadiza	017	2
Chadiza	030	4
Chama	002	2
Chama	015	2
Chama	026	2
Katete	009	3
Katete	022	1
Katete	036	2
Katete	051	4
Katete	063	2
Katete	076	4
Katete	090	1
Lundazi	004	2
Lundazi	017	4
Lundazi	030	3
Lundazi	039	4
Lundazi	051	4
Lundazi	060	1
Lundazi	070	1
Lundazi	083	2
Lundazi	093	2
TOTAL	SEAS	49

LUAPULA PROVINCE :-

URBAN SEAS:-

LOW COST SEAS

DISTRICT	CSA	SEA
Mansa	095	3
Mansa	101	1
Mansa	103	1
Samfya	045	3
TOTAL	SEAS	4

MEDIUM COST SEAS

Mwense	045	1
Samfya	047	1
TOTAL	SEAS	2

HIGH COST SEAS

Mansa	093	3
Mansa	095	5
TOTAL	SEAS	2

RURAL SEAS:-

Kawambwa	010	1
Kawambwa	016	2
Kawambwa	024	2
Kawambwa	048	3
Mansa	014	2
Mansa	030	1
Mansa	045	1
Mansa	059	1
Mansa	074	1
Mansa	089	3
Mwense	010	3
Mwense	028	4
Mwense	048	2
Mwense	059	2
Nchelenge	018	1
Nchelenge	033	3
Nchelenge	054	1
Nchelenge	069	1
Samfya	001	2
Samfya	013	2
Samfya	027	1
Samfya	041	2
Samfya	063	2
Samfya	078	1
TOTAL	SEAS	24

GRAND TOTAL (LUAPULA PROVINCE)

4 LOW COST SEAS
2 HIGH COST SEAS
2 MEDIUM COST SEAS
24 RURAL SEAS

32 SEAS

LUSAKA PROVINCE

URBAN SEAS

LOW COST SEAS

NAME OF RESIDENTIAL AREA	CSA	SEA
Chunga	005	3
Desai	011	1
Paradise	015	4
Soweto	020	3
George	025	3
George	031	3
Matero	035	3
Matero	038	2
Matero	042	2
Matero	045	3
Chaisa	050	3
Chaisa	054	1
Marapodi	057	4
Mandevu	061	1
Marapodi	064	3
Chipata	068	3
Chipata	071	2
Kabanana	074	2
Chazanga	077	2
Ng'ombe	081	5
Kamanga	088	3
Chainda	104	1
Chainda	108	1
Kayomba/kola	117	2
Chibolya	119	4
Kanyama	122	2
Kanyama	126	3
Kanyama	131	3
Kanyama	135	3
Misisi	140	2
Misisi	143	4
Kalingalinga	158	3
Mtendere	164	1
Mtendere	169	1
Kalikiliki	172	1
Bauleni	178	4
Chilenje	194	4
Cook	208	4
Chawama	212	4
Chawama	215	4
Chawama	218	4
Chawama	222	3
John Howard	225	3
Linda/Buckley	232	2
TOTAL	SEAS	44

LUSAKA PROVINCE Cont'd:

URBAN SEAS:-

MEDIUM COST SEAS

NAME OF RESIDENTIAL AREA	CSA	SEA
Chainama	087	1
Chainama	089	3
Chainama	090	4
Chainama	099	1
Lilanda	012	1
New Kamwala	145	1
Kamwala	147	4
Ridgeway	183	2
Kabwata	185	1
Kabwata	186	1
Libala	187	3
Ridgeway/UTH	188	3
Libala	191	2
Chilenje	196	1
Chilenje	196	3
Chilenje	197	3
Chilenje South	198	1
Chilenje South	199	1
Chilenje South	200	2
Chilenje South	201	1
Chilenje South	202	2
Libala	204	1
Kabwata	205	2
Makeni	210	2
TOTAL SEAS		24

