PREFACE

The Census of Population, Housing and Agriculture was conducted from 20th August to 5th September, 1990. However, an allowance of one week was allowed to cover very remote rural areas. This was the third Census since independence in 1964. The other two were carried out in 1969 and 1980. Census operations were undertaken with the use of grade 12 pupils (In some cases, Grade 11 or lower grade pupils were used) as enumerators, secondary and primary school teachers as supervisors while professional and technical staff of the Central Statistical Office undertook various technical and professional tasks.

This publication is one of the 10 in the series of analytical reports produced by the Central Statistical Office (CSO). The report contains data on Population and Housing for Western Province, while data on Agriculture is contained in separate reports.

The various census stages i.e. preparations, data collection, processing, verification, analysis and production of this report was carried out by mainly CSO local personnel. For the first time in the history of Census taking in Zambia, the 1990 Census of Population, Housing and Agriculture was processed using micro-computers.

A Census of Population is usually a massive and costly exercise involving nearly everybody in the country in one way or another. In this regard, I wish to thank the people of Zambia for cooperating in providing the valuable information asked of them. In a similar vein, thanks to the four thousand primary and secondary school teachers who supervised the enumerators during the data collection stage. My thanks are also extended to the sixteen thousand senior secondary school pupils who took leave from their studies to be census enumerators.

My sincere thanks go to donor agencies, namely UNFPA, USAID, NORAD, UNDP and the World Bank for providing financial, material and technical assistance which enabled the CSO carry out the Census.

I extend my gratitude to the Government of Zambia for funding the Census as well as providing the mandate to conduct the Census appropriately in 1990.

Thanks to all those CSO professional and technical staff who bore the blunt of carrying out all the census activities from start to finish. Special mention should be made of personnel in the Population and Demography Division of CSO who provided guidance and plans for implementing the stages of Census operations, especially for writing up this report.

Finally many thanks to all those who contributed directly or indirectly, but not mentioned above, to the success of the Census and in the production of this report.

The statistical data obtained from 1990 Census is massive and rich allowing for extensive use and applications. As such what is contained in the report is not the whole but only a very small portion. I urge all users of the Census data to feel free and request CSO for any data not found in this publication but was collected in the Census.

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Lusaka, ZAMBIA
August 10th, 1995.

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EXECUTIVE SUMMARY

Western Province has a population of 606,813 which comprises 282,053 males and 324,760 females. Out of the 606,813 persons, 78467 live in urban areas and 528,346 in rural areas. The population of the province is young. Almost 45 percent are below 15 years. The rate of population growth in the province has increased from 1.6 percent (1969-80) to 2.2 percent (1980-90).

The major ethnic group of Western Province is Lozi. About 16 languages have been identified as major ones in the province. However, Barotse and North-Western group of languages are the most widely spoken in the province. They are spoken by about 68 and 27 percent of the population of the province, respectively. English is spoken mainly as a second language of communication.

In Western province 48.5 percent of persons aged 5 years or older are literate. The percentage of males able to read and write is 54.9 percent while that of females is 43.3 percent. The literate population is concentrated in the age group 15-44 years. In age groups 45 years and older 23.4 percent are able to read and write. In 1990, 30.8 percent of the population aged 5 years and above were attending school. A comparison of 1980 and 1990 Census data on school attendance, show that the proportion of the population attending school increased from 19.7 in 1980 to 30.8 percent in 1990.

The majority of those who were reported as attending school in 1990 were in grades 1-7. Only 10.9 percent of the population attending school were in grades 8-12. Of the population that previously attended school, 81.8 percent in age group 20 years and over attended formal school. The percentages of males and females were 83.5 percent and 77.9 percent respectively. In all the districts of Western Province the percentage of the population that had previously attended school ranges from 80 to 84 percent for the population aged 20 years or older.

The working age population (age 12 and over) in Western Province in 1990 is 391,369. That for males is 175,260 and 216,109 females. In rural areas, the working age population is 340,422 and in urban areas it is 50,947. The urban working population declined by 0.1 percent in the period 1980 to 1990 while in rural areas it increased by 33.3 percent. It increased by 27.7 percent over the ten-year period for the whole province. The increase of 32.4 percent in the male working-age population is more than that of 24.2 percent for females.

Of the total labour force (183,557) in the province, 84.3 percent was in rural areas. Of the total labour force, 83.4 percent were employed in 1990 compared to only 49.1 percent in 1980. The employed population has increased by 61.7 percent between the two censuses. The increase in the male employed population is 61.1 percent, while that of the females is 62.5 percent. The majority of the workers in the province (59.6 percent) have agricultural and related occupations, while almost an equal percentage (60.5 percent) are employed by the agriculture industry. Primary industrial economic activities therefore predominate the province.

Marriage is near-universal in Western Province. By the age of 45-49 years, 4.7 percent of males had never been married. The corresponding figure for females was 3.6 percent. This is coupled with early Singulate Mean Age at Marriage (SMAM) more so for females pegged at 22.8 years.

The fertility level in the Province has risen slightly as shown by a TFR of 6.2 from TFR of 5.7 children per woman recorded in 1980. There are differences in the levels of fertility among women of different levels of education. Those with primary education have a TFR of 6.9 children which is the highest. Women without education follow with a TFR of 6.5 children, those with secondary have a TFR of 6.5 and those with higher levels of education have a TFR of 2.2. The TFR is higher for women in rural areas at 6.2 than in urban areas at 5.7.

In the 1980s the mortality level increased. Recent estimates of infant mortality rate indicate huge increases over the 1980-1990 intercensal period. Overall, infant mortality rate for Western Province increased from 105.7 deaths in 1980 to 141.3 deaths per 1,000 live births in 1990. Infant mortality rate for female children increased from 94.7 deaths in 1980 to 136.3 deaths per 1,000 live births. Male infant mortality rate increased from 117 to 146.3 deaths per 1,000 live births. Children in rural areas were most affected as compared to those in urban areas. High increases in infant mortality rate were observed in Kaoma, Mongu and Sesheke districts. Similarly, child mortality rate increased from 79 in 1979 to 125 deaths per 1000 children aged 1-4 years in 1989.

The life expectancy of both males and females declined substantially in the 1980s. Overall, the expectation of life at birth declined from 47 years in 1981 to 41.1 years in 1990.

The 1990 Census recorded a total number of 8,753 persons with disabilities in Western Province, which is 1.4 percent of the total population. The largest proportion of the disabled (30.6 percent) are physically handicapped while the mentally retarded (9.3 percent) are the smallest proportion.

The distribution of disabled persons by economic activity shows that close to half of the disabled aged 12 years and older are not available for work. The majority of disabled household heads (65 percent) are family workers and the least (1.2 percent) are employers. The vast majority of the disabled aged 5 years and older (71.2 percent) have not completed any level of education.

The majority of households in Western province occupy two-roomed housing units . The most common construction materials for roofs, walls and floors are grass, pole/dagga and mud used in 87.2, 66.4 and 81.9 percent of the housing units respectively. The majority of households (62.1 percent) use water drawn from wells or boreholes. Sixty nine percent of the rural households and 11.2 percent of urban households, however, use this source of water. Flush toilets are used by 3.7 percent of the households while the vast majority (69.6 percent) use "other" toilet facilities. Wood and paraffin (Kerosene) are the most common sources of cooking and lighting energy respectively.

The majority (92.8 percent) of housing units in the province are owned by individuals. However, only 40 percent of the rented housing units are rented out by individuals. The Central Government is also a common landlord renting out 34 percent of the housing units.

CHAPTER 1

BACKGROUND

1.1 GEOGRAPHY

Western Province covers an area of 126,386 sq. km. This represents about 17 percent of the total land of Zambia. In 1990 the province had six administrative districts namely Kalabo, Kaoma, Lukulu, Mongu, Senanga and Sesheke.

The province consists of a vast sandy upland plain. This plain is intersected by the flood plains of the Zambezi river and its tributaries. This covers an area of 12 950 sq km which is about 10 percent of the total land area in the province.

1.2 PEOPLE

The population of Western province was 606,813 in 1990. This is an increase from 486,455 in 1980 and represents an average annual rate of 2.2 percent. Of the 606,813 enumerated population in Western province, 46.5 percent were males and 53.5 percent were females. The average population density for Western province had also increased from 3.9 persons in 1980 to 4.8 persons per square kilometre in 1990.

Table 1.1

Population, Area, Density, Percentage Distribution and Annual Growth Rate by District, 1969,1980 and 1990

District	Population			Area (Sq.Km)	Density			Percentage Distribution			Growth Rate (%)	
	1969	1980	1990		1969	1980	1990	1969	1980	1990	1969-80	1980-90
Kalabo	105,893	98,496	97,320	17,526	6.0	5.6	5.6	25.8	20.2	16.0	-0.7	-0.1
Kaoma	56,450	70,066	112,049	23,315	2.4	3.0	4.8	13.8	14.4	18.5	2.0	4.8
Lukulu	-	44,800	51,953	16,291	-	2.8	3.2	-	9.2	8.6	-	1.5
Mongu	110,123	114,405	142,795	10,075	10.9	11.4	14.2	26.9	23.5	23.5	0.3	2.2
Senanga	88,602	101,957	137,768	29,906	3.0	3.4	4.6	21.6	21.0	22.7	1.3	3.1
Sesheke	49,019	56,731	64,928	29,272	1.7	2.0	2.2	11.9	11.7	10.7	1.3	1.4
Zambia Total	410,087	486,455	606,813	126,386	3.3	3.9	4.8	100.0	100.0	100.0	1.6	2.2

Source: CSO (1973): 1969 Census of population and housing; CSO (1985): 1980 Census of Population and housing, Final report Volume II; CSO (1985): 1980 Census of Population and Housing; General Population and Migration Tables, Volume I.

Table 1.1 compares the distribution of population between districts. Mongu had the highest population of 147,795 while Lukulu had the smallest population of 51,953. Apart from Kalabo, all the districts registered population increases between 1969 and 1990.

As regards geographical area, Senanga is the largest district with an area of 29,906 square kilometres and the smallest district is Mongu which covers an area of 10,075 square kilometres.

The 1990 Census results show that Mongu the most densely populated district with 14.2 persons per square kilo. letre and Sesheke was the least densely populated with 2.2 persons per square kilometre.

Of the total population in the province, Mongu had the largest share of 23.5 percent and Lukulu had the smallest share of 8.6 percent, going by the 1990 Census results.

During the 1969-80 intercensal period the highest population growth occured in Kaoma at a rate of 2.0 percent per annum and the least growth occured in Kalabo at a rate of -0.5 percent per annum. During the 1980-90 intercensal period the pattern was similar as Kaoma still displayed the highest population growth at a rate of 4.8 percent per annum and Kalabo had the least population growth of -0.1 percent per annum.

The overall provincial population growth rate grew from 1.6 percent per annum during the 1969-80 intercensal period to 2.2 percent per annum during the 1980-90 intercensal period.

1.3 ECONOMY

The major eonomic activity in the province is Agriculture, particularly rearing cattle. The potential of the cattle industry has not been fully exploited because of the low fertility and the high calf mortality rate. These problems are attributed to low nutrient availability during flood season, poor management and the outbreak of diseases.

The province also has a potential for hard wood processing but the absence of industries for wood processing in the province makes it difficult to process the wood. Fishing is another economic activity that takes place in Western province. The development of this industry has remained marginal but the actual production of fish has gone up. The fishing rights in the floord plain and the inadequancy of facilities such as transport to carry out extention work are some of the major constraints in this industry..

Agriculture

The most important agricultural zone of Western province is the Zambezi flood plain. The greatest potential for crop production is in Kaoma district. The dambo areas are suited for growing rice. Table 1.2 shows the production and marketing of some crops grown in Western province for selected years.

Table 1.2

Major Crops Grown, Western Province, 1988-90

		Production and Marketing (90kg Bags)					
		1988		1989		1990	
Crops	Unit	Produced	Marketed	Produced	Marketed	Produced	Marketed
Maize	90kg Bags	527,482	315,326	555,046	285,255	410,849	59,350
Tobacco	Kgs	-	-	56,766	54,344	86,400	19,477
Cotton	Kgs	88,067	88,067	48,275	48,275	157,910	54,075
Sunflower	50Kg Bags	160	144	281	199	1,123	161
Soyabean	90Kg Bags	455	436	320	-	161	240
Groundnut	80Kg Bags	9,246	80	9,482	10	6,010	0
Wheat	90Kg Bags	-	-	-	-	-	-

Source: 1989/90 Agricultural Statistics Bulletin.

The people who rear livestock in the province mainly use the traditional methods. The livestock mainly reared is cattle, sheep, goats and pigs. Details on livestock for Western province are given in Table 1.3.

Table 1.3

Livestock Population by Sector, Western Province, 1980-89

	Year					
Sector	1980	1985	1986	1987	1988	1989
Traditional						
Cattle	388,518	486,782	475,532	491,225	503,668	512,794
Sheep & Goats	3,177	3,855	4,166	4,499	4,859	6,874
Pigs	4,226	2,467	2,784	3,062	3,369	3,763
Commercial						
Cattle	-	-	-	-	-	-
Sheep & Goats	-	-	-	-	-	-
Pigs	-	-	-	-	-	-

Note: (-) Figures not Available.

Source: 1989/90 Agricultural Statistics Bulletin, pp. 23 and 24.

Figure 1.1

Livestock by Sector, Western Province, 1989

Sheep & Goats 1.3%

Cattle 98.0%

Pigs 0.7%

Traditional Sector
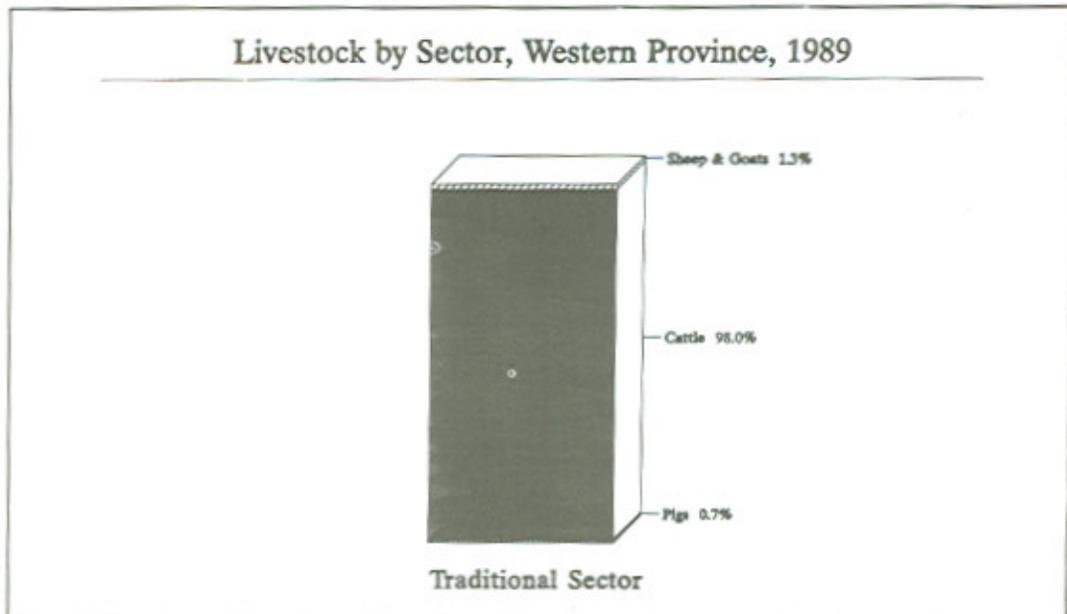
Communication

The Western province has a problem of transport. This is due to the sand terrain and this has contributed, to a large extent, towards the difficulties that the people in the province experience in realising social and economics development aims and objectives.

The roads that are available in the province are maintained by the Roads department but their capacity to maintain these roads is very low thus the roads being in bad condition.

The floods of the Zambezi plain necessitates the development of waterways and harbours. There are waterways like the Mongu-Kalabo waterways.

In 1990, Mongu, Lukulu, Senanga, Kalabo and Kaoma were connected to micro-wave link. Sesheke was left out because of the security situation there. The postal services were improved in the province by the introduction of the post-bus between Lusaka and Mongu, and the introduction of Mobile Post office services between Mongu and Senanga, and Mongu and Kaoma.

1.4 EDUCATION

The primary school enrolment for Western province was 101 911 in 1986. It increased from 84887 in 1980 and 94 151 in 1983. The secondary school enrolment also increased from 6692 in 1980, 8058 in 1983 to 9312 in 1986. This increase in enrolment is generally for boys and girls. Table 1.4 shows some of the features of the education sector in Western province.

Table 1.4

Schools, Teachers and Enrolment, Western Province 1980 - 1986

	Year		
	1980	1983	1986
Schools			
-Primary	327	335	343
-Secondary	9	13	18
Teachers			
-Primary	1,933	2,111	2,530
-Secondary	308	324	369
Enrolment			
Primary - Total	84,887	94,151	101,911
- Boys	45,865	50,206	53,753
- Girls	38,992	43,945	48,158
Secondary - Total	6,692	8,058	9,312
- Boys	4,319	5,170	6,107
- Girls	2,373	2,888	3,205

Source: Educational Statistics Reports for 1980, 1983 and 1986 - Ministry of Education

The Enrolment ratios in table 1.5 show how the primary education has evolved over the years. It can be noticed from the table that enrolment of boys is higher than that of girls for the given years.

Table 1.5

Enrolment Ratios of Primary Schools, Western Province 1980 - 1987

	1980	1983	1986	1987
Primary				
- Totals	77.1	98.2	101.5	98.6
- Boys	83.4	104.8	106.2	97.7
- Girls	70.9	91.6	96.8	99.5

Source: CSO (1984, 1992): Educational Statistics (1982, 1987)

1.5 HEALTH

In 1990, the Western province had 104 health institutions. There were 11 hospitals and 93 health centres. Each district had at least one hospital and a number of health centres.

Table 1.6 shows that the number of hospitals did not change from 1986 to 1990. The number of health centres increased from 93 in 1986 to 100 in 1988 and reduced to 93 in 1990. The number of beds and cots increased from 1896 in 1986 to 2150 in 1988 and decreased to 1955 in 1990.

Table 1.6

Number of Health Institutions, Beds and Cots by Type of Health Institution, District and Year, 1986, 1988 and 1990

	Hospitals		Health Centres		Total	
	Number	Beds/Cots	Number	Beds/Cots	Number	Beds/Cots
Year						
1986	11	1,329	93	567	104	1,896
1988	11	1,462	100	688	111	2,150
1990	11	1,470	93	485	104	1,955
Districts -						
Kalabo	2	222	11	61	13	283
Kaoma	3	329	11	43	14	372
Lukulu	1	125	11	27	12	152
Mongu	1	344	24	238	25	582
Senanga	1	102	23	174	24	276
Sesheke	3	348	13	147	16	495

Source: Ministry of Health (Bulletin of Health Statistics, 1985-86 and 1987-88 and Health facilities in Zambia, 1990).

Diseases

Deaths among children below the age of 5 years in Western Province are mainly of preventable diseases. These diseases are such as, polio, tuberculosis, diptheria, measles, pertussis and tetanus. There are vaccines available for these diseases and information on immunization for some of these diseases is provided in table 1.7

Table 1.7

Immunisations of Children Below 1 Year, Western Province, 1985-1988

Year	BCG	Polio Third Dose	DPT Third Dose	Measles
1985	20,339	8,998	10,429	14,145
1986	22,911	10,711	13,790	16,747
1987	23,681	14,725	14,139	20,629
1988	23,944	13,921	15,081	16,188

Source: Ministry of Health 1985-86, 1987-88 Bulletin of Health Statistics.

Table 1.7 shows that there has been a general increase in immunisations administered to children in order to curb the prescribed diseases over the period 1985-88. But inter-year drops in immunisations were registere between 1987 and 1988 regarding polio and measles.

However, decrease were registered in immunisations concerning polio and measles during the period 1987-88.

CHAPTER 2

EVALUATION OF COVERAGE AND CONTENT ERRORS

2.1 INTRODUCTION

Checks and controls are instituted during census enumerator. However despite the measure taken, there are usually errors in the census data. In view of this, evaluation of census data comes into play. Data evaluation identifies the errors that are in the data and provides for possible adjustment. Information that is used in evaluating the quality of data is derived from the following questions that were included in the Census questionnaire:

- Sex of members of household,
- Age (in completed years) of members of household,
- Residential status of household,
- Children still living (within the household or elsewhere), and
- Children dead.

2.2 DEFINITION OF CONCEPTS

Listed below are the definitions of the major concepts used in this chapter.

Age Ratio

Ratio of the population in a given age group to one third of the sum of the population in the given age group, the preceding age group and the following age group, multiplied by 100.

Census of Population

Complete enumeration of all persons during a specified time period in a demarcated geographical area.

Child-Woman Ratio

Number of children aged 0-4 years in a population to every 1000 women aged 15-49 years in the same population.

Content Error

Error made when the characteristics of a person such as; age, sex, marital status, fertility, mortality and economic activity collected during the census are incorrectly reported or recorded.

Coverage Error

Under or over-enumeration in a population census due to either omission or enumeration of persons more than once.

Dependency Ratio

Ratio of children aged 0-14 and persons aged 65 years and above, per 100 persons in the age-group 15-64 years.

Digit Preference

Reporting of age by respondents often ending in digits they prefer. This results in heaping of population in ages ending with certain digits.

Evaluation of Census Data

Measurement of the quality of census data.

Sex Ratio

Number of males per 100 females in a population.

2.3 METHODS OF EVALUATION

During the census, some people may be completely omitted or some characteristics of an individual such as age, sex, fertility and economic activity may be incorrectly reported or tabulated. In general, there are two approaches used to evaluate the quality of data, the direct and indirect methods.

The direct method basically involves the carrying out of a Post Enumeration Survey (PES). In a PES, a sample of households is revisited after the census and data is again collected on a smaller scale and is later compared with that collected during the actual census. The matching process of the two sets of data can then be used to evaluate the quality of the census data. With regard to the 1990 Census, the PES was undertaken in December 1990. The PES evaluation is available in a separate report.

Indirect method, usually employs the comparison of data using both internal and external consistency checks. Internal consistency checks compare relationships of data within the same census data, whereas external consistency checks compare census data with data generated from other sources. For instance, one can compare data on education obtained during a census with administrative data maintained by the Ministry of Education.

Age Composition

Table 2.1 and Figure 2.1 show the distribution of dthe population in Western Province in broad age groups for 1980 and 1990 censuses.

Table 2.1

Population Distribution by Broad Age Groups, Western Province, 1980 and 1990

Age Group	Population Distribution			
	1980 Population	1980 Percent	1990 Population	1990 Percent
0 - 14	214,551	44.1	263,648	43.4
15 - 64	242,395	49.8	312,197	51.4
65+	26,955	5.5	29,815	4.9
Age Not Stated	2,554	0.5	1,153	0.2
Total	486,455	100.0	606,813	100.0

The proportion of persons aged 0-14 years in 1980 is higher than in 1990. This could be attributed to a decline in fertility as well as an increase in child mortality between 1980 and 1990 or under-enumeration of children especially those aged between 0 and 4 years during the 1990 census in Western Province. The proportion of those aged 5-64 years rose from 49.8 percent in 1980 to 51.4 percent in 1990. The proportion of those who did not state their age declined from 0.5 percent in 1980 to 0.2 percent in 1990. See Table 2.1 and Figure 2.10

Figure 2.1

Population Distribution by Broad Age Groups
Western Province, 1980 and 1990

	1980 Census		1990 Census

65+ 5.5%
15 - 64 49.8%
0 - 14 44.1%
Age Not Stated 0.5%

65+ 4.9%
15 - 64 51.4%
0 - 14 43.4%
Not Stated 0.2%

1980 Census   1990 Census
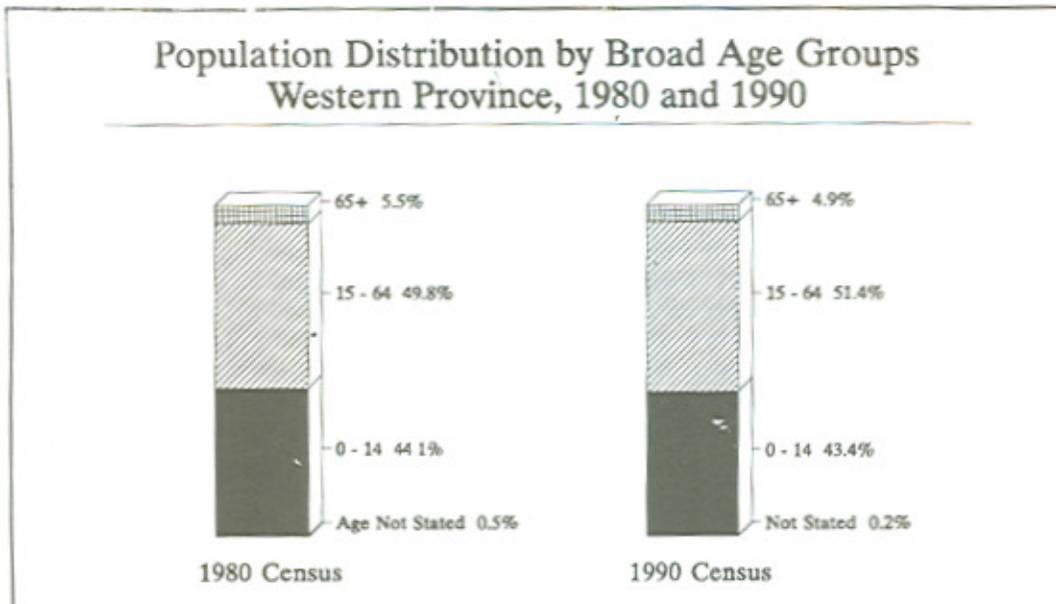
Child-Woman Ratio

Child-woman ratio is given in the table below. The child-woman ratio declined from 665.1 in 1980 to 621.6 in 1990. The decline in the child-woman ratio is in agreement with the decline in the percentage of the population aged between 0-14 years observed above. The decline in the child-woman ratio could be due to the increase in mortality levels coupled with a decline in fertility between 1980 and 1990.

Age Dependency Ratio

Dependency ratios are shown in Table 2.2. The overall dependency ratio for Western Province declined from 99.6 in 1980 to 94 in 1990 per 100. This implies that, in 1990, there were 94 dependants for every 100 compared to 100 dependants for every 100 potential producers in 1980. The child dependency ratio of the population aged 0-14 years to those aged 15-64 years is 88.5 in 1980 and 84.4 in 1990. The aged dependency ratio of those aged 65 years and above to those aged 15-64 years dropped from 11.1 in 1980 to 9.6 in 1990. The dependency ratios have declined between 1980 and 1990. In all instances, the decline in the dependency ratios could be attributed to either an increase in the population aged 15-64 years, an increase in child mortality or a decline in fertility.

Table 2.2

Dependency Ratios and Child-Woman ratio for Western Province, 1980 and 1990

Ratios	1980	1990
Western Province		
- Overall Dependency Ratio	99.6	94.0
- Child Dependency Ratio	88.5	84.4
- Aged Dependency Ratio	11.1	9.6
- Child-Woman Ratio	665.1	621.6

Digit Preference

The tendency of respondents to report certain ages as ending in certain digits even when they do not is called age heaping, age preference or digit preference. Age heaping is most prevalent among the illiterate persons who do not know the exact ages. An assessment of age heaping in Western Province is done through the calculation of Myers' Index.

Meyer's Index is a useful indicates used for evaluating the quality of age data. The index is calculated by summing up the no. of persons aged between 10 years and 69 79 years. The sum of those with ages ending in zero is done separately from those ending in 1,2,3 up to 9. Ten summations are, therefore, obtained. This may be done by sex. Weights are then applied to the 10 summations to get the blended pep. The blended population is then distributed in percent for each digit 0 to 9. Then deviations are obtained from 10 for each digit 0 to 9. The deviation are summed up irrespective of sign and the sum is divided by 2 to get Myers' index. Refer to Shryock H.S., et al (1976) for mare details on the calculation of Myers' Index. The index is scaled from 0 to 90. An index lower on the scale implies that the age reporting for the population with that index is better than for the population with an index higher up on the scale.

Table 2.3

Myers' Index for Digit Preference in Age Data, Western Province, 1980 and 1990

	Male				Female			
	1980		1990		1980		1990	
Digit	Percent	Deviation From 10%	Percent	Deviation From 10%	Percent	Deviation From 10%	Percent	Deviation From 10%
0	15.9	5.9	13.4	3.4	17.8	7.8	14.3	4.3
1	7.8	-2.2	8.1	-1.9	7.7	-2.3	8.5	-1.5
2	11.3	1.3	11.4	1.4	10.9	0.9	11.2	1.2
3	8.2	-1.8	8.8	-2.0	8.1	-1.9	7.6	-2.4
4	9.8	-0.2	9.6	-1.3	8.7	-1.3	9.2	-0.8
5	9.4	-0.6	10.2	0.2	10.2	0.2	10.4	0.4
6	9.7	-0.3	10.0	0.3	9.3	-0.7	10.7	0.7
7	7.3	-2.7	8.5	-1.2	7.0	-3.0	8.6	-1.4
8	11.8	1.8	11.7	2 `	11.6	1.6	11.2	1.2
9	8.7	-1.3	8.2	-1.4	8.7	-1.3	8.3	-1.7
Myers' Index		9.0		6.8		10.6		7.9

Table 2.4

Summary of Myers' Index for Digit Preference in Age Data by Rural/Urban, Western Province, 1980 and 1990

Western Province		1980	1990
Total	Male	9.0	6.8
	Female	10.2	7.2
Rural	Male	y.0	6.8
	Female	10.6	7.4
Urban	Male	8.8	6.2
	Female	7.6	6.4

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Myers' index for digit preference in age data for Western Province during 1980 and 1990 censuses are shown in Tables 2.3 and 2.4. Table 2.3 shows a breakdown of the Index while Table 2.4 is a summing of the index for 1980 and 1990 census data. Table 2.8 and 2.4 show that Myers' index have declined. For example, Myers' index of males for the whole province declined from 9.0 in 1980 to 6.8 in 1990 while that of women dropped from 10.2 in 1980 to 7.2 in 1990. In urban areas Myers' index for males dropped from 8.8 to 6.2 in 1980 to 1990, respectively whereas that of females declined from 7.6 in 1980 to 6.4 in 1990. Between 1980 and 1990 implying that the quality of age data for 1990 has improved compared to that of 1980. Results from Table 2.4 shows that in 1980 and 1990, the male age data were better reported than the female age data. However, in general, the indices from Table 2.5 indicate good quality of age data since they range between 0 and 11. Refer to Tables 2.5 and 2.6 for details.

There was rounding of ages during 1980 and 1990 Census. The most preferred digits among males and females are presented in Table 2.5 in decreasing order of preference.

Table 2.5

Most Preferred Digits, Western Province, 1980 and 1990

Sex/Year			Myers
Western Province			
	Male	- 1980	0, 8, 2
		- 1990	0, 8, 2
	Female	- 1980	0, 8, 2
		- 1990	0, 2, 8
Rural			
	Male	- 1980	0, 8, 2
		- 1990	0, 8, 2
	Female	- 1980	0, 8, 2
		- 1990	0, 2, 8
Urban			
	Male	- 1980	0, 8, 2
		- 1990	0, 8
	Female	- 1980	0, 2 & 8
		- 1990	0, 8, 2

Note: & indicates same degree of preference

The most preferred digits among males and females were 0, 2 and 8. The tendency to over state the age among males could lead to the preference of these digits. However, among the females, the age itself could have been subjected to the rounding. In the case of females, there could be rounding of ages due to proxy respondents. Analysis of digit preference using the Myers' Index shows that in 1980 and 1990, the same digits 0, 2 and 8 were preferred in Western Province.

Age misreporting errors are also presented in Figures 2.2 to 2.5. A comparison of figures shows that grouping of age data in 5 years age groups than in single years helps minimise age misreporting errors. This is shown by fluctuations which are more pronounced in Figures 2.2 and 2.3 than in Figures 2.4 and 2.5. The peaks on the curves show the most preferred digits while the troughs show the less preferred digits.

Figure 2.2

Population Distribution of
Western Province in Single Years, 1980

Source: CSO 1980 Census

Figure 2.3

Population Distribution of
Western Province in Single Years, 1990

Source: CSO 1990 Census

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Figure 2.4

Population Distribution of
Western Province by 5 Year Age Group, 1980

Source: CSO 1980 Census

Figure 2.5

Population Distribution of
Western Province by 5 Year Age Group, 1990

Source: CSO 1990 Census
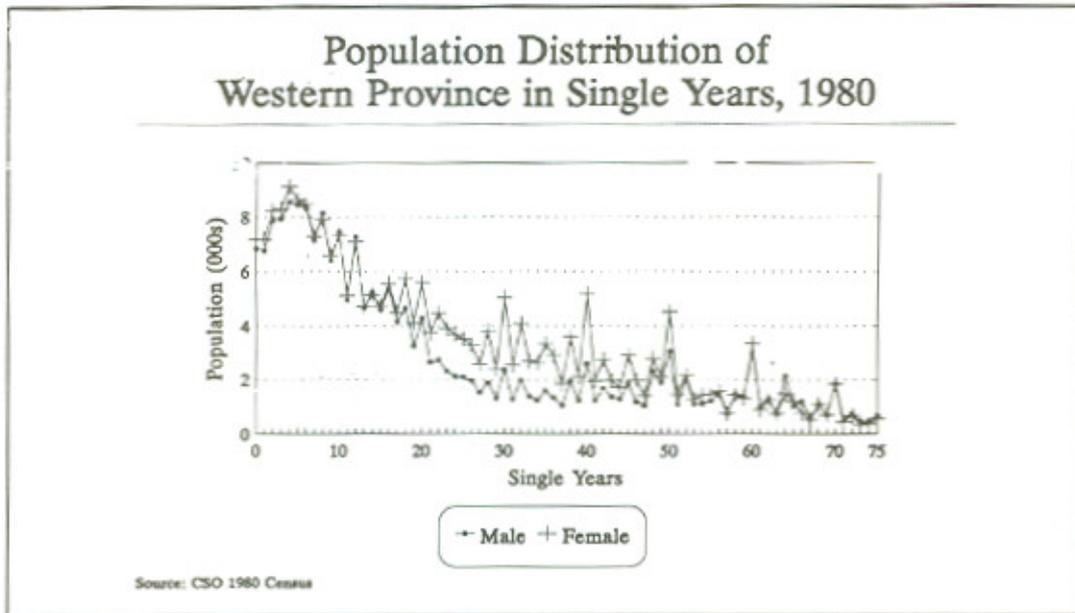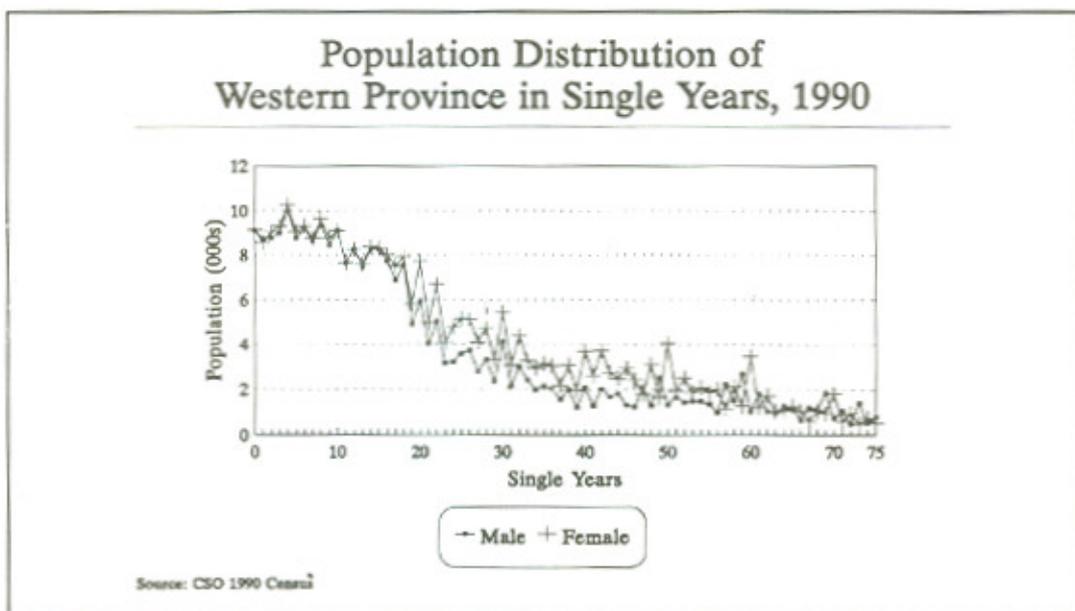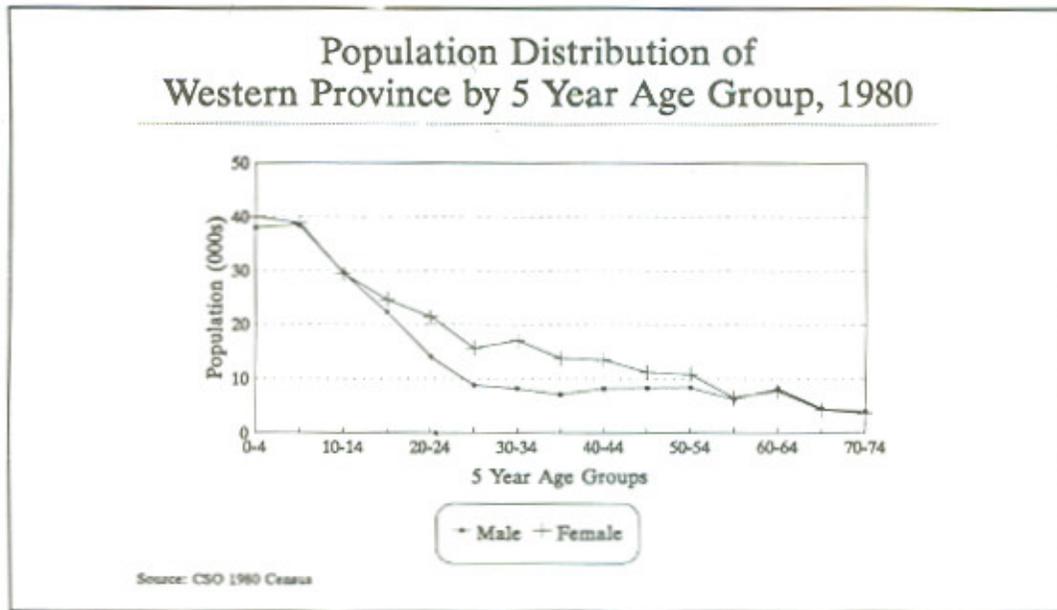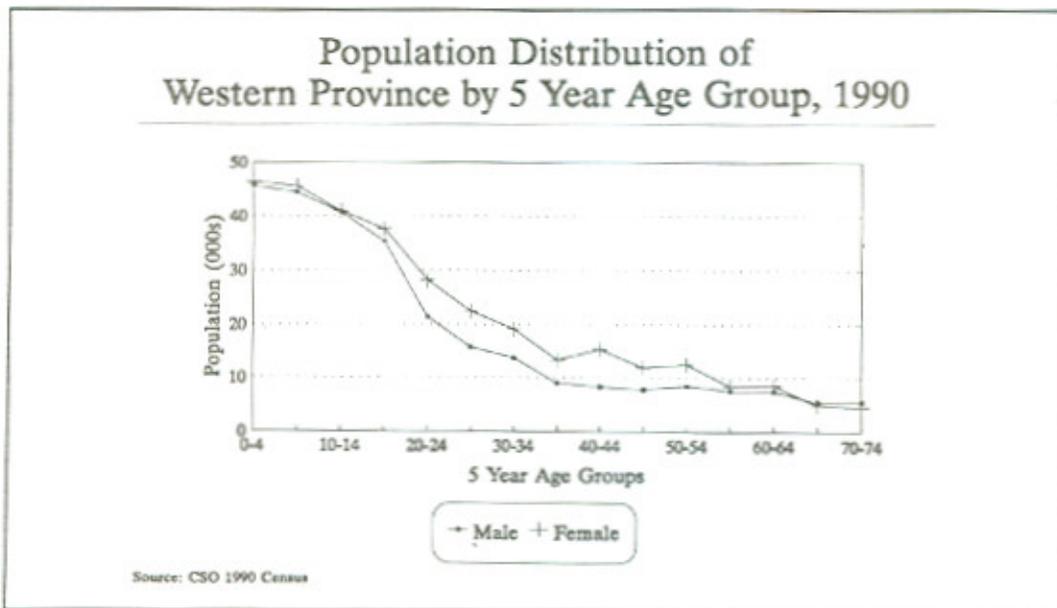
Sex Ratios

The presence of errors of ommission and age misreporting and also in or out-migration can be detected by using sex ratios. A sex ratio of more than 100 indicates an excess of males whereas a sex ratio of less than 100 shows a deficit of males while that of 100 shows an equal number of males and females. Information on sex ratio is given in Tables 2.6, 2.7, 2.8 and Figure 2.6. Table 2.6 shows that the sex ratio for the total province rose from 83.4 in 1980 to 86.8 males per 100 females in 1990. In the rural areas, the sex ratio rose from 81.8 in 1980 to 86.3 in 1990 while in urban areas, the sex ratio dropped from 91.7 in 1980 to 90.4 males per 100 females in 1990. These results show that Western Province is in excess of females. Having an excess females in Western Province can be attributed to out-migration of the economically active males, or high male child and adult mortality or recording errors.

Table 2.6

Sex Ratios for Western Province, 1980 and 1990

Western Province	1980	1990
Total	83.4	86.8
Rural	81.8	86.3
Urban	91.7	90.4

Age Specific Sex Ratios for Western Province during 1980 and 1990 Censuses have been analysed and the results are presented in Tables 2.7, 2.8 and Figure 2.7. Table 2.7 shows that in 1980 the age groups which had excess females or which had a sex ratio of less than 100 were from 0-9 and 15-59 years whereas in 1990, Table 2.8 shows that excess of females are in the age groups ranging from 0-64 years. The rest of the age groups have more males than females especially in the old ages i.e 65 years and above. These results from Tables 2.7 and 2.8 that there is out-migration of adult males. High male mortality could be another reason for having low sex ratios. Possibilities of having more males in the old ages as shown in the tables are many. A undercount of females is one of them since men are mainly the respondents during enumeration. Another possibility is that men have a tendency of over stating their age while women have the tendency of under stating their age. This results in the former being shifted into older ages and the other into young ages, hence affecting the sex ratios.

Age Ratios

Age ratios are used for evaluate the quality of age data. Age ratios have been calculated and the results are presented in Tables 2.7, 2.8 and on Figure 2.7. In normal circumstances, the age ratios do no deviate from 100 when there are no major changes in fertility, mortality, or migration. Therefore, any substantial deviation is explained in terms of age misreporting. The average age ratio deviation for males was 9.4 in 1980 and declined to 6.7 in 1990 while that of females was 10.6 and 8.5 in 1980 and 1990, respectively. The average sex ratio difference was 8.5 in 1980 and 8.7 and 1990. The Age-Sex Accurancy Index was 45.5 in 1980 and 42.2 in 1990.

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Table 2.7

Population by Five Year Age Group, Sex, Age Ratio and the Age-Sex Accuracy Index, Western Province, 1980

Age Group	Population		Age Ratio		Deviation		Sex Ratio	Difference
	Male	Female	Male	Female	Male	Female		
0-4	37,979	40,055	-	-	-	-	94.8	-
5-9	38,532	38,924	108.9	107.7	8.9	7.7	99.0	-4.2
10-14	29,614	29,447	98.2	95.0	-1.8	-5.0	100.6	-1.6
15-19	22,336	24,630	101.4	97.9	1.4	-2.1	90.7	9.9
20-24	14,116	21,415	93.6	104.2	-6.4	4.2	65.9	24.8
25-29	8,783	15,628	84.7	86.7	-15.3	-13.3	56.2	9.7
30-34	8,226	17,025	102.1	109.9	2.1	9.9	48.3	7.9
35-39	7,163 *	13,825	91.3	93.3	-8.7	-6.7	51.8	-3.5
40-44	8,147	13,582	103.5	105.5	3.5	5.5	60.0	-8.2
45-49	8,308	11,221	100.3	94.4	0.3	-5.6	74.0	-14.0
50-54	8,386	10,859	109.5	113.8	9.5	13.8	77.2	-3.2
55-59	6,277	6,551	82.5	78.1	-17.5	-21.9	95.8	-18.6
60-64	8,171	7,746 *	128.8	124.9	28.8	24.9	105.8	-9.7
65-69	4,584	4,306	81.9	82.1	-18.1	-17.9	106.5	-1.0
70-74	4,035	3,682	-	-	-	-	109.6	-3.1
Total	276,581	319,807		122.3*			138.5*	119.4
Mean				9.4			10.6	8.5

Note: * Denote Total irrespective of sign

$$\text{Age Accuracy Index} = \text{3 x Mean Difference in Sex Ratios + Mean Deviations of Male and Female Age Ratios}$$
$$= (3 \times 8.5) + 9.4 + 10.6$$
$$= 45.5$$

Figure 2.6

Population Distribution of Western Province by Sex Ratio, 1980 and 1990

Source: CSO 1990 Census
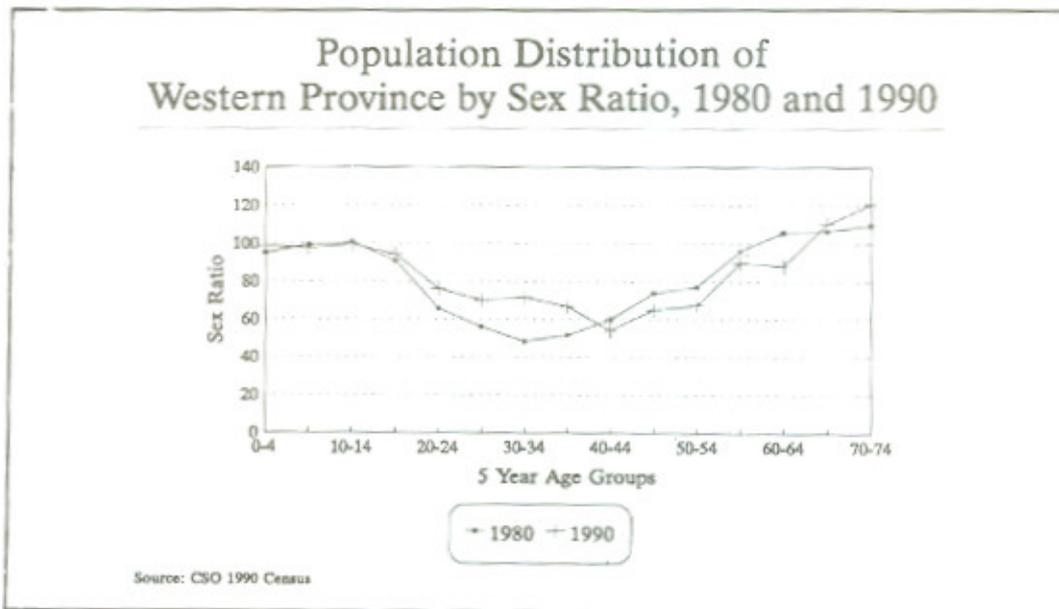
Table 2.8

Population by Five Year Age Group, Sex, Age and the Age-Sex Accuracy Index, Western Province, 1990

Age Group	Population		Age Ratio		Deviation		Sex Ratio	Difference
	Male	Female	Male	Female	Male	Female		
0-4	45,644	46,315	-	-	-	-	98.6	-
5-9	44,399	45,567	101.8	102.9	1.8	2.9	97.4	1.2
10-14	40,748	40,975	101.5	99.1	1.5	-0.9	99.4	-2
15-19	35,312	37,560	108.6	105.5	8.6	5.5	94.0	5.4
20-24	21,454	28,225	88.7	95.9	-11.3	-4.1	76.0	18.0
25-29	15,789	22,487	93.0	96.6	-7.0	-3.4	70.2	5.8
30-34	13,710	19,119	107.0	104.3	7.0	4.3	71.7	-1.5
35-39	8,945	13,386	86.7	84.1	-13.3	-15.9	66.8	4.9
40-44	8,280	15,251	99.5	112.8	-0.5	12.8	54.3	12.5
45-49	7,738	11,911	94.9	90.1	-5.1	-9.9	65.0	-10.7
50-54	8,441	12,479	106.5	114.0	5	14.0	67.6	-2.6
55-59	7,591	8,437	96.7	85.9	-3.	-14.1	90.0	-22.4
60-64	7,528	8,544	109.8	116.9	9.8	16.9	88.1	1.9
65-69	5,444	4,941	88.1	81.9	-11.9	-18.1	110.2	-22.1
70-74	5,558	4,610	-	-	-	-	120.6	-10.4
Total					87.6	122.8		121.4
Mean					6.7	9.4		8.7

Note: * Denote Total irrespective of sign.

$$\text{Age Accuracy Index} = 3 \times \text{Mean Difference in Sex Ratios} + \text{Mean Deviations of Male and Female Age Ratios}$$
$$= (3 \times 8.7) + 6.7 + 9.4$$
$$= 42.2$$

Survival Ratios

Survival ratios represent the probability that individuals of the same birth cohort or group of cohorts will still be alive 10 years later. Evaluating the quality of age and sex data is among the many was of survival ratios. Evaluating of age and sex data from two censuses is achieved only under certain assumptions. The population should be closed to migration. Influence of abnormal mortality through wars, disasters, diseases, etc., over a 10 year period should be absent. The more erratic the census survival ratios are, the more inconsistence the age data are.

Tables 2.9 and 2.10 show the survival ratios in Western Province during 1980 and 1990 intercensal period. Table 2.9 shows the Cohort Survival Ratios while Table 2.10 below shows the Overall Survival Ratios according to sex in 5 year age groups. Cohort survival ratio refers to the probability of showing from a given age group to the next age while overall survival ratio refers to the probability of surviving of total population aged say 10 years and aove or 20 years and above to the next age.

Cohort survival ratios are expected to be high at age group 10-14 where mortality is assumed to be lowest and then to decline continuously, thereafter. Results from Table 2.9 and Figure 2.8 show some irregularities. Females and 35-54 years for males alone. Some distortions are also present in the female data. The pattern of cohort survival ratios declining with the increase in age is not systematic for females. These results suggest that presumably, some males have migrated with their spouses together with their children considering that the age group 10-14 years has a survival ratio of over 1. Alternatively, it is possible that some young dynamic females especially upon completing school, could have migrated from Western Province in search of employment, hence, the distortion in the female data. However, results from Table 2.10 show that the age data for males and females has improved overtime. This is evidenced by the systematic decline of the overall survival ratios with the increase in age.