HIGH COST SEAS

NAME OF RESIDENTIAL AREA	CSA	SEA
Mulobela	046	3
Chakunkula	092	1
Chakunkula	098	4
Chibalamabwe	101	5
Town Center	115	2
Maluba	151	1
Kapila	155	3
Lusaka East State Lodge	176	2
Kacha	188	2
TOTAL SEAS		9

RURAL SEAS:-

DISTRICT	CSA	SEA
Lusaka Rural	005	1
Lusaka Rural	014	2
Lusaka Rural	024	3
Lusaka Rural	039	2
Lusaka Rural	053	1
Lusaka Rural	064	2
Lusaka Rural	087	2
Luangwa	003	3
Luangwa	076	1
TOTAL SEAS		9

GRAND TOTAL (LUSAKA PROVINCE)

44 LOW COST SEAS
24 MEDIUM COST SEAS
9 HIGH COST SEAS
9 RURAL SEAS

86 SEAS

NORTHERN PROVINCE

URBAN SEAS

LOW COST SEAS

DISTRICT	CSA	SEA
Chilubi	014	3
Kaputa	002	1
Kasama	053	2
Luwingu	029	3
Mpika	043	1
TOTAL SEA		5

MEDIUM COST SEAS

Isoka	060	3
Luwingu	029	1
Mpika	042	2
TOTAL SEAS		3

HIGH COST SEAS

Kasama	048	1
Kasama	050	3
TOTAL SEAS		2

RURAL SEAS

Chilubi	006	2
Chilubi	019	2
Chilubi	031	3
Chinsali	004	1
Chinsali	018	1
Chinsali	034	2
Chinsali	050	3
Chinsali	064	3
Isoka	001	1
Isoka	015	3
Isoka	029	4
Isoka	045	1
Isoka	061	1
Isoka	075	1
Kaputa	016	3
Kaputa	032	3
Kasama	011	4
Kasama	023	1
Kasama	036	2
Kasama	069	1
Kasama	084	2
Kasama	095	2
Kasama	109	1
Kasama	122	1
Luwingu	010	1
Luwingu	025	2
Luwingu	043	2
Luwingu	059	3
Mbala	006	2
Mbala	023	2
Mbala	041	4
Mbala	057	1
Mbala	072	2
Mbala	088	1
Mpika	010	3
Mpika	024	2
Mpika	038	4
Mpika	058	1
Mpika	073	3
Mporokoso	019	1
Mporokoso	038	2
TOTAL SEAS		41

NORTHERN PROVINCE Cont'd:

GRAND TOTAL (NORTHERN PROVINCE)

5 LOW COST SEAS
3 MEDIUM COST SEAS
2 HIGH COST SEAS
41 RURAL SEAS

51 SEAS

NORTH-WESTERN PROVINCE

URBAN SEAS:-

LOW COST SEAS

DISTRICT	CSA	SEA
Mwinilunga	032	1
Solwezi	024	3
TOTAL SEAS		2

MEDIUM COST SEAS

Solwezi	022	1
Solwezi	029	1
Mufumbwe	010	1
TOTAL SEAS		3

HIGH COST SEAS

Zambezi	030	3
Solwezi	029	2
TOTAL SEAS		2

RURAL SEAS:-

Kabompo	016	1
Kabompo	027	1
Kabompo	040	1
Solwezi	008	2
Solwezi	018	1
Solwezi	039	4
Solwezi	051	4
Kasempa	004	2
Kasempa	016	2
Mwinilunga	004	3
Mwinilunga	015	3
Mwinilunga	026	3
Mwinilunga	035	1
Mwinilunga	039	1
Zambezi	008	1
Zambezi	018	1
Zambezi	032	2
Zambezi	043	1
TOTAL SEAS		18

GRAND TOTAL (NORTH-WESTERN PROVINCE)

2 LOW COST SEAS
3 MEDIUM COST SEAS
2 HIGH COST SEAS
18 RURAL SEAS

25 SEAS

SOUTHERN PROVINCE

URBAN SEAS

LOW COST SEAS

DISTRICT	CSA	SEA
Kalomo	058	1
Namwala	016	1
Livingstone	010	1
Livingstone	012	2
Livingstone	016	2
Livingstone	028	2
Choma	076	2
Sinazongwe	029	3
TOTAL SEAS		8

MEDIUM COST SEAS

Livingstone	010	2
Livingstone	023	1
Livingstone	030	1
Sinazongwe	027	3
Gwembe	012	2
TOTAL SEAS		5

HIGH COST SEAS

Livingstone	007	4
Choma	105	1
TOTAL SEAS		2

RURAL SEAS

Choma	002	1
Choma	015	3
Choma	030	1
Choma	042	3
Choma	054	1
Choma	063	3
Choma	079	1
Choma	093	3
Livingstone	001	1
Namwala	007	1
Namwala	020	3
Namwala	031	1
Namwala	042	1
Sinazongwe	002	2
Sinazongwe	013	3
Sinazongwe	022	1
Sinazongwe	036	2
Gwembe	008	3
Gwembe	019	2
Siavonga	009	3
Monze	001	2
Monze	013	1
Monze	024	3
Monze	045	1
Monze	056	2
Monze	069	1
Mazabuka	005	1
Mazabuka	026	3
Mazabuka	036	2
Mazabuka	047	1
Mazabuka	057	2
Mazabuka	065	2
Mazabuka	076	3
Kalomo	007	2
Kalomo	019	3
Kalomo	032	1
Kalomo	045	1
Kalomo	068	3

SOUTHERN PROVINCE Cont'd

RURAL SEAS

Kalomo	081	3
Kalomo	091	1
Kalomo	103	2
Kalomo	107	3
TOTAL	SEAS	42

GRAND TOTAL (SOUTHERN PROVINCE)

8 LOW COST SEAS
5 MEDIUM COST SEAS
2 HIGH COST SEAS
42 RURAL SEAS

57 SEAS

WESTERN PROVINCE

URBAN SEAS

LOW COST SEAS

DISTRICT	CSA	SEA
Mongu	091	5
Sesheke	045	2
Kaoma	051	3
TOTAL	SEAS	3

MEDIUM COST SEAS

Mongu	083	5
Mongu	085	1
Senanga	055	5
TOTAL	SEAS	3

HIGH COST SEAS

Mongu	084	2
TOTAL	SEAS	1

RURAL SEAS

Kalabo	012	4
Kalabo	024	2
Kalabo	039	1
Kalabo	050	2
Kalabo	063	2
Lukulu	014	2
Lukulu	030	2
Senanga	016	1
Senanga	017	1
Senanga	030	1
Senanga	043	2
Senanga	054	1
Senanga	071	1
Senanga	084	3
Senanga	095	2
Sesheke	012	3
Sesheke	029	2
Sesheke	047	4
Mongu	008	2
Mongu	022	3
Mongu	034	1
Mongu	049	1
Mongu	062	1
Mongu	075	3
Kaoma	017	3
Kaoma	031	1
Kaoma	045	1
Kaoma	064	3
Kaoma	077	1
Kalabo	003	1
TOTAL	SEAS	30

GRAND TOTAL (WESTERN PROVINCE)

3 LOW COST SEAS
3 MEDIUM COST SEAS
1 HIGH COST SEA
30 RURAL SEAS

37 SEAS

Appendix 4: List Of Participants

The following people took part in the Priority survey:-

MEMBERS OF THE SECRETARIAT

1. D. S. Diangamo ..... Director,
2. E. M. Silanda ..... Assistant Director, (Soc)
3. Ms. E. Chulu ..... Senior Statistician
4. W. C. Mayaka ..... Senior Statistician
5. K. S. Chipako ..... Senior Systems Analyst
6. G. Sakala ..... Statistician
7. F. Muchingile ..... Statistician
8. E. Chuma ..... Statistician/Computer Analyst
9. L. Chongo ..... Computer Programmer