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Table 2.9

Cohort Survival Ratios By Sex, Western Province, 1980-1990

Age Group	Male	Female
10-14	1.0729	1.0230
15-19	0.9164	0.9650
20-24	0.7245	0.9585
25-29	0.7069	0.9130
30-34	0.9712	0.8928
35-39	1.0184	0.8565
40-44	1.0066	0.8964
45-49	1.0803	0.8616
50-54	1.0361	0.9188
55-59	0.9137	0.7519
60-64	0.8977	0.7868
65-69	0.8673	0.7542
70-74	0.6802	0.5951
75-79	0.5242	0.4489
80-84	0.3544	0.3542
85+	0.4015	0.3897

Figure 2.7

Cohort Survival Ratio by Sex, Western Province, 1980-1990

Source: CSO 1990 Census
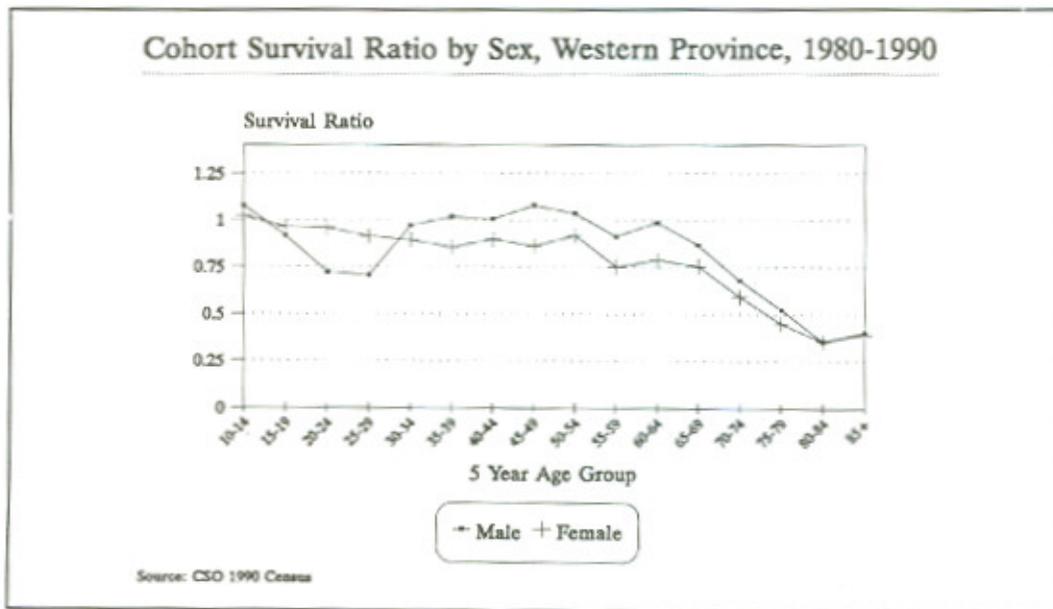
The overall Survival ratios are expected to decline continously as we go up to older ages. Female ratios should be higher than the male ratios because females usually have lower mortality than males. Results from Table 2.10 and Figure 2.8 show some irregularities than the expected pattern.

The observed irregularities in both the cohort of the overall enumeration at some age groups suggest that, there was age misreporting and under or over ount. Migration is also another contributing factor to the observed irregularities.

Table 2.10

Overall Survival Ratios, Western Province, 1980-1990

Age Group	Male	Female
10-14	0.8697	0.8807
15-19	0.8273	0.8552
20-24	0.8034	0.8321
25-29	0.8239	0.8081
30-34	0.8524	0.7883
35-39	0.8308	0.7678
40-44	0.8068	0.7530
45-49	0.7797	0.7211
50-54	0.7394	0.6902
55-59	0.6861	0.6270
60-64	0.6350	0.5901
65-69	0.5581	0.5112
70-74	0.4712	0.4336
75-79	0.3507	0.3357
80-84	0.2678	0.2782
85+	0.4015	0.3897

Figure 2.8

Overall Survival Ratio by Sex, Western Province, 1980-1990

Source: CSO 1990 Census
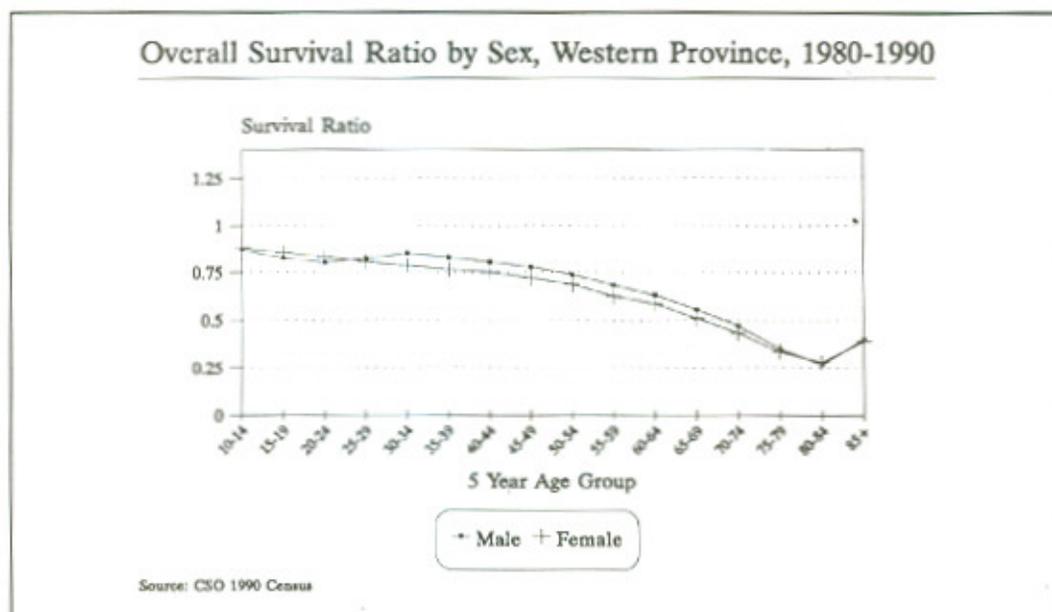
2.4 SUMMARY

In 1990, 486,455 people were enumerated in Western Province. Out of these, 2,554 (0.5 percent did not state their age. The proportion of those aged 0-14 also declined from 44.1 percent in 1980 to 43.4 percent in 1990. This decline in the proportion of children aged 0-14 years could be due to a decline in fertility coupled with an increase in mortality levels and or an under-count of children especially those aged 0-14 years in 1990. Among other notable observations made is that the dependency ratio declined from 99.6 in 1980 to 94.0 in 1990. There was age heaping in Western Province. The most preferred digits in 1980 and 1990 0, 2 and 8.

Analysis of age-sex data using Myers' Index and the age ratio method shows that age reporting was better for males than females in 1980 and 1990. In 1990, Myers' Index was 6.8 for males and 7.2 for females. During the same year, the average age ratio deviation for for males was 6.7 and 9.4 for females. Further analysis of the 1990 census data using the age-specific, sex ratios that mortality is not favourable among male infants. Western Province is in excess of females and had a sex ratio of 86.8 males per 100 females in 1990. The sex ratio method shows that mortality is high among males and out migration is there in Western Province. The sex ratio is high in old ages. Perhaps, this could be as a result of men's tendency to over state their age which could have shifted them to old age groups. Generally, the 1990 census data are better than the 1980 census data. This is evidenced by the decline in the Age-Sex Accuraccy Index.

CHAPTER 3

POPULATION SIZE, GROWTH AND COMPOSITION

3.1 INTRODUCTION

The size of a population, its growth and composition are very important inputs into effective social and economic development planning. This chapter aims to provide an analysis of data on these aspects.

Censuses of population in Zambia have been designed to collect the de facto population data. However, in the 1990 population census, both the de facto and de jure counts were employed. Nevertheless, results presented in this report refer to the de facto count. The de facto population constitutes people actually present at the time of the census with the exception of foreign diplomatic personnel accredited to Zambia. The 1990 population census also excluded Zambian diplomats accredited to embassies in foreign countries and their families, Zambian migrant workers and students residing in other countries. The dejure population constitutes usual household members present and usual household members temporarily absent from their homes at the time of the 1990 Census.

Population composition is defined as the distribution of certain traits, characteristics or attributes of the population and how these affect the overall demographic structure of the country. There are three main characteristics of population composition, namely:

- Demographic characteristics, such as age and sex,
- Social characteristics, such as ethnicity, citizenship,
- Economic characteristics, such as crude activity ratio and labour force participation ratio.

3.2 POPULATION SIZE AND GROWTH

The census recorded a population of 606,813 for Western Province. Out of this figure, 282,053 are male and 324,760 are female. More details are given in Table 3.1

Table 3.1

Population Size by Sex, Residence and District, Western Province, 1990

District	Total			Rural		Urban	
	Both Sexes	Male	Female	Male	Female	Male	Female
Kalabo	97,320	43,710	53,610	39,445	49,007	4,265	4,603
Kaoma	112,049	53,450	58,599	49,038	53,486	4,412	4,753
Lukulu	51,953	24,089	27,864	22,624	26,200	1,465	1,664
Mongu	142,795	66,348	76,447	47,848	55,737	18,500	20,710
Senanga	137,768	63,360	74,408	58,983	69,459	4,377	4,949
Sesheke	64,928	31,096	33,832	26,850	29,309	4,246	4,523
Total	606,813	282,053	324,760	244,788	283,558	37,265	41,202

Table 3.2 gives information on population sizes and annual population growth rates corresponding to the 1969, 1980 and 1990 population censuses.

Table 3.2

Population Size and Growth Rates, Western Province, 1969, 1980 and 1990

Province/District	1969	Annual Growth Rate 1969-80	1980	Annual Growth Rate 1980-90	1990
Western Province					
- Total	410,087	1.6	486,455	2.2	606,813
- Rural	400,487	0.1	404,137	2.7	528,346
- Urban	9,6//	21.6	82,318	-0.5	78,467
Districts					
Kalabo	105,893	-0.7	98,496	-0.1	97,320
Kaoma	56,450	2.0	70,066	4.8	112,049
Lukulu	-	-	44,800	1.5	51,953
Mongu	110,123	0.3	114,405	2.2	142,795
Senanga	88,602	1.3	101,957	3.1	137,768
Sesheke	49,019	1.3	56,731	1.4	64,928

Figure 3.1

Population Distribution by Districts, Western Province, 1990

1980 Census
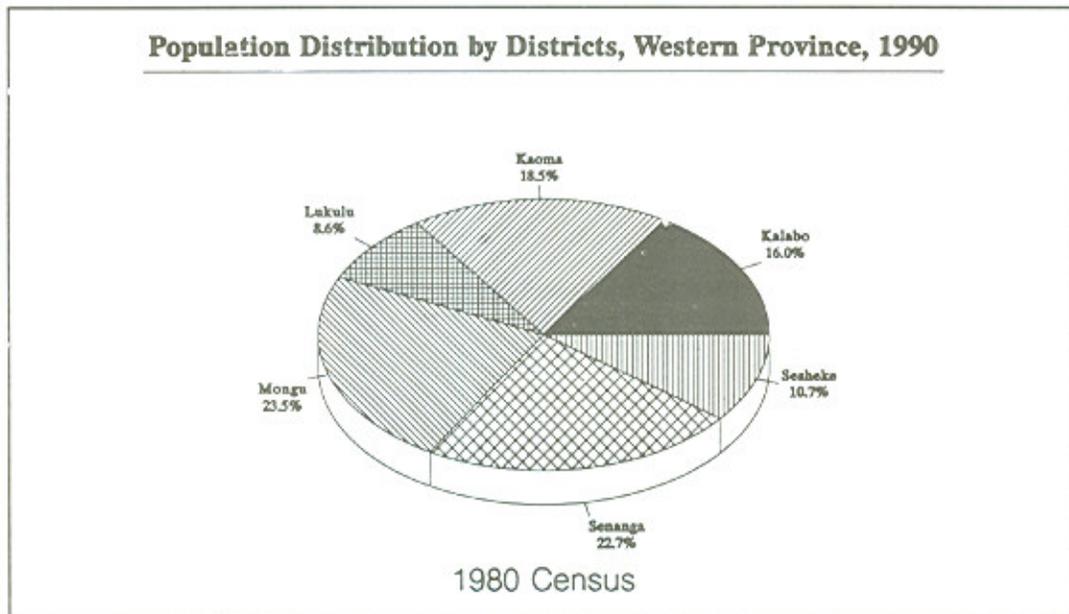
The Population of Western Province, recorded as 410,087 in 1969, grew to 486,455 in 1980 and 606,813 in 1990. Population change is often spoken of as "population growth". However, in reality, an increase or decrease is possible. The Geometric Growth Rate (annual compounding) method has been used to calculate the intercensal growth rates for the two intercensal periods. The growth of the population has not been very steep as shown by annual population growth rates of 1.6 percent (1969-80) and 2.2 percent (1980-90)

The urban area of the Province show a dramatic annual growth rate of 21.6 percent in the 1969-80 intercensal period. However, this reduced to - 0.5 percent annual growth rate in the 1980-90 intercensal period. This may, be attributed to out-migration. The situation of negative annual growth rate is also obtained in Kalabo district.

Population growth may also be assessed by observing population density over a period of time. Details on this aspect may be obtained from Table 3.3.

Table 3.3

Area and Population Density by District and Population Census Year, Western Province, 1969, 1980 and 1990

District	Area (Sq Km)	Population Density/Census Year (Population Per sq.km)		
		1969	1980	1990
Total Western	126,386	3.3	3.9	4.8
Kalabo	17,526	6.0	5.6	5.6
Kaoma	23,315	2.4	3.0	4.8
Lukulu	16,291	-	2.8	3.2
Mongu	10,075	10.9	11.4	14.2
Senanga	29,906	3.0	3.4	4.6
Sesheke	29,272	1.7	2.0	2.2

That the population of the Province is growing, though at a pace which is not very fast, may be decerned from the increase in population density. Except for Kalabo district where out-migration is a possible reason for the fall in population, all other areas have experienced an increase in population density.

3.3 POPULATION COMPOSITION

Age Composition

Age in the Census was defined as "the number of completed years (as at last birthday) before the census date". Age is an important factor in demographic analysis as it is closely related to other demographic and social processes. For example, the number of births depends on the number of child-bearing women aged 15-49 years. Migration, school-going population and labour force also have a bearing on age since the target groups are concentrated in specific age groups.

The median age is considered the best basis for discribing a population as "young" or "old". The median age is defined as the age which divides a population into two equal groups, one of which is younger and the other of which is older than the median. The median age of the population of Western Province is calculated to be 17.7 years. The population census data for 1980 gave a median age of 17.9 years. As may be observed, there is no significant difference. The population of the Province is that which may be termed as "young". A population pyramid is a graphical representation which one may use to visualise this factor. Figures 3.2 and 3.3 fulfill this objective.

Figure 3.2

Population Pyramid, Western Province, 1980
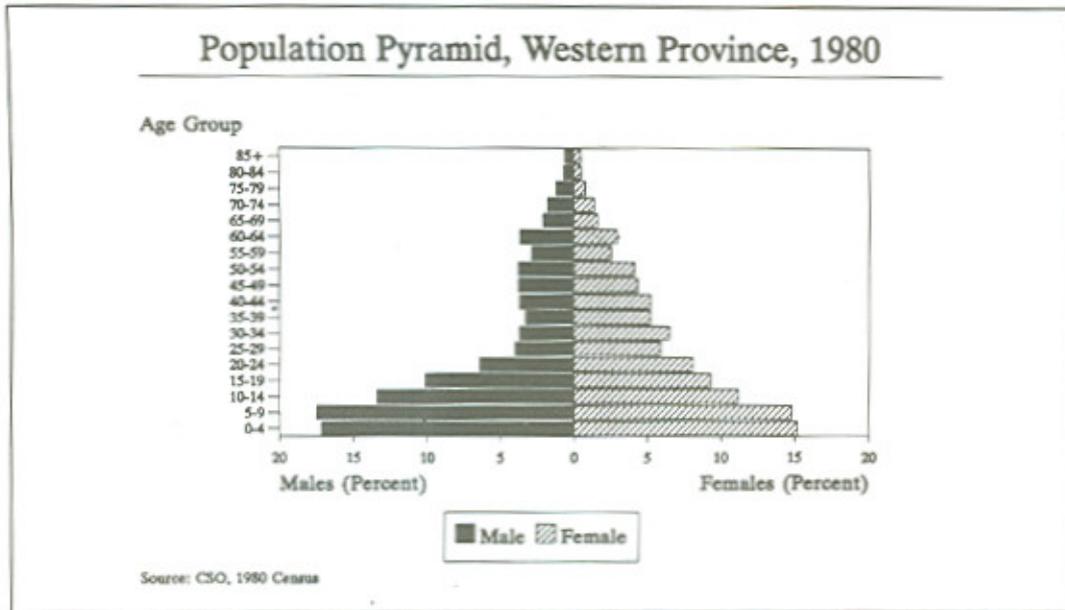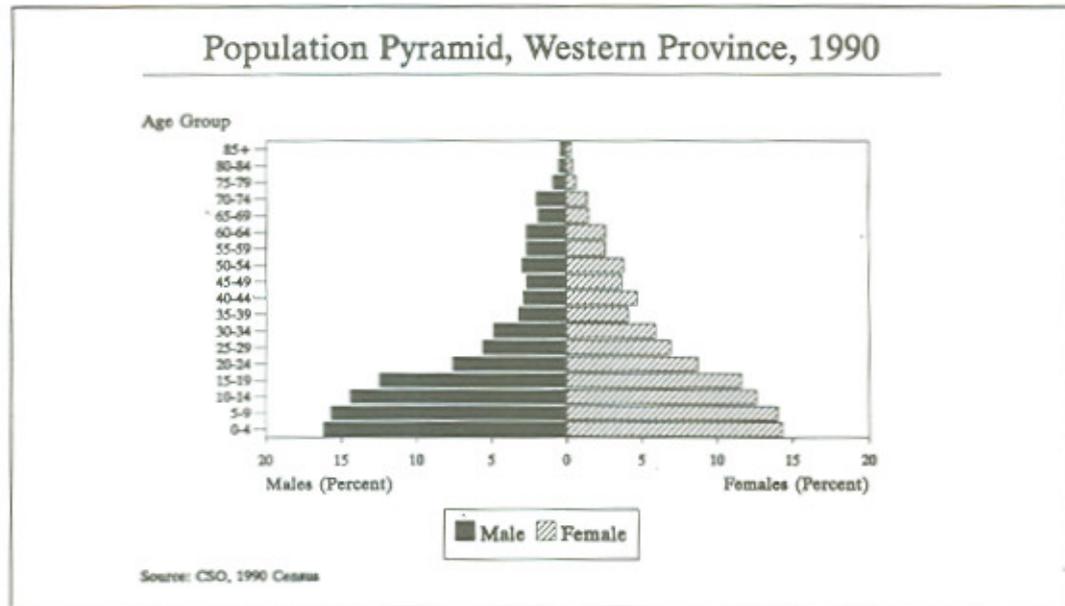
The large bases in the population pyramids are an indication that the child population in the Province is big. Contrary to this situation, age pyramids for developed countries show narrow bases. This is as a result of less births occurring in the population due to birth control (family planning) measures. Assuming little out-migration, the population of the Province is expected to continue growing as the child population enters the reproductive ages, put at 15-49 years for females.

Figure 3.3

Population Pyramid, Western Province, 1990

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Additional details on the age-sex population distribution of Western Province are provided in Table 3.4.

Table 3.4

Age-distribution of Population by Rural, Urban and Districts, (Percent), Western Province, 1990

Age Group	Western			Rural		Urban		Kalabo	Kaoma	Lukulu	Mongu	Senanga	Sesheke
	Both Sexes	Male	Female	Male	Female	Male	Female	Both Sexes	Both Sexes	Both Sexes	Both Sexes	Both sexes	Both Sexes
0 - 4	15.2	16.2	14.3	16.3	14.3	15.7	13.9	15.6	13.8	15.9	14.6	16.1	14.9
5 - 9	14.8	15.7	14.0	15.8	14.0	15.1	14.1	14.6	14.1	15.4	14.3	15.7	14.9
10 - 14	13.5	14.4	12.6	14.4	12.3	14.6	14.6	12.7	13.7	13.2	13.6	13.3	14.1
15 - 19	12.0	12.5	11.6	12.4	11.3	13.4	13.7	11.2	13.0	11.5	12.4	11.5	11.8
20 - 24	8.2	7.6	8.7	7.5	8.5	8.3	10.1	7.5	8.3	7.7	8.7	8.2	8.0
25 - 29	6.3	5.6	6.9	5.4	6.7	6.7	8.2	6.0	6.2	6.3	6.4	6.6	5.9
30 - 34	5.4	4.9	5.9	4.7	5.7	5.8	6.9	5.8	5.3	5.2	5.5	5.3	4.9
35 - 39	3.7	3.2	4.1	3.0	4.0	4.5	4.7	3.6	5.3	3.3	3.9	3.6	3.9
40 - 44	3.9	2.9	4.7	2.8	4.9	3.9	3.6	4.2	3.8	3.9	3.6	3.9	4.0
45 - 49	3.2	2.7	3.7	2.7	3.8	3.3	2.5	3.3	3.3	3.5	3.1	3.1	3.3
50 - 54	3.4	3.0	3.8	3.0	4.1	2.8	2.3	3.9	3.5	3.3	3.2	3.4	3.4
55 - 59	2.6	2.7	2.6	2.8	2.8	2.0	1.5	3.0	2.8	2.8	2.9	2.3	2.8
60 - 64	2.6	2.7	2.6	2.9	2.8	1.4	1.4	3.2	2.5	2.8	2.4	2.5	2.7
65 - 69	1.7	1.9	1.5	2.1	1.6	0.9	0.8	2.0	1.6	1.7	1.7	1.5	1.8
70 - 74	1.7	2.0	1.4	2.2	1.5	0.7	0.7	1.9	1.5	1.9	1.8	1.5	1.7
75 - 79	0.7	0.9	0.6	0.9	0.6	0.3	0.3	0.8	0.5	0.7	0.8	0.7	0.8
80 - 84	0.5	0.5	0.4	0.6	0.4	0.2	0.3	0.5	0.4	0.5	0.5	0.4	0.5
85 +	0.4	0.4	0.3	0.4	0.3	0.2	0.2	0.4	0.3	0.3	0.4	0.3	0.4
N/Stated	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.5	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total Pop.	606,813	282,053	324,760	244,788	283,558	37,265	41,202	97,320	114,049	51,953	142,795	137,768	64,928

The age group 0-14 is considered to be the child population in demographic studies. O the male population, 46.3 percent are children aged 0-14 years. The corresponding figure for females is 40.9 percent. This is an in-built population growth momentum. Prospects for future population growth are high if we were to discount any pronounced out-migration from the Province.

Ethnicity and Citizenship

Ethnicity in the Population Census was defined as continent of origin when referring to the total population, when applied to Zambians only it referred to the indigenous Zambian tribes. 99.24 percent of the persons in Western Province are Africans. Other ethnic groups only form a negligible 0.14 percent. These details are presented in Table 3.5.

Table 3.5

Ethnic Composition of the Population of Western Province, 1990

Sex	Ethnic Group						
	African	American	Asians	European	Other	Not Stated	Total
Male	279,861	40	35	91	261	1,765	282,053
Female	322,318	46	30	96	300	1,970	324,760
Total	602,179	86	65	187	561	3,735	606,813
% of Total Population	99.24	0.01	0.01	0.03	0.09	0.62	100.0

The foreign population of Western Province is shown by country of citizenship in Table 3.6.

Table 3.6

Foreign Population of Western Province by Citizenship, 1990 and Percentage
Foreign Citizens, 1980

Country/Region	Population 1990	Percent 1990	Percent 1980
Central Africa	45	0.4	0.1
Eastern Africa	34	0.3	0.2
Northern Africa	26	0.2	0.1
Angola	7,680	61.0	72.9
Botswana	23	0.2	8.5
Malawi	36	0.3	0.3
Namibia	2,301	18.3	0.6
Zimbabwe	187	1.5	6.4
Other (Southern Africa)	35	0.3	0.6
West Africa	76	0.6	0.2
America	12	0.1	0.2
Asia ana Oceanic	41	0.3	0.5
Europe	141	1.1	0.9
Not Stated	1,961	15.6	8.6
% Total		100.0	100.0
Total Foreign Citizens	12,598		21,145
% Foreign Population		2.1	4.3

The major foreign citizens in Western Province are Angolans (61.0 percent) and Namibians (18.3 percent). In 1980 the order of magnitude was Angola (72.9 percent), Botswana (8.5 percent) and Zimbabwe (6.4 percent).

The position of Angola may be explained by two factors. Firstly, the country shares boundaries with Western Province (close proximity). Secondly, the country has been experiencing civil strife for a long time such that some of her citizens may be refuge seekers in Western Province. Overall, foreign citizens in Western Province have declined by about 2 percent are points from 4.3 percent in 1980 to 2.1 percent in 1990.

Economic Characteristics

There is a specialised chapter on economic characteristics. In this present chapter, only introductory information on crude activity ratio and labour force participation rates are presented. Table 3.7 contains data on crude activity Ratio.

Table 3.7

Crude Activity Ratio, Western Province, 1990

Province/Residence		Crude Activity Ratio (%)
Western Province	- Total	30.2
	- Rural	30.8
	- Urban	26.7

The information in the table means that for every 100 persons in the Province, there are about 30 persons who are economically active. This may be deemed low considering that there are more people who are economically inactive than those who are economically active. Age-sex specific activity ratio is a more refined measure of economic activity. It is also referred to as labour force participation rate. Table 3.8 presents data on this aspect.

Table 3.8

Age - Sex Specific Activity Ratio (ASSAR), Western Province, 1990

| Age | Age-Specific Activity Ratio (%) | | | | | |
| | Western | | Rural | | Urban | |
	Male	Female	Male	Female	Male	Female
Total	59.6	36.6	60.3	37.7	54.8	29.2
12-14	27.0	26.4	28.8	28.5	15.5	16.8
15-19	38.0	37.8	40.2	40.0	25.0	25.4
20-24	63.8	42.3	65.5	43.3	53.8	36.7
25-29	77.6	40.5	77.7	41.0	77.0	37.7
30-34	81.0	38.2	80.8	38.7	82.3	35.4
35-39	81.8	37.7	80.8	37.8	86.1	36.6
40-44	80.5	36.6	79.6	37.2	84.8	31.1
45-49	79.2	35.9	78.1	36.4	84.9	30.4
50-54	77.7	36.1	77.1	36.8	81.4	27.7
55-59	74.6	37.8	75.3	38.8	68.2	24.4
60-64	71.6	36.6	72.0	37.7	66.3	21.0
65-69	68.6	36.8	69.5	37.9	55.4	22.1
70-74	60.5	31.2	61.5	32.3	39.5	14.0
75+	49.0	23.9	50.1	24.8	27.2	13.8
N/S	45.0	26.8	46.2	27.2	38.2	23.1

Figure 3.4

Age - Sex Specific Activity Ratio, Western Province, 1990
Rural

Figure 3.5

Age - Sex Specific Activity Ratio, Western Province, 1990
Urban
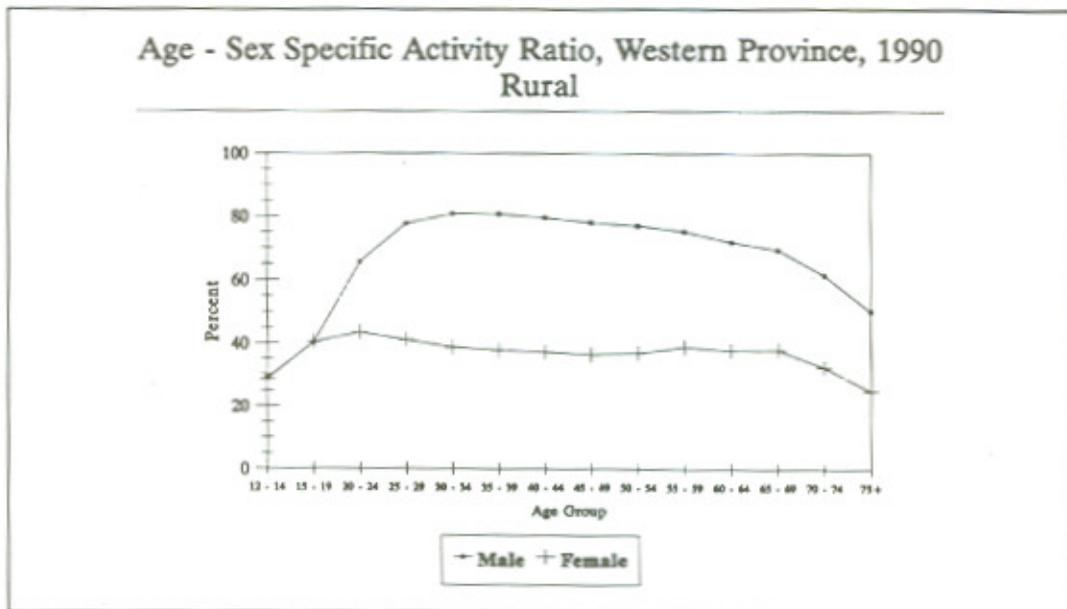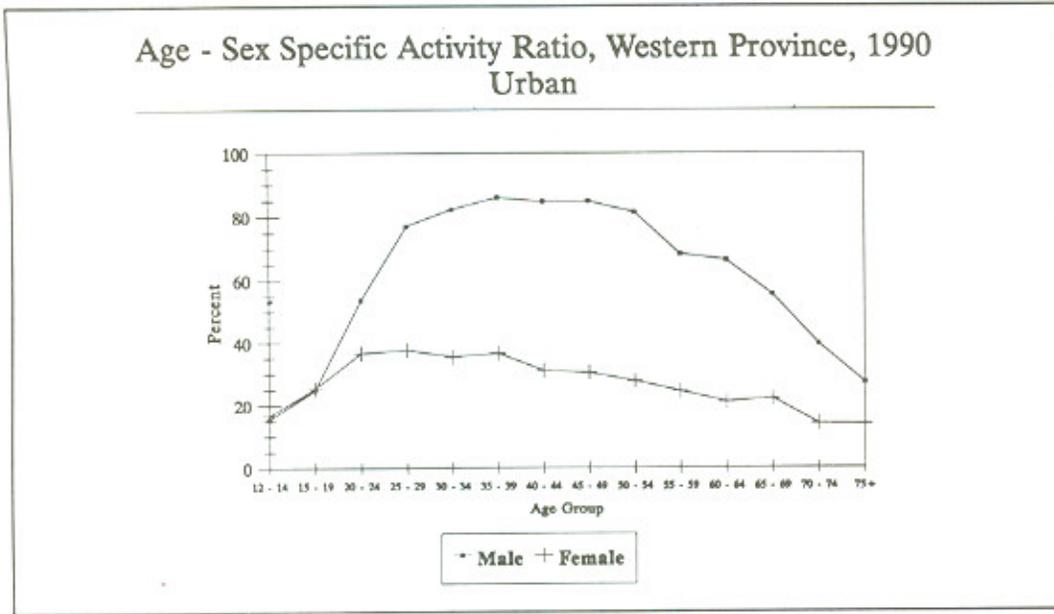
Table 3.8 reveals some interesting results. Labour force participation rates for younger age groups 12-14 and 15-19 years are lower than those for older age groups. This may be attributed to the fact that these are school-going ages and thus most persons in these age groups may still be attending school. The other interesting feature is that labour force participation rates for females are consistently lower than those for males giving rates which are about half of those pertaining to males. This may be because females were involved in economic activities which fall in the economically inactive category such as full-time homekeeping.

3.4 SUMMARY

The population of Western Province as enumerated in the three previous censuses has been shown to have been 410,087 in 1969, 486,455 in 1980 and 606,813 in 1990. Correspondingly annual population growth rates have been calculated to be 1.6 percent and 2.2 percent for the 1969-80 and 1980-90 intercensal periods, respectively. Population density has shown a similar slight rise.

The population of the province is that which may be termed "young". This is because the population comprises a sizeable proportion of young people. The population of the Province is predominatly African. Angolans and Namibians constitute major foreign citizens. Labour force paticipation rates are favourably high for males, but those for females have been shown to be low.

CHAPTER 4

LANGUAGE OF COMMUNICATION

4.1 INTRODUCTION

There are many languages and dialects in Zambia. It is estimated that there are 72 ethnic groups in Zambia each with a unique language and dialects. However, there are seven languages designated as Zambian Languages which are spoken widely, taught in schools, aired on both radio and television. The seven languages are Bemba, Nyanja, Tonga, Lozi, Kaonde, Lunda and Luvale. English is the official language in the country. It is used in all government functions and is a medium of instruction in schools. English is a compulsory subject at primary and secondary levels of education and each student must pass it to obtain a full school certificate.

In the 1990 Census of Zambia, every person was asked to state his/her predominant and second language of communication. A predominant language of communication was defined as the language most frequently used for one's day-to-day communication with others at all places. The second language of communication was conceived to be the next in importance to the predominant language.

This chapter presents data on languages of communication in Western Province as at the time of the 1990 census. For easy understanding, individual important languages in the province have been selected for presentation. In certain cases, languages have been grouped into major language groups. The seven language groups used here are Bemba, Tonga, North-Western, Barotse, Nyanja, Mambwe and Tumbuka. It should be emphasised that although the language groups adopted here describe geographical language groupings in the country, individual languages in each group may be distinct and unrelated to each other. The "other" category shown in all the tables include those languages not commonly spoken in Western Province.

Out of the provincial population of 606,813 enumerated, 581,956 persons spoke any language. The remaining population comprised 18,242 persons mostly aged between 0-4 years in the "not applicable" category and 6,615 persons who did not state any language. The "not applicable" and "not stated" cases have been excluded from all tables.

4.2 PREDOMINANT LANGUAGE OF COMMUNICATION

The major indigenous ethinic groups in Western Province are Lozi, Nkoya, Mashi, Koma, Kwangwa, and Nyengo. The indigenous languages in the province are associated with these ethinic groups. However, due to internal movements of people, other languages in the province are also spoken. Table 4.1 presents data on the first 17 major languages spoken in the province and the districts.

Table 4.1

Predominant Language of Communication by District, (Percent), Western Province, 1990

Major Language	Province	Kalabo	Kaoma	Lukulu	Mongu	Senanga	Sesheke
Bemba	0.6	0.1	1.4	0.2	0.9	0.1	0.4
Tonga	0.4	0.1	0.6	0.3	0.6	0.1	0.7
Luvale	5.0	2.2	6.6	27.5	2.8	0.9	1.6
Lunda (N-West)	0.4	0.1	0.3	3.6	0.1	0.0	0.0
Kaonde	0.4	0.0	1.5	0.1	0.3	0.0	0.0
Kwangwa	2.3	0.1	1.8	0.3	6.6	1.7	0.3
Kwandi	0.6	0.9	0.1	0.2	0.1	1.8	0.1
Koma	2.3	10.7	0.8	3.9	0.2	0.0	0.0
Nyengo	1.6	9.3	0.3	0.1	0.2	0.1	0.0
Simaa	1.2	4.9	0.0	0.0	0.0	1.7	0.0
Mwenyi	0.9	5.4	0.0	0.0	0.0	0.0	0.0
Milangu	0.5	3.0	0.0	0.1	0.0	0.0	0.0
Mashi	2.8	3.5	0.7	0.1	0.4	8.7	1.0
Lozi	56.5	38.4	30.2	35.5	73.0	66.8	88.0
Nkoya	4.6	0.1	16.1	15.7	0.4	0.0	1.4
Nyanja	0.4	0.1	0.9	0.2	0.4	0.1	0.4
English	0.2	0.2	0.3	0.0	0.3	0.2	0.1
Other Languages	19.3	21.0	38.2	12.4	13.5	17.7	6.0
Percentage Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Size	581956	93471	107472	49657	137078	131709	62569

The table above shows that the Lozi (56.5 percent) and the Luvale (5.0 percent) languages account for slightly over 60 percent of the people in Western Province speaking these as predominant languages. The Nkoya language is the third in importance as a predominant language accounting for 4.6 percent of the population. Other languages in the range of 2 and 3 percent include Mashi, Kwangwa, Koma languages together being spoken by about 7 percent of the population. The remaining languages are spoken in small varying proportions.

The Lozi language as a predominant language of communication ranks highest in all the 6 districts of Western Province. The percentage is highest in Sesheke (88 percent), followed by Mongu (73 percent). English, the official language in Zambia is spoken by less than one percent of the population in all the districts.

4.3 PREDOMINANT LANGUAGE GROUP

The languages spoken in Western Province have been grouped according to their respective language groups described in Section 4.1 and the results are presented by sex in Table 4.2 for rural and urban areas of the province.

Table 4.2

Predominant Language Groups by Sex and Rural/Urban, (Percent), Western Province, 1990.

Language Group	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Bemba	0.7	0.7	0.6	0.4	0.4	0.4	2.3	2.5	2.1
Tonga	0.7	0.7	0.6	0.4	0.4	0.4	2.4	2.6	2.2
N/Western	27.1	27.0	27.2	23.0	23.0	23.0	13.8	13.9	13.6
Barotse	68.5	68.4	68.7	75.1	72.9	73.3	78.3	77.2	79.2
Nyanja	0.5	0.6	0.4	0.3	0.4	0.3	1.7	2.0	1.6
Mambwe	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.1
Tumbuka	0.0	0.1	0.0	0.0	0.0	0.0	0.3	0.3	0.2
English	0.2	0.3	0.1	0.1	0.2	0.1	0.8	1.0	0.6
Other	2.2	2.2	2.2	2.5	2.5	2.5	0.3	0.3	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Size	581956	269836	312120	506977	234287	272690	74979	35549	39430

Note: Size does not include "Not Stated" and "Not Applicable" cases.

In rural areas of the province the Barotse group of languages are spoken by over 70 percent of the population followed by the North-Western language group with 23 percent. The other language groups are spoken in very small proportions with the Mambwe and Tumbuka language groups being almost non-existent in rural Western Province.

Table 4.2 shows that the proportion of persons speaking the Barotse group of languages in urban areas is about 78 percent followed by the North-Western group with 14 percent. Other language groups are more noticeable in urban than in rural areas. The sex differences in the use of language groups is minimal, however, English is spoken more by males than females.

Table 4.3 below shows changes in the share of each language group during the intercensal period, 1980-90. Over the 10-year period, the Barotse group has decreased by almost 6 percentage points. This decrease has meant a gain for the North-Western group whose share increased from 18.5 percent in 1980 to 27.1 percent in 1990. The English language dropped from 3.0 percent in 1980 to a low proportion of 0.2 percent in 1990.

Table 4.3

Predominant Language Groups by Year, (Percent), Western Province, 1980 and 1990.

Language Group	Percentage of Total Population	
	1980	1990
Bemba	0.7	0.7
Tonga	0.6	0.7
North-Western	18.5	27.1
Barotse	74.2	68.5
Nyanja	0.8	0.5
Mambwe	0.0	0.0
Tumbuka	0.0	0.0
English	3.0	0.2
Other	2.2	2.2
Total	100.0	100.0
Size	455758	581956

4.4 SECOND LANGUAGE OF COMMUNICATION

The 1990 Census solicited information on the second language besides the predominant language from each respondent. Of the 606,813 persons enumerated 258,844 or 43 percent responded that they had a second language of communication in Western Province.

Table 4.4 presents results of the second languages spoken in the province and districts as at the time of the census. The Lozi language ranks first as a second language spoken in Western province and its proportional share is largest in Kalabo district at 72 percent. Other important second languages are English for total Province, Luvale in Kaoma and Lukulu, Kwangwa in Mongu and Senanga and Totela in Sesheke.

Table 4.4

Second Language of Communication by District, (Percent), Western Province, 1990

Second Language	Total	Kalabo	Kaoma	Lukulu	Mongu	Senanga	Sesheke
Bemba	1.2	1.2	2.9	1.5	4.8	1.7	5.1
Tonga	1.2	0.5	1.2	0.4	1.6	1.0	3.3
Luvale	4.3	1.4	6.1	17.3	2.5	1.3	2.5
Lunda (N-West)	0.5	0.0	0.3	3.3	0.2	0.1	0.1
Kwangwa	4.9	0.1	3.4	0.3	14.0	5.3	1.8
Kwandi	0.6	0.4	0.2	0.6	0.2	2.0	1.0
Koma	0.8	2.1	0.5	1.7	0.5	0.0	0.1
Nyengo	0.6	1.8	0.4	0.1	0.4	0.2	0.2
Simaa	1.1	4.4	0.0	0.0	0.1	1.1	0.0
Mashi	1.1	1.3	0.3	0.1	0.3	3.2	0.6
Lozi	53.4	71.6	49.4	53.7	44.8	56.5	26.9
Totela	1.9	0.0	0.0	0.0	0.2	3.9	17.7
Subiya	0.5	0.1	0.1	0.2	0.2	0.2	4.7
Nkoya	2.8	0.1	8.2	6.0	1.2	0.2	1.4
Nyanja	3.2	1.4	3.2	1.2	5.7	2.2	7.7
English	7.7	4.8	4.4	2.6	13.3	9.0	13.1
Other	14.1	8.9	19.3	11.2	10.1	12.0	13.8
Total	100.0	100.0	99.7	100.0	100.0	100.0	100.0
Size	258844	54505	55528	26699	56233	49239	16640

The sex distribution of second language groups for rural and urban areas of Western Province is presented in Table 4.5. The Barotse group of languages still dominate the province as a second language group followed by the North-Western language group. The remaining language groups attract small proportions of varying magnitudes. Sex differences are minimal for most of the language groups though female proportions are generally higher than males due to small proportions of females speaking English language as compared to males.

Table 4.5

Second Language Groups by Sex and Rural/Urban, (Percent), Western Province.

Language Group	Total			Rural			Urban		
	Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females
Bemba	2.9	2.8	3.0	2.4	2.3	2.5	6.3	6.0	6.6
Tonga	1.9	1.8	1.9	1.6	1.6	1.7	3.6	3.3	3.8
North-Western	14.3	13.7	14.9	14.4	13.8	14.9	13.9	12.8	15.1
Barotse	68.6	67.1	69.9	72.4	71.2	73.4	41.0	39.2	42.9
Nyanja	3.4	3.6	3.2	2.7	2.9	2.5	8.8	8.4	9.1
Mambwe	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Tumbuka	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.3	0.2
English	7.7	9.8	5.8	5.2	6.9	3.7	25.4	29.3	21.5
Other	1.2	1.1	1.2	1.2	1.2	1.3	0.6	0.5	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Size	258844	122819	136025	227751	107236	120515	31093	15583	15510

Table 4.6 shows the percentage distribution of the second language groups of communication for the years 1980 and 1990. Notable changes are observed in the Barotse group and English. Whereas the latter had its share drop, the former had increased the proportionate share during the intercensal period..

Table 4.6

Second Language Groups, (Percent), Western Province, 1980 and 1990.

Language Group	Percentage of Total Population	
	1980	1990
Bemba	2.5	2.9
Tonga	1.9	1.9
North-Western	15.1	14.3
Barotse	58.1	68.6
Nyanja	4.3	3.4
Mambwe	0.0	0.0
Tumbuka	0.1	0.1
English	15.5	7.7
Other	2.5	1.2
Total		100.0
Size	140869	258844

In conclusion, Table 4.7 presents rank order of the predominant and second language for the first five mostly used languages. The ranking is such that the language on top of each cell is the predominant language of communication. The language below is the second language of communication. Where a cell has only one language, it signifies that the language has the same indicated rank order for both predominant and second languages. The results of rank ordering for each district are summarised in Table 4.7. Lozi predominates as a predominant language of communication throughout the districts of Western Province. The second language of communication which is widely spoken is Luvale for total Province, Lukulu and Sesheke districts.

Table 4.7

Rank Order of Predominant and Second Language of Communication by District Western Province, 1990.

Rank Order	Western Province	Kalabo	Kaoma	Lukulu	Mongu	Senanga	Sesheke
1	Lozi	Lozi	Lozi	Lozi	Lozi	Lozi	Lozi
2	Luvale English	Koma English	Nkoya	Luvale	Kwangwa	Mashi English	Luvale Yotela
3	Nkoya Kwangwa	Nyengo Simaa	Luvale	Nkoya	Luvale English	Kwandi Kwangwa	Nkoya English
4	Mashi Luvale	Mwenyi Koma	Kwangwa English	Koma Kwangwa	Bemba Nyanja	Kwangwa Totela	Mashi Nyanja
5	Kwangwa Nyanja	Simaa Luvale	Kaonde Kwangwa	Kaonde English	Tonga Bemba	Simaa Mashi	Tonga Bemba

4.5 SUMMARY

Indigenous languages are the major predominant languages spoken in Western Province. About 16 languages have been identified as major ones in the province. However, Barotse and North-Western group of languages are the most widely spoken in the province. They are spoken by about 68 and 27 percent of the population of the province, respectively. English is spoken mainly as a second language of communication.

CHAPTER 5

EDUCATIONAL CHARACTERISTICS

5.1 INTRODUCTION

The term education generally refers to 'the skills and knowledge acquired formally through the framework of an established schooling system, or non-formally through interaction with one's society. In the development of human resources, education is the most important consideration that has an overt impact on the quality of human resources in terms of their skills and knowledge.

In Zambia, as in most countries, formal education implies age-specific, full-time classroom attendance in a graded system geared to certificates, diplomas, degrees, or other formal credentials. Subsequently, it is relatively easy to define formal education as well as to measure its costs and identify its outputs. Similarly, the collection and documentation of statistical information related to formal education is easy. Such information includes number, size and geographical distribution of schools, age, sex and number of pupils in each class and spatial location; age sex and number of teachers by qualification per school, as well as the financial cost of building and of running each school.

In contrast, non-formal education involves activities that are aimed at a wider range of goals. Such activities tend to be heterogeneous, unstandardized and seemingly unrelated. No single institution may be identified as having the major responsibility of providing or regulating the scope and standards of non-formal education. In addition, the costs, inputs and outputs of non-formal education cannot be readily measured. However, non-formal education in most developing countries may even have a greater role than formal education in generating skills, influencing attitudes, and moulding values of the people through routinely and often unconsciously learning-by-doing, being instructed or inspired by others to perform specific tasks or simply by participating or associating in a community.

The 1990 Census of Population, Housing and Agriculture included the following educational aspects on all persons aged 5 years and over:-

- Whether they can read and write,
- Attendance to any institution of learning,
- Previous attendance to any institution of learning,
- Highest level of academic education completed, and
- Highest professional/vocational education completed.

Information on current grade, school attendance by level of education was not collected in the 1990 Census. Thus, no estimates can be made on age-specific current grade attendance rates.

5.2 CONCEPTS AND DEFINITIONS

Educational System

Formal education in Zambia is based on a three tier system. The primary school cycle starts at age seven and is spanned over a period of 7 years. The progression from primary to secondary is restricted through examinations. After secondary education, which lasts for 5 years, another selection takes place such that only a small number of graduates proceed to institutions of higher learning. Since the 1980s, there has been an expansion of part of the secondary education system (grades 8 to 9 or junior secondary) due to manpower needs. Basic schools, offering grades 1 to 9 classes, have greatly increased the number of pupils attending grades 8 and 9.

School Attendance

School attendance is synonymous with school enrolment in any regular educational institution, public or private, for systematic instruction at any level of education during a well defined and recent time period. The legal age for a child to start school in Zambia is seven years. Taking the entry to grade 1 as 7 years, the age groups used in the subsequent presentation correspond to a given educational level.

- Lower primary grades 1, 2, 3 and 4 correspond to pupils aged 7-10 years.
- Upper primary grades 5, 6 and 7 correspond to pupils aged 11-13 years.
- Junior secondary grades 8 and 9 correspond to pupils aged 14 and 15 years.
- Senior secondary grades 10, 11 and 12 correspond to pupils aged 16-18 years.
- Students above 18 years could be considered to be in higher institutions of learning.

With this kind of correspondence, there sometimes exists an age-grade mismatch in the educational system. For instance, a person above 19 years could still be in secondary school.

Literacy

Literacy refers to the ability to read and write in any language. Individuals who can read and write are called literate.

Academic education

This is the highest level of formal education that an individual has attained or completed regardless of duration in school. Educational qualifications attained such as certificate, diploma are included in the educational outputs.

Professional/Vocational Education completed

This is higher qualification attained after formal school (grade 1-12) either at college or university, including specified fields of study.

5.3 LITERACY STATUS

Information collected in the 1990 census on literacy status of the population in Western Province by age and sex is provided in Table 5.1. Results show that 48.5 percent of the population is literate. Respectively, 54.7 and 43.3 percent of males and females are literate. The literate population is concentrated in the age range 10-44 years. Over 50 percent of the population in each age group, in the age range 10-44 years, are able to read and write.

Table 5.1

Literate Population by Age Group, Sex and Residence, (Percent), Western Province, 1990

Residence/Sex	Total	Age Group							
		5-9	10-14	15-19	20-24	25-29	30-44	45+	Not Stated
Western Province	48.5	14.2	57.5	71.5	69.8	68.4	58.4	29.4	23.7
- Total	54.7	13.7	56.2	74.3	76.1	77.1	74.5	46.3	37.6
- Male	43.3	14.6	58.9	68.8	65.0	62.2	48.0	14.8	14.2
- Female									
Residence									
Rural									
- Total	45.3	12.2	53.9	68.5	66.8	65.2	54.5	27.6	20.0
- Male	51.7	11.9	52.6	71.7	73.8	74.6	71.3	44.1	31.5
- Female	39.8	12.6	55.2	65.5	61.4	58.6	44.1	13.7	12.6
Urban									
- Total	70.3	27.6	80.1	88.6	87.6	86.0	81.4	49.7	54.2
- Male	74.0	26.6	79.5	89.7	89.8	90.2	90.0	68.7	76.4
- Female	67.1	28.6	80.7	87.6	86.0	82.9	74.2	29.7	30.8
Districts									
Kalabo									
- Total	42.4	11.9	54.8	67.1	65.9	63.3	51.2	20.8	15.0
- Male	49.6	11.3	53.4	71.8	75.1	75.6	71.7	36.1	49.6
- Female	36.7	12.4	56.2	62.8	59.6	55.8	39.8	8.8	36.7
Kaoma									
- Total	48.5	13.7	56.7	71.6	68.4	67.9	56.6	29.4	15.6
- Male	55.1	13.7	55.8	75.1	75.1	77.6	73.5	46.3	26.3
- Female	42.6	13.8	57.6	68.3	62.9	60.5	45.0	13.2	42.6
Lukulu									
- Total	44.9	14.2	55.2	67.0	66.0	65.3	54.5	25.8	10.0
- Male	51.8	14.0	56.3	70.8	72.4	75.9	70.5	43.0	22.2
- Female	39.0	14.4	54.1	63.3	61.1	58.2	44.6	11.2	-
Mongu									
- Total	58.8	19.3	68.1	81.1	81.1	81.0	71.6	38.1	27.2
- Male	64.2	18.7	66.2	82.1	84.5	85.4	83.9	57.4	42.7
- Female	54.3	19.8	70.0	80.2	78.4	77.8	62.9	22.7	17.8
Senanga									
- Total	39.4	10.0	47.1	61.3	57.0	55.3	46.6	23.9	22.1
- Male	45.3	9.7	45.3	64.7	65.1	65.7	63.1	38.7	38.3
- Female	34.5	10.2	48.8	58.2	51.3	48.4	36.3	11.5	6.3
Sesheke									
- Total	56.8	17.0	62.9	79.5	81.8	80.3	72.1	38.9	25.0
- Male	61.6	15.5	60.8	80.1	84.6	84.3	84.5	57.0	34.6
- Female	52.4	18.5	64.9	79.0	79.6	77.1	63.2	21.1	13.6

As regards place of residence, a higher proportion of literacy is more noticeable in urban areas than in rural areas. Only 45.3 percent of the population in rural areas is literate as compared to 70 percent in urban areas. A similar pattern is shown in all age groups.

Amongst districts, Mongu has the highest proportion (58.8 percent) literate persons followed by Sesheke with 56.8 percent. Other districts have each a literate population of below 50 percent.

In both rural and urban areas and by district, literacy proportions of males are higher than those of the females.

Figure 5.1

Literate Population by Age Group, Western Province Rural, 1990

Figure 5.2

Literate Population by Age Group, Western Province Urban, 1990
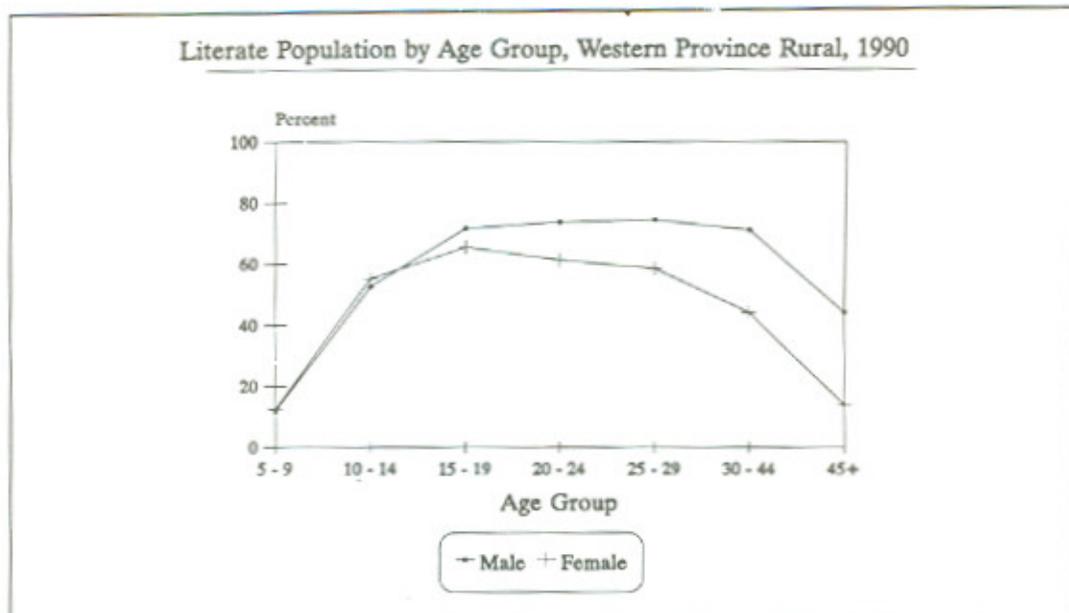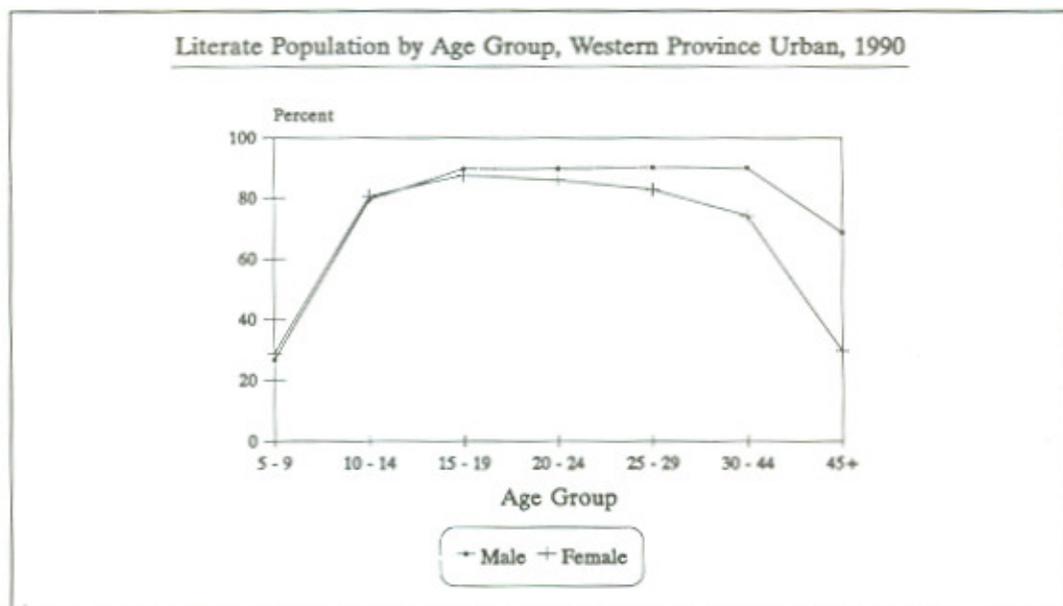
5.4 SCHOOL ATTENDANCE

Table 5.2 and 5.3 present information collected in the 1990 and 1980 Census regarding the presently attending school population by sex and residence. The population reported as presently attending school in 1990 is 30.8 percent. About 37 percent of the males and 26 percent of the females were attending school at the time of 1990 Census.

The majority of persons reported as attending school are aged 10-19 years. School attendance proportions are higher in urban areas than rural areas. In rural and urban areas the proportions attending school are 27.8 and 54.2 percent, respectively.

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Among the districts, Mongu has the highest proportion of school attendance (40.0 percent) followed by Sesheke (38.7 percent). Other districts have proportions ranging from 22 to 33 percent.

A comparison of the two census results shows an increase in the proportions of population presently attending school, from 19.7 percent in 1980 to 30.8 percent in in 1990. Generally, there has been an improvement in school attendance between the intercensal period 1980-1990.

Apparently more males than females are recorded as presently attending school in both rural and urban urban areas and by district. The 1980 Census results show similar patterns.

Table 5.2

Population Presently Attending School by Sex, Age and Residence, (Percent), Western Province, 1990

Residence/Sex	Age Group							
	5-9	10-14	15-19	20-24	25-29	30+	Not Stated	Total
Western Province								
- Total	22.9	65.6	61.4	27.4	9.8	2.1	5.5	30.8
- Male	22.0	64.8	67.8	41.4	15.5	3.4	8.7	36.6
- Female	23.7	66.4	54.7	16.3	7.1	1.5	3.4	26.3
Residence								
Rural								
- Total	20.2	62.1	57.7	24.2	9.1	2.0	4.6	27.8
- Male	19.4	61.3	64.7	38.3	14.6	3.2	6.1	33.5
- Female	21.0	62.9	50.3	13.8	6.4	1.4	3.6	23.4
Urban								
- Total	44.0	86.3	82.5	52.6	18.0	3.5	14.1	54.2
- Male	39.5	86.6	85.8	66.2	24.1	5.6	27.1	59.3
- Female	42.3	86.1	79.1	39.2	14.8	2.5	2.0	50.0
Districts								
Kalabo								
- Total	18.7	61.7	56.2	24.0	6.4	1.2	8.0	25.4
- Male	17.7	60.9	65.1	42.2	11.4	1.9	9.1	31.7
- Female	19.6	62.5	47.3	11.7	4.4	0.9	7.1	20.9
Kaoma								
- Total	22.7	66.4	64.1	25.6	9.0	1.9	3.4	32.1
- male	22.3	65.9	70.8	38.4	14.4	3.0	4.7	37.9
- Female	23.1	67.0	57.0	15.5	6.1	1.3	2.5	27.4
Lukulu								
- Total	22.4	64.0	58.1	24.2	8.2	1.7	4.2	28.8
- Male	21.8	64.5	66.9	40.1	13.8	2.5	-	35.3
- Female	23.1	63.6	48.5	11.3	5.7	1.3	9.1	23.7
Mongu								
- Total	30.4	76.2	72.7	42.3	18.9	3.6	5.2	40.4
- Male	29.5	75.1	76.2	55.2	25.4	6.0	7.8	46.6
- Female	31.4	77.3	69.0	30.9	15.3	2.5	3.7	35.4
Senenga								
- Total	16.1	52.2	47.5	17.6	6.9	1.8	14.3	22.4
- Male	15.7	51.3	54.3	29.4	11.5	3.0	28.9	27.0
- Female	16.5	53.2	40.8	9.8	4.7	1.2	1.9	18.9
Sesheke								
- Total	28.5	73.8	70.8	38.6	14.1	2.6	-	38.7
- Male	26.2	72.2	74.8	54.3	19.6	4.1	-	43.6
- Female	30.8	75.3	66.0	22.9	10.8	1.9	-	34.7

Figure 5.3

Population Presently Attending School, Western Province Rural, 1990

Percent

Age Group

— Male + Female

Figure 5.4

Population Presently Attending School, Western Province Urban, 1990

Percent

Age Group

— Male + Female
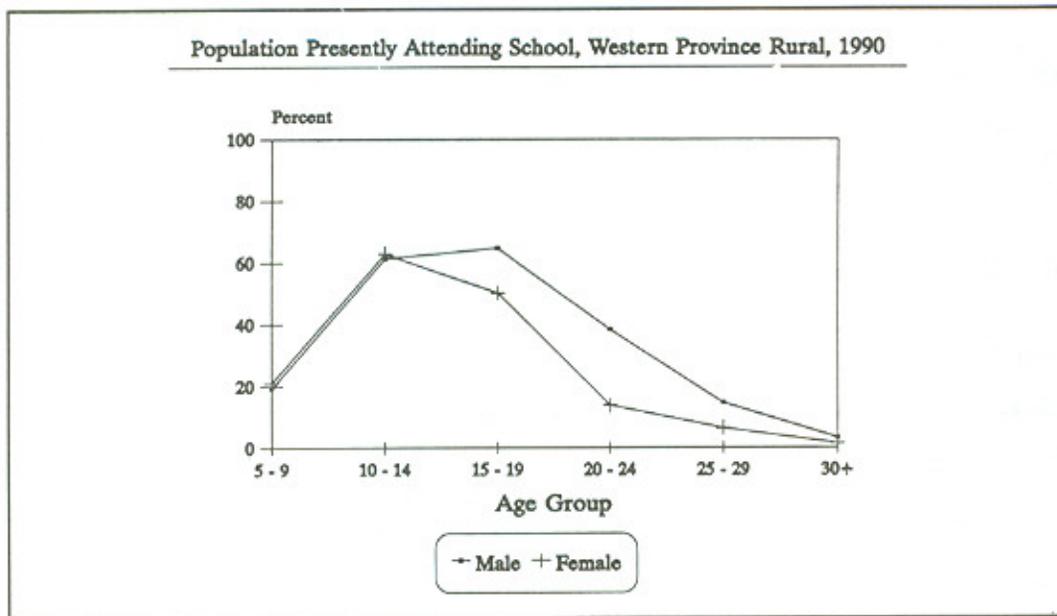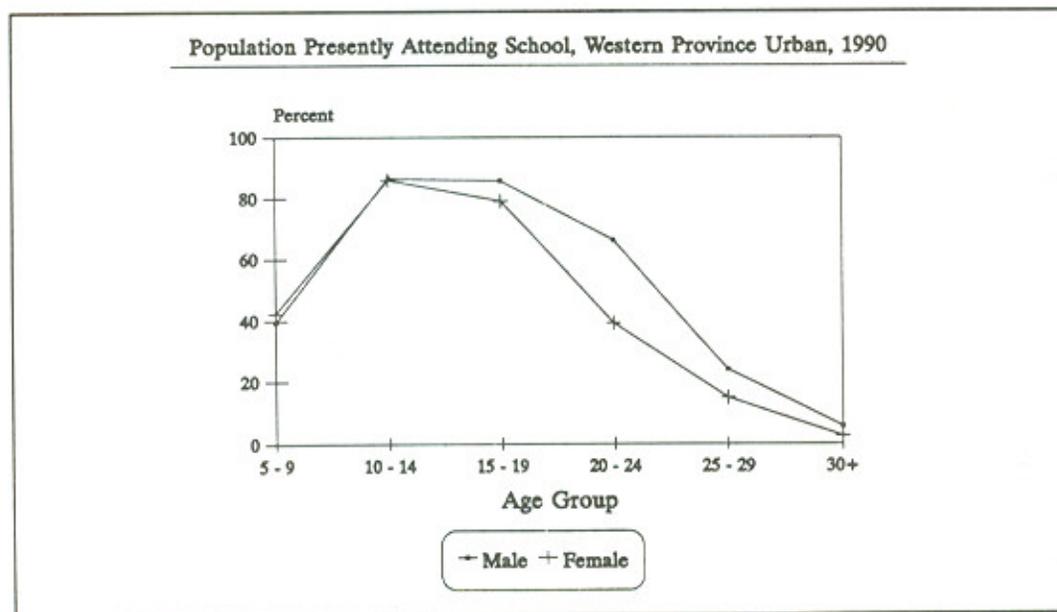
Table 5.3

Population Presently Attended School by Sex, Age and Residence, (Percent), Western Province 1980

Residence/Sex		Age Group						
		5-9	10-14	15-19	20-24	25+	Not Stated	Total
Western Province								
	- Total	22.4	69.6	44.0	10.2	0.9	2.5	19.7
	- Male	21.9	70.6	57.1	70.1	1.4	3.8	25.1
	- Female	23.0	68.5	32.2	3.7	0.6	1.8	17.0
Residence								
Rural	- Total	20.6	67.4	42.8	10.0	0.7	2.1	19.5
	- Male	20.3	68.4	56.3	20.1	1.0	2.9	24.2
	- Female	21.0	66.3	30.7	3.2	0.4	1.5	15.8
Urban								
	- Total	31.2	79.9	49.5	10.9	0.8	3.0	18.2
	- Male	29.6	81.2	60.7	24.7	1.1	4.5	23.8
	- Female	32.9	78.7	39.2	2.9	0.4	2.2	14.0
Districts								
Kalabo	- Total	18.0	66.6	41.4	8.1	0.6	3.0	18.0
	- Male	17.9	68.6	56.5	16.1	1.0	2.6	21.9
	- Female	18.0	64.5	28.4	2.6	0.4	3.2	14.6
Kaoma	- Total	23.6	68.7	37.1	8.0	0.5	0.7	18.6
	- Male	23.3	71.3	51.7	16.5	1.0	1.1	23.3
	- Female	23.9	66.1	24.4	2.7	0.3	0.5	14.9
Lukulu	- Total	31.7	82.2	53.1	13.3	1.5	3.6	26.2
	- Male	30.1	82.8	66.0	24.1	2.3	5.1	31.2
	- Female	33.2	81.6	40.7	5.9	0.9	2.6	22.1
Mongu	- Total	31.7	82.2	53.1	13.3	1.5	3.6	26.2
	- Male	30.1	82.8	66.0	24.1	2.3	5.1	31.2
	- Female	33.2	81.6	40.7	5.9	0.9	2.6	22.1
Sesheke	- Total	16.1	57.2	39.2	9.2	0.7	2.3	18.9
	- Male	15.8	57.7	49.3	18.1	0.9	3.6	21.7
	- Female	16.4	56.7	30.1	3.2	0.4	1.1	15.0
Senenga	- Total	27.7	78.8	44.6	8.4	0.9	5.2	23.8
	- Male	26.5	78.4	55.5	15.1	1.4	7.9	26.5
	- Female	28.8	79.0	34.2	3.6	0.4	2.9	21.3

Analysis of information pertaining to population presently attending school, by highest level completed, reveal that, the majority (49.5 percent) completed lower primary grades 1-4, while 30.9 percent completed upper primary grades 5-7.

A slightly larger proportion of females (51 percent) presently attending school, have completed primary grades 1-4, than that of males (48 percent). However, as the pupils progress to secondary school, more female pupils than males drop out of school due to various reasons. The proportion of male pupils presently attending school and completed grades 8-9 is 8.4 percent while that of females is 6.7 percent. Similar patterns are noticed in all the age groups.

Information on the population recorded as presently attending school in the 1990 and 1980 Census by age, sex and highest level completed, is provided in Tables 5.4 and 5.5 respectively.

In rural areas the proportion of males currently attending school and completed primary grades is slightly higher (87.3 percent) than that of females (80.9 percent).However, more females (11.1 percent) than males (7.4 percent) completed secondary grades. The situation is rather different in urban areas. A low proportion of males recorded as presently attending school, completed primary grades, while a high proportion of females completed the same grades.

From the 1980 census results 58.9 percent of the presently attending school population completed grades 1-4 and a further 29.5 percent completed in grades 5-7. Male pupils who completed grade 1-7 are 56.1 percent while the female pupils are 62.3 percent. At secondary level, 7.7 percent of the male pupils completed grade 8-12 as compared to 5.9 of female pupils.

Table 5.4

Population (5 Years and Older) Presently Attending School by Age, Sex, Level of Education Completed and Residence, (Percent), Western Province, 1990

Residence and Age Group	Education Level Completed								
	1-4	5-7	8-9	10-12	'A' Level	Degree	Not Stated	Total	Size
Western Province									
Both Sexes									
Total	49.5	30.9	7.5	3.4	0.0	0.0	8.5	100.0	112,051
5-9	72.9	.	.	.	.	.	27.1	100.0	20,208
10-14	66.9	27.0	0.7	.	.	.	5.4	100.0	50,108
15-19	19.0	55.6	19.5	4.6	.	.	2.3	100.0	32,054
20-24	7.7	31.2	30.3	28.1	0.1	0.0	2.6	100.0	5,909
25-29	11.7	44.1	14.2	24.3	0.3	0.1	5.1	100.0	1,393
30+	27.1	36.6	7.2	14.3	0.3	0.0	11.5	100.0	2,325
Not Stated	40.7	22.2	5.6	25.9	.	.	5.6	100.0	54
Male									
Total	48.3	30.9	8.4	4.2	0.0	0.0	8.2	100.0	58,373
5-9	72.0	.	.	.	.	.	28.0	100.0	9,588
10-14	68.5	25.1	0.7	.	.	.	5.7	100.0	24,694
15-19	21.0	54.7	17.6	4.4	.	.	2.3	100.0	18,181
20-24	6.3	28.7	33.3	29.4	0.1	.	2.1	100.0	3,923
25-29	8.8	38.8	16.9	30.3	0.4	0.1	4.6	100.0	716
30+	24.5	37.4	7.0	20.1	0.3	0.1	10.6	100.0	1,237
Not Stated	38.2	17.6	5.9	38.2	.	.	.	100.0	34
Female									
Total	50.9	31.0	6.7	2.6	0.0	0.0	8.8	100.0	53,678
5-9	73.7	.	.	.	.	.	26.8	100.0	10,620
10-14	65.3	28.9	0.8	.	.	.	5.1	100.0	25,414
15-19	16.3	56.9	19.6	4.8	.	.	2.4	100.0	13,873
20-24	10.3	36.2	24.4	25.5	0.1	0.1	3.5	100.0	1,986
25-29	3.8	49.8	11.8	17.9	0.1	.	5.6	100.0	677
30+	32.6	35.7	7.4	2.7	0.2	.	19.0	100.0	1,088
Not Stated	45.0	30.0	5.0	5.0	.	.	15.0	100.0	20
Rural									
Male									
Total	53.4	30.3	8.3	2.1	0.0	0.0	9.0	100.0	42,565
5-9	73.8	.	.	.	.	.	26.2	100.0	8,189
10-14	68.2	25.8	0.6	.	.	.	5.4	100.0	20,516
15-19	19.4	58.8	17.5	3.9	.	.	2.6	100.0	10,804
20-24	11.9	30.9	22.4	29.2	0.1	0.1	3.3	100.0	1,512
25-29	14.7	52.0	11.9	14.4	.	.	5.0	100.0	556
30+	31.4	35.9	6.8	6.1	0.2	.	19.6	100.0	969
Not Stated	47.4	26.3	5.3	5.3	.	.	15.8	100.0	19
Female									
Total	50.1	30.8	7.2	3.5	.	.	8.2	100.0	47,231
	72.3	.	.	.	.	.	27.7	100.0	7,402
5-9	70.3	23.1	0.5	.	.	.	6.1	100.0	20,156
15-19	23.7	55.9	15.4	2.6	.	.	2.4	100.0	14,807
20-24	7.6	41.4	21.3	24.8	0.0	.	2.3	100.0	3,131
25-29	9.5	41.0	16.0	27.3	0.2	0.2	4.6	100.0	613
30+	26.6	39.1	6.9	15.9	0.1	0.1	10.2	100.0	1,101
Not Stated	50.1	30.8	7.2	3.8	0.0	0.0	8.2	100.0	47,231
Urban									
Male									
Total	41.3	31.2	13.4	5.9	0.1	.	8.2	100.0	11,142
5-9	71.0	.	.	.	.	.	29.0	100.0	2,186
10-14	60.5	34.2	1.4	.	.	.	4.0	100.0	4,538
15-19	7.5	53.3	31.6	7.8	.	.	1.8	100.0	3,374
20-24	3.9	19.1	41.3	34.7	0.4	.	1.6	100.0	792
25-29	4.9	20.4	22.3	45.6	1.9	.	4.9	100.0	103
30+	7.4	24.3	7.4	46.3	0.2	.	14.0	100.0	136
Not Stated	7.4	.	.	84.6	.	.	.	100.0	13
Female									
Total	41.5	33.8	11.9	4.4	0.0	.	8.3	100.0	11,113
5-9	73.4	.	.	.	.	.	26.6	100.0	2,431
10-14	53.3	41.4	1.7	.	.	.	3.6	100.0	4,898
15-19	5.4	59.3	34.7	7.9	.	.	1.7	100.0	3,069
20-24	5.7	20.9	30.8	39.6	.	.	4.2	100.0	474
25-29	5.8	39.7	11.6	33.0	0.8	.	8.3	100.0	121
30+	18.5	33.6	12.6	21.0	.	.	14.3	100.0	119
Not Stated	.	100.0	.	.	.	.	.	100.0	1

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Table 5.5

Population (5 Years and Older) Presently Attending School by Age Sex, Level of Educational Completed and Residence, (Percent), Western Province, 1980

Residence and Age Group	Education Level Completed							Total	Size
	1-4	5-7	8-9	10-12	'A' Level	Degree	Not Stated		
Western Province Both Sexes									
Total	58.9	29.5	4.6	3.1	0.0	0.0	3.9	100	82,959
5-9	88.3	0.5	0.0	-	-	-	11.2	100	17,383
10-14	71.3	25.8	0.5	0.0	-	-	2.3	100	41,021
15-19	18.3	61.7	13.2	5.7	-	-	1.1	100	20,354
20-24	6.8	29.6	25.5	36.9	0.1	0.0	1.1	100	3,220
25+	32.7	27.4	9.6	20.5	-	0.3	9.5	100	924
Not Stated	77.2	21.1	-	-	-	-	1.8	100	57
Male Total	56.1	31.0	5.3	3.9	0.0	0.0	3.8	100	4,500
5-9	88.1	0.5	0.0	-	-	-	11.5	100	8,423
10-14	72.4	24.6	0.5	0.0	-	-	2.6	100	20,868
15-19	19.3	62.6	11.9	5.2	-	-	1.0	100	12,596
20-24	5.5	30.1	27.4	36.0	0.2	-	0.9	100	2,583
25+	23.4	25.5	12.8	31.1	-	0.4	6.8	100	499
Not Stated	81.3	18.8	0.0	-	-	-	-	100	32
Female Total	62.3	27.6	3.8	2.1	-	0.0	4.1	100	37,958
5-9	88.5	0.5	0.0	-	-	-	11.0	100	8,960
10-14	70.1	27.2	0.6	0.1	-	-	2.1	100	20,153
15-19	16.8	60.2	15.2	6.6	-	-	1.3	100	7,758
20-24	12.2	27.3	17.9	40.5	-	0.2	1.9	100	637
25+	43.5	29.6	5.0	8.0	-	0.2	12.7	100	425
Not Stated	72.0	24.0	0.0	-	-	-	4.0	100	25
Rural Male Total	56.7	30.5	4.9	3.9	0.0	-	4.1	100	35,991
5-9	86.9	0.4	0.0	-	-	-	12.7	100	6,505
10-14	74.0	22.7	0.3	0.0	-	-	2.9	100	16,780
15-19	20.5	62.7	10.8	5.0	-	-	1.0	100	10,184
20-24	5.6	30.4	27.3	35.8	0.1	-	0.8	100	2,145
25+	25.6	25.3	12.6	29.2	-	-	7.3	100	356
Not Stated	85.7	14.3	0.0	-	-	-	-	100	21
Female Total	56.7	27.0	3.3	2.0	-	0.0	4.5	100	29,692
5-9	63.2	0.4	0.0	-	-	-	12.5	100	6,775
10-14	87.1	25.1	0.5	0.0	-	-	2.3	100	15,999
15-19	72.2	61.5	13.3	5.7	-	-	1.3	100	6,107
20-24	18.1	26.0	17.4	42.3	-	0.2	2.2	100	489
25+	11.9	26.5	4.6	9.2	-	-	14.1	100	306
Not Stated	45.8	18.8	-	-	-	-	6.3	100	16
Urban Male Total	53.7	33.2	6.6	3.9	0.0	0.0	2.5	100	9,010
5-9	92.1	0.5	0.0	-	-	-	7.5	100	1,918
10-14	65.5	32.2	1.1	0.0	-	-	1.2	100	4,088
15-19	14.2	62.1	16.9	5.8	-	-	1.0	100	2,412
20-24	4.8	28.8	28.1	37.0	0.2	-	1.1	100	438
25+	18.2	25.9	13.3	35.7	-	1.4	5.6	100	143
Not Stated	72.7	27.3	0.0	-	-	-	-	100	11
Female Total	59.0	30.1	5.5	2.7	-	0.0	2.7	100	8,266
5-9	93.0	0.6	0.0	-	-	-	6.3	100	2,185
10-14	62.1	35.3	1.2	0.1	-	-	1.3	100	4,154
15-19	11.7	55.2	22.2	9.9	-	-	1.1	100	1,651
20-24	13.5	31.8	19.6	34.5	-	-	0.7	100	148
25+	37.8	37.8	9.2	5.0	-	0.8	9.2	100	119
Not Stated	66.7	33.3	-	-	-	-	-	100	9

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5.5 PREVIOUSLY ATTENDED SCHOOL

In Western Province, 151,215 persons were recorded in 1990 Census as having previously attended school. This comprise about the same number of males and females. Of these, 125,358 are in rural areas and 25,857 are in urban areas.

Table 5.6 reveals that less than 20 percent of the population who were recorded as having previously attended school are aged between 5 and 19 years. Slightly more males (84.3 percent) than females (78.9 percent) who were aged 20 years and above previously attended school.

Age distribution of the population who were reported as previously attended school in 1990, is such that high proportions are recorded in the age group 20 years and above. This age group is considered to have completed secondary school grades. Overall, 81.8 percent of the population aged 20 years and above had previously attended school. More males (84.3 percent) than females (78.9 percent) who previously attended school are in age group 20 years and above.

Among the districts Mongu has the highest number of people recorded as previously attended school while Lukulu has the least. Results of the 1990 census as regards previously attended school population are provided in Table 5.6.

Table 5.6

Population Previously Attended School by Sex, Age and Residence, Western Province, 1990

Residence and Sex		5-9	10-14	15-19	20-24	25-29	30+	N/S	Total	Size
Western Province										
	-Total	1.0	3.5	13.6	18.6	16.0	47.2	0.1	100	151,215
	-Male	1.0	3.4	11.1	15.7	14.5	54.1	0.1	100	76,772
	-Female	1.0	3.6	16.3	21.5	17.4	40.0	0.1	100	74,443
Residence										
Rural	-Total	1.1	3.8	14.2	18.6	15.6	46.7	0.1	100	125,358
	-Male	1.0	3.7	11.6	15.9	14.1	53.5	0.1	100	64,159
	-Female	1.1	3.9	17.0	21.4	17.0	39.5	0.1	100	61,199
Urban										
	-Total	0.7	2.1	10.9	18.7	17.9	49.6	0.2	100	25,857
	-Male	0.7	4.6	8.3	15.1	16.5	57.5	0.2	100	12,613
	-Female	0.6	2.4	13.3	22.2	19.2	42.0	0.1	100	13,244
Districts										
Kalabo										
	-Total	0.7	2.6	13.7	18.7	16.6	47.7	-	100	20,464
	-Male	0.7	2.3	10.8	15.2	14.8	56.2	-	100	10,264
	-Female	0.8	2.8	16.6	22.1	18.5	39.2	-	100	10,200
Kaoma		0.9	3.5	13.7	19.3	16.3	46.4	0.1	100	27,562
	-Total	0.9	3.2	10.7	16.5	14.8	53.9	0.1	100	14,596
	-Male	0.9	3.9	17.1	22.3	17.9	37.9	0.1	100	12,966
	-Female									
Lukulu										
	- Total	0.5	2.7	13.9	18.6	16.8	47.5	0.0	100	11,915
	- Male	0.6	2.7	10.3	15.6	15.5	55.3	0.0	100	6,053
	- Female	0.5	2.7	17.6	21.6	18.2	39.3	-	100	5,862
Mongu										
	- Total	0.9	3.1	13.1	18.7	15.8	48.3	0.3	100	42,906
	- Male	0.9	2.9	10.9	16.2	14.4	54.4	0.4	100	21,018
	- Female	0.9	3.2	15.1	21.0	17.1	42.4	0.3	100	21,888
Senenga										
	- Total	2.1	5.9	14.9	18.3	16.0	42.9	0.0	100	28,796
	- Male	2.1	5.8	12.7	15.3	14.6	49.4	0.1	100	14,814
	- Female	2.1	5.9	17.1	21.4	17.4	36.1	0.0	100	13,982
Sesheke										
	- Total	0.6	2.5	12.8	17.9	14.7	51.3	0.1	100	19,572
	- Male	0.5	2.7	10.2	14.9	13.5	58.1	0.1	100	10,027
	- Female	0.7	2.4	15.6	21.2	16.0	44.1	0.0	100	9,545

Results in Table 5.7 regarding population recorded as previously attended school are similar to those of 1990 Census.

Table 5.7

Population Previously Attended School by Sex, Age and Residence, Western Province, 1980

Residence and Sex		Age Group						Total	Size
		5-9	10-14	15-19	20-24	25+	Not Stated		
Western Province									
	- Total	0.4	3.3	15.6	20.3	57.5	2.9	100	109,547
	- Male	0.4	3.0	11.6	16.1	68.6	0.3	100	52,729
	- Female	0.4	3.8	20.4	25.5	49.7	0.2	100	53,868
Residence									
Rural	-Total	0.4	3.7	16.6	20.6	58.4	0.3	100	83,158
	-Male	0.4	3.3	12.1	16.1	67.8	0.3	100	40,701
	-Female	0.4	4.0	21.0	24.9	49.5	0.2	100	42,508
Urban	-Total	0.3	2.4	14.0	21.7	61.1	0.4	100	23,490
	-Male	0.2	2.1	9.8	16.2	71.2	0.6	100	12,053
	-Female	0.4	2.8	18.4	27.4	50.6	0.3	100	11,427
Districts									
Kalabo									
	-Total	0.3	3.4	17.1	23.0	55.9	0.2	100	17,804
	-Male	0.4	3.1	12.5	17.2	66.6	0.2	100	8,274
	-Female	0.3	3.7	21.2	28.0	46.6	0.2	100	9,536
Kaoma									
	-Total	0.4	3.5	16.1	22.2	57.7	0.1	100	14,911
	-Male	0.4	2.9	10.4	17.5	68.6	0.2	100	7,740
	-Female	0.3	4.2	22.2	27.3	45.9	0.1	100	7,186
Lukulu									
	- Total	0.7	5.2	17.3	20.3	55.6	0.9	100	10,163
	- Male	0.6	4.7	12.8	16.0	65.0	1.0	100	4,929
	- Female	0.8	5.7	21.6	24.2	46.8	0.9	100	5,233
Mongu		0.2	2.7	14.4	20.6	61.8	0.2	100	29,590
	- Total	0.2	2.3	10.5	15.8	70.8	0.3	100	14,352
	- Male	0.3	3.0	18.1	25.1	53.3	0.2	100	15,219
	- Female								
Senenga									
	- Total	0.4	4.1	18.1	21.1	56.2	0.1	100	18,117
	- Male	0.4	3.8	13.3	16.4	65.9	0.1	100	9,216
	- Female	0.4	4.4	23.0	25.9	46.2	0.1	100	8,904
Sesheke									
	- Total	0.3	2.7	14.7	17.7	64.2	0.4	100	16,072
	- Male	0.2	2.6	10.9	14.0	71.7	0.5	100	8,238
	- Female	0.4	2.8	18.6	21.6	56.2	0.4	100	7,448

5.6 HIGHEST LEVEL OF EDUCATION COMPLETED

Educational achievements are quantified by analysing the highest levels of education completed for the
population aged 15 years and above. It is assumed that the population has completed at least grade 7. Table 5.8
shows the percent distribution of population aged 15 years and older by highest level of education completed.
Results show that, 45.2 percent of the population aged 15 years and above never attended formal school. The
highest is that of females, 53.3 percent as compared to 34.9 males, without formal educatioin. About 40 percent
of the population 15 years and older completed primary grades 1-7 whereas only 13.2 percent completed
secondary level grades 8-12. A marginal proportion of 1.2 percent completed secondary 'A' and degree levels,
comprising only persons aged 25 years and above.

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The majority (7.4 percent) of those aged 45 years and above have no formal education. Of the same age group 56 percent of males and 84.6 percent of females have no formal education.

Generally proportions with no formal education have declined between the intercensal period 1980-1990. However, for age groups 15-19 and 20-24 the situation is different. There has been an increase in the proportion with no formal education from 19.5 percent in 1980 to 27.2 percent in 1990. In age group 20-24 the proportion without formal education increased from 27.2 percent in 1980 to 30.8 percent in 1990.

Table 5.8

Population (15 Years and Above) by Highest Level of Education Completed, Sex and Age Group, (Percent), Western Province, 1990

| Age Group | Sex | Total Population | Highest Level Completed | | | | | | | |
			No Schooling	Grade 1-4	Grade 5-7	Grade 8-9	Grade 10-12	A'Level / Degree	Not Stated	Total
15+	Both	338,994	45.2	12.6	27.8	6.5	6.7	0.1	1.1	100
	Male	149,530	34.9	14.9	31.1	8.0	9.8	0.1	1.2	100
	Female	189,464	53.3	10.8	25.1	5.4	4.4	0.1	0.9	100
15-19	Both	72,281	27.2	15.4	42.5	10.9	2.5	0.0	1.5	100
	Male	35,068	24.0	17.6	43.1	11.0	2.7	0.0	1.6	100
	Female	37,213	30.2	13.4	42.0	10.8	2.4	0.0	1.2	100
20-24	Both	49,184	30.8	8.7	37.0	13.3	9.3	0.0	0.9	100
	Male	21,270	24.7	8.9	37.4	16.3	11.8	0.0	0.9	100
	Female	27,914	35.5	8.5	36.7	11.1	7.3	0.0	0.9	100
25-29	Both	37,913	32.7	8.0	36.6	7.0	14.9	0.1	0.7	100
	Male	15,662	24.2	7.2	36.9	9.4	21.3	0.2	0.8	100
	Female	22,251	38.6	8.5	36.4	5.3	10.4	0.1	0.7	100
30-44	Both	77,965	42.8	11.9	27.0	4.7	12.4	0.2	1.0	100
	Male	30,637	27.7	10.4	31.8	6.2	22.3	0.4	1.2	100
	Female	47,320	52.6	12.9	23.8	3.7	6.0	0.1	0.9	100
45+	Both	101,651	71.4	14.8	10.1	1.4	1.2	0.1	1.0	100
	male	46,893	56.0	21.1	16.9	2.5	2.1	0.1	1.3	100
	Female	54,758	84.6	9.4	4.3	0.5	0.4	0.0	0.8	100

Table 5.9

Population (15 Years and Above) by Highest Level of Education Completed by Sex and Age Group, (Percent), Western Province, 1980

| Age Group | Sex | Total Population | Highest Level Completed | | | | | | | |
			No Schooling	Grade 1-4	Grade 5-7	Grade 8-9	Grade 10-12	A'Level / Degree	Not Stated	Total
15+	Both	269,350	52.3	17.4	21.8	3.4	4.2	0.1	0.7	100
	Male	114,089	40.9	19.8	27.1	5.0	6.4	0.1	0.8	100
	Female	155,261	60.7	15.7	18.0	2.3	2.6	0.1	0.7	100
15-19	Both	46,966	19.5	20.1	48.7	6.9	3.8	0.0	1.0	100
	Male	22,336	15.6	20.5	51.6	7.6	3.8	0.0	1.0	100
	Female	24,630	23.0	19.8	46.2	6.3	3.7	0.0	1.0	100
20-24	Both	35,531	27.2	15.3	37.9	5.8	13.0	0.0	0.8	100
	Male	14,116	19.6	12.2	39.7	8.5	19.1	0.0	0.8	100
	Female	21,415	32.1	17.4	36.7	4.0	9.0	0.0	0.8	100
25-44	Both	92,379	52.3	20.8	17.6	3.5	4.9	0.1	0.8	100
	Male	32,319	33.8	21.5	26.6	6.5	10.4	0.2	0.9	100
	Female	60,060	62.3	20.4	12.8	1.9	1.9	0.1	0.7	100
45+	Both	94,474	78.1	13.5	6.5	0.8	0.4	0.0	0.6	100
	Male	45,318	65.0	20.6	11.5	1.4	0.7	0.0	0.7	100
	Female	49,156	89.4	7.1	2.0	0.1	0.1	0.0	0.5	100

Figure 5.5

Population 15 Years and Older by Highest Level of Education Completed, Western Province, 1980

Figure 5.6

Population 15 Years and Older by Highest Level of Education
Completed, Western Province, 1990
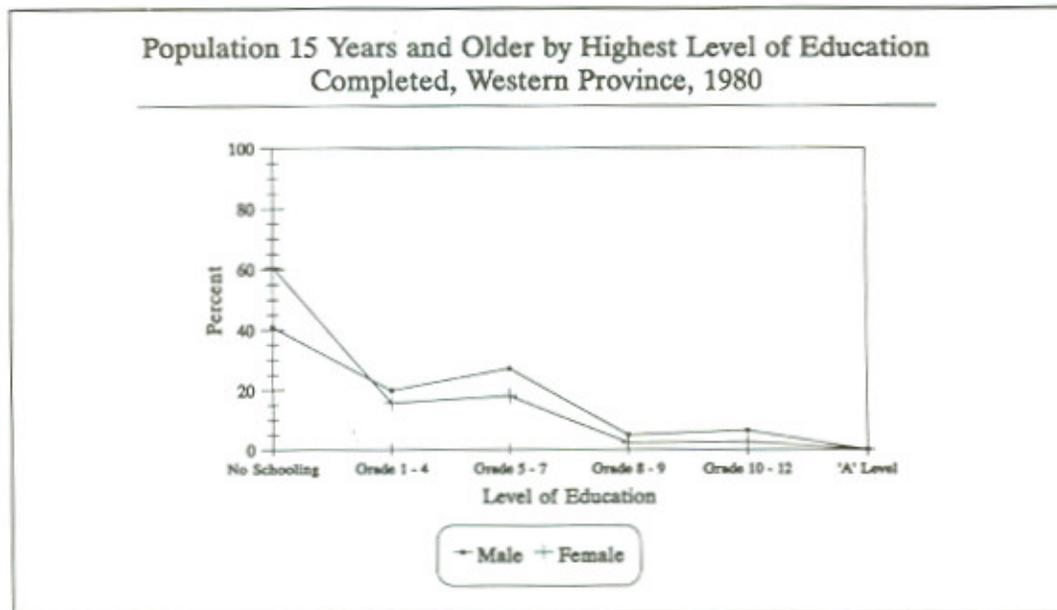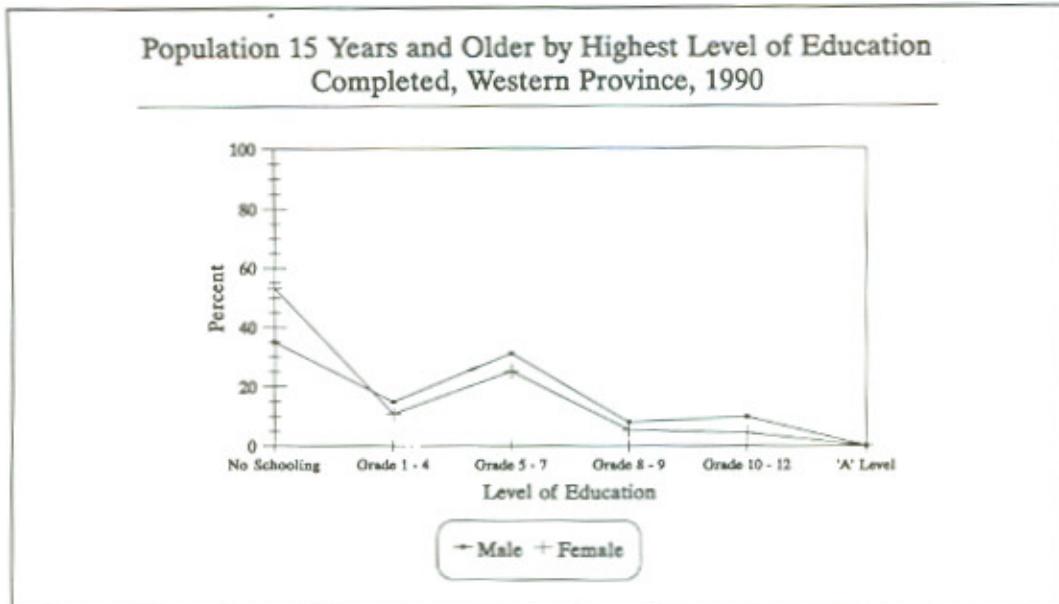
5.7 SELECTED FIELDS OF STUDY

The results of 1990 Census show that 4,882 males and 2390 females trained in various courses of specialisation. The selected fields of study considered in the 1990 Census are listed in Table 5.10. The major fields of study include various courses of engineering, medicine, nursing, accountancy, teacher training, law, business administration, secretarial, agriculture, etc.

Of the male population who had undergone professional training, in any of the given fields, 25.4 percent completed primary levels, grades 1-7 while 70.9 percent completed secondary level. Only 2.1 percent completed higher levels. As for the female population 19.5 percent completed grades 1-7 and 77.2 percent had completed grades 8-12. A small proportion of 1.4 percent had completed higher education.

Table 5.10

Selected Fields of Study by Level of Education Completed, (Percent), Western Province, 1990

| Field of Study | Size | Total | Level of Education Completed | | | | | |
			1-7	8-9	10-12	'A' Level	Degree	Not Stated
Males								
Total	4,882	100	25.4	12.5	58.4	1.5	0.6	1.6
Electrical Engineering	93	100	32.3	11.8	51.6	3.2	0.0	1.1
Mechanical Engineering	217	100	34.1	13.8	46.5	1.4	0.0	4.1
Mining Engineering	77	100	74.0	5.2	16.9	0.0	0.0	3.9
Industrial Engineering	223	100	79.4	12.6	4.0	0.0	0.0	4.0
Medicine and Surgery	139	100	20.1	4.3	69.8	1.4	0.7	3.6
Pharmacy	136	100	25.7	14.0	53.7	1.5	2.9	2.2
Nursing	109	100	15.6	2.8	75.2	0.0	0.0	6.4
Medical Technology	69	100	17.4	11.6	58.0	7.2	2.9	2.9
Accountancy	185	100	51.4	14.1	34.1	-	-	0.4
Teacher Training	346	100	10.1	9.5	78.1	2.0	0.3	0.0
Law/Jurisprudence	2,019	100	14.4	13.7	68.4	1.2	1.0	1.3
Criminology	217	100	22.1	14.3	60.8	1.4	0.9	0.5
Business Administration	169	100	20.1	11.8	62.7	3.6	0.0	1.8
Secretarial Training	236	100	23.1	18.6	56.8	0.4	0.0	0.8
Agricultural/Forestry/Fisheries	429	100	25.4	10.7	59.0	3.5	0.2	1.2
Wood work	218	100	67.0	11.5	20.2	0.0	0.0	1.4
Females								
Total	2,390	100	19.5	14.1	63.1	1.0	0.4	2.0
Electrical Engineering	7	100	85.7	0.0	0.0	0.0	-	14.3
Mechanical Engineering	8	100	87.5	0.0	12.5	0.0	-	-
Mining Engineering	10	100	70.0	0.0	10.0	0.0	-	20.0
Industrial Engineering	182	100	80.2	13.7	3.8	0.0	-	2.2
Medicine and Surgery	6	100	50.0	16.7	16.7	0.0	0.0	16.7
Pharmacy	17	100	5.9	0.0	58.8	23.5	11.8	-
Nursing	31	100	9.7	3.2	71.0	0.0	-	16.1
Medical Technology	451	100	13.3	12.0	71.6	0.9	-	2.2
Accountancy	14	100	7.1	0.0	71.4	0.0	0.0	21.4
Teacher Training	37	100	8.1	5.4	81.1	2.7	0.0	2.7
Law/Jurisprudence	1,046	100	16.3	16.2	64.4	1.1	0.4	1.6
Criminology	12	100	16.7	8.3	50.0	8.3	0.0	16.7
Business Administration	16	100	6.3	12.5	81.3	0.0	0.0	0.0
Secretarial Training	502	100	9.0	15.3	75.3	0.4	0.0	0.0
Agricultural/Forestry/Fisheries	45	100	15.6	6.7	66.7	0.0	6.7	4.4
Wood work	6	100	50.0	16.7	33.3	0.0	0.0	0.0

It is apparent that a larger percent of the population reported as having trained in the various fields, had at least completed secondary school grades. However, for the fields of mining/industrial engineering and wood work, the largest percent of the population who studied in each of these fields only completed primary school grades. The most common proffessional training undertaken by the largest proportion of both male and female is Law/jurisprudence and this is followed by engineering for males and secretarial training for females. The population size of males who took Law/Jurisprudence and engineering of various kinds is 2,019 and 610 respectively, while that of the females who took Law/Jurisprudence and secretarial training is 1,046 and 502 respectively.

Table 5.11 shows the percent distribution of persons with certificates and diplomas by level of education completed. In 1990, a population size of 10,187 and 1,195 had certificates and diplomas respectively. The figures exclude those who did not state their grades. Among those with certificates, 466 worked in rural areas, whereas 729 with diplomas operated in urban areas.

Table 5.11

Certificates and Diplomas by Level of Education, Sex and Rural/Urban, (Percent), Western ..ovince, 1990

Certificates and Diplomas	Educational Level					
	1-7	8-9	10-12	'A' Level	Total	Size
Western Province						
Certificates						
Total	32.8	15.2	51.6	0.4	100	10,187
Male	34.9	14.7	50.0	0.4	100	7,061
Female	28.1	16.5	55.2	0.3	100	3,126
Rural						
Total	41.7	15.9	41.9	0.4	100	6,498
Male	42.4	15.1	42.0	0.5	100	4,686
Female	40.1	17.9	41.7	0.3	100	1,011
Urban						
Total	17.0	14.1	68.6	0.3	100	3,689
Male	20.0	13.8	65.9	0.3	100	2,375
Female	11.6	14.5	73.7	0.2	100	1,314
Diplomas						
Total	7.4	6.5	76.8	9.2	100	1,195
Male	7.4	6.4	77.7	8.4	100	997
Female	".6	7.1	72.2	13.1	100	198
Rural						
Total	13.3	11.2	68.0	7.5	100	466
Male	13.4	11.3	67.8	7.5	100	373
Female	12.9	10.8	68.8	7.5	100	93
Urban						
Total	3.7	3.6	82.4	10.3	100	729
Male	3.8	3.5	83.7	-9.0	100	624
Female	2.9	3.8	75.2	18.1	100	105

5.8   SUMMARY

In Western province 48.5 percent of persons aged 5 years or older are literate. The percentage of males able to read and write is 54.9 percent while that of females is 43.3 percent.The literate population is concentrated in the age group 15-44 years. In age groups 45 years and older 23.4 percent are able to read and write.

In 1990, 30.8 percent of the population aged 5 years and above were attending school. A comparison of 1980 and ,1990 Census results on school attendance, show that the proportion of the population attending school increased from 19.7 in 1980 to 30.8 percent in 1990. For both rural and urban areas, school attendance proportions increased between the intercensal period, 1980 to 1990.

The majority of those who were reported as attending school in 1990 were in grades 1-7. Only 10.9 percent of the population attending school were in grades 8-12.

Of the population that previously attended school, 81.8 percent in age group 20 years and over attended formal school. The percentages of males and females were 83.5 percent and 77.9 percent respectively. In all the districts ofWestern province the percentage of the population that had previously attended school ranges from 80 to 84 percent for the population aged 20 years or older.

The common field of study for both males and females is Law/Juriprudence, followed by engineering, for males and Secretarial training for females. In total 10,187 and 1,195 persons had certificates and diplomas respectively in various fields.

ECONOMIC CHARACTERISTICS

6.1 INTRODUCTION

Information on economic characteristics is used to plan, monitor, evaluate and formulate policies and programs in order to promote the development of human resources. The same information is also used to study the observed level and distribution of income among individuals and households.

During the 1990 census, information was collected from all persons who were 12 years and over, on the following economic characteristics:-

- Economic activity,
- Employment Status,
- Occupation and
- Industry.

6.2 WORKING-AGE POPULATION

The 1990 census defined the working-age population as all persons who are aged 123 years and over. Table 6.1 shows the percentage distribution of working-age population by age, sex and residence for 1980 and 1990. The working-age population of Western Province has increased by 27.7 percent between 1980 and 1990. The increase of 32.4 percent in the male working-age population is more than that of 24.2 percent for females.

While the rural areas have experienced an increase of 33.3 percent in the working-age population, the urban areas have experienced a decline of 0.1 percent in this population between the two censuses. Within the rural areas, the increase in the male working-age population of 40.0 percent is higher than that of 28.4 percent for females. In urban areas, on the other hand, the male working-age population has declined by 1.8 percent, while the female working-age population has increased by 1.4 percent.

The distribution of working-age population by age shows that it has declined with the increase in age. This pattern has prevailed in both rural and urban areas and for both sexes. The pattern owes its existence to the fact that the young population is greater than the adult population in Western Province.

The proportion of working-age population residing in rural areas has remained higher than those in urban areas in both 1980 and 1990. 83.4 percent of the working age population in 1980 are in rural areas, while 87.0 percent are in rural areas in 1990. Those living in urban areas have declined from 16.6 percent in 1980 to 13.0 percent in 1990.