MASTER TRAINERS

1. M. F. C. Banda	Senior Statistician	- Central Province
2. G. Sakala	Statistician	- C/Belt "
3. F. Mkandawire	Statistician	- Eastern "
4. W. C. Mayaka	Senior Statistician	- Luapula "
5. A. Tembo	Principal Stat. Officer	- Lusaka "
6. P. Mukuka	Statistician	- Northern "
7. S. C. Chakamisha	Statistician	- N/western "
8. D. Simusonkwe	Senior Statistician	- Southern "
9. F. Chiyala	Statistician	- Western "

PROVINCIAL STATISTICAL OFFICERS

1. P. D. Sikazwe ..... Central Province
2. K. S. Banda ..... C/Belt "
3. E. S. Mwansa ..... Eastern "
4. W. K. Njovu ..... Luapula "
5. T. Mwamba/B. Mbolongwe ..... Lusaka "
6. J. Chiumia ..... Northern "
7. T. M. Siansendeka ..... N/western "
8. J. Chilufya ..... Southern "
9. D. Njungu ..... Western "

SUPERVISORS

CENTRAL PROVINCE

1. E. Shamende
2. D. Chitansha
3. G. Nsama
4. E. Simwanza
5. R. H. Siakanede
6. C. Muntanga
7. L. Mwakawele

EASTERN PROVINCE

1. O. P. Ndhlovu
2. A. L. Njovu
3. W. G. Mwanza
4. B. Mtonga
5. J. Mbewe
6. E. Mweene
7. M. J. Mwanza

LUSAKA PROVINCE

1. J. Zulu
2. L. Chilumbu
3. L. Sunsawila
4. D. Malunga
5. A. S. Nkomba
6. A. Ngoma
7. P. G. Zimba

COPPERBELT PROVINCE

1. E. M. Sooma
2. T. Kumwenda
3. M. Mwanza
4. G. M. Chifunda
5. E. Mwanalanga
6. P. Simfukwe
7. P. K. Miti
8. R. Milupi
9. A. Shiwale
10. A. S. Susiku
11. W. Chileshe
12. O. Kalumba

LUAPULA

1. E. Mulenga
2. E. Chabala
3. H. G. Mpande
4. N. Chisamu
5. Ms. A. Musonda
6. O. Kalumba
7. Z. Mweshi

NORTHERN PROVINCE

1. E. C. Banda
2. F. Chileshe
3. T. K. Mumba
4. F. M. Chibuye
5. M. Akatumwa
6. Ms. J. Museba

LUSAKA PROVINCE Cont'd

8. Ms. P. Mwenya
9. Ms. C. Mweemba
10. Ms. M. Kabika
11. S. Mulambo
12. J. Chizalila
13. P. Akende
14. L. Chongo
15. N. Nkhoma

NORTH-WESTERN PROVINCE

1. G. Lunyinje
2. A. Chiwana
3. F. C. Chibanda
4. S. Sondashi

SOUTHERN PROVINCE

1. R. S. Chipandwe
2. C. Malinde
3. S. Nasilele
4. J. Ntaimo
5. M. Chiyota
6. E. Katongo
7. K. Kapinga
8. P. Mubu

WESTERN PROVINCE

1. N. Sitali
2. E. Mwamolo
3. P. M. Mulai
4. F. Mate
5. A. Munema

NUMBER OF ENUMERATORS THAT WERE USED IN THE SURVEY PER PROVINCE

CENTRAL:	31
COPPERBELT:	69
EASTERN:	39
LUAPULA:	24
LUSAKA:	66
NORTHERN:	34
N/WESTERN:	22
SOUTHERN:	36
WESTERN:	29
TOTAL	350

ANTHROPOMETRIC CONSULTANT: V. Chowa

DRIVERS: 36 (About 4 in each province)

LIST OF CONSULTANTS

1. Bjorn Wold ..... World Bank/Central Statistical Bureau, Norway.
2. Gustav Haraldsen ..... Central Statistical Bureau, Norway
3. Jorn Leipart ..... "
4. John Ngwafon ..... World Bank
5. Liv Belsby ..... Central Statistical Bureau, Norway
6. Ib Thomsen ..... "
7. Jan Lyngstad ..... "
8. Eiliv Mork ..... "
9. Hilde Holte ..... "
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