Table 6.1

Population 12 Years and Over by Broad Age Groups, Residence and Sex, (Percent), Western Province, 1980 and 1990

Residence, Sex and Year			Size	Total	12-19	20-24	25-29	30-59	60+	Not Stated
Western Province										
	-Total	1980	306,357	100.0	26.5	11.7	8.0	39.0	14.0	0.9
		1990	391,369	100.0	30.9	12.7	9.8	34.6	11.7	0.3
	- Male	1980	132,411	100.0	29.9	10.7	6.7	35.2	16.8	0.7
		1990	175,260	100.0	33.8	12.3	9.0	31.2	13.4	0.3
	- Female	1980	173,946	100.0	23.9	12.4	9.0	42.0	11.8	0.9
		1990	216,109	100.0	28.6	13.0	10.4	37.3	10.4	0.3
Residence										
Rural	- Total	1980	255,340	100.0	26.1	11.2	7.5	39.3	15.1	0.8
		1990	340,422	100.0	30.4	12.5	9.5	34.7	12.6	0.3
	- Male	1980	108,348	100.0	30.0	10.4	6.2	34.3	18.4	0.7
		1990	151,643	100.0	33.6	12.1	8.8	30.6	14.6	0.3
	- Female	1980	146,992	100.0	23.2	11.8	8.5	43.0	12.7	0.8
		1990	188,779	100.0	27.8	12.8	10.1	38.0	11.0	0.3
Urban	- Total	1980	51,017	100.0	28.6	14.0	10.4	37.6	8.3	1.1
		1990	50,947	100.0	34.5	14.3	11.5	33.7	5.7	0.3
	- Male	1980	24,063	100.0	29.5	12.3	8.9	38.8	9.6	0.9
		1990	23,617	100.0	35.0	13.1	10.6	35.2	5.8	0.3
	- Female	1980	26,954	100.0	27.7	15.6	11.6	36.6	7.2	1.3
		1990	27,330	100.0	34.1	15.2	12.3	32.5	5.7	0.2

6.3 ECONOMICALLY ACTIVE POPULATION

The economically active population includes all persons 12 years and over who are either employed or unemployed. The employed and unemployed are sometimes together referred to as the labour force. The economically active population is the total number of persons who are available to produce goods and services for a region.

Table 6.2 shows the currently economically active population 12 years and over by residence and sex. The labour force has increased by 5.3 percent between 1980 and 1990. The male labour force has increased by 3.1 percent, while the female labour force has declined by 14.4 percent.

The majority in the labour force have remained in the rural areas in both censuses. About 84 percent are in the rural areas in 1980 and 88.6 percent in 1990. A smaller proportion of 15.7 percent in 1980 and 11.4 percent in 1990 of the labour force reside in urban areas.

A person is considered to be employed if he or she does any work for pay or profit or family gain during the reference period. Payment may be in the form of money, goods, services or a combination of these.

Of the 183,557 in the labour force, 83.4 percent are employed in 1990 compared to only 49.1 percent. The employed population has increased by 61.7 percent between the two censuses. The increase in the male employed population is 61.1 percent, while that of the females is 62.5 percent.

The unemployed population has declined by 69.8 percent between 1980 and 1990. The decline in the female unemployed population of 76.3 percent is more than that of the male unemployed population of 62.8 percent. 85.4 percent of the unemployed are in rural in 1990, compared to 86.2 percent in 1980. On the other hand, 14.6 percent of the unemployed are in urban areas in 1990, compared to 13.8 percent in 1980.

202,730 on 51.8 percent of the working-age population in the Western Province are economically inactive in 1990. This compares with 112,200 or 36.6 percent of the working-age population in 1980 who are inactive. One third of the economically inactive population are male, compared to two thirds who are females in 1990. This compares with 27.5 percent males who are inactive in 1980 and 72.5 percent inactive females.

The economically inactive population has an increase of 80.7 percent during this intercensal period. This implies that most of the 27.7 percent increase in the working-age population has gone to boost the inactive population rather than the labour force, which has declined by 5.3 percent over the same period. The increase of 121.9 percent for the male economically inactive population is much more than that of 65.0 percent for the female inactive population.

Table 6.2

Economically Active Population 12 Years and Over by Residence and Sex, (Percent), Western Province, 1980 and 1990

| Activity and Sex | Residence | | | | | | | |
| | 1980 | | | | 1990 | | | |
	Total Number	Total	Rural	Urban	Total Number	Total	Rural	Urban
Population								
- Total	306,357	100.0	83.4	16.6	391,369	100	87.0	13.0
- Male	132,411	100.0	81.8	18.2	175,260	100	86.5	13.5
- Female	173,946	100.0	84.5	15.5	216,109	100	87.4	12.6
Labour Force								
- Total	193,798	100.0	84.3	15.7	183,557	100	88.6	11.4
- Male	101,333	100.0	82.3	17.7	104,430	100	87.6	12.4
- Female	92,465	100.0	86.5	13.5	79,127	100	89.9	10.1
Employed								
- Total	95,101	100.0	82.3	17.7	153,784	100	89.2	10.8
- Male	53,879	100.0	77.2	22.8	86,797	100	87.7	12.3
- Female	41,222	100.0	89.0	11.0	66,987	100	91.2	8.8
Unemployed								
- Total	98,697	100.0	86.2	13.8	29,773	100	85.4	14.6
- Male	47,454	100.0	88.0	12.0	17,633	100	87.0	13.0
- Female	51,243	100.0	84.5	15.5	12,140	100	83.1	16.9
Inactive								
- Total	112,200	100.0	81.7	18.3	202,730	100	85.8	14.2
- Male	30,857	100.0	80.3	19.7	68,473	100	85.2	14.8
- Female	81,343	100.0	82.2	17.8	134,257	100	86.1	13.9
Not Stated								
- Total	359	100.0	96.7	3.3	5,082	100	76.3	23.7
- Male	221	100.0	98.6	1.4	2,357	100	77.7	22.3
- Female	138	100.0	93.5	6.5	2,725	100	75.1	24.9

Figure 6.1

**Economically Active Population 12 Years and Over
Western Province, 1980**

Male

Not Stated 0.2%
Inactive 23.3%
Unemployed 35.8%
Employed 40.7%

Female

Not Stated 0.0%
Inactive 89.8%
Unemployed 5.7%
Employed 4.5%

Figure 6.2

**Economically Active Population 12 Years and Over
Western Province, 1990**

Male

Not Stated 1.3%
Inactive 39.1%
Unemployed 10.1%
Employed 49.5%

Female

Not Stated 1.3%
Inactive 62.1%
Unemployed 5.6%
Employed 31.0%

Table 6.3 gives the distribution of the economically active population by age and sex for 1990. 47.7 percent are in the age group 12-29 years, 10.0 percent in the age group 30-34 years, 25.1 percent in the age group 35.54 years and 17.0 percent for the age groups 55 years and over. The employed show an age pattern which is similar to that of the labour, as described above.

The age distribution of the unemployed and the inactive, however, are different from those of the labour force. Two thirds of the unemployed are aged 12-29 years, while more than half of the inactive are aged 12-29 years, while more than half of the inactive were aged 12-29 years. In this region, both unemployed and economic inactivity are problems which are more serious among the young than the adult population.

Table 6.3

Current Economically Active Population 12 Years and Over by Age and Sex, (Percent), Western Province 1990

Activity and Sex	Total Number	Total	Age Group							
			12-19	20-24	25-29	30-34	35-54	55-64	65+	Not Stated
Labour Force										
- Total	183,557	100.0	22.1	14.0	11.6	10.0	25.1	9.5	7.5	0.2
- Male	104,430	100.0	19.1	13.1	11.7	10.6	25.6	10.6	9.1	0.2
- Female	79,127	100.0	26.1	15.1	11.5	9.2	24.5	8.0	5.4	0.2
Employed										
- Total	153,784	100.0	20.0	12.6	11.4	10.2	27.0	10.3	8.3	0.2
- Male	86,797	100.0	17.3	11.6	11.4	10.8	27.2	11.5	10.0	0.2
- Female	66,987	100.0	23.6	13.9	11.4	9.6	26.6	8.7	6.0	0.2
Unemployed										
- Total	29,773	100.0	32.5	20.9	13.0	8.9	15.4	5.4	3.7	0.2
- Male	17,633	100.0	27.6	20.4	13.5	9.9	17.2	6.4	4.8	0.2
- Female	12,140	100.0	39.7	21.7	12.2	7.5	12.8	3.9	2.1	0.1
Inactive										
- Total	202,730	100.0	38.5	11.5	8.2	7.0	19.6	7.2	7.7	0.3
- Male	68,473	100.0	55.7	10.9	4.9	3.7	9.5	5.8	9.2	0.3
- Female	134,257	100.0	29.8	11.8	9.8	8.7	24.8	7.8	7.0	0.3
Not Stated										
- Total	5,082	100.0	49.7	14.1	7.4	4.7	11.4	4.5	6.4	1.8
- Male	2,357	100.0	54.9	13.4	7.1	3.8	9.8	3.7	5.0	2.3
- Female	2,725	100.0	45.1	14.7	7.6	5.6	12.8	5.1	7.7	1.4

6.4 ECONOMICALLY INACTIVE POPULATION

The economically inactive population consists of all persons 12 years and over who are neither classified as employed nor unemployed during the reference period. The inactive population includes full-time homemakers, full-time students, prisoners, beggars/vagrants and those pensioners living sorely on retirement benefits. Also included are disabled and invalid persons who are unable to work due to their disability and severe sickness, respectively.

Homemakers are persons who are inactive due to their engagement in household duties in their own homes. Students are persons who are inactive due to their engagement in full-time studies. The definitions of the other inactive groups are as implied in their titles, as listed above.

Table 6.4 shows the distribution of the current economically inactive population by reason for inactivity, residence and sex. Of the 202,730 inactive population in 1990, 39.0 percent are inactive due to homemaking, 25.1 percent due to Studying and 35.9 percent are inactive owing to other reasons. In rural areas, homemaking (40.3 percent) is the most important reason for economic activity, followed by other reasons (35.9 percent). Studying is the least important reason for economic inactivity in the rural areas, on the other hand, studying (36.3 percent) is the most important reason for inactivity, followed by other reasons (32.8 percent). Homemaking (30.9 percent) is the least important reason for inactivity.

Other reasons (48.9 percent) are a more important cause of male inactivity, while homemaking (53.5 percent) is the most important cause of female inactivity in the province.

Table 6.4

Economically Inactive Population by Reason for Inactivity, Residence and Sex, (Percent), Western Province, 1990

Residence and Sex	Reason for Inactivity				
	Total Number	Total	Home maker	Student	Other
Residence					
- Total	202,730	100.0	39.0	25.1	35.9
- Rural	173,904	100.0	40.3	23.3	36.4
- Urban	28,826	100.0	30.9	36.3	32.8
Sex					
- Male	68,473	100.0	10.5	40.6	48.9
- Female	134,257	100.0	53.5	17.3	29.2

Table 6.5 gives the percentage distribution of the current economically inactive population by residence and reason for inactivity. Out of 202,730 inactive persons, 85.8 percent reside in rural areas, while 14.2 percent reside in urban areas.

Of the 79,003 Homemakers in the province, 88.7 percent are in the rural areas and 13.3 percent are in the urban areas.

Of the 51,008 students in the province, 79.5 percent are in the rural areas and 20.5 percent are in the urban areas.

Of the 72,719 persons who are inactive due to other reasons, 87.0 percent are in the rural areas and 13.0 percent are in the urban areas.

Table 6.5

Current Economically Inactive Population by Reason for Inactivity, Residence and Sex, (Percent), Western Province, 1990

Residence and Sex	Reason for Inactivity			
	Total	Home maker	Student	Other
Western Province				
- Total Number	202,730	79,003	51,008	72,719
- Total	100.0	100.0	100.0	100.0
- Rural	85.8	88.7	79.5	87.0
- Urban	14.2	11.3	20.5	13.0

6.5 LABOUR FORCE PARTICIPATION RATES

The Labour force participation rate is defined as the proportion of persons of a particular age-group in the labour force expressed as a percentage. This rate measures the degree to which a particular age and/or sex group is involved in economic activities. Labour force participation rates by age, sex and residence are given in table 6.6.

Western Province has experienced a big decline in the degree of involvement in economic activities over the ten-year period. The labour force participation rate has declined from 63.3 percent in 1980 to 46.9 percent in 1990. The male labour force participation rate has declined from 76.5 percent in 1980 to 59.6 percent in 1990, while the female rate has declined from 53.2 percent in 1980 to 36.6 percent in 1990.

The participation rates in rural areas are higher than in urban areas in both 1980 and 1990. In 1980, the rural rate is 64.0 percent, compared to 59.7 percent in urban areas. In 1990, the rural rate is 47.8 percent, compared to 41.0 percent for the urban rate.

Declines in Labour force participation rates are experienced in both rural and urban areas. In rural areas the rate has declined from 64.0 percent to 47.8 percent, while in urban areas the rate has declined from 59.7 percent to 41.0 percent.

Within rural areas, the male participation rate has declined from 76.9 percent to 60.3 percent, while the female rate has declined from 54.4 percent to 37.7 percent. In urban areas, the male labour force participation rate has declined from 74.7 percent to 54.8 percent, while the female rate has declined from 46.3 percent to 29.2 percent.

The distribution of labour force participation rates by age in 1990 shows that they begin by being lowest (33.4 percent) for the youngest age group (12-19 years), rise with the increase in age to reach a peak of 56.1 percent for the age-group 30-34 years, before declining to reach 46.3 percent for the age group 65 years and over. This pattern is maintained for both males and females, and in both rural and urban areas.

The male labour force participation rates are higher than the female participation rates at almost all age groups, and in both rural and urban areas.

Table 6.6

Current Labour Force Participation Rates by Age, Sex and Residence, Western Province, 1980 and 1990

| Age-Group | Current Participation Rates | | | | | | | | |
| | Total | | | Rural | | | Urban | | |
	Both	Male	Female	Both	Male	Female	Both	Male	Female
1980	63.3	76.5	53.2	64.0	76.9	54.4	59.7	74.7	46.3
1990	46.9	59.6	36.6	47.8	60.3	37.7	41.0	54.8	29.2
1990 Census Age Groups									
12-19	33.4	33.6	33.3	35.5	35.6	35.5	21.1	21.2	21.2
20-24	51.6	63.8	42.3	52.9	65.5	43.3	44.0	53.8	36.7
25-29	55.8	77.6	40.5	56.0	77.7	41.0	54.5	77.0	37.7
30-34	56.1	81.0	38.2	56.1	80.8	38.7	55.6	82.3	35.4
35-39	55.3	81.8	37.6	54.5	80.8	37.8	59.5	86.1	36.6
40-44	52.0	80.5	36.6	51.2	79.6	37.2	57.8	84.8	31.1
45-49	52.9	79.2	35.9	52.0	78.1	36.4	59.8	84.9	30.4
50-54	52.9	77.7	36.1	52.5	77.1	36.8	56.0	81.4	37.7
55-59	55.2	74.6	37.8	55.8	75.3	38.8	48.4	68.2	24.4
60-64	53.0	71.6	36.6	53.8	72.0	37.7	42.6	66.3	21.0
65+	46.3	59.7	30.9	47.5	60.6	32.0	28.6	42.4	16.7
Not Stated	34.7	45.0	26.8	35.2	46.2	27.2	31.2	38.2	13.1

Figure 6.3

Current Labour Force Participation Rates, Western Province, Rural, 1990

Figure 6.4

Current Labour Force Participation Rates, Western Province, Urban, 1990

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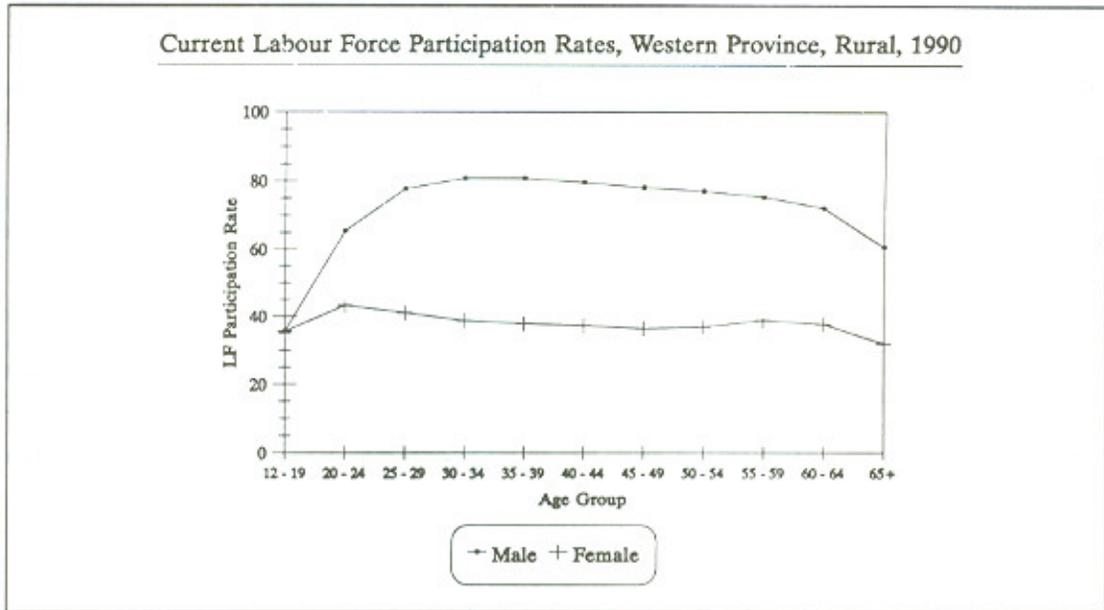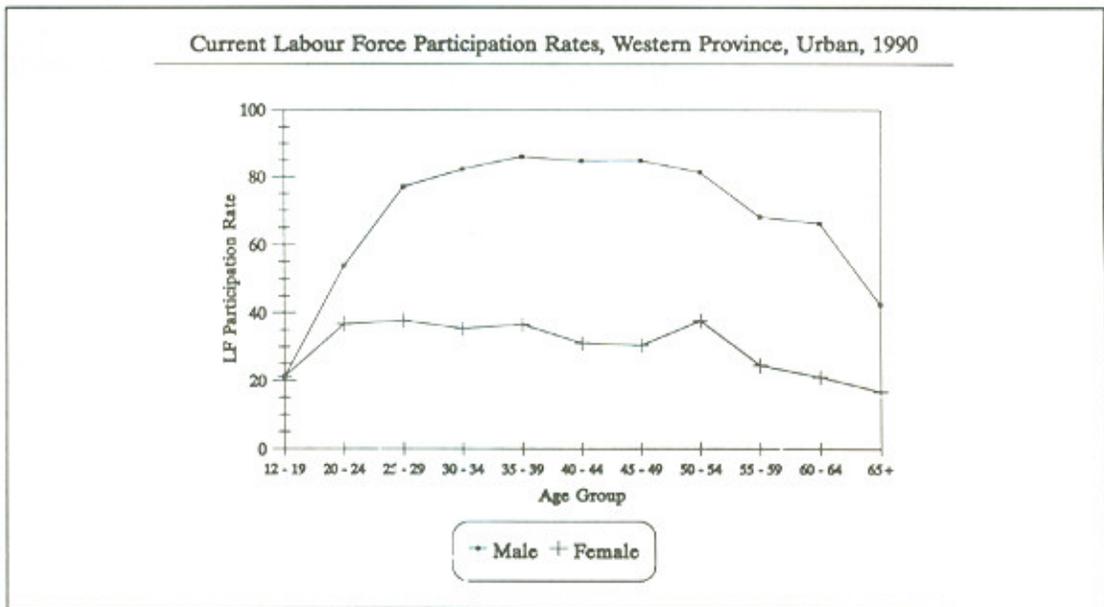
EMPLOYMENT STATUS, OCCUPATIONAL AND INDUSTRIAL CLASSIFICATION

The status in employment, the occupational and industrial structure of a region's employed population indicates the level of its economic development and the general efficiency with which its resources are utilised. When sustained economic progress is usually accompanied by the increased division and specialization of the labour force. Therefore, low levels of division and specialization of the work force do strongly suggest the absence of economic progress. Among the outstanding features of a backward economy are: it has a large part of its workforce engaged in its primary industries; all forms of self-employment constitute the dominant type of status in employment, and; the majority of workers are engaged in agricultural and related occupations which are characterized by low skill requirement.

6.6 EMPLOYMENT STATUS

Employment status refers to whether a worker is an employer, employee, self-employed or an unpaid family worker. An employer is a person who operates his or her own economic enterprise or engages independently in a profession or trade, and hires one or more employees. An employee is a person who works for a public or private employer and receives remuneration in wages, salary, commission, tips, piece-rates or pay-in kind. A self-employed worker is a person who operates his or her own economic enterprise or engages independently in a profession or trade, and hires no employees. Finally, an unpaid family worker is a person who works without pay in an economic enterprise operated by a related person living in the same household.

The lack of significant economic progress in Western Province can be seen from its continued reliance on family labour rather than relying on employers and employees who characterize advanced regions. In 1980, the self-employed and unpaid family workers together make up 75.2 percent of the work force, compared to 24.6 percent for employers and employees. In 1990, 83.2 percent of the work force are self-employed and unpaid family workers, while only 14.3 percent are employers and employees.

Intercensal changes in employment status appear to suggest that the economic recession of the 1980's has more serious effects in the Western region. The self-employed have declined from 61.8 percent in 1980 to 25.5 percent in 1990, while employees have declined from 24.4 percent in 1980 to 13.3 percent in 1990. On the other hand, unpaid family workers have increased from 13.4 percent in 1980 to 57.7 percent in 1990, while employers have increased from 0.2 percent in 1980 to 1.0 percent in 1990. Employees appear to have lost jobs while the self-employed appear to have faced closures for their small businesses. This also explains the growth of unpaid family work during the same period.

In 1980, the self-employed (69.0 percent) dominate other statuses in rural areas, while employees (67.4 percent) dominate other statuses in urban areas. In 1990, unpaid family workers (62.7 percent) dominate other statuses in rural areas, while employees (55.9 percent) dominate all the other statuses in urban areas.

Table 6.7

Usually Working Population 12 Years and Over by Employment Status, Sex and Residence, (Percent), Western Province, 1980 and 1990

Employment Status and Sex	Residence and Year					
	Total		Rural		Urban	
	1980	1990	1980	1990	1980	1990
Total Number						
- Total	95,101	138,060	78,265	123,133	16,836	14,927
- Male	53,879	79,230	41,592	69,257	12,287	9,973
- Female	41,222	58,830	36,673	53,876	4,549	4,954
Total						
- Total	100.0	100.0	100.0	100.0	100.0	100.0
- Male	100.0	100.0	100.0	100.0	100.0	100.0
- Female	100.0	100.0	100.0	100.0	100.0	100.0
Self-Employed						
- Total	61.8	25.5	69.0	26.0	28.6	21.0
- Male	60.5	29.1	72.2	30.6	21.0	18.6
- Female	63.6	20.6	65.3	20.1	49.4	25.7
Employee						
- Total	24.4	13.3	15.1	8.1	67.4	55.9
- Male	34.7	18.3	22.0	11.7	77.4	64.1
- Female	10.8	6.5	7.2	3.4	40.4	39.4
Employer						
- Total	0.2	1.0	0.2	0.8	0.3	2.9
- Male	0.3	1.4	0.3	1.2	0.4	3.5
- Female	0.1	0.5	0.1	0.4	0.0	1.7
Unpaid-Family Worker						
- Total	13.4	57.7	15.5	62.7	3.4	16.3
- Male	4.3	48.8	5.3	54.2	1.0	10.7
- Female	25.3	69.7	27.2	73.6	9.7	27.6
Not Stated						
- Total	0.2	2.5	0.2	2.4	0.3	3.9
- Male	0.2	2.4	0.2	2.3	0.2	3.1
- Female	0.2	2.7	0.2	2.5	0.6	5.6

Figure 6.5

Usually Working Population 12 Years and Above by Employment Status
Western Province

1980 Census

- Employer 0.2%
- Self Employed 61.8%
- Unpaid Family Worker 13.4%
- Employee 24.3%
- Not Stated 0.2%

1990 Census

- Employer 1.1%
- Self Employed 25.5%
- Unpaid Family Worker 57.7%
- Employee 13.3%
- Not Stated 2.5%
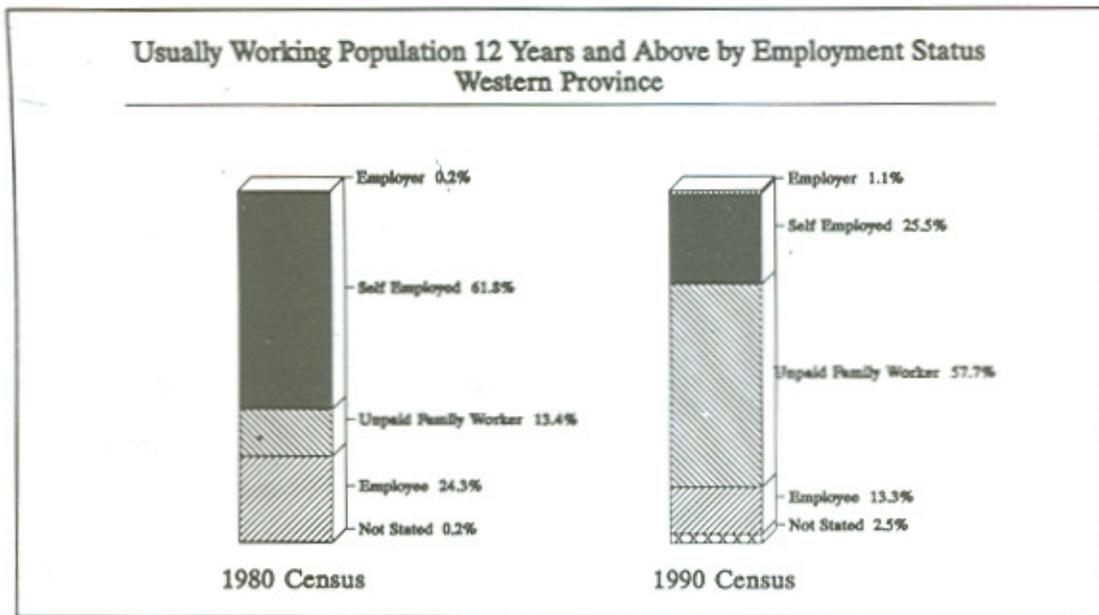
6.7 WORKING POPULATION BY OCCUPATION

Occupation is the title which identifies a set of characteristics of a job and a group of specific tasks to be performed by a person.

Primary production dominates in Western Province, as shown by the prevalence of agricultural and related occupations. The following were the five most important occupations for the province in 1990: agriculture and related occupations (59.6 percent), Professional, technical and related occupations (4.8 percent), Production and related workers (3.6 percent), service workers (3.0 percent) and sales workers (2.8 percent).

The work force in rural areas was distributed in a pattern similar to that for the whole province. The urban areas, however, show a unique pattern. The urban work force in the Province was widely distributed over many occupations. Professional, technical and related occupations had 16.7 percent, agriculture and related occupations had 12.6 percent, service workers had 12.4 percent, sales workers had 11.9 percent, and so on.

A comparison of the distribution of male and female workers over the various occupations did not show important differences at provincial level, within rural areas or within urban areas.

All occupations experienced manpower losses between 1980 and 1990.

Table 6.8

Usually Working Population By Occupation, Sex and Residence, (Percent), Western Province, 1998 and 1990.

Occupation	Percentage of Working Population								
	Total			Rural			Urban		
	Both	Male	Female	Both	Male	Female	Both	Male	Female
1980									
Total Number of Workers	95,101	53,879	41,222	78,265	41,592	36,673	16,836	12,287	4,549
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Professional, Technical	5.6	6.2	4.9	4.4	5.2	3.5	11.4	9.5	16.5
Administrative and Manag.	0.4	0.7	0.1	0.1	0.2	0.0	2.0	2.6	0.5
Clerical and Related	1.4	1.6	1.0	0.5	0.8	0.3	5.4	4.7	7.3
Sales Workers	3.1	3.5	2.7	2.1	2.6	1.6	7.7	6.5	10.8
Service Workers	6.0	9.0	2.0	3.3	5.1	1.3	18.3	22.3	7.6
Agriculture, Animal Hus.	71.1	61.0	84.3	81.2	73.7	89.6	24.2	17.7	41.9
Production and Related	10.3	15.2	3.9	6.6	9.9	2.7	27.6	32.9	13.3
Unclassified	0.9	1.3	0.3	0.7	1.1	0.2	1.9	2.2	0.8
Not Stated	1.2	1.5	0.8	1.1	1.4	0.8	1.5	1.6	1.3
1990									
Total Number of Workers	138,060	79,230	58,830	23,133	69,257	53,876	14,927	9,973	4,954
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Professional, Technical	4.8	5.4	3.9	3.3	3.9	2.5	16.7	15.3	19.6
Administrative and Manag.	0.2	0.3	0.1	0.1	0.2	0.0	1.2	1.6	0.4
Clerical and Related	0.9	1.0	0.8	0.3	0.4	0.2	6.4	5.7	7.7
Sales Workers	2.8	2.9	2.6	1.7	1.8	1.5	11.9	10.4	15.1
Service Workers	3.0	4.1	1.5	1.9	2.4	1.1	12.4	15.8	5.4
Agriculture, Animal Hus.	59.6	57.7	62.3	65.3	64.2	66.8	12.6	12.5	12.9
Production and Related	3.6	4.2	2.7	2.8	3.3	2.2	9.8	10.6	8.3
Unclassified	1.4	1.5	1.3	1.2	1.3	1.1	3.2	3.0	3.4
Not Stated	23.7	22.9	24.8	23.4	22.5	24.6	25.8	25.1	27.2

6.8 WORKING POPULATION BY INDUSTRY

Industry identifies the type of product or service produced at one's place of work. Table 6.9 shows the distribution of usually working population 12 years and over by industry and employment status.

In 1990, the agriculture industry has employed 60.5 percent, mining has employed a negligible percentage, the secondary industry has employed 3.8 percent and the tertiary industry has employed 11.8 percent. The agriculture industry is therefore the most important employer in the Western Province in 1990. The industrial distribution of workers in 1980 is the same as in 1990.

The self-employed and unpaid family workers are mostly in the agriculture industry in both 1980 and 1990. In 1990, 88.9 percent of the workers in agriculture are self-employed, while in 1980 there are 70.0 percent of them. In 1990, 68.9 percent of the workers are unpaid family workers, while 95.9 percent of the workers are unpaid family workers in 1980.

The most important industries for employees in Western Province are Community, Social and Personal service (44.2 percent in 1990 and 51.6 percent in 1980) and agriculture (14.9 percent in 1990 and 15.8 percent in 1980). In 1990, the most important industries for employers are agriculture (33.4 percent) and community, social and personal services (30.1 percent); in 1980, the important industries for employers are agriculture (51.7 percent) and trade (36.1 percent).

ine distribution of usual workers by employment status and industry is given in Table 6.10. For all the industries, unpaid family workers (57.7 percent) in 1990 and the self-employed (61.9 percent) in 1980 are the most important statuses in the Province. In 1990, the self-employed are important in manufacturing (55.0 percent), trade 48.4 ercent) and finance (44.9 percent). Employees are important to the mining industry (66.1 percent), Electricity industry (91.8 percent), construction (62.3 percent), Transport (85.0 percent) and community (69.0 percent).

There is no industry in which employers dominated other statuses. The unpaid family worker is important only in agriculture (65.7 percent) in 1990.

Table 6.9

Usually Working Population 12 Years and Over by Employment Status and Industry, (Percent), Western Province, 1980 and 1990

Industrial and Year		Total Number, Working	Self Employed	Employee	Employer	Unpaid Family Worker	Not Stated
Total Number	- 1980	95,101	58,815	23,147	205	12,722	212
	- 1990	138,060	35,178	18,294	1,451	79,653	3,484
Western Province	- 1980	100.0	100.0	100.0	100.0	100.0	100.0
	- 1990	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture	- 1980	71.9	88.9	15.8	51.7	95.9	23.1
	- 1990	60.5	70.0	14.9	33.4	68.9	22.4
Mining	- 1980	0.1	0.0	0.3	0.3	0.0	-
	- 1990	0.0	0.0	0.2	0.3	0.0	-
Manufacturing	- 1980	3.2	3.2	4.6	1.9	0.7	0.9
	- 1990	2.7	5.9	4.9	5.3	0.8	2.1
Electricity	- 1980	0.3	0.0	1.3	-	-	5.7
	- 1990	0.3	0.0	1.8	0.7	0.0	0.2
Construction	- 1980	2.4	0.8	7.7	1.9	0.1	-
	- 1990	0.8	0.8	4.0	2.0	0.1	0.6
Trade	- 1980	3.0	3.0	3.8	36.1	0.8	5.7
	- 1990	1.7	3.2	4.5	5.0	0.4	1.2
Transport	- 1980	1.4	0.2	5.2	1.0	0.0	1.4
	- 1990	0.7	0.2	4.4	3.0	0.0	0.7
Finance	- 1980	0.4	0.2	1.4	-	-	-
	- 1990	0.9	1.5	2.8	2.1	0.1	0.8
Community	- 1980	13.9	1.9	51.6	5.4	1.0	7.1
	- 1990	8.5	5.0	44.2	30.1	1.6	4.5
Other	- 1990	1.6	1.5	3.9	2.4	1.2	1.5
Not Stated	- 1980	3.4	1.8	8.3	1.5	1.5	56.1
	- 1990	.3	11.9	14.4	15.4	26.9	66.0

Table 6.10

Usually Working Population 12 years and Over by Industry and Employment Status, (Percent), Western Province, 1980 and 1990

Industrial and Year		Total Number Working	Total	Self Employed	Employee	Employer	Unpaid Family Worker	Not Stated
Total Number	- 1980	95,101	100.0	61.9	24.3	0.2	13.4	0.2
	- 1990	138,060	100.0	25.5	13.2	1.1	57.7	2.5
Agriculture	- 1980	68,329	100.0	76.6	5.3	0.1	17.9	0.1
	- 1990	83,473	100.0	29.5	3.3	0.6	65.7	0.9
Mining	- 1980	109	100.0	26.6	71.6	0.9	0.9	-
	- 1990	62	100.0	21.0	66.1	6.4	6.5	-
Manufacturing	- 1980	3,031	100.0	61.8	35.1	0.1	2.9	0.1
	- 1990	3,768	100.0	55.0	23.8	2.0	17.3	1.9
Electricity	- 1980	306	100.0	1.0	85.1	-	-	3.9
	- 1990	356	100.0	1.7	91.8	3.1	1.1	2.3
Construction	- 1980	2,257	100.0	20.0	79.4	0.2	0.4	-
	- 1990	1,174	100.0	23.7	62.3	2.5	9.7	1.8
Trade	- 1980	2,860	100.0	62.3	31.1	2.6	3.6	0.4
	- 1990	2,356	100.0	48.4	34.9	3.1	11.9	1.7
Transport	- 1980	1,312	100.0	7.8	91.8	0.1	0.1	0.2
	- 1990	950	100.0	6.0	85.0	4.5	1.9	2.6
Finance	- 1980	420	100.0	24.8	75.2	-	-	-
	- 1990	1,210	100.0	44.9	42.8	2.6	7.4	2.3
Community	- 1980	13,210	100.0	8.4	90.4	0.1	1.0	0.1
	- 1990	11,705	100.0	15.0	69.0	3.7	11.0	1.3
Other	- 1990	2,267	100.0	22.6	31.2	1.7	42.3	2.2
Not Stated	- 1980	3,267	100.0	32.1	58.6	0.1	5.6	3.6
	- 1990	30,739	100.0	13.6	8.6	0.7	69.6	7.5

Figure 6.6

Usually Working Population 12 Years and Over by Industry,
Western Province

	Agriculture	Mining	Manufacturing	Electricity	Construction	Trade	Transport	Finance	Community	Other	Not Stated
1980 Census	71.9	0.1	5.2	0.3	2.4	3.0	1.4	0.4	13.9		3.4
1990 Census	60.5	0.0	2.7	0.3	0.8	1.7	0.7	0.9	8.5	1.6	22.3
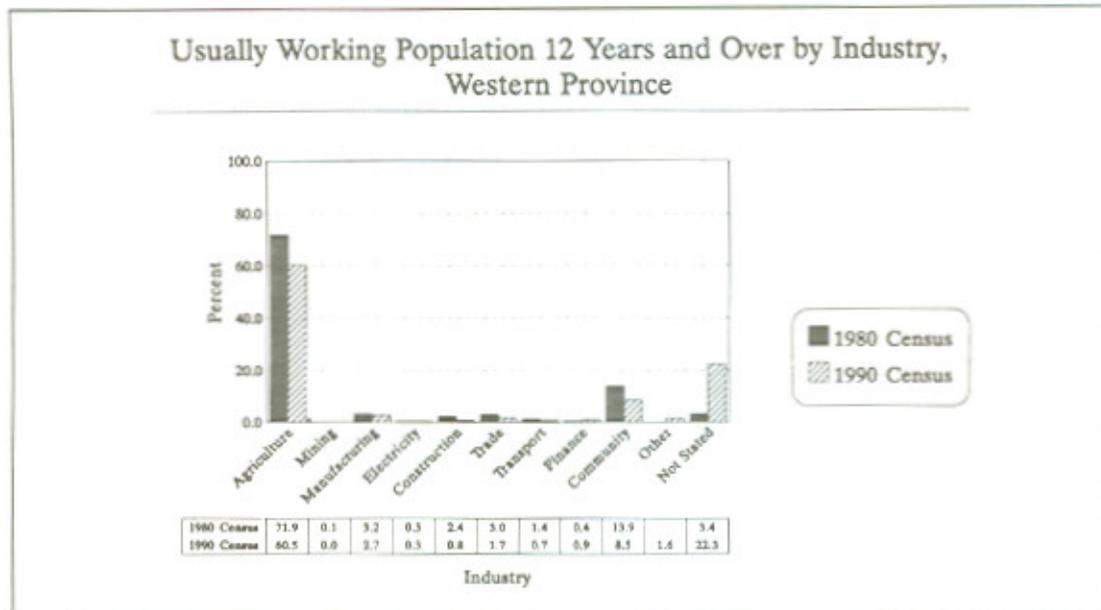
6.9 UNEMPLOYMENT

The unemployed population are defined as all persons aged 12 years and over who are either actively seeking work or are available for work during the reference period. Unemployment arises whenever the supply of labour exceeds its demand. The situation of unemployment is caused mainly by poor economic conditions, though demographic trends do affect the growth and composition of the labour force. A high level of unemployment implies that a shortfall in employment opportunities is causing many people to be without work. The number of unemployed persons when measured against the total labour force is called the unemployment rate.

Current unemployment rates by sex and residence for 1980 and 1990 are given in table 6.11. The province has experienced a large drop in the rate of unemployment, from 50.9 percent in 1980 to 16.2 percent in 1990. The decline in female unemployment, from 55.4 percent in 1980 to 15.3 percent in 1990, is higher than the decline in male unemployment, from 46.8 percent in 1980 to 16.9 percent in 1990.

The decline in the rate of unemployment in rural areas, from 52.1 percent in 1980 to 15.6 percent in 1990, is more than the decline in urban unemployment, from 44.7 percent in 1980 to 20.7 percent in 1990. The decline in female unemployment is higher than that of male unemployment in both rural and urban areas.

The reduction in male unemployment in rural areas (from 52.1 percent in 1980 to 15.6 percent in 1990) is more than that in urban areas (from 31.6 percent in 1980 to 17.7 percent in 1990). The reduction in female unemployment, on the other hand, is almost to the same degree in rural and urban areas.
An examination of unemployment rates by districts show that they range from 11.3 percent in Kaoma district to 21.3 percent in Sesheke district in 1990.

The growing popularity of informal sector economic activities is responsible for drawing many of the previously unemployed and inactive populations into family businesses. A better coverage of the same activities in the 1990 Census than in the 1980 census has ensured that the said changes are fully brought out in the figures.

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Table 6.11

Current Unemployment Rates by Sex and Residence, (Percent), Western Province, 1980 and 1990

Employment Status, Sex and Residence	1980	1990
Western Province	50.9	
-Total	46.8	16.2
-Male	55.4	16.9
-Female		15.3
Residence		
Rural	52.1	
-Total	50.1	15.6
-Male	54.1	16.8
-Female		14.2
Urban	44.7	
-Total	31.6	20.7
-Male	63.5	17.7
-Female		25.7
Districts		
-Kalabo		14.5
-Kaoma		11.3
-Lukulu		18.1
-Mongu		17.9
-Senanga		17.3
-Sesheke		21.3

Table 6.12 gives unemployment rates by age, residence and sex in 1990. Unemployment in Western Province is problem which is more serious among the youthful population of 12-29 years than it is among the adult population of 30 years and over. Unemployment rates range from 18.1 percent to 24.3 percent for the age group 12-29 years, while it ranges from 8.0 percent to 14.5 percent for the age group of 30 years and older.

At provincial level, the unemployment rates of females are less than those males at every age group. In rural areas, female unemployment rates are less-than those of males in rural areas. In urban areas, however, female unemployment rates were higher than those of males at all age groups except the age groups of 55-59 years and 65 years and over when it is less.

The overall rate of unemployment in urban areas is higher than the one for rural areas.

Table 6.12

Current Unemployment Rates by Age, Sex and Residence, (Percent), Western Province, 1990

Age Group	Current Unemployment Rates								
	Total			Rural			Urban		
	Both	Male	Female	Both	Male	Female	Both	Male	Female
Total	16.2	16.9	15.3	15.6	16.8	14.2	20.7	17.7	25.7
12-9	23.9	24.4	23.4	22.3	23.0	21.7	39.2	38.4	39.9
20-24	24.3	26.3	22.0	22.5	25.1	19.5	36.7	34.3	39.3
25-29	18.1	19.5	16.2	17.8	19.7	15.2	19.7	18.1	22.2
30-34	14.5	15.7	12.5	14.7	16.4	12.1	13.3	12.3	15.0
35-39	11.2	12.1	9.9	11.6	13.0	9.6	9.2	8.2	11.4
40-44	9.7	11.4	7.5	10.1	12.5	7.4	7.2	6.6	8.9
45-49	9.8	11.4	7.3	10.1	12.3	7.2	7.7	7.2	9.5
50-54	9.1	10.5	7.1	9.3	11.0	6.9	8.0	7.2	10.4
55-59	9.5	10.6	7.6	9.4	10.6	7.5	10.7	10.9	10.1
60-64	8.8	9.7	7.2	8.6	9.6	6.9	12.7	11.9	14.9
65+	8.0	8.9	6.0	7.9	8.8	6.0	10.8	12.3	7.4
Not Stated	12.7	15.6	9.1	13.2	16.8	8.7	9.1	6.9	13.3

Table 6.13 shows the percentage distribution of the usually unemployed population by level of education completed and age. 85.6 percent of the unemployed population has either absolutely no education or they have a rudimentary education attainment level of grades 1 to 7, leaving only 13.1 percent with a Secondary educational attainment of grades 8 to 12. Those with "A" Level are negligible. Unemployment is equally high at all age groups for persons with no education. For those with some education, unemployment is higher among the younger than among the older unemployed population.

Table 6.13

Usually Unemployed Level of Education Completed and Age, (Percent), Western Province, 1990

Age Group	Total Number Unemployed	Total	None	Grade 1-7	Grade 8-12	"A" Level	Degree	Not Stated
Total	36,970	100.0	43.9	41.7	13.1	0.0	-	1.3
12-19	11,376	100.0	49.0	44.1	5.4	-	-	1.5
20-24	7,654	100.0	28.7	47.0	23.2	-	-	1.1
25-29	4,837	100.0	30.4	44.5	24.2	0.0	-	0.8
30-34	3,284	100.0	34.9	42.8	21.3	-	-	1.0
35-39	1,820	100.0	41.2	40.5	16.3	-	-	2.0
40-44	1,561	100.0	54.3	36.5	8.1	-	-	1.1
45-49	1,328	100.0	56.9	36.9	5.4	0.1	-	0.7
50-54	1,354	100.0	64.5	31.7	2.3	0.1	-	1.4
55-59	1,131	100.0	63.5	32.7	1.9	-	-	1.9
60-64	1,014	100.0	70.4	27.2	1.5	-	-	0.9
65+	1,551	100.0	72.3	23.9	1.2	-	-	2.6
Not Stated	60	100.0	51.7	16.7	3.3	-	-	28.3

Figure 6.7

Usually Unemployed, Western Province, 1990
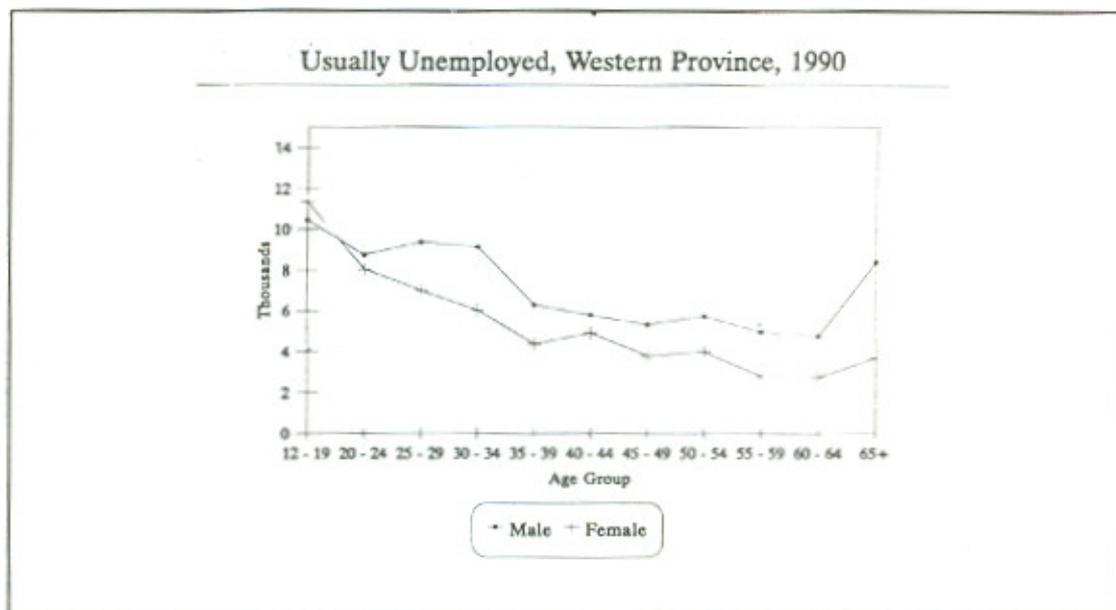
THE MARITAL STATUS OF THE UNEMPLOYED

Table 6.14 shows the distribution of the currently unemployed by marital status, sex and residence. More than half of the unemployed had never been married, 29.6 percent were married, leaving 10.1 percent for the remaining marital statuses. In urban areas, those who were single were more than two thirds, compared to 55.6 percent in rural areas. Those who were married were 19.7 percent in urban areas but 31.3 percent in rural areas.

Table 6.14

Currently Unemployed by Marital Status, Sex and Rural/Urban, (Percent), Western Province, 1990

Residence and Sex		Total Number Unemployed	Marital Status						
			Total	Single	Married	Widowed	Divorced	Separated	Not Stated
Total									
	Both Sexes	29,773	100.0	57.6	29.6	2.7	5.3	2.1	2.7
	Male	17,633	100.0	52.9	40.3	0.7	1.7	1.0	3.4
	Female	12,140	100.0	64.5	14.0	5.5	10.4	3.8	1.8
Rural									
	Both Sexes	25,432	100.0	55.6	31.3	2.9	5.3	2.2	2.7
	Male	15,340	100.0	51.2	42.1	0.7	1.8	1.0	3.2
	Female	10,092	100.0	62.4	14.9	6.1	10.7	4.1	1.8
Urban									
	Both Sexes	4,341	100.0	69.3	19.7	1.3	5.3	1.4	3.0
	Male	2,293	100.0	64.3	28.3	0.4	1.9	0.6	4.5
	Female	2,048	100.0	74.9	10.1	2.3	9.0	2.3	1.4

Figure 6.8

Currently Unemployed by Marital Status, Western Province, 1990

Never Married 57.6%

Not Stated 2.7%

Separated 2.1%

Divorced 5.3%

Widowed 2.7%

Married 29.6%
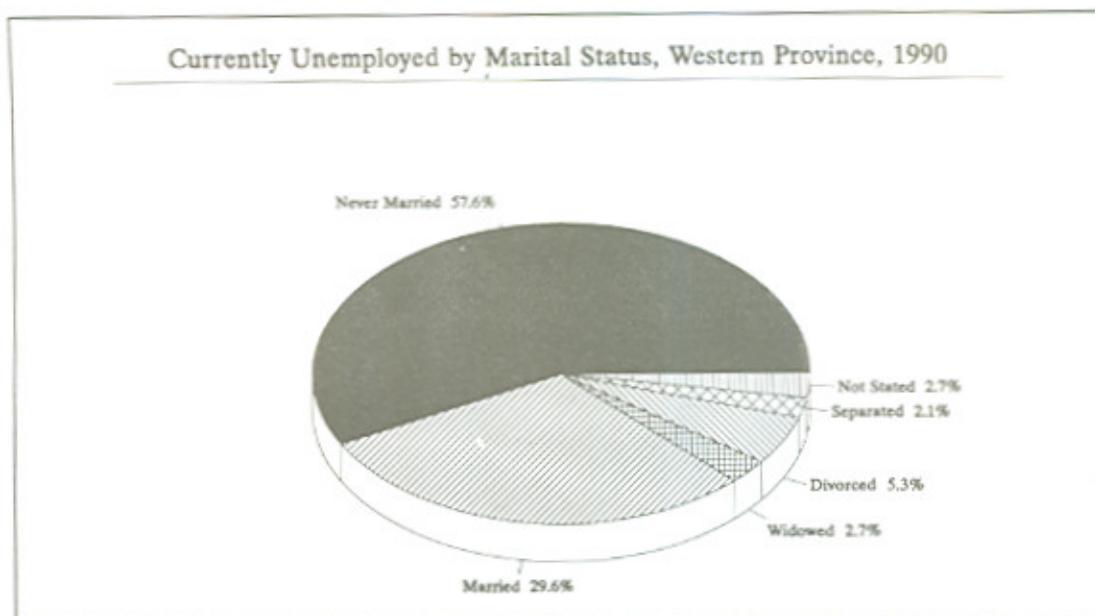
6.10 SUMMARY

The working-age population has increased by 27.7 percent in the province; the increase of 32.4 percent for the male working-age population is more than the 24.2 percent increase for feamles.

The labour force has registered a decline of 5.3 percent between 1980 and 1990. The male labour force has an increase of 3.1 percent, whereas the female labour force has registered a decline of 14.4 percent.

Eighty three percent of the labour force is employed in 1990, of which the employed males have increased by 61.1 percent and employed females have increased by 62.8 percent.

Unemployment has declined by 69.8 percent over this period. Female unemployment has registered a decline of 76.3 percent, while the unemployment of males has declined by 62.8 percent.

The economically inactive population has experienced an increase of 80.7 percent; this is in contrast to the decline of 5.3 percent for the labour force. This implies that much of the increase of 27.7 percent in the working-age population has gone to boost the inactive population, rather than the labour force. Two thirds of the inactive in 1990 are female and one third are male. Homemaking (39.0 percent) is the most important reason for economic inactivity in the province, followed by other reason (35.9 percent). Studying is the least important reason (25.1 percent)

About eighty three percent of the employed population in the province are self-employed and unpaid family workers, there-by leaving only 14.3 percent who are employers and employees. This shows that most of the work in this region is informal.

The majority of the workers in the province (59.6 percent) have agricultural and related occupations, while almost an equal percentage (60.5 percent) are employed by the agriculture industry. Primary industrial economic activities therefore predominate in the province.

There is a strong suggestion that many of the unemployed have no jobs due to having little or no education; however, the problem of unemployment has since extended to those with secondary education in recent years Unemployemnt does also appear to be a hindrance to marriage for the affected persons.

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CHAPTER 7

CHILDREN, YOUTH AND WOMEN

7.1 INTRODUCTION

The subject of children, youth and women has been discussed in a number of national and international fora for some time now. In this chapter, an attempt is made to examine and analyse the situation of children, youth and women under the following:-

- Distribution within the province,
- Composition and Change over time,
- Marital Status in the case of the youth and women,
- Fertility,
- Education and
- Economic Activity.

For ease of reference, a child is defined as a person within the age group of 0-14 years inclusive, whereas a youth is a person within the age group 15-24 years inclusive.

7.2 POPULATION CHANGE, COMPOSITION AND D. TRIBUTION OF CHILDREN AND THE YOUTH.

Population Change

Population change refers to the increase or decrease in population size, hence, population change can be negative or positive. Population change over a period of ten years, (1980-90), has been studied to come up with the average annual growth rate of children and youth in Western Province. Table 7.1 shows that the population of children aged 0-14 years, increased from 214 551 in 1980 to 263 648 in 1990. This population increase occured at an average annual growth rate of 2.1 percent.

Table 7.1 further shows that the growth rate of the youth is almost double, (4.0 percent), that of the children. In the urban part of the province, a negative growth rate for children has been recorded. This implies that the population of children in the urban areas of Western Province decreased during the intercensal period of 1980-90.

Table 7.1

Population Size and Growth Rates of Children and Youth by Broad Age Group, Western Province, 1980 and 1990

	Age Group	Residence	Total Population 1980	Total Population 1990	Average Annual Growth Rate (%) 1980-1990
Children	0 - 14	Total	214,551	263,648	2.1
		Rural	176,760	229,163	2.6
		Urban	37,791	34,485	-0.9
Youth	15 - 24	Total	82,497	122,551	4.0
		Rural	66,825	104,673	4.6
		Urban	15,672	17,878	1.3

Figure 7.1

Population of Children and Youth by Residence, Western Province, 1990

Rural
229,163

Urban
34,485

Children (0 - 14)

Rural
104,673

Urban
17,878

Youth (15 - 24)
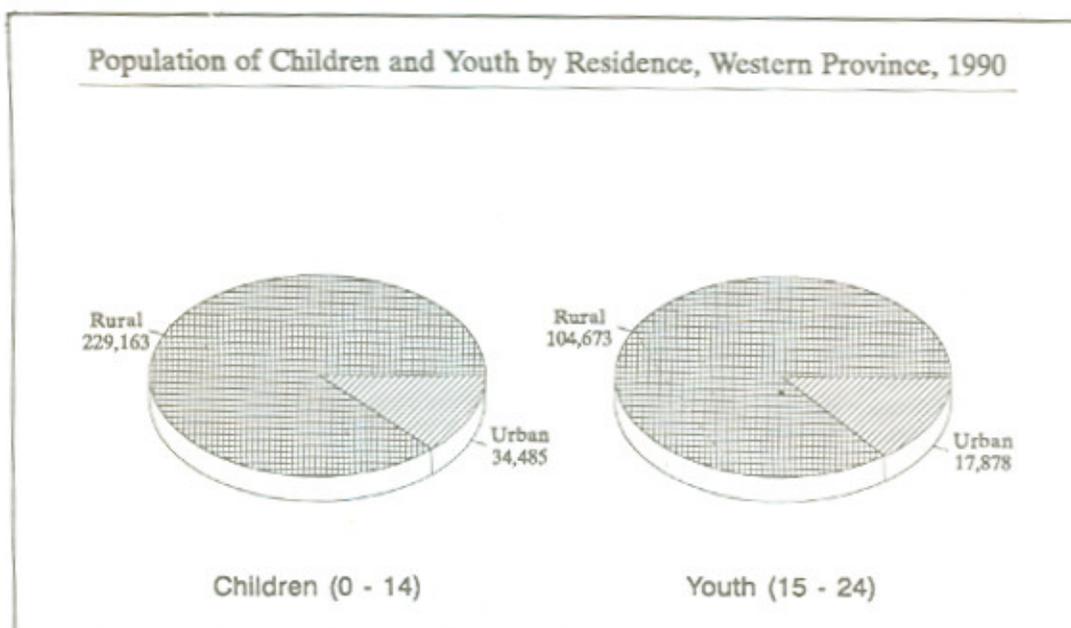
Population Composition and Distribution

The total population of Western Province recorded is 606,813. About 43 percent of the population are children below 15 years of age. A further 20.2 percent is made up of the youth aged 15-24 years. Together, the children and youth in Western Province account for about 64 percent of the population.

A further breakdown shows that of the youth population in the province, 85 percent live in rural areas while 15 percent live in urban areas (see Figure 7.1). A similar breakdown of the children in the province reveals that 87 percent of them live in rural areas while 13 percent live in urban areas.

Table 7.2

Population Under 25 Years as a Proportion of Total Population by Sex and Broad Age Group, Western Province, 1990

Age Group	Sex	Children/Youth	Proportion
0-14	Both Sexes	263,648	43.4
	Male	130,791	46.4
	Female	132,857	40.9
15-24	Both Sexes	122,551	20.2
	Male	56,766	20.1
	Female	65,785	20.3

A large proportion of children and youth in Western Province implies the province has a young population. A young population has an in-built momentum for growth due to a large number of young people entering the reproductive ages. Further more, a very young population has economic implications as well. Enormous amounts of resources are diverted to providing social services such as health and education, leaving little recources for investment and savings.

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The data presented in Table 7.3 allows for the calculation of sex ratios of children and youth in Western Province. The table shows that the sex ratios of children and youth are 98.4 and 86.3 indicating that females are in excess of males. Generally, all the districts have sex ratios for children which are higher than those for the youth. As regards children, all districts except Kaoma have females in excess of males whereas in the case of the youth all the districts show that females are in excess of males. This implies that all the districts have more male children per 100 females than male youth per 100 females.

Table 7.3

Population Distribution and Sex Ratios of the Children and Youth by District, Western Province, 1990

Residence	Population	Total	Male	Female	Sex ratio
Western Province	Children	263,648	130,791	132,857	98.4
	Youth	122,551	56,766	65,785	86.3
Kalabo	Children	41,643	20,519	21,124	97.1
	Youth	18,149	8,139	10,010	81.3
Kaoma	Children	47,490	23,870	23,620	101.1
	Youth	24,219	11,450	12,769	89.7
Lukulu	Children	23,072	11,456	11,616	98.6
	Youth	9,976	4,629	5,347	86.6
Mongu	Children	60,805	30,107	30,698	98.1
	Youth	30,157	14,052	16,105	87.3
Senenga	Children	62,108	30,725	31,383	97.9
	Youth	27,169	12,324	14,845	83.0
Sesheke	Children	28,530	14,114	14,416	97.9
	Youth	12,881	6,172	6,709	92.0

Table 7.4 shows the sex ratios of the children and youth in the province by five-year age groups. There is a near balance of males and females in the older age group of children (10-14 years), in which the sex ratio is 99.4. From this age group onwards, the sex ratio reduces. This indicates a reduction of male with increasing age.

Table 7.4

Age-Sex Ratio of the Children and Youth, Western Province, 1990

Age Group	Male	Female	Sex ratio
0 - 4	45,644	46,315	98.6
5 - 9	44,399	45,567	97.4
10 - 14	40,748	40,975	99.4
15 - 19	35,312	37,560	94.0
20 - 24	21,454	28,225	76.0

Figure 7.2

Population Distribution of Children and Youth by District, Western Province, 1990

Children (0-14)

Kaoma 47,490
Lukulu 23,072
Kalabo 41,643
Mongu 60,805
Seaheke 28,530
Senanga 62,108

Youth (15-24)

Kaoma 24,219
Lukulu 9,976
Kalabo 18,149
Mongu 30,157
Seaheke 12,881
Senanga 27,169
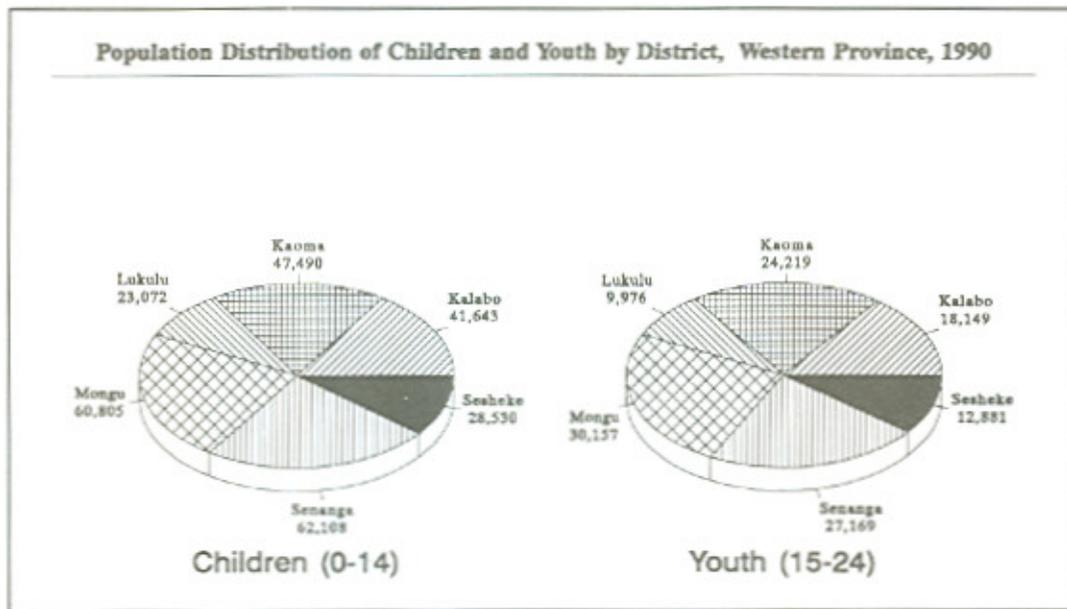
7.3 SOCIAL AND ECONOMIC ACTIVITIES OF THE YOUTH

The population of Western Province, as already discussed, is young. Unfortunately, education levels completed by the youth in the province are low, while unemployment levels are high. The youth, therefore, hardly participate in the development of the province.

Marital Status of the Youth

Data on marital status of the youth by age and sex is presented in Table 7.5. Table 7.5 shows that in age group 15-19 years, 15 percent of the female youth in the province are married compared to only 1 percent of their male counterparts. Similarly, in the older age group of 20-24 years, about 50 percent of the female youth are married compared to only 19.5 percent of the male youth in the same age group. This indicates that females marry much earlier than males.

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Table 7.5

Youth by Age, Sex and Marital Status and Rural/Urban, (Percent), Western Province, 1990

Residence	Age group	Sex	Total		Marital Status					
			Number	Percentage	Never Married	Married	Widowed	Divorced	Separated	Not Stated
Western Province	15-19	Male	35,312	100.0	92.3	1.1	0.0	0.1	0.2	6.3
		Female	37,560	100.0	80.8	15.0	0.2	0.6	0.6	2.8
	20-24	Male	21,454	100.0	74.2	19.5	0.2	0.5	0.4	5.2
		Female	28,225	100.0	41.8	49.6	0.7	4.1	1.8	2.0
Rural	15-19	Male	30,331	100.0	92.2	1.2	0.0	0.1	0.2	6.3
		Female	31,916	100.0	79.4	16.3	0.2	0.7	0.6	2.8
	20-24	Male	18,354	100.0	73.0	20.8	0.2	0.5	0.5	5.0
		Female	24,072	100.0	39.9	51.3	0.8	4.3	1.9	1.8
Urban	15-19	Male	4,981	100.0	93.3	0.5	0.1	0.1	0.0	6.0
		Female	5,644	100.0	89.2	7.3	0.1	0.3	0.3	2.8
	20-24	Male	3,100	100.0	81.3	11.7	0.1	0.4	0.2	6.3
		Female	4,153	100.0	52.5	40.1	0.3	2.8	1.1	3.2

Further, Table 7.5 shows that in rural and urban areas, the marital status pattern is similar to that of the province as a whole. However, the proportions of married male and female youth are higher in rural than urban areas. This may be attributed to the different number of school years completed by the youth in the rural and urban areas of the province. The youth in rural areas tend to complete lower levels of education than their counterparts in urban areas, hence, get into marriage early.

Fertility of Female Youth

Age Specific Fertility Rates for the female youth of the province have been calculated and presented in Table 7.6. The table shows that the youth in age group 15-19 years had 71 live births per 1 000 of them in the same age group, during the year prior to 1990 Census. The youth in the age group of 20-24 years had 219 live births per 1000 of them in the same age group during the same period. Table 7.6 also shows that the female youth in the rural areas of the province have more live births than their counterparts in urban areas. For instance, in age group 15-19 years, the age specific fertility rates are 74 and 54 live births per 1 000 females in rural and urban areas, respectively.

Table 7.6

Age-Specific Fertility Rates for the Youth, Western Province, 1990

Age Group	Age Specific Fertility Rate		
	Total	Rural	Urban
15-19	0.071	0.074	0.054
20-24	0.219	0.226	0.182

Education of Economically Active Children and Youth

Table 7.7 presents data on the distribution of working children and youth and their highest level of education completed. It can be observed from the table that out of the total working children, i.e. 6512, almost 60 percent of them have never attended school, and 38 percent of them have completed primary level of education. There is no marked difference in the proportions of male and female children with or without formal schooling. As expected, none of these children have completed higher levels of education. For various reasons, these working children opt for work as opposed to school.

Table 7.7

Usually Working Children and Youth (12-24 Years) by Age, Sex and Highest Level of
Education Completed, Western Province, 1990

Age Group	Sex	Total Population	Total Usually Working Population	Education Level Completed					
				Never Attended	Primary	Secondary	Higher		Not Stated
							'A' Level	Degree	
12-14	Both Sexes	48,204	6,512	58.6	38.3	0.3	-	-	2.8
	Male	23,998	3,281	59.4	37.2	0.3	-	-	3.1
	Female	24,206	3,231	57.9	39.4	0.3	-	-	2.4
15-19	Both Sexes	72,872	15,286	42.7	49.9	5.8	-	-	1.6
	Male	35,312	7,184	41.0	51.0	6.0	-	-	2.0
	Female	37,560	8,102	44.3	48.9	5.6	-	-	1.2
20-24	Both Sexes	49,679	16,810	32.0	48.0	18.8	0.0	0.0	1.2
	Male	21,454	8,759	26.2	51.5	21.2	0.0	-	1.1
	Female	28,225	8,051	38.3	44.1	16.2	0.0	0.0	1.4

Table 7.7 further shows that the majority of the working youth have only completed primary education.
Whilst none of the youth in the age group 15-19 years have completed the higher level of education,
negligible proportions of their counterparts in age group 20-24 years, have completed higher education.
The difference in proportion between the male and female youth who have never attended any formal
schooling is more pronounced at age group 20-24 years.

Figure 7.3

Economic Activity of Youth (15-19 years) by Sex,
Western Province, 1990

Male: Others 18.4; Student 46.5; Housewife/Homemaker 1.9; Unemployed 11.6; Employed 20.3

Female: Others 19.4; Student 33.3; Housewife/Homemaker 13.1; Unemployed 11.2; Employed 21.6
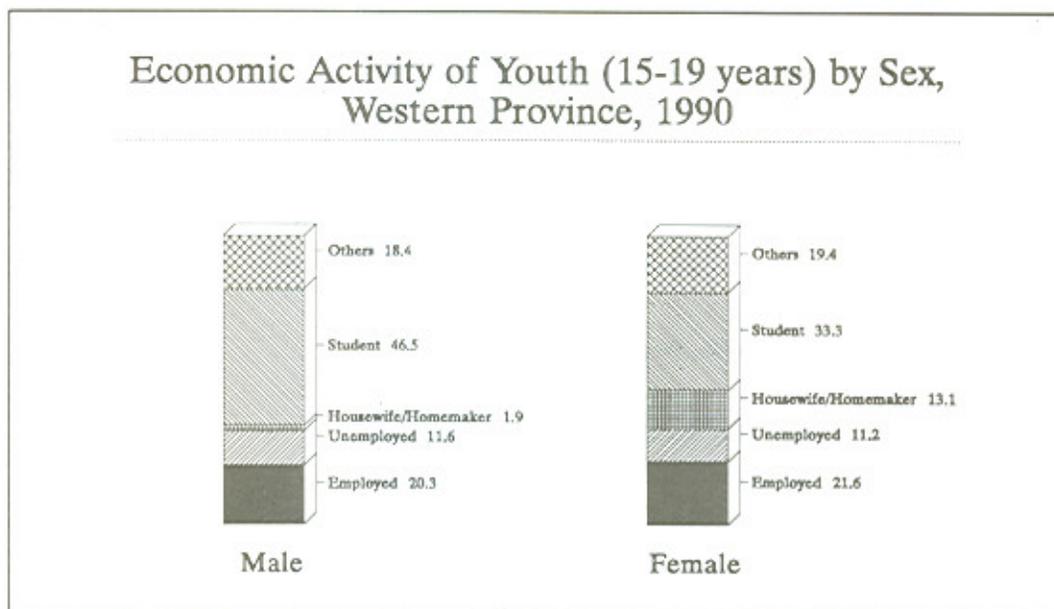
Economically Active and Inactive Children and Youth

Table 7.8 shows that in Western Province, economically active male and female children aged 12-14
years constitute high proportions of about 20 percent each. Out of this proportion, over half of them
are employed. As expected, the majority of economically inactive male and female children are full
time students, constituting about 57 percent each.

It can be observed from Table 7.8 that with an increase in age, more of the youth became economically inactive, with the majority of them being employed. Of interest is the fact that at age group 20-24 years, the majority of females are full-time housewives (37.4 percent), whereas the majority of their male counterparts are employed (40.8 percent).

Figure 7.4

Economic Activity of Youth (20-24 years) by Sex, Western Province, 1990

Male
- Not Stated 1.4
- Other 17.9
- Student 16.4
- Housewife/Homemaker 3.2
- Unemployed 20.3
- Employed 40.8

Female
- Not Stated 1.5
- Other 15.3
- Student 5.6
- Housewife/Homemaker 37.4
- Unemployed 11.7
- Employed 28.5
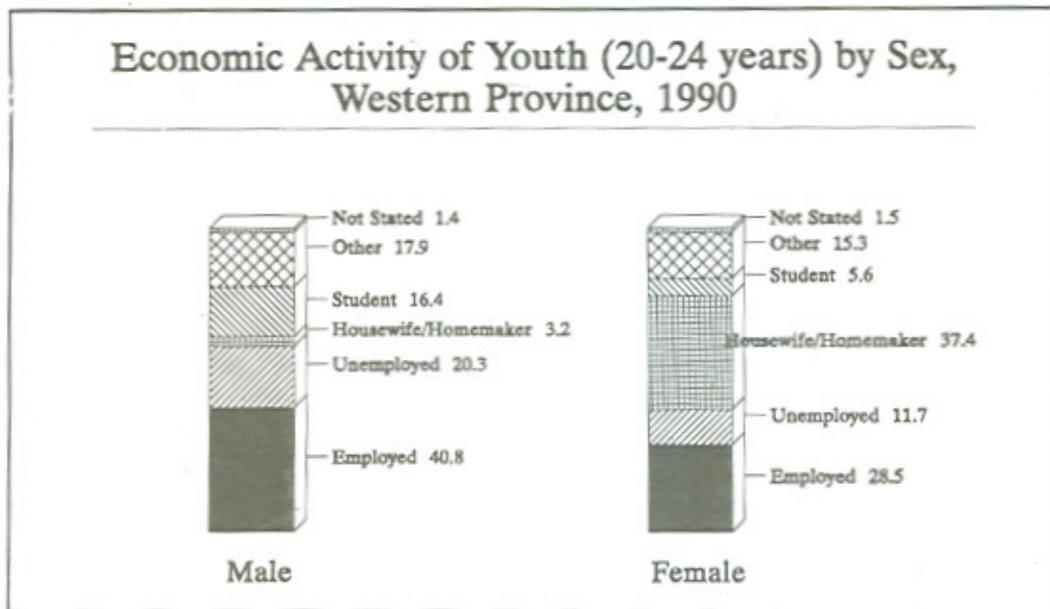
Table 7.8

Usually Working Children and Youth (12-24 years) by Age, Sex and Economic Activity, Rural/Urban, (Percent), Western Province. 1990

Residence	Age Group	Sex	Total		Economically Active		Economically Inactive			Not Stated
			Population	Percentage	Employed	Unemployed	Full-time Housewife/ Homemaker	Full-time Students	Others	
Western Province	12-14	Male	23,998	100	13.7	6.5	1.5	56.5	20.1	1.7
		Female	24,206	100	13.3	6.4	2.5	56.9	19.4	1.5
	15-19	Male	35,312	100	20.3	11.6	1.9	46.5	18.4	1.3
		Female	37,560	100	21.6	11.2	13.1	33.3	19.4	1.4
	20-24	Male	21,454	100	40.8	20.3	3.2	16.4	17.9	1.4
		Female	28,225	100	28.5	11.7	37.4	5.6	15.3	1.5
Rural	12-14	Male	20,716	100	15.2	6.9	1.5	53.2	21.4	1.8
		Female	20,523	100	15.0	6.8	2.7	53.4	20.6	1.5
	15-19	Male	30,331	100	22.4	11.8	1.9	43.5	19.0	1.4
		Female	31,916	100	24.0	11.1	14.0	29.9	19.7	1.3
	20-24	Male	18,354	100	42.5	20.3	3.3	14.8	17.7	1.4
		Female	24,072	100	30.4	10.9	37.7	4.5	15.1	1.4
Urban	12-14	Male	3,282	100	3.7	4.1	1.3	77.7	12.0	1.2
		Female	3,683	100	4.0	3.8	1.7	76.5	12.8	1.2
	15-19	Male	4,981	100	8.0	10.3	1.8	64.3	14.3	1.3
		Female	5,644	100	7.9	11.6	8.4	52.5	17.7	1.9
	20-24	Male	3,100	100	30.8	20.4	2.3	25.5	18.8	2.2
		Female	4,153	100	17.6	16.4	35.6	12.0	16.0	2.4

The pattern above flows through to the rural and urban areas of the province. However, it should be noted that the proportions of economically inactive children and youth are lower in rural than urban areas. For instance, the proportion of children in rural areas who are full-time students is about 53 percent compared to about 77 percent of their counterparts in urban areas.

7.4 SOCIAL AND ECONOMIC CHARACTERISTICS OF WOMEN

The contribution of women in the development of an economy is usually undervalued by both policy makers and planners. As it is, little effort is made to quantify women's economic activities or value the output of their work. In all types of industries, the majority of the women folk do not participate fully in decision-making matters. Therefore, it is important to look at some of the social and economic factors in explaining low participation rates of women in economic development. In this section, marital, education and economic status of female heads of households and women in general, are discussed.

In Western Province, there are 112 882 households of which 26 793 are headed by females. These figures indicate that headship of households is dominated by males. This is true for both rural and urban areas.

Marital Status Of Household Heads

Table 7.9 shows that in Western province, 24 percent of the total household heads are female. The proportion of female heads of households is higher in urban than rural areas. Amongst the districts, Mongu has the highest (27.7 percent) proportion of female heads of households while Kaoma has the least (19.6 percent).

Table 7.9.

Female Household Heads as a Proportion of Total Household Heads by Residence and Marital Status, (Percent), Western Province, 1990

Residence	Total	Never Married	Married	Widowed	Divorced	Separated	Not Stated
Western Province							
Total	23.7	52.7	4.3	87.9	82.0	74.5	6.6
Rural	23.4	53.6	4.3	88.0	82.2	74.8	5.6
Urban	25.9	50.3	4.4	86.6	81.0	72.2	16.9
Districts							
Kalabo	25.7	57.9	5.2	89.2	83.7	75.5	4.8
Kaoma	19.6	53.4	3.0	82.8	75.7	72.3	7.3
Lukulu	23.0	65.2	3.9	86.8	83.8	73.0	3.2
Mongu	27.7	48.1	4.1	90.1	83.3	75.3	10.5
Senanga	22.6	57.5	5.0	89.3	85.1	79.4	5.3
Sesheke	21.8	42.3	4.8	85.2	77.6	67.6	6.6

Table 7.9 also indicates that mostly women tend to be household heads when they have no spouse. Only 4.3 percent of married household heads are female. Out of the total household heads who are widowed, divorced and separated, as much as 87.9, 82.0 and 74.5 percent respectively, are female. It should be noted that of the never married heads of households, over half (52.7 percent) of them are female.

Of all districts in the province, it is interesting to note that Lukulu has the highest proportion of female heads of households who have never married.

Educational Status of Female Household Heads

Female heads of households in Western Province have been classified by their highest level of education achieved in Table 7.10. Table 7.10 shows that about 70 percent of female household heads have never attended formal education. Of those that have been to school, the majority of them (21.7 percent) have only attained primary level of education. It should be noted that only enjoyable number of female heads have attained higher education.

Table 7.10

Female Household Heads by Highest Level of Education Completed, Rural/Urban, (Percent), Western Province, 1990

Level of Education	Total	Rural	Urban
Never Attended	69.5	73.9	40.5
Primary	21.7	20.7	28.3
Secondary	7.5	4.2	29.1
Higher Education	0.1	0.0	0.2
Not Stated	1.2	1.2	1.9
Total Percentage	100.0	100.0	100.0
Total Female Heads	26,793	23,274	3,519
Total Household Heads	112,882	99,317	13,565

In rural areas, 73.9 percent of female household heads have never attended formal education compared to those in urban areas who constitute a lower proportion of 40.5 percent. In urban areas, the proportions of female heads who have completed primary and secondary levels of education are not only almost equal but also higher than the rural ones. Infact, the proportion of female heads of households in rural areas who have attained secondary level of education is as low as 4.2 percent.

The employment status of women in Western Province is shown in Table 7.11. It is observed from the table that, in all, women make up 42.6 percent of the working population in the province. In rural and urban areas, they make up 43.8 and 33.2 percent, respectively. Table 7.11 further shows that the majority of the working females are unpaid family workers, followed by those who are self-employed. The proportions of females who are either unpaid family workers or self-employed are higher in urban than rural areas. Of the total employers in the province, only 21.1 percent are female.

Table 7.11

Usually Working Females (12 Years and Older) as a Proportion of Total Usually Working Population by Employment Status, (Percent), Western Province, 1990

Employment Status	Total	Rural	Urban
Total	42.6	43.8	33.2
Employer	21.1	21.7	19.5
Employee	20.7	18.5	23.4
Self-Employed	34.4	33.8	40.6
Unpaid Family Workers	51.5	51.4	56.1
Not Stated	46.3	46.0	47.5

Figure 7.5

Usually Working Females (12 Years and Above) by Employment Status (Percent) of all Working Persons, Western Province, 1990
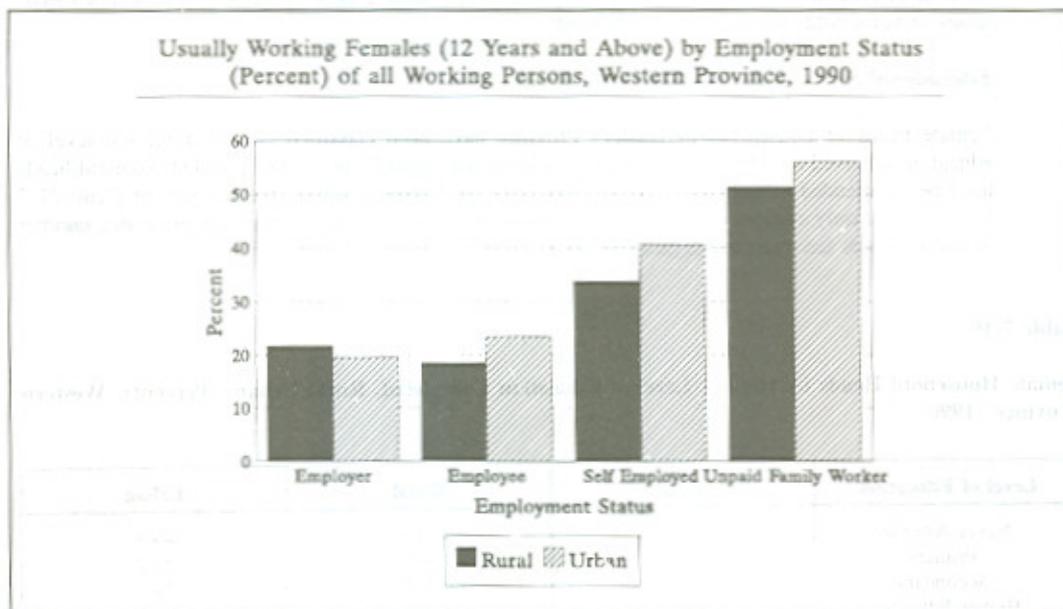
Table 7.12 shows the proportion of females aged 12 years and older by their employment and occupation status. It can be seen from the table that high proportions of the working women are in Agriculture, Husbandry, Forestry and Fishery and Sales occupations. It is interesting to note that female employers are prominent in the Sales occupation (40.2 percent). On the whole, the majority of working females in all occupations are unpaid family workers. It should however, be noted that of the self-employed in the Service occupation, 45.9 percent of them are women.

Table 7.12

Usually Working Females (12 Years and Older) as a Proportion of Total Usually Working Population by Occupation and Employment Status, (Percent), Western Province, 1990

Occupation	Total	Employment Status				
		Employer	Employee	Self Employed	Unpaid Family Worker	Not Stated
Total	42.6	21.1	20.7	34.4	51.5	46.3
Professional/Technical and Related Workers	35.3	31.4	33.9	25.7	52.2	43.8
Admin. Managerial Workers	9.4	9.1	9.5	16.7	-	-
Clerical and related workers	36.4	25.4	37.4	31.6	22.2	32.1
Sales Workers	40.4	40.2	39.4	39.8	44.2	44.4
Service workers	21.2	10.0	10.5	45.9	57.7	31.1
Agriculture, Husbandry, Forestry and Fishery	44.5	22.0	11.7	33.2	51.2	38.7
Production, Transport and Labourers	32.5	10.7	11.3	43.2	52.7	35.4
Unclassified Occupations	38.1	18.4	12.1	31.9	51.4	37.0
Not Stated	44.6	9.9	10.6	34.4	52.5	50.3

Women In Industry

Table 7.13 shows that most working females are in the industries of Agriculture, Hunting, Forestry and Fishery and Wholesale and Retail Trade, Restaurants and Hotels. The proportions are 44.2 and 39.0 percent, respectively, of the total workers in these industries. In the industry of Agriculture, about 50 percent of the total unpaid family workers are female whilst in the Wholesale and Retail Trade, 69 percent of the self-employed workers are female. Low proportions of females are observed in industries like Mining and Quarrying; Electricity, Gas and Water; Construction and Allied Repairs; and Transport, Storage and Communication. This may be due to the notion that these are male-oriented industries.

Table 7.13

Usually Working Females (12 Years and Older) as a Proportion of Total Usually Working Population by Industrial Category and Employment Status, (Percent), Western Province, 1990

Industry	Total	Employment Status				
		Employer	Employee	Self-Employed	Unpaid Family Worker	Not Stated
Total	42.6	21.1	20.7	34.4	51.5	46.3
Agric., Hunting, Forestry and Fishery	44.2	22.3	11.8	33.0	51.2	37.8
Mining and Quarrying	6.5	-	7.3	7.7	.	-
Manufacturing	32.2	10.4	13.5	33.9	53.4	49.3
Electricity, Gas and Water	7.9	-	2.9	-	50.0	-
Construction and Allied Repairs	2.3	3.4	2.5	2.2	1.8	-
Wholesale and Retail Trade, Restaurants and Hotels	39.0	36.1	35.8	69.3	42.1	36.6
Transport, Storage and Communication	5.7	.	5.8	7.0	5.6	8.0
Finance, Insurance and Real Estates	33.9	16.1	27.8	39.0	40.0	46.4
Community, Social and Personal Services	32.6	24.3	27.3	41.1	55.9	42.3
Unclassified Industry	35.7	23.1	19.8	29.6	51.4	34.0
Not Stated	47.6	19.2	17.9	41.1	52.5	50.8

7.5 SUMMARY

The growth rates of children and youth in Western Province have shown not only low rates in urban areas but also a negative change in the population of children. All in all, the growth rates of children and youth are 2.1 and 4.0 percent, respectively. Almost half the population of the province constitutes children below 15 years of age. A further 20 percent comprises the youth aged 15-24 years. Over 80 percent of children and youth live in rural areas of the province. Calculated sex ratios show that there are more female children and youth than males in respective age categories. Children have a sex ratio of 98.4 while that of the youth is 86.3 per 100 females.

Data on marital status of the youth aged 15-24 years show that nearly 50 percent of females in the age group 20-24 are married as opposed to nearly 20 percent of their male counterparts. The female youth in the same age group had 219 live births in the year prior the to 1990 census. This could be attributed to the observed fact that about half of them are married considering most births occur within marriage. Proportions of married female youth are higher in rural (51.3 percent) than urban areas (40.1 percent). This again may explain the higher age specific fertility rates in rural than urban areas.

The vast majority of the usually working children have never attended any formal schooling. Of the working youth, about 50 percent of them have only completed primary level of education.

Of the total households in Western Province, 24 percent of them are headed by females. At district level, Mongu has the highest proportion of female heads of households while Kaoma has the least.

The information presented in this chapter suggests that women tend to become heads of households when they no longer have a spouse. It is unfortunate that the majority (70 percent) of these female heads of households have never attended school. This is especially so in the rural areas of the province where they constitute 74 percent, compared to about 40 percent in urban areas.

Lastly, it has been observed that women make up 42.6 percent of the working population. Most of these women are either unpaid family workers or self-employed. Those working females are concentrated in industries like Agriculture and Wholesale and Retail Trade. Low proportions of working females are observed in male-oriented industries like Mining and Quarrying; and Construction and Allied Repairs to mention but a few.

CHAPTER 8

NUPTIALITY AND FERTILITY

8.1 INTRODUCTION

Nuptiality study deals with the frequency of marriages between members of the opposite sex in a society. The planners and policy makers use fertility and nuptiality data in evaluating population policies and programmes. In demographic studies, family formation is important because it has a bearing on fertility. It is assumed that the larger the proportion of married persons, the higher the expected fertility in that society.

Fertility forms an important part of demography in that it is responsible for the biological maintenance of society. Fertility is one of the most important parts of demographic change, the others being mortality and migration.

In the 1990 Population Census nuptiality and fertility topics were adequately covered and the following data items were collected for persons aged 12 years and above:-

- Marital Status, i.e. whether a person is married, separated, divorced, widowed or never married (question P-12).
- Age at first marriage (question P-25).

For females aged 12 years and above, the following additional data items were collected:-

- Whether they have had a live birth (question F-1),
- Age at first live birth (question F-2),
- Number of children ever born and are still alive by sex (question F-3),
- Number of children dead by sex (question F-4).

The last two items were repeated for females who had given birth during the last 12 months prior to the Census.

8.2 CONCEPTS AND DEFINITIONS

Fertility

Fertility refers to the frequency of occurence of births or more specifically live births within populations and sub-populations.

Nuptiality

Nuptiality refers to the frequency, characteristics and dissolution of marriages in a population. Marriage is a characteristics which together with birth and death can be conceived to be a vital event in one's life-cycle.

Singulate Mean Age at Marriage (SMAM)

Refers to the average age at which those who marry before age 50, marry. It is computed from the proportions of persons who are in the "never married" marital category corresponding to five-year age groups from 15-54 years.

Crude Birth Rate (CBR)

Ratio of live births in a specified period (usually a calendar year) to the average population in that period. The ratio is expressed as per 1,000 persons.

Child-Woman Ratio (CWR)

The CWR (Fertility Ratio) is the number of children per 1,000 females of child-bearing age. Various ages have been used, but commonly (as is the case in this Chapter) the numerator refers to children aged 0-4 years and the denominator refers to females aged 15-49 years.

General Fertility Rate (GFR)

Ratio of live births in a specified period (usually a calendar year) to the average number of females of childbearing period (taken as 15-49 years). It is commonly expressed as per 1,000 females of childbearing period 15-49 years.

Total Fertility Rate (TFR)

The TFR represents the average number of children that a female would have from age 15 to age 49 if the prevailing age-specific fertility rates of childbearing were to persist.

Gross Reproduction Rate (GRR)

GRR is the average number of daughters a female would have or give birth to if she experiences a given set of age-specific fertility rates throughout the reproductive ages with no allowance for mortality over this period.

Net Reproduction Rate (NRR)

The average number of daughters a female would have or give birth to if mortality patterns paersist. This provides a measure of the way in which a generation of females replaces itself with daughters given a particular combination of fertility and mortality.

8.3 NUPTIALITY

This section discusses the marital status characteristics and mean age at marriage among sub-population groups of Western Province as at the time of the 1990 population census. In an analysis meant to explore the possible influence on fertility behaviour of a population, the knowledge of the marital characteristics of respondents is important.

Average Parity

Also referred to as Mean Number of Children Ever Born (MNCEB). Refers to the number of children ever born to females in an age group divided by the number of females in the same age group. The average parity for age group 45-49 years is called Completed Family Size.

Marital Status

In the study of population dynamics, marital status is an important factor. Although it mostly affects fertility, it also affects mortality and migration to a lesser extent. The categories under which marital status data was collected in the census are never married, married, widowed, separated and divorced. These categories are recommended by the United Nations.

Table 8.1 shows that by age 45-49 years 4.7 percent males and 3.6 percent of females in Western Province had ever been married. Of the 187,902 female population aged 15 years and over enumerated in 1990 in Western Province, 28.3 percent had never been married, 50.6 percent were married, 8.4 percent were widowed, 9.7 percent were divorced and 3.1 percent were separated. Similarly, of the 145,305 males aged 15 years and older in the province, 41.4 percent had never been married, 53.7 were married, 1.3 were widowed, 2.4 were divorced and 1.2 were separated. Table 8.1 presents more data on marital characteristics of the population of Western Province.

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Table 8.1

Adult Population Classified by Age, Sex and Marital Status, (Percent), Western Province, 1990

Age Group	Never Married		Married		Widowed		Divorced		Separated		Total No of Cases	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
15 - 19	98.5	83.2	1.2	15.4	0.1	0.2	0.1	0.7	0.2	0.6	33,105	36,512
20 - 24	78.3	42.7	20.6	50.7	0.2	0.7	0.5	4.1	0.5	1.8	20,336	27,657
25 - 29	40.3	21.1	56.4	65.3	0.3	1.6	1.8	8.9	1.1	3.1	15,251	22,143
30 - 34	18.7	10.9	75.9	70.7	0.6	2.7	3.4	11.8	1.4	3.8	13,333	18,874
35 - 39	10.3	7.2	83.8	71.3	0.9	4.3	3.6	12.9	1.4	4.3	8,766	13,216
40 - 44	6.7	4.3	86.4	72.2	1.1	6.7	4.0	13.3	1.8	3.5	8,095	15,129
45 - 49	4.7	3.6	88.1	68.6	1.3	9.9	4.0	14.3	1.8	3.6	7,592	11,792
50 - 54	3.5	3.8	89.3	62.1	1.9	14.6	3.6	15.0	1.7	4.5	8,286	12,322
55+	2.8	5.8	86.3	38.4	4.3	33.1	4.6	17.5	2.1	5.2	30,541	30,257
Total	41.4	28.3	53.7	50.6	1.3	8.4	2.4	9.7	1.2	3.1		
Size	60,105	53,153	78,051	95,140	1,929	15,699	3,499	18,142	1,721	5,768	145,305	187,902

Note: Total excludes not stated cases by Age and Marital Status.

Figure 8.1

Adult Population by Marital Status, Western Province, 1990

Male

Female

■ Never Married ▦ Married ▤ Widowed ▥ Divorced ▧ Separated
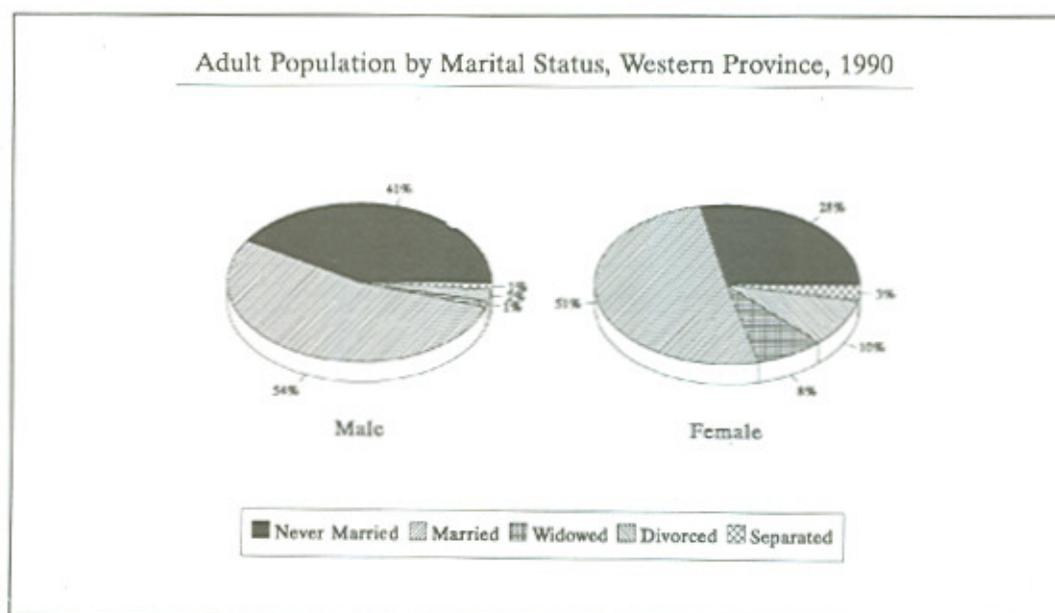
Differentials by Residence

In fertility analysis, the study of fertility variation by rural/urban residence is a widely used factor. Table 8.2 shows the rural-urban differentials in marriage pattern. In Western Province the proportions of never married males are higher in urban areas from the age group 15-19 to the age group 30-34. The age group with the highest proportion of married males in Western Province is the age group 50-54 for both urban and rural areas. The age group in which the highest proportions of widowed, divorced and separated males are found is the age group 55 years and above.

Table 8.2

Adult Male Population by Age and Marital Status, Rural-Urban Areas, (Percent), Western Province, 1990

Age Group	Never Married		Married		Widowed		Divorced		Separated		Total	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
15 - 19	98.4	99.3	1.3	0.5	0.1	0.1	0.1	0.0	0.2	0.0	28,425	4,680
20 - 24	76.9	86.8	21.9	12.5	0.2	0.1	0.5	0.4	0.5	0.2	17,433	2,903
25 - 29	38.3	50.9	58.3	46.5	0.3	0.4	1.9	1.7	1.2	0.5	12,836	2,415
30 - 34	18.6	19.1	75.9	75.4	0.6	0.6	3.3	3.8	1.5	1.1	11,209	2,124
35 - 39	10.6	9.3	83.8	83.6	1.0	0.6	3.3	4.8	1.3	1.6	7,133	1,633
40 - 44	7.0	5.1	86.0	85.0	1.2	0.8	4.0	4.3	1.8	1.7	6,657	1,438
45 - 49	4.8	3.9	87.8	89.7	1.4	1.2	4.0	4.1	2.0	1.2	6,392	1,200
50 - 54	3.6	3.0	89.1	90.7	2.0	1.4	3.6	3.4	1.7	1.5	7,268	1,018
55+	2.7	3.8	86.6	81.5	4.2	4.7	4.3	7.6	2.1	2.4	28,512	2,029
Total	40.5	47.3	54.5	48.3	1.4	0.9	2.4	2.6	1.2	0.9		
Size	50,919	9,186	68,652	9,399	1,758	171	2,984	515	1,552	169	125,865	19,440

Note: Total excludes not stated cases by Age and Marital Status.

Table 8.3 shows that in Western Province there are more women who have never been married in urban areas than in rural areas. The divorce rates for females aged 30 and above were higher in urban areas than in rural areas in 1990. On the contrary, the rates for separated females were higher for rural areas than those for urban areas.

Table 8.3

Adult Female Population by Age and Marital Status, Rural- Urban Areas, (Percent), Western Province, 1990

Age Group	Never Married		Married		Widowed		Divorced		Separated		Total	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
15 - 19	81.6	91.9	16.8	7.5	0.2	0.1	0.7	0.3	0.6	0.3	31,030	5,482
20 - 24	40.7	54.2	52.2	41.4	0.8	0.3	4.3	2.9	1.9	1.1	23,635	4,022
25 - 29	20.2	26.3	66.0	61.7	1.6	1.2	8.9	8.7	3.3	2.1	18,860	3,283
30 - 34	10.6	12.7	71.0	69.0	2.8	2.1	11.6	13.2	4.0	3.0	16,076	2,798
35 - 39	7.2	7.2	71.7	69.1	4.3	4.0	12.4	16.2	4.4	3.5	11,318	1,898
40 - 44	4.3	4.6	72.9	65.7	6.7	6.8	12.6	19.4	3.5	3.5	13,662	1,467
45 - 49	3.5	4.9	69.5	59.2	9.8	11.3	15.6	21.3	3.7	3.3	10,772	1,020
50 - 54	3.7	4.9	62.9	52.0	14.5	16.8	14.4	22.4	4.5	3.8	11,412	910
55+	5.6	7.6	39.3	26.6	32.9	35.2	17.0	24.7	5.1	5.9	28,183	2,074
Total	26.8	38.7	51.7	43.3	8.7	5.6	9.6	10.1	3.2	2.3		
Size	44,261	8,892	85,203	9,937	14,410	1,289	15,829	2,313	5,245	523	164,948	22,954

The marital characteristics of the population of Western Province and its districts are presented in Table 8.4. In all the districts of Western Province, there were more males than females who had never been married at the time of the 1990 Population Census. Among districts, proportions of married males range from 49.9 percent in Mongu to 58.3 percent in Kalabo. Lukulu also had the highest proportion of married females while Mongu had the lowest.

Table 8.4

Adult Population (15 years and over) by Sex and Marital Status, Rural/Urban and Districts, (Percent), Western Province, 1990

Province/ District	Never Married		Married		Widowed		Divorced		Separated	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Western Province										
Total	41.4	28.3	53.7	50.6	1.3	8.4	2.4	9.7	1.2	3.1
Rural	40.5	26.8	54.5	51.7	1.4	8.7	2.4	9.6	1.2	3.2
Urban	47.3	38.7	48.3	43.3	0.9	5.6	2.6	10.1	0.9	2.3
Districts										
Kalabo	36.8	24.4	58.3	52.1	1.4	9.2	2.4	11.3	1.1	3.0
Kaoma	42.5	30.0	52.0	51.0	1.4	7.0	2.7	8.7	1.3	3.4
Lukulu	37.2	23.9	57.1	54.0	1.4	7.8	2.8	11.3	1.4	3.0
Mongu	45.1	3.20	49.9	45.2	1.2	8.9	2.6	10.4	1.2	3.4
Senanga	41.1	27.8	55.1	52.5	1.2	8.4	1.8	8.4	0.9	2.8
Sesheke	41.4	28.0	53.2	53.3	1.5	8.3	2.5	8.2	1.3	2.3

Singulate Mean Age at Marriage (SMAM).

In Africa, there are two particular characteristics of marriage that have an important bearing on fertility. These characteristics are universlity of marriage and early age at marriage, particularly for females. This is mainly prevalent in the largely subsistence agricultural economy of the country. Age at marriage plays an important role in influencing levels of fertility. It is assumed that the lower the age at marriage, the higher the expected level of fertility.

Table 8.5 shows the Singulate Mean Age at Marriage (SMAM) data for Western Province and it's districts. The SWAM for males and females in the province are 27.1 and 22.8 years, respectively. The SMAM for both males and females are higher in urban areas than in rural areas.

Mongu district shows the highest SMAM for both males and females and Lukulu district shows the lowest SMAM. SMAM figures for males in all the districts in Western Province are higher than those for females, meaning that males marry females who are on average younger than themselves.

Table 8.5

Singulate Mean Age at Marriage Classified by Sex and Residence, Western Province, 1990

Province and Districts	SMAM	
	Males	Females
Western Province		
- Total	27.1	22.8
- Rural	26.9	22.6
- Urban	28.2	23.9
Districts		
Kalabo	26.4	22.5
Kaoma	27.1	22.3
Lukulu	25.7	21.8
Mongu	28.0	23.7
Senanga	26.8	22.7
Sesheke	28.3	22.6

The level of education has an influence on one's age at marriage. Generally it is believed that, the longer one stays in school, the longer he/she takes to experience marriage. The value of SMAM of this group of people will therefore tend to be high. Table 8.6 gives details on this aspect.

Table 8.6

Singulate Mean Age at Marriage by Educational Attainment and Residence, (Females), Western Province, 1990

Residence	All Levels of Education	Level of Education		
		No Schooling	Primary	Secondary
Western Province				
- Total	22.6	21.8	22.2	24.7
- Rural	22.4	21.7	22.1	24.6
- Urban	23.7	22.4	22.9	24.7
Districts				
Kalabo	*	22.3	21.7	22.8
Kaoma		21.4	22.0	22.4
Lukulu	*	21.2	21.5	23.9
Mongu	23.5	22.4	22.7	25.9
Senanga	22.5	21.4	22.6	25.7
Sesheke	22.8	22.4	22.3	24.1

One feature that may be noticed from Table 8.6 is that SMAM for females with no schooling was higher for Kalabo and Sesheke as compared to the females with primary education. It can also be noted that the SMAM for females with Secondary education is higher than that for females with Primary education. This may therefore be attributed to the fact that SMAM plays an important role in influencing age at marriage.

8.4 FERTILITY

Fertility is one of the three population dynamics, the others being mortality and migration. Population projections is made possible by assessing fertility trends over time.

There are various techniques of estimating fertility indices. In this present chapter, fertility measures of crude birth, general fertility, total fertility, gross reproduction and net reproduction rates have been used to explain the fertility situation in Western Province. Some of the analysis techniques used in estimating fertility are the Brass PF Ratio method and the Brass Relational Gompertz Model. For further clarifications on the application of these methods one may refer to United Nations Department of International (1983) and Newell, (1988).

The summary fertility measure of Total Fertility Rate which is shown in Table 8.7 has been derived by using the Brass Relational Gompertz Model. The Brass P/F Ratio method yielded high estimates which were not deemed plausible. Fertility measures differ in their error tolerance levels of data being used. The Brass Relational Gompertz Model has been found to yield reasonable fertility estimates.

The Gompertz function has been used by many authors to represent the cumulative fertility of a population. The function is

$$F(x) + F = A^{B^x}$$

Where,

F(x) is the cumulative fertility by age
F is the total fertility rate by the end of the reproductive life
A and B are constants and lie between zero and unity and

The F values can be taken as cumulative fertility from age-specific rates or parity data (United Nations, 1992).

Data on Mean Number of Children Ever Born (MNCEB) and Births in the Last one Year (BLY) contain a lot of errors. It is for this reason that methods such as Brass Relational Gompertz Model are used to obtain adjusted fertility rates. The most important error in the reported number of births is the omission of births by older women, especially those births that end in early deaths. Women in older age groups also tend to forget grown up children, children born to another husband and children not present at home for various reasons. There are also factors that may tend to inflate the number of births by the inclusion of step or adopted children, grandchildren, etc. Another error in the reported number of children is the inclusion of still births. The net effect of these errors is a tendency for mean number of children to steadily decrease as age of women increases. The purpose for the use of the Gompertz function is to overcome these limitations in the fertility data

Fertility Levels

Table 8.7 presents a number of fertility measures. The results shown on the CBRs suggest a rise in the birth rate in the 1980-90 intercensal period. The CBR is affected by the age and sex distribution of the population. For example, it is not every member of the population who is at risk of giving birth. It is for this reason that direct comparison of CBRs between populations and sub-populations which may have different age-sex structures could lead to erroneous conclusions. An adjusted measure, such as Total Fertility Rate (TFR) will be used to explore this observation further.

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Table 8.7

Summary Fertility Measures, Western Province, 1980 and 1990

Residence/District		Crude Birth Rate	Child Woman Ratio	General Fertility Rate	Adjusted		
					Total Fertility Rate	Gross Reproduction Rate	Net Reproduction Rate
Western Province							
Total	- 1980	31	666	127	5.7*	2.8	2.0
	- 1990	39	622	160	6.2	3.1	2.0
Rural	- 1980	30	654	124	5.4*	2.7	1.9
	- 1990	39	631	163	6.2	3.1	2.0
Urban	- 1980	35	724	144	6.2*	3.1	2.3
	- 1990	37	565	142	5.7	2.8	1.8
Districts	- 1990						
	kalabo	41	630	167	5.9	2.9	1.9
	Kaoma	38	571	155	6.1	3.0	1.9
	lukulu	40	662	168	6.3	3.1	2.0
	Mongu	37	596	152	5.9	2.9	1.9
	Senanga	40	655	161	6.4	3.2	2.1
	Sesheke	38	650	164	6.5	3.2	2.1

* TFR estimates extracted from Analytical Report Volume IV of the 1980 population census, CSO 1985.

ASFR's relate the number of births to the number of females in each 5 year age group of the reproductive age span 15-49 years. They show the variability of fertility in different age groups over the whole reproductive period of females aged 15-49 years. The rates are used in the calculation of TFR. Information on this aspect is contained in Table 8.8.

Table 8.8

Age-Specific Fertility Rates (ASFR), Western Province, 1990

Age Group	Total			Rural			Urban		
	Total Women	Births	ASFR	Total Women	Births	ASFR	Total Women	Births	ASFR
15 - 19	37,560	2,671	0.0711	31,916	2,367	0.0742	5,644	304	0.0539
20 - 24	28,225	6,193	0.2194	24,072	5,437	0.2259	4,153	756	0.1820
25 - 29	22,487	5,355	0.2381	19,122	4,629	0.2421	3,365	726	0.2158
30 - 34	19,119	4,395	0.2299	16,257	3,787	0.2329	2,862	608	0.2124
35 - 39	13,386	2,594	0.1938	11,452	2,253	0.1967	1,934	341	0.1763
39 - 44	15,261	1,740	0.1140	13,772	1,602	0.1163	1,489	138	0.0927
45 - 49	11,911	628	0.0527	10,867	596	0.0548	1,044	32	0.0300
Total	147,949	23,576	1.119	127,458	20,671	1.1429	20,491	2,905	0.9638
Observed TFR			5.6			5.7			4.8
Adjusted TFR			6.2			6.2			5.7
MeanAge at Childbearing			30.6			30.6			30.5

Figure 8.2

Age-Specific Fertility Rates (Observed), Western Province, 1990
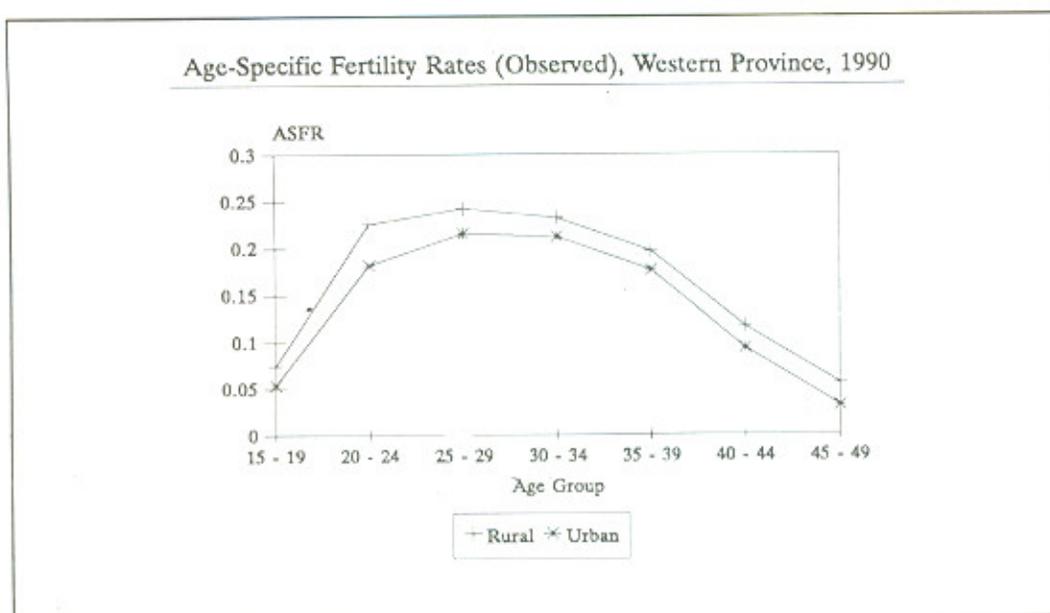
The observed TFR's presented in Table 8.8 are adjusted and presented in Table 8.7, showing 6.2, 6.2 and 5.7 children per female for total, rural and urban, respectively. They show that fertility in the Province has risen over the 1980 levels, except for urban areas. However, the differences are small, thus not very significant, showing difference of about half a child in each case.

The GRRs show the same pattern as the TFRs. GRRs do not take into account the mortality situation in the Province. To overcome this limitation, Net Reproduction Rates (NRR) were calculated and are shown in Table 8.9.

Table 8.9

Net Reproduction Rate (NRR), western Province, 1990

Age Group	Total		Rural		Urban	
	Female Births still Alive	ASFR"	Female Births still Alive	ASFR"	Female Births still Alive	ASFR"
15 - 19	1,205	0.0321	1,058	0.0331	147	0.0260
20 - 24	2,725	0.0965	2,402	0.0998	323	0.0778
25 - 29	2,387	0.1062	2,053	0.1074	334	0.0993
30 - 34	2,042	0.1068	1,757	0.1081	285	0.0996
35 - 39	1,159	0.0866	1,002	0.0875	157	0.0812
40 - 44	786	0.0515	725	0.0526	61	0.0410
45 - 49	286	0.0240	269	0.0248	17	0.0163
Total	10,590	0.5037	9,266	0.5133	1,324	0.4412
Observed NRR		2.5		2.6		2.2
Adjusted NRR		2.0		2.0		1.8

The adjusted of the Net Reproduction Rates (NRR) has been done by multiplying the GRR by an estimate of the Probability of females surviving to the mean age of childbearing. The adjusted NRRs are shown as 2.0 for the Province, 2.0 rural and 1.8 daughters per female for urban areas. This measure takes into consideration the prevailing fertility and mortality situation. The result may be viewed as the number of daughters who would live to the ages of the mothers to replace them.

Another fertility measure discussed in this chapter is Children Ever Born (CEB). The measure CEB is defined as the number of children ever born to a group of females of given age during their child-bearing period beginning from on set of reproductive life to their current ages. The number of children ever born to females in an age group divided by the number of females in the same age group yields average parities (Mean CEB). The average parity for the age group 45-49 years is referred to as Completed Family Size. It is likened to TFR under constant fertility, mortality and migration experiences. Table 8.10 presents details on CEB and Mean CEB.

Table 8.10

Average Parity, (Observed), Western Province, 1990

Age Group	Total Women	Children Ever Born	Average Parities Reported
15 - 19	37,560	6,386	0.1700
20 - 24	28,225	31,587	1.1191
25 - 29	22,487	56,486	2.5119
30 - 34	19,119	78,282	4.0945
35 - 39	13,386	71,224	5.3208
40 - 44	15,261	94,034	6.1617
45 - 49	11,911	73,047	6.1327

Figure 8.3

Average Parity, Western Province, 1990
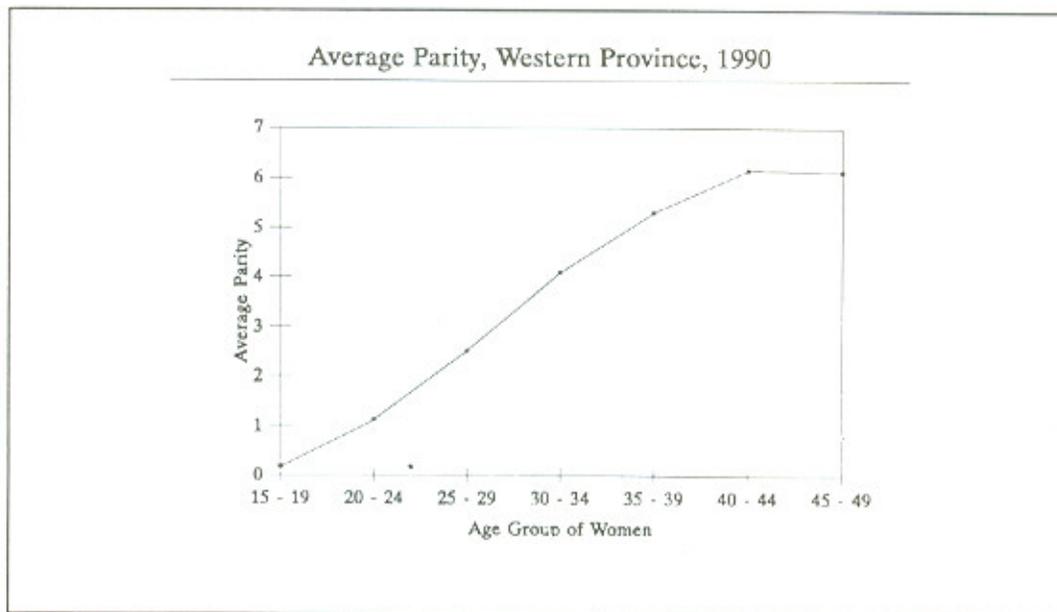
The Completed Family Size is 6.1 children per female. As may be observed, it compares very well with TFR of 6.2 children per female calculated for the Province.

8.5 FERTILITY DIFFERENTIALS

Fertility tends to vary according to different socio-economic groups. Fertility data for the Province has shown that differences do exist between rural and urban areas, districts and education level completed.

Rural-Urban Differences

Residence is broadly defined as referring to rural and urban areas. A individual is regarded as a resident in a rural or urban area if he/she was enumerated in the areas regardless of length of stay in that area. The fertility level in the rural areas of Western Province is higher than in the urban areas. TFRs are 6.2 and 5.7 children per woman for rural and urban areas, respectively.

District Differences

Fertility levels in the districts of Western Province range from 5.9 in Kalabo and Mongu to 6.5 children per woman in Shesheke. The fertility level in the Province may be deemed to be low compared to other provinces.

There is a relationship between the level of education completed by females and the level of fertility. The relationship is an inverse one; the higher the level of education completed, the lower the expected level of fertility. This is largely attributed to two factors: females who stay long in school marry late reducing their reproductive span; and secondly, it is believed that females who are highly educated are more receptive to modern contraceptive methods and may be more likely to use these to limit the number of children they would give birth to. Table 8.11 presents data on this aspect.

Table 8.11

Completed Family Sizes by Level of Education of Women, Western Province 1990

Residence	No Education	Primary	Secondary	Higher
Western Province				
Total	5.8	6.9	6.5	2.2
Rural	5.9	6.9	6.5	0.0
Urban	6.5	6.7	6.4	2.8

The inverse relationship has held for Western Province, but only when one begins the observation from primary through higher-education. Contrary to the inverse view, females with primary level of eduation have shown higher level of fertility than females with no education. The implication one may draw from this observation is that females need to be educated to at least secondary level of education for the inverse relationship to take firm effect.

8.6 SUMMARY

Nuptiality analysis has shown that marriage in Western Province is near universal. By the age of 45-49 years, 4.7 percent of males had never been married. The corresponding figure for females was 3.6 percent. This is coupled with early mean age at marriage, more so for females pegged at 22.8 years.

The fertility level in the Province has risen slightly as shown by a TFR of 6.2 from TFR of 5.7 children per woman recorded in 1980. Females with no education have exhibited lower fertility level than females with primary education. The implication drawn is that education of females becomes more effective in depressing the level of fertility at higher levels. Females ought to be encouraged to stay longer in school.

CHAPTER 9

MORTALITY

9.1. INTRODUCTION

Direct estimation of mortality levels using 1990 Census data is not possible because it is generally difficult to collect data on deaths by age. As such, the analysis of mortality is done using indirect methods of estimation. The Brass Method employed here uses information on children ever born and surviving by age of mothers. The Brass Method employs probability measures and assumes the following relationship:-

$q_{(x)} = D_{(x)}.K_{(x)}$

where $q_{(x)}$ = probability of dying between exact age x and x + 1,

   $D_{(x)}$ = proportion dead at age x,

   $K_{(x)}$ = the correction factor or multiplier at age x.

   $l_{(x)} = 1 - q_{(x)}$, where $l_{(x)}$ is probability of surviving between exact age x and x + 1

The exact ages used are 1, 2, 3, 5, 10, 15, and 20. Since the information on children ever born and surviving is usually affected by age pattern of fertility and age errors, the proportion dead is adjusted by multiplying factors at each age. Trussell's (1975) multipliers are used in the equation. In order to facilitate easy computation of these mortality indicators, the United Nations Mortality measurement package "Mortpak-Lite" was used.

Data on children ever born and children surviving yields mortality indicators on infant and child mortality rates that also include reference periods. Levels of mortality may be estimated using the probabilities of dying at exact ages.

Data that is used in analysing mortality is derived from the following:-

- Deaths in household by sex,
- Children still alive by sex,
- Children who died by sex,
- Females 12 years and over by age.

Information on deaths particularly for young ages usually has many errors of omission because for some reason, respondents may not register some of their dead children.

9.2 DEFINITIONS AND CONCEPTS

Mortality

Deaths in a population are termed as mortality. It also refers implicitly to the underlying conditions or causes of death, rather than to specific measures which may be affected by other factors.

Infant Mortality Rate (IMR)

Refers to the rate at which persons aged below 1 year die. Infant mortality refers to deaths of live-born babies who have not reached their first birthday.

Child Mortality Rate (CMR)

Refers to the rate at which children 1-4 years die. Child mortality refers to deaths of children 1-4 years.

Under-Five Mortality Rate (UMR)

The rate at which children below 5 years die. It combines the infant and child mortality.

Crude Death Rate (CDR)

Ratio of deaths in a year to the mid-year population. Usually, the reference period is one calendar year. The value conventionally is expressed per 1000.

Expectation of Life at Birth

The average number of years that a child below one year is expected to live before it dies, if the current existing mortality conditions were to prevail for a long time.

9.3 CRUDE DEATH RATE (CDR)

The observed crude death rates by sex for Western Province are high. As a result adjusted crude death rates give a better reflection of the existing mortality level in Western Province. Coale and Demeny (1966) Model Life Table system was used in the devrivation of the adjusted crude death rates. Western Province recorded an adjusted crude death rate of 20.6 deaths per 1,000 population in 1990. The previous 1980 Census crude death rate was 14.6 deaths per 1,000 population. Crude death rate for male population has always been higher than that of females. In 1990 Census, males recorded a crude death rate of 21.4 deaths while that of females was 19.9 deaths per 1,000 population. Lower crude death rates were recorded in 1980 when compared with rates obtained in 1990. Refer to Table 9.1 for further details. Reasons that can explain for the increase in crude death rates need to be investigated further.

Table 9.1

Crude Death Rate by Sex, Western Province, 1980 and 1990

Sex	1990 Census Observed		Adjusted CDR	
	Deaths	CDR	1980	1990
Western Province				
- Total	23,413	38.6	14.6	20.6
- Male	11,866	42.1	15.3	21.4
- Female	11,547	35.6	13.9	19.9

Note: (1) Used Coale and Demeny North Model Life Tables, levels 11.2 (males) and 10.8 (females) for the 1990 Census. In the case of 1980 Census, levels 15.2 (males) and 15.0 (females) are used.

(2) Used a sex ratio of 103 males per 100 females to derive the crude death rate for the province level.

9.4 PERIOD MEASURES

Estimates of mortality rates derived from 1990 Census data include infant, child and under-five mortality rates, and expectation of life at each age. Direct mortality question on age of the deceased was not included in the 1990 Census. Hence, indirect methods of estimating mortality patterns are used. Information on children ever born and surviving are used to estimate probabilities of dying (q_{00}) for both 1980 and 1990 Censuses, at exact ages 1, 2, 3, 5, 10, 15 and 20. Probabilities of surviving are found by subtracting 1, i.e $l_{00} = 1-q_{00}$. Mortality levels for both males and females are estimated using Coal and Demeny (1966) Model Life Tables. A computer software package developed by the United Nations (1988) called Mortpak-lite facilitated the calculations of mortality levels and patterns. Reference dates are also included in the estimation of probabilities of dying and child mortality rates. In Table 9.2, probabilities of dying, surviving, mortality levels and reference dates are presented at each exact age of 1, 2, 3, 5, 10, 15, and 20. The age group 15-49 years refers females who are in childbearing group and provided the responses on children ever born and surviving.

Table 9.2

Estimates of Probabilities of Dying and Surviving by Sex, Implied Mortality Levels and Reference Dates, North Model, Western Province, 1990

Age Group	Age (x)	Probabilities of Dying, q_{00} and of Surviving, l_{0}				Mortality Levels		Reference Date	
		Male		Female		Male	Female	Male	Female
		q_{00}	l_{00}	q_{00}	l_{00}				
15-19	1	.156	.844	.152	.848	10.7	9.3	1988.6	1988.6
20-24	2	.188	.812	.173	.827	11.2	10.8	1987.3	1987.4
25-29	3	.203	.797	.180	.820	11.7	11.7	1985.6	1985.6
30-34	5	.223	.777	.204	.796	12.1	12.0	1983.3	1983.4
35-39	10	.246	.754	.227	.773	12.5	12.4	1980.9	1981.0
40-44	15	.280	.720	.266	.734	11.9	11.6	1978.3	1978.3
45-49	20	.293	.707	.281	.719	12.1	11.7	1975.3	1975.4

Note: Estimates are based on Trussell's Coefficients and the Reference Date of the 1990 Census is 25th August, 1990.

The patterns of probabilities of surviving for both males and females have shown that children low to younger mothers aged 15-29 years in Western Province have high survival chances as compared to their counterparts born to older age groups of females aged 30-49 years. An equally important observation is that female children regardless of each exact age, have high survival chances as compared to male children. Low child survival chances had existed in late 1970's and early 1980's (see Table 9.2).

Results from Table 9.3 showed high chances of child survival in the 1970's and late 1960's. The 1980 Census data also showed high chances of child survival at each exact age of 1, 2, 3, 5, 10, 15 and 20. Similarly, female children in Western Province recorded high probabilities of surviving at the mentioned exact ages when compared to their male counterparts. Refer to Table 9.3 for details.

Table 9.3

Estimates of Probabilities of Dying and Surviving by Sex, Implied Mortality Levels and Reference Dates, North Model, Western Province, 1980

| Age Group | Age (x) | Probabilities of Dying, $q_{(x)}$ and of Surviving, $l_{(x)}$ | | | | Mortality Levels | | Reference Date | |
| | | Male | | Female | | Male | Female | | |
		$q_{(x)}$	$l_{(x)}$	$q_{(x)}$	$l_{(x)}$			Male	Female
15-19	1	.137	.863	.079	.921	12.0	15.6	1978.8	1978.8
20-24	2	.123	.877	.107	.893	15.2	15.0	1977.4	1977.5
25-29	3	.170	.830	.176	.824	13.3	11.9	1975.5	1975.4
30-34	5	.199	.801	.182	.818	13.2	13.0	1972.9	1972.8
35-39	10	.232	.768	.223	.777	13.0	12.6	1970.2	1970.0
40-44	15	.255	.745	.238	.762	12.8	12.6	1967.2	1967.0
45-49	20	.252	.748	.241	.759	13.6	13.1	1964.3	1964.0

Note: Estimates are based on Trussel's coefficients and the Reference Date of the 1980 Census is 20th August, 1980.

Reporting of children ever born and surviving by females is believed to be better for age group 20-24 years. As a result, mortality estimations basing from $q_{(2)}$ value are much more plausible as compared to other age groups. Thus, plausible mortality levels of 11.2 and 10.8 for males and females, respectively, were obtained from the 1990 Census data (see Table 9.2). Corresponding $q_{(2)}$ values obtained from the 1990 Census data were 0.188 and 0.827 for males and females, respectively. Similarly, plausible mortality levels estimated from the 1980 Census data using $q_{(2)}$ values were 15.2 and 15.0 for males and females, respectively. Probabilities of dying ($q_{(2)}$) values that refer to the estimated mortality levels were 0.123 and 0.107 for males and females, respectively. Refer to Table 9.2 and 9.3 for further clarification. It can be deduced from Tables 9.2 and 9.3 that children aged below 5 years had high survival chances in 1980 as compared to 1990. This can be inferred from probabilities of dying ($q_{(x)}$'s) and surviving ($l_{(x)}$) shown in the same Tables 9.2 and 9.3.

Infant Mortality Rate (IMR)

The current rate of dying of infants aged below one year had increased from 105.7 deaths in 1980 to 141.3 deaths per 1000 live births in 1990. Similar increases were noted for earlier years 5-9 and 10-14 years prior to the censuses. The 1990 Census infant mortality rate showed an increasing pattern from 130 deaths (10-14 years) to 124.5 deaths per 1000 live births (5-9 years). Meanwhile the 1980 Census showed a declining pattern from 10-14 to 0-4 years prior to the conduct of the exercise. Significant increase, in infant mortality rate were observed in all the 5 year groups prior to the conduct of both 1980 and 1990 Censuses.

Male children experienced high infant mortality rate in all the 5 year groups and ranged between 129 and 150 deaths per 1000 live births. In the case of female children, the infant mortality rate ranged between 119 and 140 deaths per 1,000 live births. Previous rates estimated from the 1980 Census where such lower than the rates estimated from the 1990 Census. There was a declining trend in infant mortality rates for both male and female children prior to the conduct of the 1980 Census. However, the opposite was the case for 1990 Census, where an increasing trend in infant mortality rate was recorded. Refer to Table 9.4 for details. Recent increases in infant mortality rate might indicate falling standards of living, increased number of HIV/AIDS infected children, etc. It should also be noted that most of the infant deaths are caused by endogenous (physiological) factors. Table 9.4 provides a detail on the trends of infant mortality rate in Western Province.

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Table 9.4

Infant and Child Mortality Rates by Five Year Period Preceding the Census, Western Province, 1980 and 1990

Years Preceding Census	Infant Mortality ($_1q_0$)		Child Mortality ($_4q_1$)		Under-Five Mortality ($_5q_0$)	
	1980	1990	1980	1990	1980	1990
Western Province - Total						
0-4	105.7	141.3	77.3	112.7	131.7	175.3
5-9	115.5	124.5	87.5	96.5	209.0	224.5
10-14	115.0	130.0	86.0	102.0	246.0	280.0
Sex of Child - Male						
0-4	117.0	146.3	88.3	117.3	143.3	182.3
5-9	119.5	129.5	91.0	101.0	215.5	234.5
10-14	118.0	133.0	89.5	104.5	253.5	286.5
- Female						
0-4	94.7	136.3	67.0	107.7	120.7	168.3
5-9	112.5	119.5	84.0	91.0	202.5	215.5
10-14	111.5	127.0	83.0	99.0	239.5	273.5

Child Mortality Rate (CMR)

The trend of child mortality rate in Western Province, as observed from 1990 Census data showed an increase from that of the previous 1980 Census. An overall child mortality rate of 112.7 deaths per 1,000 children aged 1 - 4 years was estimated in 1990. Male and female rates were 117.3 and 107.7 deaths per 1,000 children aged 1 - 4 years, respectively. Lower rates were observed in the 5 - 9 years prior to the conduct of the 1990 Census. Female child mortality rate was much lower than that of male children aged 1 - 4 years. It was apparent in periods of 5-9 and 10-14 years before the censuses that child mortality rates by sex was lower than that of 1-4 years period before the censuses. For details, refer to Table 9.4. Factors that affect the trend of child mortality rate are mostly environmental (exogenous) in nature.

Under-five Mortality Rate (UMR)

This is an overall mortality rate that affect children below the age of 5 years. Factors that affect the under-five mortality rate are both endogenous (physiological) and exogenous (environmental). Higher under-five mortality rates were attained in 1990 as compared to 1980. Results from the 1990 Census showed that under-five mortality rate had reduced from 280 deaths per 1,000 children aged below 5 years in the period 10-14 years to 175.3 deaths in the period 0-4 years prior to the conduct of the exercise. Male under-five mortality rate declined from 286.5 deaths to 182.3 deaths per 1,000 children aged below 5 years during the same mentioned periods. Lower under-five mortality rates were estimated from the 1980 Census data. For details, refer to Table 9.4.

9.5 MORTALITY BY SELECTED BACKGROUND CHARACTERISTICS

The analysis of mortality rates by socio-economic variables is important in understanding the linkages or causal factors. Variables that have been included for analysis are sex of child, residence, education, marital and economic status of mothers. Mortality measures under study are infant and child mortality rates, and expectation of life at birth. Table 9.5 includes information on infant and child mortality rates while table 9.6 has estimates of expectation of life at birth. Mortality levels derived from the Coale and Demeny (1996) Model Life Table systems are used in the selection of mortality rates. Mortapak - Lite (UN : 1988) computer software package was used to generate child mortality rates and expectation of life at birth.

Infant Mortality Rate (IMR)

Children in Western Province experienced an increase in infant mortality rate between 1980-1990 intercensal period of 33.7 percent. An overall infant mortality rate of 141.3 deaths per 1,000 children aged below one year was attained in 1990. Even though, infant mortality rate for male children was estimated to be very high, the intercensal percentage increase was lower than that of female children. A substantial increase in infant mortality rate was recorded in rural areas as compared to urban areas. All the districts in Western Province recorded high infant mortality rate of above 120 deaths per 1,000 live births, except for Lukulu District which was pegged at 122.7 deaths. The 1980 Census results gave relatively low infant mortality rates of less 100 deaths per 1,000 live births for Kaoma and Sesheke districts.

Kalabo District had recorded the highest infant mortality rate of 151.7 deaths per 1,000 live births in 1980 (see Table 9.5).

Children in Western Province whose mothers had either no formal education or only attended primary school grades 1-7 experienced very high infant mortality rates of above 140 deaths per 1,000 live births. The "secondary +" category recorded the lowest infant mortality rate of 94.3 deaths per 1,000 live births. Similarly, the 1980 Census infant mortality rate was lower at 89.0 deaths per 1,000 live births for the "secondary +" education category. All marital status categories recorded high infant mortality rates of above 100 deaths per 1,000 live births in 1990. The worst affected children are those born to widowed mothers with an infant mortality rate of 131 deaths per 1,000 live births. Refer to Table 9.5 for details.

The economic status of mothers does influence the pattern of child mortality. Results from the 1980 and 1990 censuses have indicated declining infant mortality rates for "working" and "unemployed" economic status categories. Children born to "full-time housewife" category registered an increasing infant mortality rate. In 1990, the children born to working mothers recorded an infant mortality rate of 113 deaths per 1,000 children from the previous 1980 Census rate of 124 deaths. The 1990 Census results also showed that children born to women who were in "unpaid family worker" and not available for work" categories had experienced the highest infant mortality rates of 147 deaths and 132.7 deaths per 1,000 live births, respectively. Similarly, the "agriculture sector" category recorded a high infant mortality rate of 144.3 deaths per 1,000 live births. Detailed results from both 1980 and 1990 Censuses are shown in Table 9.5

Table 9.5.

Infant and Child Mortality Rates for the 5 Year Period Preceding the Census, by Selected Background Characteristics, Western Province, 1980 and 1990

Background Characteristic	Infant Mortality (₄q₀)			Child Mortality (₄q₁)			Under-Five Mortality (₅q₀)		
	1980	1990	% Increase	1980	1990	% Increase	1980	1990	% Increase
Western Province - Total	105.7	141.3	33.7	77.3	112.7	45.8	131.7	175.3	33.1
Sex of Child									
Male	117.0	146.3	25.0	88.3	117.3	32.8	143.3	182.3	27.2
Female	94.7	136.3	43.9	67.0	107.7	60.7	120.7	168.3	39.4
Residence									
Rural	111.0	145.0	30.6	82.5	116.0	40.6	138.5	180.0	29.9
Urban	101.5	113.7	12.0	74.0	85.3	15.3	126.5	139.3	10.1
District									
Kalabo	156.3	151.7	-2.9	127.3	123.0	-3.4	190.0	188.7	-0.7
Kaoma	76.0	142.0	86.8	48.0	113.0	135.4	95.0	176.0	85.3
Lukulu	114.0	122.7	7.6	85.5	94.0	9.9	158.0	153.0	-3.2
Mongu	102.5	138.3	34.9	74.5	109.3	46.7	140.5	171.0	21.7
Senenga	125.5	148.3	18.2	96.5	119.7	24.0	156.5	184.0	17.6
Sesheke	94.3	132.3	40.3	66.3	103.7	56.4	118.7	163.3	37.6
Education									
None	130.3	149.7	14.9	101.7	121.0	18.9	162.0	187.3	15.6
Primary	123.3	144.0	16.8	95.0	115.3	21.4	153.3	178.0	16.1
Secondary+	89.0	94.3	5.9	61.0	66.3	8.7	120.5	115.7	-4.0
Marital Status									
Never Married	-	105.3	...	-	77.3	...	-	132.0	...
Married	-	120.5	...	-	91.5	...	-	165.5	...
Separated	-	115.5	...	-	87.5	...	-	159.5	...
Divorced	-	127.5	...	-	99.0	...	-	176.5	...
Widowed	-	131.0	...	-	102.0	...	-	182.0	...
Economic Activity									
Working	124.0*	113.0	-8.9	95.0*	84.7	-10.8	154.3*	139.7	-9.5
Unpaid Family Worker	-	147.0	...	-	118.0	...	-	184.0	...
Unemployed	113.3*	106.0	-6.4	85.0*	78.0	-8.2	146.3*	144.5	-1.2
Full-Time Housewife	102.5	111.0	8.3	75.0	82.7	10.3	141.0	141.3	0.2
Not Available for Work	-	132.7	...	-	104.0	...	-	169.7	...
Sector of Agriculture									
Agricultural Sector	-	144.3	...	-	115.7	...	-	181.7	...
Non-Agricultural Sector	-	121.3	...	-	92.7	...	-	147.0	...

Note: * = Includes female unpaid family workers
  $ = Includes divorced females
  ... = Not Available

Child Mortality Rate (CMR)

Results from the 1990 Census on child mortality rate in Western Province indicated high rates, as compared to 1980 Census estimates. An overall increase of 45.8 percent was attained during the 1980-1990 intercensal period for all children aged 1-4 years in Western Province. Percentage increases of 32.8 and 60.7 percent were attained for male and female children, respectively, over the same period. Apparently, child mortality rates for both male and female children were above 100 deaths per 1,000 children aged 1-4 years.

Urban areas exhibited low child mortality rate of 85.3 deaths per 1,000 children aged 1-4 years. The 1980 Census rate was much lower at 74 deaths per 1,000 children in urban areas. High rate was attained in rural areas where a child mortality rate of 116 deaths was estimated from the 1990 Census data. Rural areas in Western Province had equally registered a much lower child mortality rate of 82.5 deaths in 1980. Districts that recorded high child mortality rate estimates in 1990 were Kalabo,

Senanga and Kaoma districts. The rates ranged between 110 and 130 deaths per 1,000 children aged 1-4 years. Child mortality rate for Lukulu District remained low at 94 deaths per 1,000 children aged 1-4 years in 1990. The 1980 Census rate for Lukulu District was 85.5 deaths per 1,000 children aged 1-4 years. Sesheke, Kaoma and Mongu districts had recorded highest percentage increases of between 46 and 135. Refer to Table 9.5 for details.

Child mortality rates were high for the "none" and "primary" school categories. Children born to mothers without formal education experienced a child mortality rate of 121 deaths in 1990. Similarly a high child mortality rate of 115.3 deaths was estimated for children born to women with primary level of education from the 1990 Census data. Highest percentage increases were also recorded for the "none" and "primary" education levels. The "secondary+" education level category had a child mortality rate that ranged from 61 deaths in 1980 to 66.3 deaths per 1,000 children aged 1-4 years in 1990. A low percentage increase of 8.7 percent was attained for the "secondary+" category in the 1980-1990 intercensal period. All the marital status categories recorded child mortality rates of below 100 deaths with an exception of "widowed" category. For more details, refer to Table 9.5

There were fluctuations in child mortality rates of economic status groups in Western Province as evidenced in estimates shown in Table 9.5. Results obtained from the 1990 Census showed a high child mortality rate for the "unpaid family worker" category with 118.0 deaths per 1,000 children aged 1-4 years. The "not available for work" category recorded a child mortality rate of 104 deaths per 1,000 children aged 1-4 years. Children born to "unemployed" mothers had the highest chances of survival and recorded the lowest child mortality rate of 78 deaths per 1,000 children aged 1-4 years. Categories that also recorded low child mortality rates in 1990 were "working" and "full-time housewife". The "non-agriculture sector" recorded a child mortality rate of 92.7 deaths. A high rate of 115.7 deaths per 1,000 children aged 1-4 years was recorded for children born to mothers in the "agriculture sector" category. Information on child mortality rate estimates by sector of agriculture was not collected in the 1980 Census. Hence, no comparisons can be made between the two censuss.

Under-five Mortality Rate (UMR)

The overall under-five mortality rate for Western Province increased by 33.1 percent from 131.7 deaths in 1980 to 175.3 deaths per 1,000 children aged below 5 years in 1990. Percentage increases for male and female children were 27.2 percent and 39.4 percent, respectively, over the 1980-1990 intercensal period. Male and female children aged below 5 years in Western Province, experienced the 1990 census under-five mortality rates of 182.3 and 168.3 deaths respectively. Previous 1980 Census rates for male and female were 143.3 and 120.7 deaths, respectively. Rural areas in Western Province continued to experience high child mortality rates as evidenced from high under five-five mortality rates in both 1980 and 1990 censuses. Low under-five mortality rates were recorded in urban areas of Western Province. Urban areas recorded a percentage increase of 10.1 in the 1980-1990 intercensal period. For details, refer to Table 9.5.

Districts in Western Province that recorded high under-five mortality rates in 1990 were Kalabo, Senanga, Kaoma and Mongu districts. Lukulu and Sesheke districts recorded relatively low under-five mortality rates in 1990 (see Table 9.5). Reductions in under-five mortality rates over the 1980-1990 census period were attained in Kalabo and Lukulu districts. Kaoma District recorded the highest percentage increase of 85.3 percent while other remaining districts had low increases. Sesheke District was second with a percentage increase of 37.6 percent.

Education background of mothers also played a role in influencing the trend of under-five mortality rate. Children who were born to mothers without formal education background and primary school experienced relatively high levels of child mortality rates as compared to the counterparts born to mothers with secondary or above level of education. Percentage increases of 15.6 and 16.1 percent were attained during the 1980-1990 intercensal period for the "none' and "primary" level categories. The "secondary+" category recorded negative percentage increase of 4.0 percent.

Information of under-five mortality rate in 1990 for all marital status categories were all equally high. The most notable ones were "widowed" and "divorced" with rates ranging from 175 to 185 child deaths aged below 5 years per 1,000 children. "Never married" category recorded the lowest under-five mortality with 132 deaths per 1,000 children aged below 5 years. For further details, refer to Table 9.5. The 1980 Census figures are not available by marital status. Hence, no comparison of under-five mortality rate can be made in the 1980-1990 intercensal period.

The economic status groups have an indirect influence on the trends of under-five mortality rate. Results from the 1980 and 1990 censuses have shown that variations do exist between economic status groups. Children born to mothers who were "npaid family workers" registered the highest under-five mortality rate of 184 deaths followed by those born to women in the "agriculture sector" category. Thereafter, the category of "not available for work recorded 169.7 deaths. No major differences existed between "full-time housewife", "unemployed", "working" and "non-agriculture sector" categories. Declines in under-five mortality rate were recorded in "working" and "unemployed" categories during the 1980-1990 intercensal period. For the first time information on agriculture sector was included in the 1990 Census.

Table 9.6

Expectation of Life at Birth for the 5 Year Period Preceding the Census, by Selected Background Characteristics, Western Province, 1980 and 1990

Background Characteristics	Expectation of Life at Birth (e₀)		Mortality Level	
	1980	1990	1980	1990
Western Province - Total	50.5	43.4	14.0	11.3
Sex of Child				
Male	48.2	42.5	13.8	11.6
Female	53.0	44.3	14.1	11.0
Residence				
Rural	49.4	42.7	13.6	11.1
Urban	51.4	48.8	14.3	13.5
District				
Kalabo	41.0	41.5	10.5	10.6
Kaoma	57.4	43.3	16.5	11.3
Lukulu	49.2	47.0	12.3	12.6
Mongu	51.2	44.0	13.4	11.6
Senenga	46.5	42.1	12.4	10.8
Sesheke	53.1	45.1	14.9	12.0
Education				
None	45.5	41.8	12.1	10.7
Primary	46.8	42.9	12.6	11.2
Secondary +	54.3	53.0	14.7	15.1
Marital Status				
Never Married	-	50.5	-	14.0
Married	-	47.4	-	11.9
Separated	-	48.4	-	12.3
Divorced	-	46.0	-	11.3
Widowed	-	45.3	-	10.9
Economic Activity				
Working	46.8*	48.9	12.6*	13.5
Unpaid Family Worker	-	42.3	-	10.8
Unemployed	49.1*	50.5	13.0*	13.2
Full-Time Housewife	51.2	49.4	13.4	13.4
Not Available for Work	-	45.1	-	11.7
Sector of Agriculture				
Agricultural Sector	-	42.7	-	10.9
Non-Agricultural Sector	-	47.4	-	13.0

Note: * = Includes female unpaid family workers
       # = Includes females not seeking work and not available for work
       .... = Not available

Expectation of Life at Birth

Western Province experienced a decline in overall expectation of life at birth during the 1980-1990 intercensal period. In 1990, the expectation of life at birth was 43.4 years as compared to 50.5 years in 1980. Similarly, mortality level dropped from 14.0 in 1980 to 11.3 in 1990. Estimates of expectation of life at birth were derived using the Coale-Demeny (1966) Model Life tables. Mortpak-Lite software computer package developed by the UN (1988) was used in the estimations. Female children in Western Province were expected to live longer at the time of birth as compared to their male counterparts. Equally an important observation was that children in urban areas experienced a higher expectation of life at birth of 48.8 years. Their fellow counterparts in rural areas experienced an expectation of life at birth of 42.7 years in 1990. Previous estimates of expectation of life at birth by sex and rural/urban were much higher in 1980. At district level, children born in Lukulu, Sesheke and Mongu experienced high expectations of life at birth of 44 years and above in 1990. The same districts recorded higher expectations of life at birth of above 50 years in 1980. Kaoma district recorded a substantial decline in expectation of life at birth from 57.4 years in 1980 to 43.3 years in 1990. No major reductions in years were recorded in Kalabo, Lukulu and Senanga districts during the 1980-1990 intercensal period. Similar observations were noted for mortality levels for districts.

Education of mothers does have an indirect influence in determining the level of expectation of life at birth. In Western Province, children born to mothers with secondary or higher level of education experience the highest expectation of life at birth. The 1990 Census rate was 53 years for the "secondary+" category followed by "primary" school level with 42.9 years. A similar trend was exhibited from the 1980 Census data.

The expectation of life at birth varied by marital status of mothers in 1990. All marital status groups recorded high expectation of life at birth apart from the "widowed" category which recorded 45.3 years. Refer to Table 9.6 for details.

Economic status of mothers is an important variable when analysing the expectation of life at birth. Categories that recorded low expectations of life at birth of below 45 years in 1990 were "unpaid family worker" and "agriculture sector". Children born to "full-time housewives" and "unemployed" recorded highest expectation of life at birth of 49.4 years and 50.5 years, respectively. A detailed of expectations of life at birth and mortality levels by socio-economic groups is shown in Table 9.6.

9.6 MORTALITY TRENDS

Trends of infant, child and expectation of life at birth in Western Province are presented in Tables 9.7 and 9.8. The rates were derived by using the United Nations "Mortpak-Lite" computer software package developed in 1988. Various Model Life Table systems are in-built in the computer software package. Mortality rates and expectation of life at birth are derived from using the North Model life Tables developed by Coale and Demeny (1966). Trussells (1975) coefficients are used in the mortality equation. Reference dates for the 1990 Census span from 1976 to 1989 (see Table 9.7). The 1980 Census reference date span from 1965 to 1979 (see Table 9.8).

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Table 9.7

Trends of Infant, Child and Expectation of life at Birth, Western Province, 1990

Year	Infant Mortality Rate	Child Mortality Rate	Under-five Mortality Rate	Expectation of life at birth
1989	154	125	154	41.1
1988	140	111	181	43.7
1986	130	102	191	45.4
1984	127	99	213	46.0
1981	122	94	236	47.0
1979	131	103	273	45.2
1976	129	101	287	45.6

Infant Mortality Rate (IMR)

Results from the 1990 Census data showed that Western Province recorded an increasing trend in infant mortality rate from 122 in 1981 to 130 deaths per 1,000 live births in 1986. Thereafter, IMR rose from 140 deaths in 1988 to 154 deaths per 1,000 live births in 1989. The peak was attained in 1989. For more details refer Table 9.7. Trends of infant mortality rates observed from the 1980 Census data (see Table 9.8) showed lower infant mortality rates of below 120 deaths per 1,000 live births. However, high rates were observed during the early 1970's and late 1960's. The trough was recorded in 1978 when IMR was 91 deaths per 1,000 live births. In 1979, the estimated IMR was 107 deaths per 1,000 live births. Figure 9.1 shows the graphical presentation of infant mortality rate trends from both the 1980 and 1990 censuses for Western Province. A possibility exists that the IMR estimate for 1978 of 91 deaths per 1,000 live births might have been caused by under-reporting of children everborn and surviving by women in the age group 20-24 years. Hence, q_2 value from 1980 Census underestimated the infant mortality rate.

Figure 9.1

Infant Mortality Rates, Western Province, 1965 - 1990

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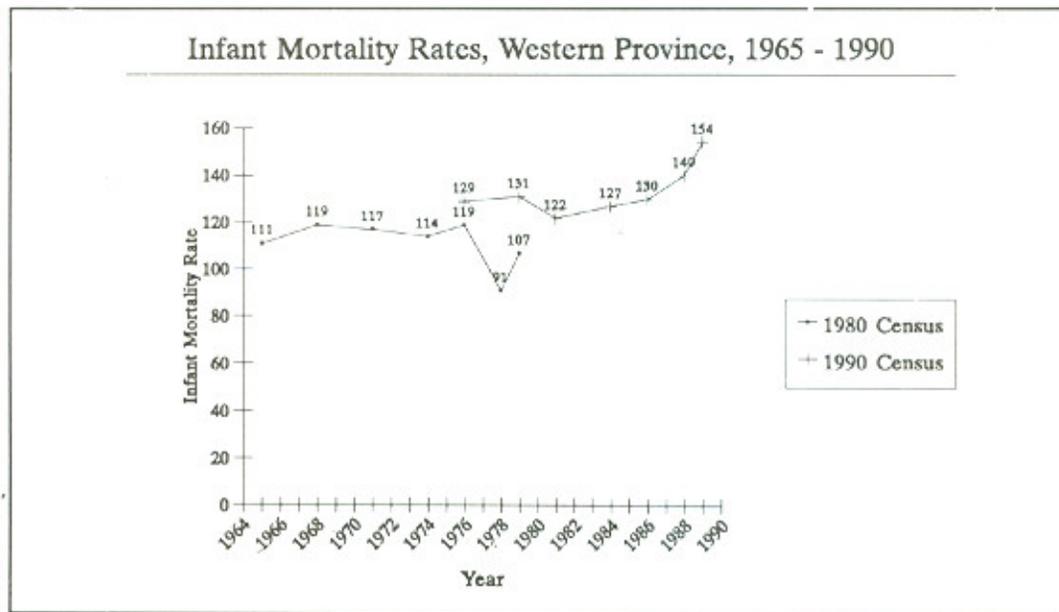
Child Mortality Rate (CMR)

The trend of child mortality rate in Western Province has been that of low fluctuations in the last half of the 1970's. Thereafter, the province witnessed reductions in child mortality rate between 1980 and 1985 period. During the first half of 1980's the child mortality rate remained below 100 deaths per 1,000 children aged between 1 and 4 years.

In the last half of the 1980's child mortality rate had remained relatively high from 102 deaths in 1986 to 125 deaths in 1989. Estimates of child mortality rate from the 1990 census are shown in Table 9.7. The 1980 Census child mortality rate estimates were much lower than those estimated from the 1990 Census. Slight fluctuations in child mortality rate had existed in Western Province between 1965 and 1976. In that period, child mortality rate ranged from 82 deaths in 1965 to 90 deaths in 1976. A further reduction was attained in 1978 when Western Province had recorded a lowest child mortality rate of 63 deaths. Refer to Table 9.8 for details. In Figure 9.2, both trends from 1980 and 1990 censuses are presented.

Table 9.8

Trends of Infant, Child and Expectation of life at Birth, Western Province, 1980

Year	Infant Mortality Rate	Child Mortality Rate	Under-five Mortality Rate	Expectation of life at Birth
1979	107	79	107	50.1
1978	91	63	115	53.8
1976	119	90	173	47.7
1973	114	86	191	48.6
1971	117	89	227	48.0
1968	119	90	246	47.7
1965	111	82	246	49.3

Figure 9.2

Child Mortality Rates, Western Province, 1965 - 1990

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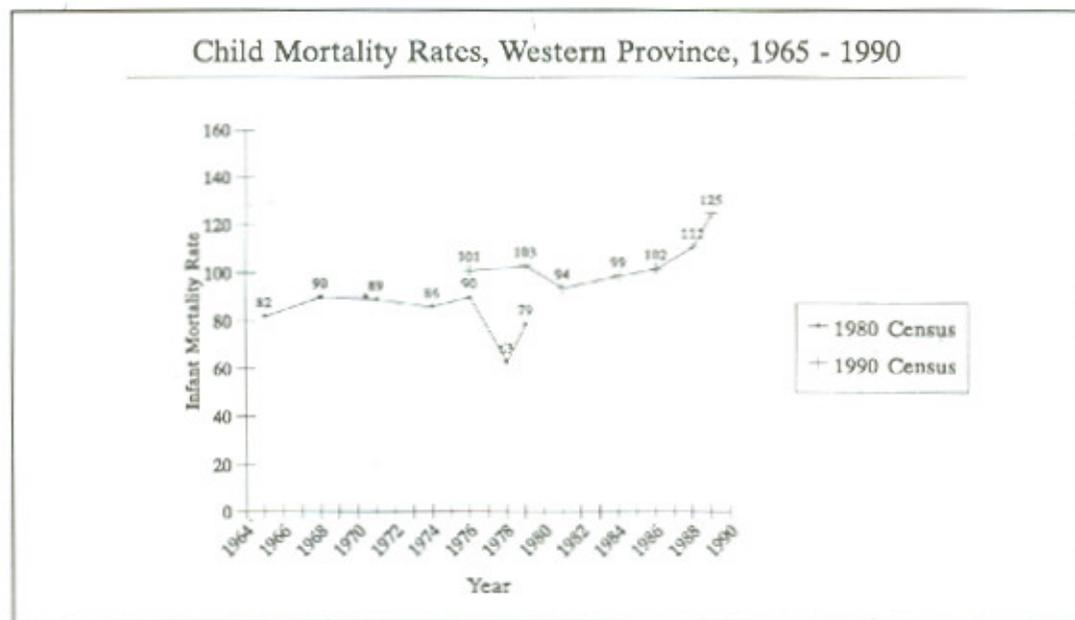
Under-five Mortality Rate

Western Province had recorded under-five mortality rate of above 200 child deaths during the 1976-1984 period (see Table 9.7). Results from the 1990 Census have shown a declining trend of under-five mortality rate in the 1976-1989 period. High contributions to the under-five mortality rate were from high numbers of infant deaths. Significant reductions in under-five mortality rate were observed during the 1986-1989 period. The rate ranged from 191 deaths in 1986 to 154 deaths in 1989.

The trend observed from the 1980 Census is that of high under-five mortality rate from 1965 to 1971. Rates of above 220 deaths were observed starting from 1973 to 1979 when under-five mortality rate reduced from 191 deaths in 1973 to 107 deaths in 1979. Estimates of under-five mortality rate from the 1980 Census are presented in Table 9.8. Figure 9.3 shows the declining trends from both the 1980 and 1990 censuses.

Figure 9.3

Under-Five Mortality Rates, Western Province, 1965 - 1990

Expectation of Life at Birth

Infant mortality rate affects the expectation of life at birth in a direct way. Low expectation of life at birth is usually accompanied by high infant mortality rate and vice-versa. In Western Province, infant mortality rate estimates were high in 1990 as a result the province recorded low estimates of expectation of life at birth.

The 1990 Census trend analysis presented in Table 9.7 show a slight decline of expectation of life at birth from 45.6 years in 1976 to 45.2 deaths in 1979. A peak was attained in 1981 when the expectation of life at birth was 47 years. Thereafter, the expectation of life at birth started declining from 46 years in 1984 to 43.7 years in 1988 and 41.1 years in 1989. Western Province recorded high expectations of life at birth in the 1970's and during the last half of 1960's. Refer to Table 9.8 for details on the trend of expectation of life at birth derived from the 1980 Census data. Figure 9.4 provides a summary of the trends established from both the 1980 and 1990 Censuses on expectation of life at birth.

The generated life table columns are as follows:-

$_nm_x$ = Central death rates between ages x and x + n,

$_nq_x$ = Probability of dying between exact ages x and x + n,

l_x = Number of persons alive at exact ages x,

$_nD_x$ = Number of persons dying between exact ages x and x + n,

$_nL_x$ = Person years lived between exact ages x and x + n,

9.7 ADULT MORTALITY

Direct mortality measures cannot be derived from the 1990 Census data because information on the deceased persons lacked age and date of death. Thus, age-sex specific mortality rates cannot be computed. Similarly, observed mortality patterns cannot be established over a period of time for Western Province. Adult mortality level can, therefore, be inferred from the Model Life Table values presented in Tables 9.9 and 9.10. Life Table columns are generated by using the expectation of life at birth (e_o) as an input parameter. Mortality, fertility and other demographic conditions in Zambia warrant the use of the North Model Life Table systems of the Coale and Demeny (1966) systems. Mortpak - Lite computer software package developed by the United Nations (UN: 1988) is used to generate the Life Table by sex for Western Province.

Trend of expectation of life at birth established from the 1980 Census indicated a steady increase in between 1977 and 1978. In 1971, the value was 51.4 years and later increased to 54.3 years in 1976. A value of 59.4 years was attained in 1978. Thereafter, the expectation of life at birth had reduced to 57.7 years. Even though there was a decline in the value of expectation of life at birth in 1979, it had surpassed values derived from the 1990 Census data. Refer to Tables 9.7 and 9.8 for pattern details.

Expectation of Life At Birth, Western Province, 1965 - 1990
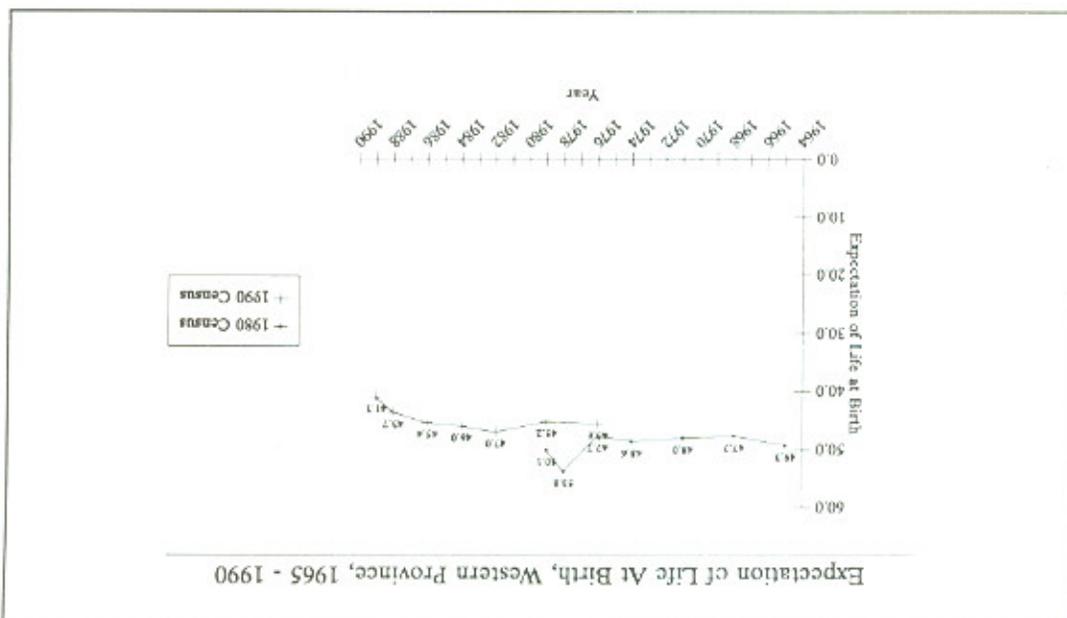
Figure 9.4

$_nS_x$ = Probability of surviving between exact ages x and x + n,

T_x = Total number of person years lived after age x,

$°e_x$ = Expectation of life at age x or the average number of years a person aged x has to live.

$a_{(x,n)}$ = Average number of years lived by those who die.

Adult mortality can be inferred from Life Table columns starting with population aged 25 years and over. The 1990 Census results showed that males in Western Province expected to live an average of 37.2 years at 25 years of age (see Table 9.9). Females were expected to live an average of 38.8 years at the same age of 25 years (see Table 9.10). Thus, females in Western Province expect to live longer in the future at each age category. By age of 45 years, life expectancy for males reduced further to 23.3 years while that of females was 24.8 years. At older age groups of above 55 years, life expectancy for males reduced further to below 15 years (see Table 9.9). In the case of females, substantial reductions were attained at 60 years and over. At 60 years, life expectancy was 14.5 years for females (see Table 9.10). Male and female patterns of life expectancies t each age categories are shown in Figure 9.5.

Table 9.9

North Model Life Table for Western Province - Males, 1990.

Age	$m_{(x,n)}$	$q_{(x,n)}$	$l_{(x)}$	$D_{(x,n)}$	$L_{(x,n)}$	$S_{(x,n)}$	$T_{(x)}$	$°e_{(x)}$	$a_{(x,n)}$	Age
0	.16402	.14778	100000	14778.	90099.	.81131 /A/	4250000.	42.500	0.330	0
1	.03032	.11226	85222.	9567.	315555.	.91046 /B/	4159901.	48.812	1.352	1
5	.00968	.04728	75655.	3577.	369334.	.96371	3844346.	50.814	2.500	5
10	.00501	.02476	72078.	1785.	355930.	.97391	3475012.	48.212	2.500	10
15	.00578	.02850	70294.	2003.	346642.	.96567	3119083.	44.372	2.591	15
20	.00824	.04039	68290.	2758.	334742.	.95812	2772440.	40.598	2.567	20
25	.00867	.04245	65532.	2782.	320723.	.95632	2437699.	37.199	2.506	25
30	.00926	.04524	62750.	2839.	306714.	.95208	2116976.	33.736	2.521	30
35	.01052	.05125	59912.	3071.	292015.	.94397	1810261.	30.216	2.544	35
40	.01267	.06146	56841.	3494.	275653.	.93272	1518246.	26.710	2.552	40
45	.01534	.07393	53347.	3944.	257106.	.91712	1242593.	23.292	2.558	45
50	.01954	.09328	49403.	4608.	235797.	.89441	985486.	19.948	2.566	50
55	.02555	.12027	44795.	5388.	210899.	.85951	749689.	16.736	2.573	55
60	.03586	.16495	39407.	6500.	181270.	.80496	538790.	13.672	2.575	60
65	.05229	.23188	32907.	7630.	145915.	.72130	357520.	10.865	2.560	65
70	.08063	.33574	25276.	8486.	105249.	.60594	211605.	8.372	2.510	70
75	.12272	.46612	16790.	7826.	63775.	.40036 /C/	106356.	6.334	2.422	75
80	.21051	...	8964.	8964	42581.	...	42581.	4.750	4.750	80

/A/ Value Given is for Survivorship of 5 Cohorts of Birth to Age Group 0-4 = L(0,5)/500000
/B/ Value Given is for S(0,5)=L(5,5)/L(0,5)
/C/ Value Given is S(75+,5)=T(80)/T(75)

Note: Used an expectation of life at Birth of 42.5 years as an input parameter in the Coale and Demeny Model Life Tables.

Figure 9.5

Expectation of Life at Exact Age, Western Province, 1990
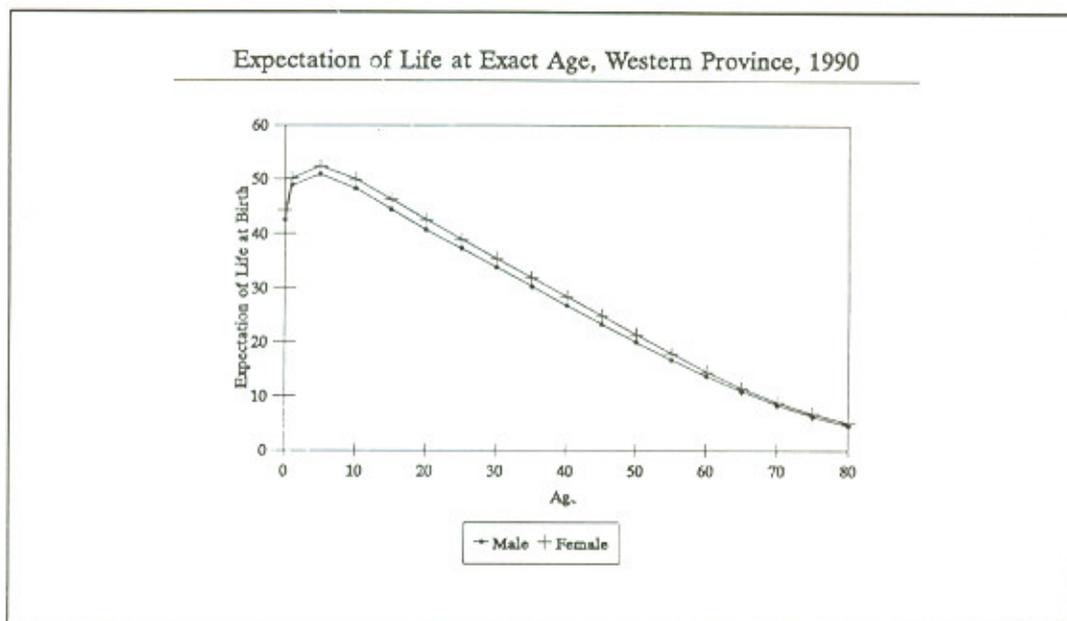
Table 9.10

North Model Life Table for Western Province - Females, 1990.

Age	$m_{(x,n)}$	$q_{(x,n)}$	$l_{(x)}$	$D_{(x,n)}$	$L_{(x,n)}$	$S_{(x,n)}$	$T_{(x)}$	$e_{(x)}$	$a_{(x,n)}$	Age
0	.14600	.13334	100000.	13334.	91333.	.82367 /A/	4430000.	44.300	0.350	0
1	.03093	.11438	86666.	9913.	320504.	.90890 /B/	4338667.	50.062	1.361	1
5	.01010	.04924	76753.	3780.	374318.	.96183	4018163.	52.352	2.500	5
10	.00538	.02652	72974.	1935.	360030.	.97283	3643846.	49.934	2.500	10
15	.00572	.02821	71038.	2004.	350246.	.96969	3283816.	46.226	2.533	15
20	.00666	.03275	69034.	2261.	339629.	.96473	2933569.	42.494	2.549	20
25	.00773	.03794	66773.	2533.	327651.	.95912	2593940.	38.847	2.546	25
30	.00899	.04397	64240.	2825.	314255.	.95287	2266290.	35.278	2.541	30
35	.01031	.05028	61415.	3088.	299444.	.94708	1952034.	31.784	2.528	35
40	.01141	.05548	58327.	3236.	283599.	.94234	1652590.	28.333	2.516	40
45	.01248	.06054	55091.	3335.	267248.	.93311	1368991.	24.849	2.539	45
50	.01557	.07503	51756.	3883.	249371.	.91361	1101743.	21.287	2.577	50
55	.02109	.10039	47873.	4806.	227827.	.87990	852372.	17.805	2.599	55
60	.03096	.14410	43067.	6206.	200464.	.82505	624545.	14.502	2.604	60
65	.04729	.21218	36861.	*7821.	165394.	.74264	424081.	11.505	2.582	65
70	.07362	.31136	29040.	9042.	122827.	.63339	258687.	8.908	2.526	70
75	.11171	.43457	19998.	8690.	77797.	.42737 /C/	135860.	6.794	2.446	75
80	.19475	....	11307.	11307.	58062.	.....	58062.	5.135	5.135	80

/A/ Value Given is for Survivorship of 5 Cohorts of Birth to Age Group 0-4 = L(0,5)/500000
/B/ Value Given is for S(0,5) = L(5,5)/L(0,5)
/C/ Value Given is S(75+,5) = T(80)/T(75)

Note: Used an expectation of Life at birth of 44.3 years as an input parameter in the Coale and Demeny Model Life Tables.

Estimated mortality patterns in Western Province point to low life expectancies for both males and females at ages 50 years or over. However, noticeable reductions in probabilities of survival were observed at the age of 65 years or over. Similarly, the age and sex structure of both males and females in Western Province was young. At age of 75 years, the age structure of both males and females tapered off.

9.8 SUMMARY

It was apparent that mortality levels had increased over the 1980 intercensal period in Western Province. The same was true for both males and females. An overall crude death rate increased from 14.6 deaths in 1980 to 20.6 deaths per 1,000 persons in 1990. Male rate had increased substantially in the same period as compared to that of females.

An important observation which was noticed from both the 1980 and 1990 Censuses was that survival chances drastically reduced for both males and females. However, females recorded highest reductions in probabilities of survival as compared to those of males. It should be noted that probabilities of survival for males were lower in both 1980 and 1990 Censuses as compared to those of females. Mortality levels obtained from q_5 values by sex gave high reductions from an average of 15 to 11 in the 1980 - 1990 intercensal period. Moderate reductions in mortality levels by sex were observed for q_3 values in the same intercensal period.

Recent estimates of infant mortality rate indicated huge increases over the 1980-1990 intercensal period. Overall, infant mortality rate for Western Province increased from 105.7 deaths in 1980 to 141.3 deaths per 1,000 live births in 1990. Infant mortality rate for female children increased from 94.7 deaths in 1980 to 136.3 deaths per 1,000 live births. Male infant mortality rate increased from 117 to 146.3 deaths per 1,000 live births. Children in rural areas were most affected as compared to urban areas. Highest increases in infant mortality rate were observed in Kaoma, Mongu and Sesheke districts. Similar observations were noted for child and under-five mortality rates.

Mothers' education was found to be an important factor in influencing the infant child, and under-five mortality rates patterns. As mothers gained high education statuses, infant and child mortality rates tended to reduce. Economic status groups that recorded low infant and child mortality rates in 1990 were " unemployed', "full-time housewife" and "working". The "non-agriculture sector" is another socio-economic status group that recorded relatively low infant and child mortality rates estimated from the 1990 Census data. All marital status groups recorded high infant and child mortality rates with an exception of "never married" category. Similar observations were noted for expectation of life at birth and mortality level.

Estimates of expectation of life at birth showed that children in 1980 had high chances of survival as compared to 1990. Overall expectation of life at birth for children born in Kalabo District remained relatively low at between 41 and 42 years in the 1980-1990 intercensal period. Slight reductions in expectation of life at birth were also observed in Lukulu and Senanga districts. All the other socio-economic groups recorded low expectations of life at birth in 1990 as compared to estimates obtained from the 1980 Census data. The trend of expectation of life at birth estimated from the 1990 Census data showed that it had been declining in the 1976-1989 period. Similarly, a declining trend in expectation of life at birth was observed from the 1980 Census data during the 1978-1979 period.

Observations noted from the model life tables for males and females, point to the fact that survival probabilities reduced drastically from the age of 50 years and above. By the age of 70 years, probabilities of survival for males and females were nearly halved compared to those obtained at the age of 50 years. Both males and females were expected to live an average of less than 20 years.

CHAPTER 10

DISABILITY

10.1 INTRODUCTION

Data on disabled persons, among other variables was collected during the 1990 Census. However, only visible disabilities were identified because it was difficult to identify invisible disabilities. The disabled persons were classified as:-

- Totally blind
- Totally deaf/dumb
- Crippled
- Mentally retarded

The above classifications do not take into account the detailed international definition of disability which includes variations in the intensity of disability. The partially blind and deaf are not included in the above classifications though these can be identified with the use of medical instruments by qualified medical personnel. Such an approach, however, would require a special survey.

Some cultural factors pose problems in the identification of disabled persons. In some communities, disability may be regarded as a curse and hence a shame in the family which should not be discussed. Census enumerators may not see such persons and the respondent may not provide accurate information. Nevertheless, the results presented in this chapter provide useful information for the understanding of the levels and patterns of disability in Western Province.

10.2. CONCEPTS AND DEFINITIONS

Disability

Refers to the inability to do something. In this report, disability refers to a person who is totally blind, totally deaf/dumb, crippled and mentally retarded. Hence a disabled person may have one or more of the following attributes:-

Totally blind

Refers to a person who has completely lost the sense of sight.

Totally deaf/dumb

Refers to a person lacking the senses of hearing and of speech.

Crippled

Loss of one or more limbs or loss of the power to use one or more limbs.

Mentally retarded

A mentally retarded person is one whose psychological functioning is defective to some degree.

Multiple disabilities

Having more than one of the above stated disabilities.

10.3 DISTRIBUTION OF DISABLED PERSONS

Table 10.1 shows the distribution of disabled persons by sex, residence and type of disability. In all, 8,753 persons were recorded as disabled in Western Province. Of these 4,473 are male and 4,280 female. Of all the disabled, 30.6 percent are crippled, 26.2 percent blind and 17.3 percent deaf/dumb. Those with multiple disabilities make up 16.6 percent while 9.3 percent comprises the mentally retarded. Among the disabled male, the largest proportion comprises the crippled while among the female, the largest comprises the blind, closely followed by the crippled.

Table 10.1

Disabled Persons by Type of Disability, Sex and Residence, (Percent), Western Province, 1990

Residence and Sex	Type of Disability						
	Total Number	Total	Blind	Deaf/ Dumb	Crippled	Mentally Retarded	Multiple Disabilities
Western Province							
Both sexes	8,753	100.0	26.2	17.3	30.6	9.3	16.6
Male	4,473	100.0	24.2	16.9	33.1	10.0	15.8
Female	4,280	100.0	28.2	17.6	28.0	8.6	17.6
Residence							
Rural							
Both sexes	7,984	100.0	27.0	17.7	30.1	8.9	16.3
Male	4,094	100.0	25.0	17.3	32.6	9.7	15.4
Female	3,890	100.0	29.1	18.0	27.6	8.1	17.2
Urban							
Both sexes	769	100.0	16.9	13.4	36.0	13.4	20.3
Male	379	100.0	15.0	12.4	39.3	13.5	19.8
Female	390	100.0	18.7	14.4	32.8	13.4	20.8
Districts							
Kalabo							
Both sexes	1,587	100.0	24.9	17.0	36.0	8.2	13.9
Male	809	100.0	23.0	15.8	39.6	8.6	13.0
Female	778	100.0	26.9	18.1	32.3	7.8	14.9
Kaoma							
Both sexes	1,178	100.0	23.7	17.7	28.3	8.7	21.6
Male	628	100.0	21.5	17.8	30.1	10.0	20.6
Female	550	100.0	26.2	17.4	26.4	7.1	22.9
Lukulu							
Both sexes	706	100.0	24.8	17.3	37.0	6.2	14.7
Male	357	100.0	22.7	16.2	40.9	7.6	12.6
Female	349	100.0	26.9	18.3	33.0	4.9	16.9
Mongu							
Both sexes	2,148	100.0	27.5	14.3	31.2	10.8	16.2
Male	1,072	100.0	25.0	14.3	33.3	11.2	16.2
Female	1,076	100.0	30.0	14.3	29.1	10.4	16.2
Senanga							
Both Sexes	1,954	100.0	29.1	20.0	26.2	9.1	15.6
Male	984	100.0	27.8	19.1	28.8	9.8	14.0
Female	970	100.0	30.4	20.3	23.7	8.5	17.1
Sesheke							
Both Sexes	1,180	100.0	23.6	18.3	28.2	10.9	19.0
Male	623	100.0	22.1	18.0	30.0	11.6	18.3
Female	557	100.0	25.3	18.7	26.0	10.2	19.8

In rural and urban areas the crippled make up 30.1 and 36.0 percent respectively. The lowest proportion in rural areas is of the mentally retarded (8.9 percent) while in urban areas the deaf/dumb and mentally retarded make up the lowest proportion of 13.4 percent in each case.

A comparison of the districts shows that Mongu has the largest share of disabled persons with 2,148 while Lukulu has the least with 706. In all districts except Senanga, the largest proportion comprises the crippled. In Senanga, the blind make up the largest proportion followed by the crippled. Proportions of the mentally retarded within the districts range from 6.2 percent in Lukulu to 10.9 percent in Sesheke.

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Table 10.2 shows the distribution of disabled persons as a proportion of total population. Out of a provincial population of 606,813, 1.4 percent are disabled. Of these, 0.4 percent are blind, 0.3 deaf/dumb, 0.4 crippled, 0.1 mentally retarded and 0.2 percent with multiple disabilities. In rural and urban areas, 1.5 and 1.0 percent of total population comprise the disabled, respectively. The proportions of total population that are disabled in the districts range from 1.0 percent in Kaoma to 1.8 percent in Sesheke.

Table 10.2

Disabled Persons as a Proportion of Total Population by Residence and Type of Disability, (Percent), Western Province, 1990

Residence	Total Population	Type of Disability					
		Total	Blind	Deaf/Dumb	Crippled	Mentally Retarded	Multiple Disabilities
Western							
Total	606,813	1.4	0.4	0.3	0.4	0.1	0.2
Rural	528,346	1.5	0.4	0.3	0.5	0.1	0.2
Urban	78,467	1.0	0.2	0.1	0.4	0.1	0.2
Districts							
Kalabo	97,320	1.6	0.4	0.3	0.6	0.1	0.2
Kaoma	112,049	1.0	0.2	0.2	0.3	0.1	0.2
Lukuiu	51,953	1.4	0.4	0.2	0.5	0.1	0.2
Mongu	142,795	1.5	0.4	0.2	0.5	0.2	0.2
Senanga	137,766	1.4	0.4	0.3	0.4	0.1	0.2
Sesheke	64,928	1.8	0.4	0.3	0.5	0.2	0.4

10.4 CHARACTERISTICS OF DISABLED PERSONS

Sex Ratios

Sex ratios of the disabled by type of disability and residence are shown in Table 10.3. Sex ratio indicates the number of males per 100 females. Hence, the total sex ratio of 104.5 implies that to every 100 disabled females, there are 104.5 disabled males. In rural areas, there are more disabled males than females and the opposite holds true for urban areas.

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Table 10.3

Sex Ratio of Disabled Persons by Residence and Type of Disability, Western Province, 1990.

Sex Ratio and Residence	Type of Disability					
	Total	Blind	Deaf/Dumb	Crippled	Mentally Retarded	Multiple Disabilities
Western						
Total	104.5	89.7	100.0	123.6	121.7	93.9
Rural	105.2	90.5	101.3	124.5	125.6	94.0
Urban	97.2	78.1	83.9	116.4	98.1	92.6
Districts						
Kalabo	104.0	89.0	90.8	127.5	114.8	90.5
Kaoma	114.2	93.8	116.7	130.3	161.5	102.4
Lukulu	102.3	86.2	90.6	127.0	158.8	76.3
Mongu	99.6	83.0	99.4	114.1	107.1	100.0
Senanga	101.4	92.9	98.0	123.0	114.3	83.1
Sesheke	111.8	97.9	107.7	129.0	126.3	103.6

Mongu is the only district with a sex ratio of less than 100 (implying more disabled females than males). However, there are more crippled and mentally retarded males than females. The numbers of mentally retarded males and females are the almost same, hence a sex ratio of 100.0.

Age Structure

The age structure of the disabled, in broad age groups is shown in Table 10.4. The table shows that 27.1 percent of the disabled children aged 0.14 have multiple disabilities and 25.4 percent are deaf/dumb. The crippled in this age category make up 24.2 percent while the blind make up 15.5 percent. The lowest proportion is that of the mentally retarded (7.8 percent). Among those aged 15 to 59 years, the largest proportion (35.6 percent) are crippled while the blind make up the largest proportion (45.5 percent)

Table 10.4

Disabled Persons by Type of Disability and Age Group, (Percent), Western Province, 1990

Type of Disability	Age Group			
	Total	0 - 14	15 - 59	60+
Blind	26.2	15.5	19.3	45.5
Deaf/Dumb	17.3	25.4	17.2	11.4
Crippled	30.6	24.2	35.6	27.2
Mentally Retarded	9.3	7.8	13.7	3.0
Multiple Disabilities	16.6	27.1	14.2	12.9
Total	100.0	100.0	100.0	100.0
Total Number	8,753*	1,872	4,323	2,514

Note: (*) This total includes even those who did not state their age.

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Usually Economically Active Disabled Population

Table 10.5 and Figure 10.1 present data on disabled persons by disability types and usual economic activity. Chapter 6 gives detailed definitions on economic activities. The table and figure show that 47.6 percent of the disabled aged 12 and older are not available for work and 26.8 percent are working. Homemakers and students make up 11.1 and 6.0 percent, respectively. Those seeking work and available for work make up 2.4 and 4.3 percent, respectively.

Table 10.5

Disabled Persons (12 Years and Older) by Type of Disability and Usual Economic Activity, (Percent), Western Province, 1990

Usual Economic Activity	Type of Disability					
	Total	Blind	Deaf/Dumb	Crippled	Mentally Retarded	Multiple Disabilities
Working	26.8	20.5	35.1	30.2	22.2	25.5
Seeking work	2.4	2.0	2.0	2.8	2.4	2.6
Available for work	4.3	2.9	5.6	4.3	6.1	4.7
Homemaker	11.1	9.6	14.3	10.7	9.5	12.6
Student	6.0	3.9	5.6	7.0	5.6	8.5
Not available for work	47.6	59.0	35.8	43.6	52.4	43.9
Not Stated	1.8	2.1	1.6	1.4	1.8	2.2
Percentage total	100.0	100.0	100.0	100.0	100.0	100.0
Total Number	7,357	2,091	1,151	2,358	716	1,051

Over half of the blind (59 percent) are not available for work. In all disability types, those not available for work make the largest proportions. Proportions of those working range from 20.5 percent among the blind to 35.1 percent among the deaf/dumb. The lowest proportions in all categories of the disabled are seeking work and they range from 2.0 percent among the blind and deaf/dumb to 2.8 percent among the crippled.

Figure 10.1

Usual Economic Activity of Disabled Persons, Western Province, 1990

Not Available for Work 47.6%

Homemaker 11.1%

Not Stated 1.8%

Seeking Work 2.4%

Student 6.0%

Available for Work 4.3%

Working 26.8%
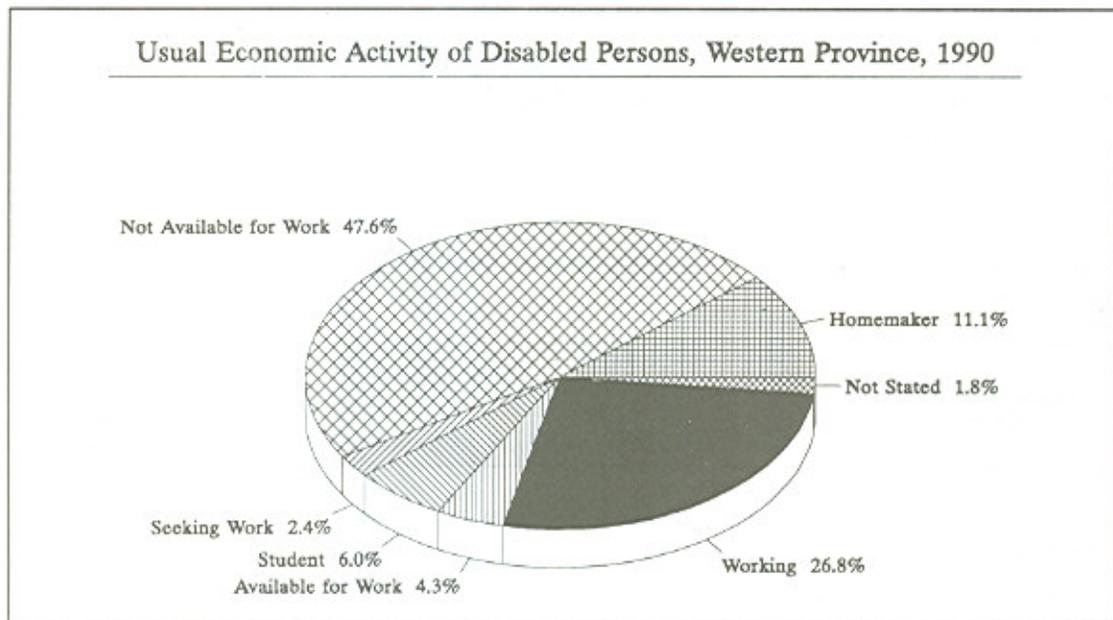
The employment status of the disabled household heads is shown on Table 10.6. The table shows that out of 320 disabled household heads, 65 percent are family workers, 23.4 percent are self employed, 6.6 percent employees and 1.2 percent are employers. About 4 percent have not stated their employment status.

Table 10.6

Disabled Household Heads Usually Active by Disability and Employment Status, (Percent), Western Province, 1990

Type of Disability			Employment Status				
	Total Number	Percentage Total	Employer	Employee	Self Employed	Family Worker	Not Stated
Total	320	100.0	1.2	6.6	23.4	65.0	3.8
Blind	60	100.0	-	5.0	20.0	73.3	1.7
Deaf/Dumb	63	100.0	6.4	6.3	20.6	65.1	1.6
Crippled	111	100.0	-	7.2	26.1	64.9	1.8
Mentally Retarded	39	100.0	-	5.1	30.8	51.3	12.8
Multiple Disabilities	47	100.0	-	8.5	19.1	66.0	6.4

None of the blind, crippled, mentally retarded and multiple disabled are employers. Proportions of the employees range from 5.0 percent among the blind to 8.5 among the multiple disabled. Family workers make up the largest proportions in all disability categories and proportions range from 51.3 percent among the mentally retarded to 73.3 percent among the blind.

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Educational Status of Disabled Population

Table 10.7 shows that out of 8,302 disabled persons aged 5 years and over, 71.2 percent have had no formal education at all, 22.2 percent have only completed primary level, while 4.6 percent have completed secondary education and a negligible proportion have completed higher levels of education.

Table 10.7

Disabled Persons (5 Years and Older) by Type of Disability and Level of Education Completed, (Percent), Western Province, 1990

Type of Disability	Level of Education						
	Total Number	Percentage Total	No Education	Primary	Secondary	Higher Level	Not Stated
Total	8,302	100.0	71.2	22.2	4.6	0.0	2.0
Blind	2,225	100.0	80.5	15.1	2.0	-	2.4
Deaf/Dumb	1,440	100.0	78.2	18.3	1.5	-	2.0
Crippled	2,576	100.0	61.4	30.2	7.0	-	1.4
Mentally Retarded	780	100.0	65.8	24.9	8.1	0.2	1.0
Multiple Disabilities	1,281	100.0	70.4	20.8	5.8	-	3.0

Proportions of those who have had no education range from 61.4 percent among the crippled to 80.5 percent among the blind. None of the blind, deaf/dumb, crippled and multiple disabled have completed higher levels of education while only 0.2 percent of the mentally retarded have completed this level.

10.5 SUMMARY

The analysis of the disabled persons of Western Province shows that out of a total population of 606,813, 8753 (1.4 percent) are disabled. There are more disabled males than females. The majority of the disabled reside in rural areas. The largest proportion of the disabled (30.6 percent) are crippled while the least (9.3 percent) are mentally retarded.

The distribution of disabled persons by economic activity shows that close to half of the disabled aged 12 years and older are not available for work. The majority of disabled household heads (65 percent) are family workers and the least (1.2 percent) are employers. The vast majority of the disabled aged 5 years and older (71.2 percent) have not completed any level of education.

CHAPTER 11

HOUSEHOLDS AND HOUSING CHARACTERISTICS

11.1 INTRODUCTION

During the 1990 census, collected data on housing characteristics for every housing unit and household was collected. The following information was solicited :-

- Type of structure
- Materials used for roofing, walls and floors
- Water and energy sources
- Type of toilet facilities
- Ownership of housing unit and type of tenancy

The last page of the 1990 Census questionnaire provides more details on the type of questions on household and housing characteristics.

11.2   CONCEPTS AND DEFINITIONS

Household

A group of persons who normally live and eat together. These people may or may not be related to each other. They make common provision for food or other essentials for living and have only one person whom they all regard as the head of household.

Household Composition

Description of the household according to some aspect of its membership, such as age, sex and number.

Housing Unit

An independent place of abode intended for habitation by at least one household. It should have its own door to the outside or a hallway.

Aqua Privy

It is a type of toilet in which water from a tank to through a large pipe sweeps away human excreta in a gully that leads to a sewerage system.

11.3 HOUSING CHARACTERISTICS

In this chapter, housing characteristics are described in terms of number of rooms per housing unit, construction materials, toilet facilities, sources of energy and water. The standard of living of a community may be measured by studying housing characteristics.

Number of rooms per housing unit

During the 1990 census, the number of rooms included bedrooms and living rooms. Verandas, lobbies, Kitchen, bathrooms and toilets were not counted as rooms. If a garage or storeroom is large enough to fit a bed for an adult and is used for living purposes, it was treated as a room. In rural areas, several units belonging to a household were treated as rooms for one housing unit.

Table 11.1 shows that in Western Province, there are 112877 households, 99312 of which are in rural and the remaining 13565 in urban areas. Of all the households in the province, 44 percent occupy two roomed housing units and 27.2 percent occupy one roomed structures. The third largest proportion occupies three roomed houses (15.3 percent). In both rural and urban areas, the largest proportion occupies two roomed houses. However, the second largest proportion occupies one roomed structures in rural areas and three roomed ones in urban areas.

Table 11.1

Households by Number of Rooms, Rural/Urban and Districts, (Percent), Western Province, 1990

Residence	Number of Households	Total	Number of Rooms										
			1	2	3	4	5	6	7	8	9	10+	Not Stated
Western Province													
Total	112,877	100.0	27.2	44.0	15.3	6.8	2.5	0.8	0.4	0.4	0.1	0.2	2.3
Rural	99,312	100.0	29.3	44.3	14.1	5.9	2.3	0.8	0.3	0.4	0.1	0.2	2.3
Urban	13,565	100.0	11.6	41.4	24.6	13.4	4.0	1.5	0.6	0.7	0.2	0.2	1.8
Districts													
Kalabo	19,418	100.0	25.3	48.9	15.8	6.1	1.6	0.5	0.2	0.3	0.1	0.1	1.1
Kaoma	20,291	100.0	20.5	43.5	17.5	8.6	4.2	1.5	0.7	0.6	0.2	0.2	2.5
Lukulu	10,151	100.0	35.2	40.7	13.7	5.6	2.1	0.7	0.3	0.2	0.2	0.1	0.8
Mongu	26,387	100.0	14.4	49.2	20.1	9.0	3.0	1.1	0.5	0.4	0.2	0.3	1.8
Senanga	24,425	100.0	41.1	38.9	8.9	4.0	1.6	0.4	0.2	0.5	0.1	0.1	4.2
Sesheke	12,205	100.0	33.9	38.7	15.1	6.6	2.1	0.7	0.3	0.3	0.0	0.1	2.0

In all the districts, the majority of households occupy two roomed housing units. In Senanga, the largest proportion (41.1 percent) occupies one roomed structures and the second largest (38.9 percent), two roomed ones. Small proportions of housing units occupy housing units with 6 or more rooms.

Figure 11.1 shows the percentage distribution of households by district. Mongu has the largest proportion of households followed by Senanga. Lukulu has the smallest proportion.

Figure 11.1

Households by Districts, Western Province, 1990
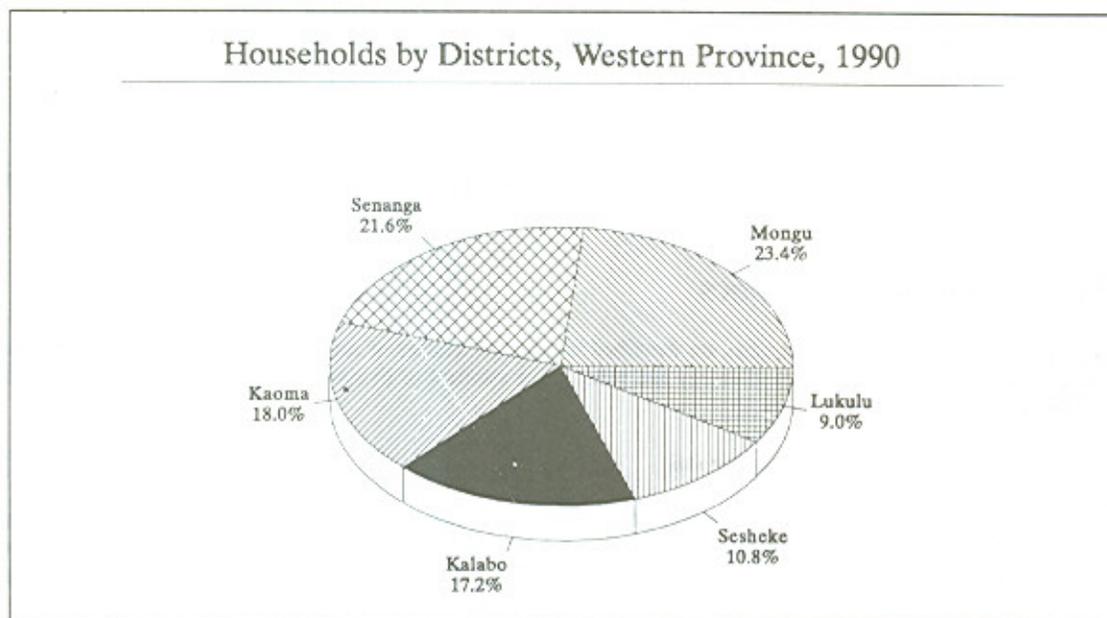
Table 11.2 shows the distribution of households by household size number of rooms per household in the province as well as rural and urban areas. The average number of rooms per household and average number of persons per room is also shown in the table. For the entire province the average number of rooms per household is 2.2. The average number of rooms is higher in urban than rural areas. The average number of persons per room is 2.4 in the entire province, 2.4 in rural areas and 2.1 in urban areas. Taking the appropriate number of persons per room to be 2, there is overcrowding in the province. Overcrowding is more apparent in rural than urban areas.

Table 11.2

Households by Household Size, Number of Rooms and Residence, (Percent), Western Province, 1990

| Residence and Household Size | Households | Number of Rooms | | | | | | | | | |
		Total	1	2	3	4	5	6+	Not Stated	Average Rooms	Persons Per Room
Western Province											
Total	112,877	100.0	27.2	44.0	15.3	6.8	2.5	1.9	2.3	2.2	2.4
1-2	23,177	100.0	36.6	48.9	8.6	2.2	0.7	0.7	2.3	1.8	0.9
3-4	30,273	100.0	30.8	48.3	12.8	3.9	1.2	1.0	2.0	2.0	1.8
5-6	25,269	100.0	26.0	44.7	17.2	6.6	2.0	1.4	2.1	2.2	2.5
7+	34,158	100.0	18.4	36.2	20.7	12.7	5.3	4.1	2.6	2.7	3.3
Rural											
Total	99,312	100.0	29.3	44.3	14.1	5.9	2.3	1.8	2.3	2.1	2.4
1-2	20,623	100.0	38.7	48.4	7.7	1.7	0.7	0.6	2.2	1.8	0.8
3-4	27,139	100.0	32.6	48.1	12.0	3.3	1.0	0.9	2.1	1.9	1.8
5-6	22,293	100.0	28.0	45.0	16.0	5.8	1.9	1.2	2.1	2.1	2.6
7+	4,901	100.0	5.8	28.5	30.9	20.8	7.0	5.1	1.9	2.2	3.4
Urban											
Total	13,565	100.0	11.6	41.4	24.6	13.4	4.0	3.2	1.8	2.7	2.1
1-2	2,554	100.0	19.1	53.5	16.0	6.0	1.7	1.3	2.4	2.2	0.7
3-4	3,134	100.0	15.2	50.4	19.8	8.7	2.3	2.2	1.4	2.4	1.4
5-6	2,976	100.0	11.2	42.7	26.5	12.7	3.0	2.6	1.3	2.6	2.1
7+	4,901	100.0	5.8	28.5	30.9	20.8	7.1	5.0	1.9	3.2	2.8

In both rural and urban areas, the largest number of households has at least seven persons. Of these households, the majority occupy two and three roomed housing structures in rural and urban areas respectively. The second largest occupy one and two roomed structures in rural and urban areas respectively.

Figure 11.2 shows that the largest proportion of households in the province has at least seven members (30.3 percent) while the smallest (20.5 percent) has 1-2 persons.

Figure 11.2

Households by Household Size, Western Province, 1990

30%

27%

Household Size
■ 1 - 2
▨ 3 - 4
▦ 5 - 6
▧ 7+

21%

22%
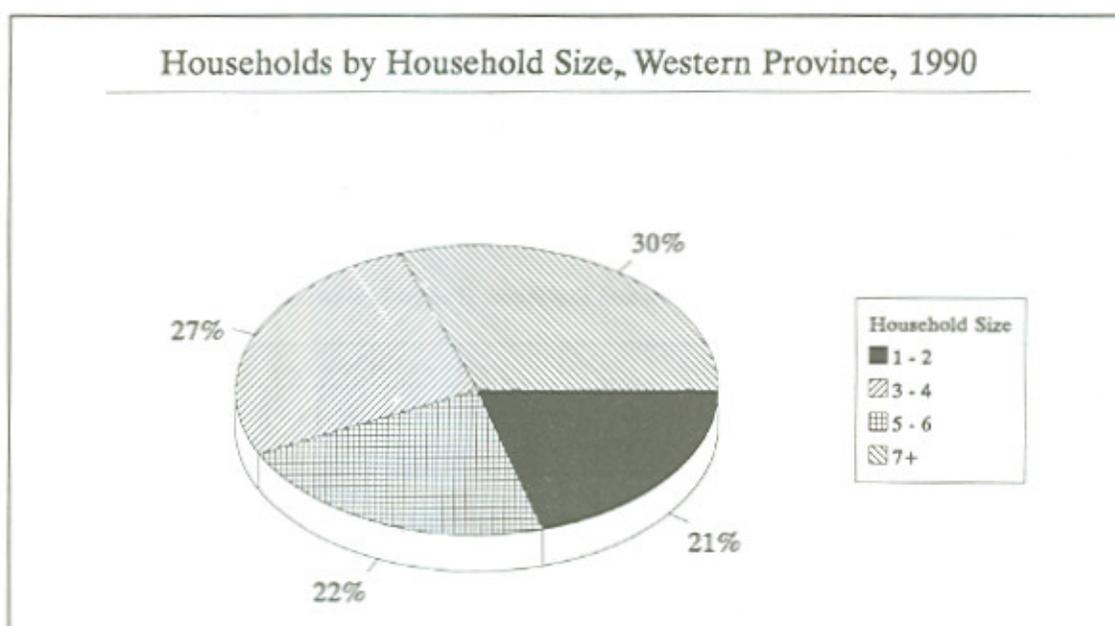
Construction materials of walls and roofs

The durability of housing units is increased with good quality building materials for walls, flowers and roofs. The construction materials for walls and roofs are shown in Table 11.3 and 11.4. In Table 11.3, it is shown that the most common roofing material in Western Province is grass used in 87.2 percent of the houses. However, of the housing structures with concrete walls, only 3.4 percent have grass thatched roofs and 16.7 percent of those with burnt brick walls or walls of asbestos, wood or hardboard have thatched roofs.

Table 11.3

Occupied Housing Units by Construction Materials of Walls and Roofs, (Percent), Western Province, 1990

Construction Materials of Walls	Number of H/units	Total	Construction Materials of Roofs						
			Concrete/ Cement	Asbestos Sheets	Iron Sheet Corrugated	Grass/ Thatch	Tiles	Other	Not Stated
Burnt Bricks	2,238	100.0	5.1	16.1	61.8	16.7	0.0	-	0.3
Unburnt/Mud Bricks	8,305	100.0	1.1	4.3	13.8	80.3	0.1	0.2	0.2
Concrete Blocks/slab	6,414	100.0	2.7	33.1	60.7	3.4	0.0	0.0	0.1
Stone	140	100.0	2.8	8.6	23.6	62.9	-	1.4	0.7
Iron Sheets	517	100.0	2.1	1.7	65.3	25.7	2.1	1.0	2.1
Asbestos/Wood/Hardboard	407	100.0	1.3	10.8	67.8	16.7	0.5	1.7	1.2
Pole and Dagga	74,845	100.0	0.4	0.4	1.9	96.9	0.1	0.2	0.1
Grass	17,230	100.0	0.6	0.4	1.6	95.5	0.4	1.2	0.3
Other	2,648	100.0	0.7	2.8	6.3	63.7	0.4	9.1	17.0
Total	112,744	100.0	0.7	3.0	7.9	87.2	0.2	0.5	0.5

Tiles and cement are not common construction materials for roofs. Proportions with asbestos roofs range from 0.4 percent for houses with grass or pole and dagga walls to 33 percent for those with concrete/slab walls. Proportions with iron sheet roofs range from 1.6 percent for houses with grass walls to 67.8 percent for those with asbestos, wood or hardboard walls.

Table 11.4 shows that the most common construction material for walls is pole and dagga used in about two-thirds of the housing units in the province. However, of the housing units with asbestos roofs, only 9.5 percent have pole and dagga walls. Stone, iron sheets, asbestos, wood and hardboard are not common construction materials for walls. Grass is relatively common, used in 15.3 percent.

Table 11.4

Occupied Housing Units by Construction Materials of Walls and Roofs, (Percent), Western Province, 1990

| Construction Materials of Walls | Total | Construction Materials of Roof | | | | | | |
		Concrete/ Cement	Asbestos Sheets	Iron Sheet Corrugated	Grass/ Thatch	Tiles	Other	Not Stated
Burnt Bricks	2.0	14.0	10.7	15.4	0.4	0.5	-	1.1
Unburnt/Mud Bricks	7.4	11.0	10.5	12.7	6.8	5.3	2.3	3.1
Concrete Blocks/Slab	5.7	21.0	62.8	43.5	0.2	0.5	0.5	1.1
Stone	0.1	0.5	0.4	0.4	0.1	-	0.3	0.2
Iron Sheets	0.5	1.3	0.3	3.8	0.1	5.8	0.8	1.8
Asbestos/Wood/Hardboard	0.4	0.6	1.3	3.1	0.1	1.1	1.2	0.8
Pole and Dagga	66.4	36.2	9.5	16.2	73.8	50.3	19.2	9.6
Grass	15.3	13.2	2.3	3.0	16.8	31.2	35.5	9.2
Other	5.2	2.2	2.2	1.9	1.7	5.3	40.2	73.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
H/units	112,744	816	3,373	8,950	98,196	189	603	617
Rural								
Burnt Bricks	1.1	11.7	8.8	15.8	0.3	-	-	1.0
Unburnt/Mud Bricks	7.0	10.1	15.7	15.9	6.5	5.0	2.1	2.9
Concrete Blocks/Slab	2.1	11.7	47.8	31.7	0.2	-	0.2	0.4
Stone	0.1	0.7	0.8	0.4	0.1	-	0.4	0.2
Iron Sheets	0.3	1.4	0.5	2.8	0.1	3.9	0.8	1.3
Asbestos/Wood/Hardboard	0.3	0.7	2.1	4.3	0.1	1.1	0.6	0.8
Pole and Dagga	71.2	45.5	18.4	24.8	74.7	52.5	21.7	10.2
Grass	15.7	16.3	3.9	2.8	16.4	31.9	40.4	9.2
Other	2.2	1.9	2.1	1.5	1.6	5.6	33.8	74.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
H/units	99,226	624	1,118	4,320	91,983	179	483	519
Urban								
Burnt Bricks	8.3	21.4	11.6	15.1	2.0	10.0	-	2.0
Unburnt/Mud Bricks	9.7	14.1	7.9	9.9	10.3	10.0	3.3	4.1
Concrete Blocks/Slab	31.8	51.1	70.5	54.5	1.2	10.0	1.7	5.1
Stone	0.2	-	0.1	0.3	0.1	-	-	-
Iron Sheets	1.8	1.0	0.1	4.7	0.2	40.0	0.8	4.1
Asbestos/Wood/Hardboard	1.0	0.6	0.9	2.0	0.3	-	3.3	1.0
Pole and Dagga	31.7	5.7	5.1	8.2	60.7	10.0	9.2	6.1
Grass	11.9	3.1	1.5	3.1	22.4	20.0	15.8	9.2
Other	3.6	3.1	2.3	2.2	2.8	-	65.9	68.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
H/units	13,518	192	2,255	4,630	6,213	10	120	98

In rural areas, 71.2 percent of houses have pole and dagga walls. In urban areas, proportions with walls of concrete/slab and pole/dagga are close; 31.8 and 31.7 percent respectively. Of the housing units with concrete/cement roofs, 45.5 percent have pole and dagga walls in rural areas compared to 5.7 percent in urban areas. In both rural and urban areas, stone, iron sheets, asbestos, wood and hardboard are not common construction materials for walls.

Construction materials of Walls and Floors

Table 11.5 shows that mud is the most common construction material for floors in the province used in 81.9 percent of the housing units. Wood and marble floors are found in 0.4 percent and 0.3 percent of the respective housing units. Concrete/cement floors are found in 10.7 percent of the housing units. Mud floors are found in 2.8 percent of the housing units with concrete/slab walls. The majority of housing units with walls of concrete/slab, iron sheets, asbestos, wood or hardboard, have concrete/cement floors.

Table 11.5

Occupied Housing Units by Construction Material of Walls and Floors, (Percent), Western Province, 1990

Construction Materials of Walls	Number of H/units	Total	Construction Material of Floors					
			Concrete/ Cement	Mud	Wood (not Wooden Tile)	Marble	Other	Not Stated
Burnt Bricks	2,238	100.0	87.7	10.4	0.7	0.1	0.7	0.4
Unburnt/Mud Bricks	8,305	100.0	22.7	76.0	0.3	0.2	0.6	0.2
Concrete Blocks/Slab	6,414	100.0	94.8	2.8	1.7	0.2	0.3	0.2
Stone	140	100.0	19.3	67.9	.	1.4	10.7	0.7
Iron Sheets	517	100.0	47.8	37.7	1.5	0.2	12.0	0.8
Asbestos/Hardboard/Wood	407	100.0	58.2	25.6	12.8	-	3.4	.
Pole and Dagga	74,845	100.0	1.7	95.1	0.2	0.2	2.4	0.4
Grass	17,230	100.0	1.6	73.3	0.2	0.6	23.7	0.6
Other	2,648	100.0	4.7	51.4	0.2	0.2	26.4	17.1
Total	112,744	100.0	10.7	81.9	0.4	0.3	6.0	0.8

Table 11.6 shows that although pole and dagga walls are generally the most common in the province, they are found in only 10.4 percent of the houses with concrete/cement floors. In these housing units, 50.3 percent have concrete/slab walls. Concrete/slab walls are relatively common in housing units with floors of wood.

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Table 11.6

Occupied Housing Units by Construction Material of Walls and Floors, (Percent), Western Province, 1990

Construction Materials of Walls	Total	Concrete/ Cement	Mud	Wood (not Wooden Tile)	Marble	Other	Not Stated
Burnt Bricks	2.0	16.2	0.3	3.8	1.0	0.2	1.1
Unburnt/Mud Bricks	7.4	15.6	6.8	5.3	4.7	0.8	1.5
Concrete Blocks/Slab	5.7	50.3	0.2	26.7	3.5	0.3	1.1
Stone	0.1	0.2	0.1	-	0.7	0.5	0.1
Iron Sheets	0.5	2.0	0.2	2.0	0.3	0.9	0.5
Asbestos/Hardboard/Wood	0.4	2.0	0.1	13.1	-	0.2	-
Pole and Dagga	66.4	10.4	77.1	37.4	56.9	26.9	30.8
Grass	15.2	2.2	13.7	10.3	31.4	60.2	13.4
Other	2.2	1.1	1.5	1.3	1.6	10.3	51.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
H/units	112,744	12,089	92,285	397	318	6,775	880
Rural							
Burnt Bricks	1.1	16.9	0.2	2.5	0.8	0.2	0.8
Unburnt/Mud Bricks	7.1	21.8	6.7	6.6	5.5	0.8	1.4
Concrete Blocks/Slab	2.1	37.6	0.1	7.7	1.5	0.1	0.5
Stone	0.1	0.2	0.1	-	0.8	0.2	0.1
Iron Sheets	0.3	1.8	0.1	1.5	0.4	0.8	0.3
Asbestos/Hardboard/Wood	0.3	2.9	0.2	15.3	-	0.2	-
Pole and Dagga	71.1	15.5	78.0	51.8	65.9	27.9	33.2
Grass	15.7	2.4	13.3	12.8	23.1	60.3	14.1
Other	2.2	0.9	1.3	1.8	2.0	9.5	49.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
H/units	99,226	5,238	86,384	274	255	6,296	779
Urban							
Burnt Bricks	8.3	15.8	0.6	6.5	1.6	-	4.0
Unburnt/Mud Bricks	9.7	10.8	9.6	3.2	1.6	0.4	2.0
Concrete Blocks/Slab	31.8	60.0	1.2	69.1	11.1	2.5	5.9
Stone	0.2	0.2	0.2	-	-	0.2	-
Iron Sheets	1.8	2.3	1.1	3.3	-	3.1	2.0
Asbestos/Hardboard/Wood	1.0	1.3	0.6	8.1	-	0.2	-
Pole and Dagga	31.8	6.4	63.5	4.9	20.6	14.8	11.9
Grass	11.9	2.1	19.1	4.9	65.1	58.3	7.9
Other	3.6	1.1	4.1	-	-	20.5	66.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
H/units	13,518	6,851	5,901	123	63	479	101

In both rural and urban areas, of the housing units with concrete floors, the largest proportion has concrete walls. Of the housing units with floors of wood, the majority (51.8 percent) have pole and dagga walls in rural areas while in urban areas the majority (69.1 percent) have concrete/slab walls and only 4.9 percent have pole and dagga walls. Of those with marble floors, 65.9 percent have pole and dagga walls in rural areas and 65.1 percent have grass walls in urban areas.

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Water Supply and Sanitation

The availability of clean water supply for households helps prevent the occurrence of water borne diseases such as dysentry, cholera, diarrhoea and bilharzia. Piped water and boreholes are among the sources of clean water supply. Boreholes and wells in this chapter are treated in one and the same category hence, there may be difficulties in distinguishing clean and unclean water supplies.

Table 11.7 shows the main sources of water supply in the province for 1980 as well as 1990. The table as well as Figure 11.3 show that proportions of households using piped water together decreased from 20.6 percent in 1980 to 15.1 in 1990. The use of well/borehole increased from 51.3 percent to 62.1 percent while that of the river/stream decreased from 20.6 to 15.6 percent. In rural areas of the province, wells/boreholes are the most common sources of water supply used by 69.1 percent of the households. In urban areas almost half (49.6 percent) of the households use piped water outside the housing unit with 100 meters radius from the housing unit compared to 3.0 percent using this source in rural areas. In rural areas, 17.3 percent use water from rivers or streams compared to 3.2 percent in urban areas.

Table 11.7

Households by Main Source of Water Supply, (Percent), Western Province, 1980 and 1990

Main source of water supply	1980	Residence - 1990								
		Total	Rural	Urban	Kalabo	Kaoma	Lukulu	Mongu	Senanga	Sesheke
Piped water inside H/unit	3.9	2.4	0.7	15.0	1.3	2.1	1.2	4.7	1.2	2.7
Piped water outside H/unit	9.4	8.6	3.0	49.6	6.4	6.6	7.5	15.4	5.4	8.5
Piped Water Beyond 100m	7.3	4.1	2.1	18.4	1.6	3.2	2.1	9.7	2.0	3.3
Well/borehole	57.3	62.1	69.1	11.2	74.8	73.9	70.3	52.4	59.2	42.3
River/Stream	20.6	15.6	17.3	3.2	6.7	5.8	11.4	12.9	24.5	37.5
Other	1.5	5.8	6.5	1.0	8.2	6.6	6.6	3.4	6.3	4.6
Not Stated	-	1.4	1.3	1.6	1.0	1.8	0.9	1.5	1.4	1.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total Households	113,321	112,877	99,312	13,565	19,418	20,291	10,151	26,387	24,425	12,205

In all the districts, the largest proportion uses water drawn from wells/boreholes. Proportions using piped water inside the housing unit range from 1.2 percent in Senanga to 4.7 in Mongu while those using rivers/streams range from 5.8 percent in Kaoma to 37.5 in Sesheke.

Figure 11.3

Households by Main Source of Water Supply,
Western Province

1980 Census:
- Other 1.5
- River/Stream 20.6
- Piped out within 100m 9.4
- Well/Borehole 57.3
- Piped out over 100m 7.3
- Piped Inside 3.9

1990 Census:
- Other 5.8
- River/Stream 15.6
- Not Stated 1.4
- Piped Out within 100m 8.6
- Well/Borehole 62.1
- Piped Out over 100m 4.1
- Piped Inside 2.4
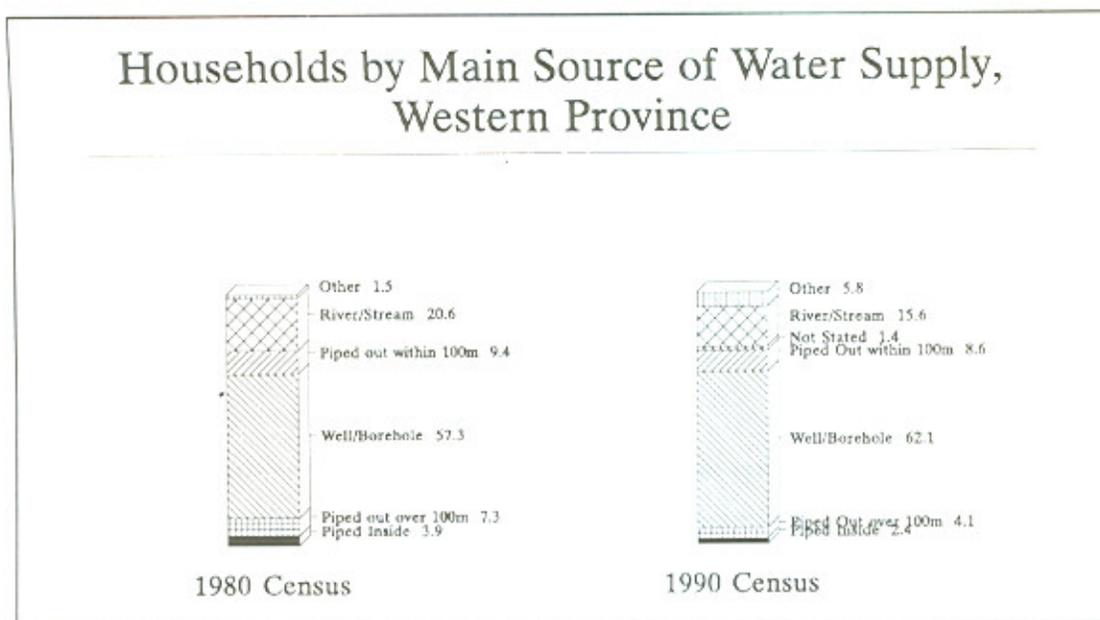
Households drawing water from rivers, streams or wells in areas where pit latrines are common could be vulnerable to various forms of water borne diseases. Seepage containing germs from pit latrines could contaminate water in rivers, streams or wells.

Table 11.8 shows the different toilet facilities used in the province. These toilet facilities include flush toilets, buckets, aqua-privy and pit latrines. The 'other' toilet facilities are used by 69.6 percent of the households in the province. The pit latrine is used by 22 percent, flush toilets by another 0.1 percent. Those who did not state the toilet facility they use make up 1.5 percent.

Table 11.8

Households by type of toilet and residence (Percent), Western Province, 1990

Type of Toilet	Residence - 1990								
	Total	Rural	Urban	Kalabo	Kaoma	Lukulu	Mongu	Senanga	Sesheke
Flush	3.2	0.7	25.5	2.1	3.4	1.6	7.5	1.6	4.2
Bucket	0.1	0.0	0.1	0.0	0.2	0.1	0.0	0.1	0.0
Aqua-Privy	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.1
Pit Latrine	25.2	20.9	56.8	17.9	46.6	23.3	24.6	16.7	21.2
Other	69.5	76.9	15.7	78.8	47.6	74.1	66.1	80.4	73.3
Not Stated	1.4	1.4	1.8	1.2	2.1	0.9	1.7	1.1	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total Households	112,877	99,312	13,565	19,418	20,291	10,151	26,387	24,425	12,205

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In rural areas, 76.9 percent use the "other" toilet faclities (which may include the bush) while 15.7 percent of urban households use these facilities. Pit latrines are used by 20.9 and 56.8 percent of rural and urban households respectively. The bucket and aqua-privy are not common in both rural and urban areas. In all the districts, the largest proportions use the "other" toilet facilities. In Kaoma, proportions using pit-latrines and "other" facilities are close; 46.6 and 47.6 percent respectively. Proportions using flush toilets range from 1.6 percent in Lukulu to 7.5 percent in Mongu.

Domestic Energy

Table 11.9 shows the six main sources of cooking energy. These are electricity, gas, paraffin, wood, charcoal and coal. The vast majority (92.7 percent) of households use wood as a source of cooking energy. Coal is used by a negligible proportion of households while 1.4 percent use electricity and 1.6 percent use charcoal. In rural areas 94.5 percent use wood and 79.4 percent of the urban households use this source. Gas and coal are not common in both rural and urban areas.

Table 11.9

Households by Main Source of Energy used for Cooking, (Percent), Western Province, 1990

Main source of Energy for cooking	Total	Residence		Districts					
		Rural	Urban	Kalabo	Kaoma	Lukulu	Mongu	Senanga	Sesheke
Electricity	1.4	0.2	10.2	0.7	1.0	0.2	3.6	0.8	1.0
Gas	0.2	0.2	0.4	0.1	0.2	0.1	0.2	0.2	0.3
Paraffin/Kerosene	1.2	1.0	2.4	0.8	1.8	0.9	1.5	0.9	0.9
Wood	92.7	94.5	79.4	94.9	91.8	96.7	86.5	94.5	96.8
Charcoal	1.6	1.0	6.5	0.4	4.0	0.8	2.4	0.8	0.2
Coal	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Other	2.4	2.7	0.2	2.7	0.2	0.1	5.3	2.5	0.4
Not Stated	0.5	0.4	0.8	0.4	1.0	0.3	0.5	0.3	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total households	112,877	99,312	13,565	19,418	20,291	10,151	26,387	24,425	12,205

In all the districts, the largest proportion of households use wood as a source of cooking energy. Proportions using electricity range from 0.2 percent in Lukulu to 3.6 in Mongu.

Table 11.10 shows the proportional changes in cooking energy sources between 1980 and 1990. The proportion of households using electricity changed from 0.6 in 1980 to 1.4 percent in 1990 while that of gas and Kerosene (Paraffin) increased from 0.8 to 1.4 percent. There was a slight change in the proportions of households using wood-fuel and coal. During the 1980 Census, wood, charcoal and coal were combined while gas and paraffin (Kerosene) were also combined unlike in the 1990 census. For comparative purposes, these energy sources from the 1990 census have been combined in Table 11.10. The separate sources are presented in Table 11.9.

Table 11.10

Households by Main Source of Energy for Cooking, (Percent), Western Province, 1980 and 1990

Energy Source	1980	1990
Electricity	0.6	1.4
Gas and Kerosene (paraffin)	0.8	1.4
Wood, Charcoal, Coal	95.2	94.3
Other	3.4	2.4
Not stated	-	0.5
Total	100.0	100.0
Households	113,321	112,877

Table 11.11 presents data on sources of lighting energy which include electricity, gas, paraffin and candle. The largest proportion of housing units in the province (57.4 percent) use paraffin for lighting. "Other" sources of lighting energy are also relatively common, used in 37.4 percent of housing units. These may include batteries and diesel. Gas and candle are not common sources of lighting energy. In both rural and urban areas, paraffin is used in the majority of housing units. A relatively large proportion of urban housing units (21.1 percent) use electricity compared to 0.8 percent in rural areas.

Sources of lighting energy are shown in Table 11.11. These include electricity, gas, paraffin and candle. The table clearly shows that paraffin (Kerosene) is the most common source of lighting energy used in 83.5 percent of housing units. Electricity is used in 4 percent of the housing units, 0.7 percent use gas and 0.6 percent use candle. In both rural and urban areas, paraffin (kerosene) is the most common source of lighting energy while less than 1 percent use gas in each case.

Table 11.11

Housing Units by Main Source of Energy Used for Lighting, (Percent), Western Province, 1990

Main source of energy for lighting	Total	Rural	Urban	Districts					
				Kalabo	Kaoma	Lukulu	Mongu	Senanga	Sesheke
Electricity	3.3	0.8	21.1	1.5	3.2	0.7	5.7	2.0	5.5
Gas	0.4	0.4	0.8	0.4	0.6	0.3	0.5	0.4	0.4
Paraffin (Kerosene)	57.4	55.8	69.5	51.2	73.0	51.7	69.4	38.5	58.1
Candle	0.8	0.7	1.7	0.7	0.7	0.4	1.1	1.0	0.7
Other	37.4	41.6	5.9	45.7	21.3	46.4	22.5	57.6	34.8
Not Stated	0.7	0.7	1.0	0.5	1.2	0.5	0.8	0.5	0.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number H/units	112,744	99,226	13,518	19,397	20,260	10,141	26,346	24,407	12,193

Proportions of housing units using electricity in the districts range from 0.7 percent in Lukulu to 5.7 percent in Mongu. While those using paraffin range from 38.5 in Senanga to 73 percent in Kaoma. Those using "other" sources of lighting energy range from 21.3 percent in Kaoma to 57.6 in Senanga.

11.4   OWNERSHIP STATUS OF HOUSING UNITS

Table 11.12 presents data on ownership status of housing units in Western Province. Out of 112,744 housing units in the province, 92.8 percent are owned by individuals. The second largest proportion (4.3 percent) are owned by the central government. Proportions owned by the district council, parastatal and private organisations are less the 1 percent in each case. In both rural and urban areas, the majority (96.2 percent and 67.9 percent respectively) of housing units are owned by individuals.

Table 11.12

Occupied Housing Units by Ownership Status and District, (Percent), Western Province, 1990

Ownership Status	Total	Rural	Urban	DISTRICTS					
				Kalabo	Kaoma	Lukulu	Mongu	Senanga	Sesheke
Central Govt.	4.3	2.3	19.0	3.6	4.1	2.6	6.5	3.1	5.2
District Council	0.9	0.1	7.0	0.5	0.6	0.6	1.6	0.7	1.6
Parastatal	0.7	0.4	3.3	0.2	0.3	0.1	1.0	0.2	3.0
Private Org.	0.5	0.3	1.7	0.3	0.5	0.5	0.7	0.3	0.6
Individual	92.8	96.2	67.9	94.8	93.3	95.7	89.4	95.0	89.0
Not Stated	0.8	0.7	1.1	0.6	1.2	0.5	0.8	0.7	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
H/units	112,744	99,226	13,518	19,397	20,260	10,141	26,346	24,407	12,193

A comparison of districts shows that proportions of housing units owned by individuals range from 89.0 percent in Sesheke to 95.7 in Lukulu. Private organisations own less than 1 percent in each district. The central government owns the second largest proportion in all districts.

Households that occupy rented housing units are presented in Table 11.13. Of the 112,877 households in the province, 5,724 occupy rented housing units. Of the 5,724, 40 percent rent housing units from individuals, 34 percent from the central government, 7.5 percent from the district council, 7 percent from parastatal organisations and 4 percent from private organisations.

Table 11.13

Households in Rented Housing Units by Residence and Ownership, (Percent), Western Province, 1990

Residence		Number of H/holds	Percentage Total	Landlord					
				Central Government	District Council	Parastatal	Private Organisation	Individual	Not Stated
Western Province									
	- Total	5,724	100.0	34.0	7.5	7.0	4.0	40.0	7.5
	- Rural	2,459	100.0	26.8	1.2	4.8	2.6	57.0	7.6
	- Urban	3,265	100.0	39.4	12.2	8.6	5.2	27.2	7.4
Districts	Kalabo	431	100.0	54.0	3.3	3.3	4.6	24.6	10.2
	Kaoma	613	100.0	31.7	8.1	2.6	2.0	45.5	10.3
	Lukulu	511	100.0	34.8	6.3	2.4	3.3	45.6	7.6
	Mongu	2,567	100.0	30.9	9.0	6.6	5.5	40.2	7.8
	Senanga	780	100.0	38.3	3.3	2.8	1.9	48.4	5.3
	Sesheke	822	100.0	30.3	9.4	20.0	3.3	32.0	5.0

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In rural areas the most common landlords are the individuals as opposed to the central government in urban areas. Private organisations are the smallest landlords in both rural and urban areas. In all districts but Kalabo, individuals are the most common landlords. In Kalabo, over half (54%) of the households rent housing structures from the Central Government.

Figure 11.4 shows households in rented housing units. Less than 500 households in Kalabo are in rented housing units compared a little over 2,500 in Mongu. In the remaining districts, households in rented housing units are between 500 and 1,000.

Figure 11.4

Households in Rented Housing Units, Western Province, 1990
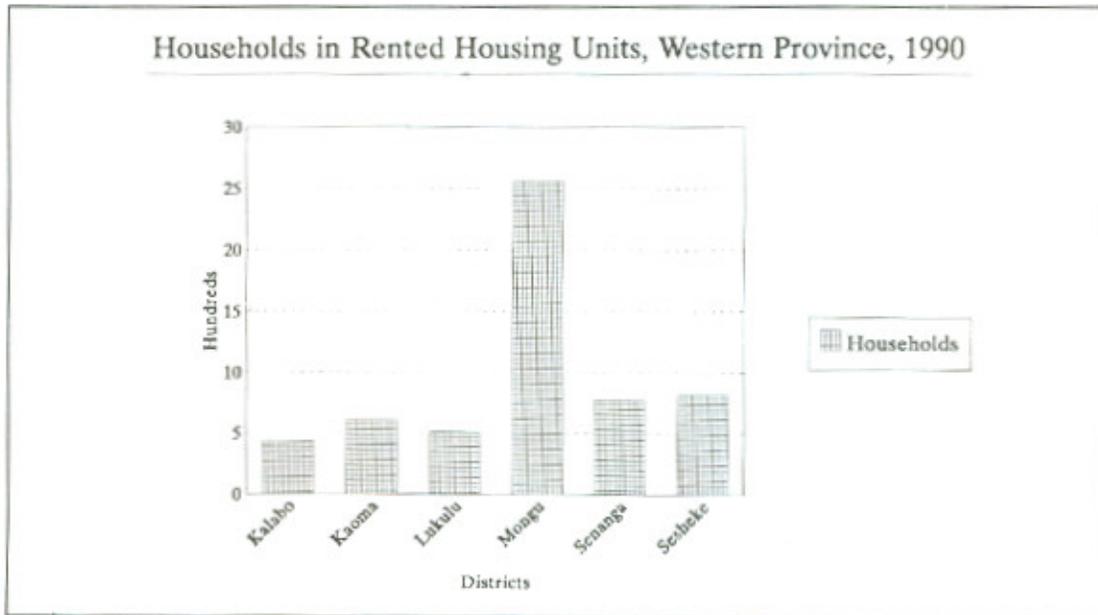
11.5 HOUSEHOLD SIZE AND COMPOSITION

Table 11.14 shows households by Household size, sex of household head and district. In the province in general and all the districts in particular, there are more male than female headed households.

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Table 11.14

Households by Size and Sex of Head, (Percent), Western Province, 1990

Sex of Household Head and District		Number of H/units	Total	Household Size									
				1	2	3	4	5	6	7	8	9	10+
Western Province													
	Male	86,089	100.0	5.5	10.8	12.4	13.3	12.5	10.9	9.2	7.2	5.3	12.9
	Female	26,793	100.0	17.5	16.7	16.2	14.2	11.0	8.2	5.5	3.8	2.3	4.6
Kalabo													
	Male	14,432	100.0	5.4	11.9	13.7	14.2	13.0	10.9	8.8	6.8	4.8	10.5
	Female	4,987	100.0	19.8	18.2	17.4	14.4	11.0	7.0	4.5	3.2	1.5	3.0
Kaoma													
	Male	16,318	100.0	5.6	11.6	12.4	13.2	11.9	10.6	9.2	7.1	5.1	13.3
	Female	3,974	100.0	18.6	15.4	15.2	13.9	10.4	7.8	5.5	4.3	2.6	6.3
Lukulu													
	Male	7,817	100.0	4.6	11.7	13.7	14.1	13.0	11.5	9.3	6.6	4.3	11.2
	Female	2,335	100.0	19.8	18.9	16.5	14.2	10.5	7.7	4.8	3.1	1.8	2.7
Mongu													
	Male	19,080	100.0	6.3	10.4	11.7	12.6	12.1	10.5	9.2	7.5	5.8	13.9
	Female	7,307	100.0	17.2	16.0	15.8	13.6	10.8	8.9	5.9	3.8	2.7	5.3
Senanga													
	Male	18,895	100.0	4.5	9.4	11.9	13.1	12.9	11.4	9.5	7.5	5.5	14.3
	Female	5,531	100.0	14.1	15.5	16.6	15.2	11.9	8.8	6.2	4.0	2.4	5.3
Sesheke													
	Male	9,547	100.0	6.4	10.8	11.7	13.2	12.4	10.8	9.4	7.6	5.7	12.0
	Female	2,659	100.0	17.0	18.3	15.5	14.4	10.6	8.2	5.7	4.0	2.4	3.9

The proportions of male headed households, are larger than female headed households for households with 5 or more members and the opposite holds true for smaller households. Of the male headed households, 5.5 and 10.8 percent are one and two member households while 17.5 and 16.7 percent of the female headed households are of these respective sizes. While 12.9 percent of male headed households have at least ten members, 4.6 percent of female headed households are of this size. All the districts portray a similar picture to that of the entire province.

Table 11.15 shows the average household size for the province as well as districts. In 1980, the average household size for the entire province was 4.3 and 5.4 in 1990. In rural areas it increased from 4.2 to 5.3 in the intercensal period 1980-90 while that of urban areas changed from 4.8 to 5.8. The average household size for male headed households is larger than that of females. A comparison of the districts shows that it ranges from 5.0 in Kalabo to 5.6 in Senanga.

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Table 11.15

Average Household Size by Residence and Sex of Head, Western Province,
1980 and 1990

Sex of Household Head and Residence	1980	1990
Western Province		
Total	4.3	5.4
Male	4.8	5.8
Female	3.4	4.1
Rural	4.2	5.3
Urban	4.8	5.8
Districts		
Kalabo	-	5.0
Kaoma	-	5.5
Lukulu	-	5.5
Mongu	-	5.4
Senanga	-	5.6
Sesheke	-	5.3

Table 11.16 shows that the proportion of single number households decreased from 19.8 percent in 1980 to 8.3 in 1990. That of at least seven members increased from 21.4 to 30.3 percent during this intercensal period. There were slight changes for households of size 2 to 6.

Table 11.16

Household Size, (Percent), Western Province, 1980 and 1990

Number of Household Members	1980	1990
1	19.8	8.3
2-3	27.3	25.5
4-6	31.5	35.9
7+	21.4	30.3
Total	100.0	100.0

Household Composition

In this chapter, household composition is described in terms of marital status, educational level of household heads, economically active household members and the presence of members below 12 years of age.

Marital Status of Household Heads

Table 11.17 shows the marital status of heads of households by sex and rural/urban. The table and figure show that slightly over four-fifths of male heads of households are married while those who have never married make up 2.8 percent. Their female counterparts are concentrated in the widowed and divorced categories.

Table 11.17

Household Heads by Marital Status, Sex and Residence, (Percent), Western Province, 1990

Marital Status	Western Province		Rural		Urban	
	Male	Female	Male	Female	Male	Female
Never Married	2.8	10.1	2.3	8.7	6.9	19.8
Married	81.0	11.8	81.1	11.9	80.3	10.6
Widowed	1.4	31.9	1.4	33.8	1.0	19.5
Divorced	2.3	33.8	2.2	33.2	3.1	37.4
Separated	1.0	9.8	1.0	10.1	1.1	8.3
Not Stated	11.5	2.6	12.0	2.3	7.6	4.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of H/Heads	86,089	26,793	76,043	23,274	10,046	3,519

Figure 11.5

Household Heads by Marital Status, Western Province, 1990

Never Married ▨Divorced ▨Married ▦Widowed ▥Not Stated ▧Separated
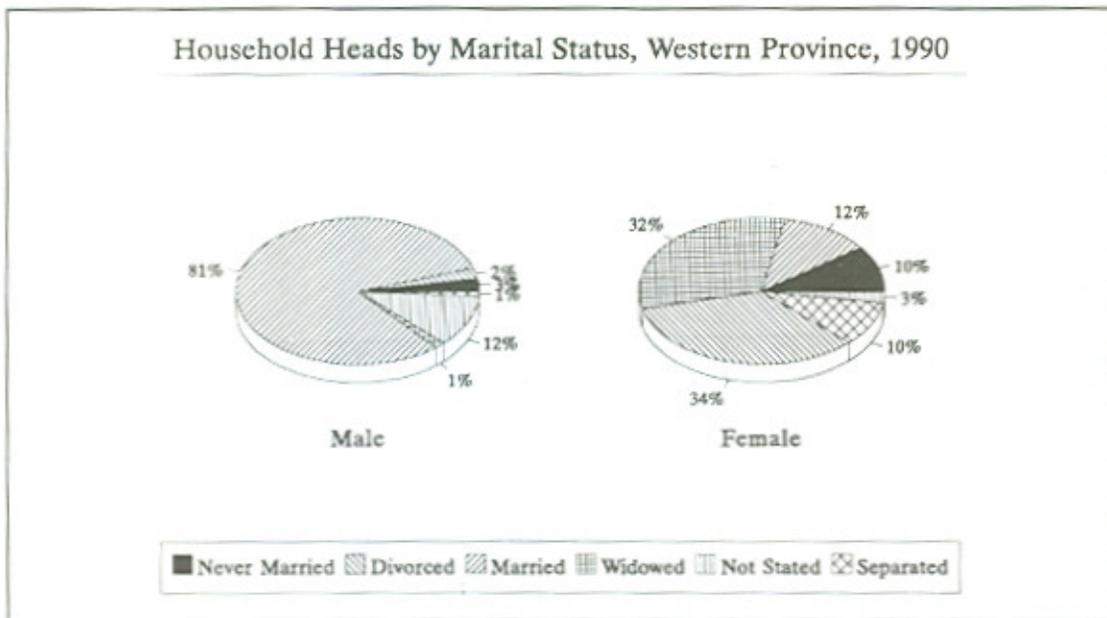
In both rural and urban areas, male heads of households are concentrated in the married category while their female counterparts are mostly widowed or divorced. Proportions of separated and never married heads of households are higher for females than males areas.

The age structure and marital status of household heads are displayed in Table 11.18. The table shows that at age group 12-14 years for males and 12-29 years for females, the majority of heads of households have never been married. From age group 20-24 years upwards, the majority of male heads of households are married. After 29, female heads of households are concentrated in the divorced and widowed categories.

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Table 11.18

Households Heads by Marital Status, Age and Sex, (Percent), Western Province, 1990

| Age of Household Head | Number of Household Heads | | Marital Status and Sex of Household Head | | | | | | | | | | | | | |
| | | | Total | | Never Married | | Married | | Widowed | | Divorced | | Separated | | Not Stated | |
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
12-14	37	31	100.0	100.0	78.4	87.1	5.4	-	-	3.2	2.7	3.2	-	3.2	13.5	3.2
15-19	337	284	100.0	100.0	52.8	76.1	40.4	12.7	-	1.1	-	4.9	0.3	4.6	6.5	0.7
20-24	4,055	1,079	100.0	100.0	15.4	55.7	73.5	18.0	0.1	1.9	0.4	16.6	0.5	6.3	10.0	1.5
25-29	8,893	1,786	100.0	100.0	8.5	35.1	77.6	17.2	0.2	5.2	1.1	29.4	0.5	10.1	12.1	3.1
30-34	10,615	2,211	100.0	100.0	3.2	16.1	81.1	19.0	0.3	8.7	1.9	40.9	0.8	12.7	12.7	2.6
35-39	7,763	2,069	100.0	100.0	1.7	9.2	83.4	17.2	0.5	14.2	2.0	42.2	0.8	13.9	11.6	3.3
40-44	7,678	2,740	100.0	100.0	1.0	4.5	82.0	16.1	0.8	22.4	2.4	42.6	1.0	11.1	12.9	3.2
45-49	7,501	2,472	100.0	100.0	0.9	3.1	81.7	12.9	1.0	30.5	2.5	40.5	1.1	10.4	12.7	2.7
50-54	8,365	3,098	100.0	100.0	0.6	3.5	83.0	10.4	1.2	35.2	2.4	37.3	1.0	10.8	11.7	2.8
55-59	7,621	2,563	100.0	100.0	0.7	2.6	83.4	8.5	1.3	43.0	2.6	35.0	1.1	8.4	10.9	2.4
60-64	7,522	3,011	100.0	100.0	0.5	3.5	82.4	7.4	1.9	48.2	2.9	30.2	1.2	8.9	11.0	1.8
65+	15,225	5,288	100.0	100.0	0.6	4.0	92.1	5.9	3.8	54.4	3.3	26.3	1.8	7.7	8.4	1.6
Not Stated	477	161	100.0	100.0	1.0	6.8	37.1	6.2	2.1	32.9	1.7	13.0	0.6	8.7	57.4	32.3
Total	86,089	26,793	100.0	100.0	2.8	10.1	81.0	11.8	1.4	51.9	2.3	33.8	1.0	9.8	11.5	2.6

Educational level of household heads

Table 11.19 shows that more than half (52.2 percent) of heads of households have never attended formal schooling while only 0.1 percent have completed higher levels of education. About one third have completed primary education while 12.5 percent have completed secondary education. In rural areas, the largest proportion of household heads have never had any formal education while the majority of their urban counterparts have completed secondary education.

Table 11.19

Household Heads by Level of Education Completed, (Percent), Western Province, 1990

| Residence | Number of Heads | Percentage Total | Level of education | | | | |
			No Schooling	Primary	Secondary	Higher	Not Stated
Western							
Total	122,882	100.0	52.2	33.7	12.5	0.1	1.5
Rural	99,317	100.0	55.5	34.1	8.9	0.1	1.4
Urban	13,565	100.0	27.9	30.9	38.4	0.7	2.1
Sex of Head							
Male	86,089	100.0	46.8	34.7	14.1	0.2	1.5
Female	26,793	100.0	69.5	21.7	7.5	0.0	1.3
Districts							
Kalabo	19,419	100.0	61.2	28.8	8.7	0.1	1.2
Kaoma	20,292	100.0	51.5	33.6	13.1	0.1	1.7
Lukulu	10,152	100.0	54.6	35.8	8.6	0.1	0.9
Mongu	26,387	100.0	43.0	36.0	18.7	0.3	2.0
Senanga	24,426	100.0	60.3	29.3	9.1	0.1	1.2
Sesheke	12,206	100.0	40.3	43.7	14.5	0.1	1.4

About 70 percent and 46.8 percent of female and male heads of households, respectively, have never had any formal education. A negligible proportion of female heads of households and 0.2 percent of their male counterparts have completed formal education.

Proportions of household head who have never had any formal education in the districts range from 40.3 percent in Sesheke to 61.2 in Kalabo. Those who have completed primary and secondary education range from 28.8 percent in Kalabo to 43.7 percent in Sesheke and from 8.6 percent in Lukulu to 18.7 in Mongu, respectively. The proportions of those who have completed higher educational levels are 0.3 percent in Mongu and 0.1 in each of the remaining districts.

Usually Economically Active

Table 11.20 shows that in 22.9 percent of the households in the province there is no economically active member while in 39.1 percent there is only one such member. In 2.8 percent of households, there is at least six economically active members. of the households with at least seven members, 13.4 percent have no economically active member while 8.9 percent have at least six such members.

Table 11.20

Households by Size and Number of Members Economically Active, (Percent), Western Province, 1990

Residence and Household Size	Households	Percentage Total	Members usually economically active						
			0	1	2	3	4	5	6+
Western Province									
Total	112,882	100.0	22.9	39.1	19.3	9.1	4.5	2.3	2.8
1-2	23,170	100.0	38.5	50.0	11.5	-	-	-	-
3-4	30,272	100.0	24.9	44.6	21.8	7.4	1.3	-	-
5-6	25,268	100.0	19.1	38.6	23.4	11.8	5.0	1.8	0.3
7+	34,172	100.0	13.4	27.2	19.5	14.8	9.9	6.3	8.9
Rural									
Total	99,317	100.0	23.8	37.7	19.2	9.3	4.6	2.4	3.0
1-2	20,616	100.0	39.5	48.9	11.6	-	-	-	-
3-4	27,140	100.0	25.6	43.5	22.0	7.5	1.4	-	-
5-6	22,293	100.0	19.8	37.1	23.4	12.3	5.2	1.9	0.3
7+	29,268	100.0	14.1	25.0	18.8	15.1	10.5	6.7	9.8
Urban									
Total	13,565	100.0	16.5	49.0	20.3	8.1	3.4	1.5	1.2
1-2	2,554	100.0	30.3	58.5	11.2	-	-	-	-
3-4	3,132	100.0	18.5	53.8	19.9	6.7	1.1	-	-
5-6	2,975	100.0	14.2	49.9	23.4	8.4	3.1	0.8	0.2
7+	4,904	100.0	9.3	40.5	23.5	13.0	6.8	3.8	3.1

In both rural and urban areas, the largest proportion of households have one economically active members regardless of household size. After this proportion, proportions decrease with increasing number of economically active members except for households with at least seven members in rural areas.

Relationship to household head

Table 11.21 shows the distribution of households by relationship of household head to household members. Out of 77,424 heads of households with spouses, 93.5 percent are in monogamous union, 5.7 percent have two spouses, 0.7 percent have 3, 0.1 percent have 4 and a negligible proportion have five or more spouses. In the province, there are 84,356 households in which there are the heads own sons or daughters. Of these 22 percent have one child, 19.3 have two and 16.4 have three. Households recorded to have members unrelated to the head of household were 5,261. The majority (63.8 percent) have only one such person. The pattern in rural and urban areas as regards the relationship of household head to household members is similar to that of the entire province.

Table 11.21

Households by Relationship to Household Head and Number of Persons, (Percent), Western Province, 1990

Relationship to Head and Residence	Number of Households	Total	Number of Persons					
			1	2	3	4	5	6+
Western Total								
Spouse	77,424	100.0	93.5	5.7	0.7	0.1	0.0	0.0
Own son/daughter	84,356	100.0	22.0	19.3	16.4	13.2	10.1	19.0
Step son/daughter	8,634	100.0	55.3	23.2	10.2	5.3	2.6	3.4
Other relations	51,997	100.0	40.0	22.2	13.4	8.5	5.5	10.3
Unrelated	5,261	100.0	63.8	17.9	7.3	3.8	1.7	5.5
Not stated	337	100.0	46.9	8.9	4.7	1.8	3.0	34.7
Rural								
Spouse	69,055	100.0	93.3	5.9	0.7	0.1	0.0	0.0
Own son/daughter	74,248	100.0	22.4	17.4	16.5	13.3	10.1	18.3
Step son/daughter	7,750	100.0	54.9	23.3	10.4	5.3	2.7	3.4
Other relations	44,526	100.0	40.3	21.8	13.3	8.4	5.5	10.7
Unrelated	4,235	100.0	63.5	18.2	7.6	4.2	1.8	4.7
Not stated	307	100.0	43.6	9.1	4.9	2.0	2.9	37.5
Urban								
Spouse	8,369	100.0	95.2	4.2	0.3	0.1	0.1	0.1
Own son/daughter	10,108	100.0	19.1	18.1	15.3	13.3	10.6	23.6
Step son/daughter	884	100.0	58.9	22.5	8.7	4.6	2.2	3.1
Other relations	7,471	100.0	38.6	24.7	14.3	8.9	5.3	8.2
Unrelated	1,026	100.0	65.1	16.6	5.8	2.4	1.2	8.9
Not Stated	30	100.0	80.0	6.7	3.3	-	3.3	6.7

Children Below 12 years of Age

Table 11.22 shows the distribution of households by sex of household head number of children below the age of 12 years and district. Proportions of male headed households are larger than those of their female counterparts for households with two or more children below the age of 12. For households with one or no such child, proportions are larger for female than male headed households. Of the male headed households, 20.6 percent have at least four children below 12 years of age compared to 9.8 percent of the female headed households. About a quarter (25.6 percent) of the male headed households no child below 12 years of age while 37.4 percent of female headed households have no child in this age range.

Table 11.22

Households by Sex of Heads and Number of Members Below 12 Years of Age, (Percent), Western Province, 1990

Sex of Household Head and Residence	Number of Households	Members below 12 years of age					
		Total	0	1	2	3	4+
Western Province							
Male	86,089	100.0	25.6	19.2	18.9	15.7	20.6
Female	26,793	100.0	37.4	22.9	18.7	11.2	9.8
Rural							
Male	76,043	100.0	25.5	19.7	19.1	15.6	20.1
Female	23,274	100.0	38.2	22.9	18.4	10.9	9.6
Urban							
Male	10,046	100.0	26.2	16.2	17.5	15.8	24.3
Female	3,519	100.0	32.2	22.7	20.5	13.2	11.4
Kalabo							
Male	14,432	100.0	26.3	21.0	19.0	15.6	18.1
Female	4,987	100.0	39.8	23.5	18.3	10.5	7.9
Kaoma							
Male	16,318	100.0	27.5	19.7	18.5	14.7	19.6
Female	3,974	100.0	40.1	20.7	18.0	10.9	10.3
Lukulu							
Male	7,817	100.0	24.7	20.6	19.0	15.8	19.9
Female	2,335	100.0	37.2	24.9	19.1	10.4	8.4
Mongu							
Male	19,080	100.0	27.1	18.4	18.4	15.4	20.7
Female	7,303	100.0	38.1	22.4	18.9	10.9	9.7
Senanga							
Male	18,895	100.0	21.6	18.3	19.9	16.9	23.3
Female	5,531	100.0	32.7	23.2	19.3	13.1	11.7
Sesheke							
Male	9,547	100.0	26.9	18.3	18.4	15.3	21.1
Female	2,659	100.0	37.4	23.6	18.3	10.9	9.8

SUMMARY

The majority of households in Western province occupy two-roomed housing units . The analysis also reveals that the most common construction materials for roofs, walls and floors are grass, pole/dagga and mud used in 87.2, 66.4 and 81.9 percent of the housing units respectively.

The majority of households (62.1 percent) use water drawn from wells or boreholes. Sixty nine percent of the rural households and 11.2 percent of urban households, however, use this source of water. Flush toilets are used by 3.7 percent of the households while the vast majority (69.6 percent) use "other" toilet facilities. Wood and paraffin (Kerosene) are the most common sources of cooking and lighting energy respectively.

The majority (92.8 percent) of housing units in the province are owned by individuals. However, only 40 percent of the rented housing units are rented out by individuals. The Central Government is also a common landlord renting out 34 percent of the housing units.

Male headed households out-number female headed households and tend to be larger in size. The majority of male heads of households are married while their female counterparts are concentrated in the divorced and widowed categories. The largest proportion of rural heads of households have had no education while that of their urban counterparts have completed secondary education.

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APPENDIX I

KEY PERSONS INVOLVED IN THE 1990 CENSUS ANALYSIS

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APPENDIX II

STRICTLY CONFIDENTIAL

CENTRAL STATISTICAL OFFICE
P.O. BOX 31908,
LUSAKA

REPUBLIC OF ZAMBIA

QUESTIONNAIRE SERIAL NO:

QUESTIONNAIRE SERIAL NO:

FORM | C | P | H | A | 9 | 0 | 0 | 1

QUESTIONNAIRE NO ☐☐ OF ☐☐

1990 CENSUS OF POPULATION, HOUSING AND AGRICULTURE

QUESTIONNAIRE IDENTIFICATION

1. PROVINCE NAME	☐ 1
2. DISTRICT NAME	☐☐ 2 - 3
3. CSA NUMBER	☐☐☐ 4 - 6
4. RURAL/URBAN	☐ 7
5. SEA NUMBER	☐ 8 CD ☐ 9
6. CENSUS BUILDING NUMBER (CBN)	☐☐☐ 13 - 14
7. HOUSING UNIT NUMBER (HUN)	☐☐☐
8. HOUSEHOLD NUMBER (HHN)	☐ 15

AREA IDENTIFICATION

9. VILLAGE/LOCALITY NAME	
10. RESIDENTIAL ADDRESS/VILLAGE NAME	
11. CHIEF'S AREA	☐☐☐ 16 - 18
12. WARD	☐☐ 19 - 20
13. INSTITUTION/COLLECTIVE QUARTER	☐ 21

ASSIGNMENT RECORD

Name		Date		INTERVIEW STATUS
Enumerator		Completed		1 - Interview completed (Occupied)
Supervisor		Checked		2 - Non - contact (Occupied)
Coder		Coded		3 - Not Interviewed (Vacant)- Go to H-1 on page 9
Editor		Edited		4 - Non-residential - Go to H - 1 on page 9

☐ 22

SUMMARY COUNT
(DEFACTO POPULATION   CODE1 AND 2 OF P -3)

CODE	MALE	FEMALE	TOTAL
1			
2			
TOTAL			

GENERAL CHARACTERISTICS

RECORD TYPE	SERIAL NUMBER	NAME (a) What is the name of the head of household? (b) What are the names of persons who spent last night here (other than the head of household)? (c) What are the names of usual household members who didn't spend last night here (other than the head of household)?	MEMBERSHIP STATUS Is........a 1- Usual member present last night ? 2- Visitor ? 3- Usual member absent? (Enter Code)	RELATIONSHIP What is......'s relationship to the head of h/hold? 1- Head 2- Spouse 3- Own Son/daughter 4- Step Son/daughter 5- Other relative 6- Unrelated (Enter Code)	SEX What is......'s sex ? 1 - Male 2 - Female	AGE What is......'s age ? (Enter age in completed year or '00' if less than 1 year)	DISABILITY Is............. (a) BLIND ? 1 - Yes 2 - No (Enter Code)	(b) DEAF/DUMB? 1 - Yes 2 - No (Enter Code)	(c) CRIPPLED? 1 - Yes 2 - No (Enter Code)	(d) MENTALLY/ RETARDED? 1 - Yes 2 - No (Enter Code)
P-1		P - 2	P - 3	P - 4	P - 5	P - 6			P - 7	
23 24 25			26	27	28	29 - 30	31	32	33	34
P	1		☐	☐	☐	☐☐	☐	☐	☐	☐
	2		☐	☐	☐	☐☐	☐	☐	☐	☐
	3		☐	☐	☐	☐☐	☐	☐	☐	☐
	4		☐	☐	☐	☐☐	☐	☐	☐	☐
	5		☐	☐	☐	☐☐	☐	☐	☐	☐
	6		☐	☐	☐	☐☐	☐	☐	☐	☐
	7		☐	☐	☐	☐☐	☐	☐	☐	☐
	8		☐	☐	☐	☐☐	☐	☐	☐	☐
	9		☐	☐	☐	☐☐	☐	☐	☐	☐
	0		☐	☐	☐	☐☐	☐	☐	☐	☐
	1		☐	☐	☐	☐☐	☐	☐	☐	☐
	2		☐	☐	☐	☐☐	☐	☐	☐	☐
	3		☐	☐	☐	☐☐	☐	☐	☐	☐
	4		☐	☐	☐	☐☐	☐	☐	☐	☐
	5		☐	☐	☐	☐☐	☐	☐	☐	☐
	6		☐	☐	☐	☐☐	☐	☐	☐	☐
	7		☐	☐	☐	☐☐	☐	☐	☐	☐
	8		☐	☐	☐	☐☐	☐	☐	☐	☐
	9		☐	☐	☐	☐☐	☐	☐	☐	☐
	0		☐	☐	☐	☐☐	☐	☐	☐	☐

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GENERAL CHARACTERISTICS

MIGRATION

S E R I A L N U M B E R	Where was .... born ?			What is .... s country of citizenship ?	How long has ....been continuously living in this district ?	
	a. State district if born in Zambia and Country if born outside Zambia (Refers to usual district/country of residence of member at time of giving birth) (Enter district name and 3-digit code from list of provinces and districts)	b. Was this part of the district rural or urban at time of birth ? 1 - Rural 2 - Urban 8 - Not Applicable (Outside Zambia) (Enter Code)		(For non Zambians write name of country and enter its code; For Zambians just enter code 148)	(Enter completed years and months)	
					Years	Months
	P - 8			P - 9	P - 10	
	35 - 37	38		39 - 41	42 - 43	44 - 45
1						
2						
3						
4						
5						
6						
7						
8						
9						
0						
1						
2						
3						
4						
5						
6						
7						
8						
9						
0						

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GENERAL CHARACTERISTICS

SERIAL NUMBER	MIGRATION		ETHNICITY AND LANGUAGE		
	Where was.......staying in August last year ?		What is ....'s ethnic group ?	What is.........'s LANGUAGE OF COMMUNICATION ?	
	State district if in Zambia and country if outside Zambia (Enter district name 3-digit code from list of provinces and districts)	Is this part of the district rural or urban ? 1 - Rural 2 - Urban 8 - Not Applicable (Outside Zambia or child less than 1 year) (Enter Code)	(Enter Zambian tribe, if not applicable enter major racial group) Code 64 - African 65 - American 66 - Asian 67 - European 68 - Other	a. PREDOMINANT (Write the name of the language and enter the code. If not applicable enter 88)	b. SECOND (Write the name of the language and enter the code. If not applicable enter 88)
	P - 11		P - 12	P - 13	
	46 - 48	49	50 - 51	52 - 53	54 - 54
1					
2					
3					
4					
5					
6					
7					
8					
9					
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
0					

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EDUCATION

S E R I A L N U M B E R	Can .... read and write in any language ? 1 - Yes ..... 2 - No	Does .... go to any institution of learning ? 1 - Yes-Full time 2 - Yes-Part time 3 - Yes-Correspondence Go to P-17 4-No	Did .... previously go to any institution of learning ? 1 - Yes-Full time 2 - Yes-Part time 3 - Yes-Correspondence 4 - No - Go to P-15	What highest level of academic education has .... completed ?	What highest professional or vocational education has .... completed ? (Write level and field of study, then enter code 1 - Certificate 2 - Diploma 3 - Degree in the first box and two digit code from the list of educational programmes)
	P - 14	P - 15	P - 16	P - 17	P - 18
	56	57	58	59 - 60	61 62 - 63
1	☐	☐	☐	☐☐	☐☐☐
2	☐	☐	☐	☐☐	☐☐☐
3	☐	☐	☐	☐☐	☐☐☐
4	☐	☐	☐	☐☐	☐☐☐
5	☐	☐	☐	☐☐	☐☐☐
6	☐	☐	☐	☐☐	☐☐☐
7	☐	☐	☐	☐☐	☐☐☐
8	☐	☐	☐	☐☐	☐☐☐
9	☐	☐	☐	☐☐	☐☐☐
0	☐	☐	☐	☐☐	☐☐☐
1	☐	☐	☐	☐☐	☐☐☐
2	☐	☐	☐	☐☐	☐☐☐
3	☐	☐	☐	☐☐	☐☐☐
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7	☐	☐	☐	☐☐	☐☐☐
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	ECONOMIC ACTIVITY		EMPLOYMENT STATUS	OCCUPATION	INDUSTRY
S E R I A L N U M B E R	What was..... mainly doing in the last 7 days ? 1 - Working for pay or profit 2 - On leave 3 - Unpaid work on household holding or business 4 - Unemployed and seeking work 5 - Not seeking work but available for work 6 - Full-time housewife/ homemaker 7 - Full-time student 8 - Not available for work for other reasons (Enter Code)	What has..... mainly been doing since.....1989 ? 1 - Working for pay or profit 2 - On leave 3 - Unpaid work on household holding or business 4 - Unemployed and seeking work 5 - Not seeking work but available for work 6 - Full-time housewife/ homemaker 7 - Full-time student 8 - Not available for work for other reasons Go to P-24 (Enter Code)	Since.....1989 ? has ..... been mainly 1 - an employer 2 - an employee 3 - self-employed 4 - an unpaid family worker ?	What was..... occupation since...1989? (Write name of occupation and enter code)	What kind of main product or service is (was) produced ? Where..... works/worked? (Write name of industry and enter code)
	P - 19	P - 20		P 22	P 23
	64	65	66	67 - 69	70 - 72
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FORM CPHA-9001

FOR PERSONS 12 YRS AND OVER			FOR FEMALES 12 YEARS AND OVER									
				FERTILITY (How children ever born alive)								
MARITAL STATUS	AGE AT FIRST MARRIAGE	LIVE BIRTH	AGE AT FIRST LIVE BIRTH	How many children born to you are still alive? If None, enter '00' GO TO F-4c	Of the children born to you alive							
					How many are still living with you? How many many of these are male and how many are female?		b. How many are living elsewhere in some other household? How many of these are male and how many are female?		c. How many died? How many of these are male and how many are female?			
SERIAL NUMBER	Is.........? 1-Married? 2-Separated? 3-Divorced? 4-Widowed? 5-Never married? (If female, GO TO F-1. otherwise go to next person or M-1 if last person)	What was ......'s age when he/she first got married? (If male GO TO next person otherwise M-1) (Give age in completed years only)	Have you ever had a live birth? (Including babies who died after birth) 1-Yes 2-No (If 'No' GO TO next person or M-1)	How old were you when you first had a live birth?	How many of these are male and how many are female?	Male	Female	Male	Female	Male	Female	Male	Female
	P - 24	P - 25	F-1	F-2	F-3				F-4				
	73	74 - 75	76	77 - 78	79 - 80	81 - 82	83 - 84	85 - 86	87 - 88	89 - 90	91 - 92	93 - 94
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GENERAL COMMENTS

FERTILITY (Own children ever born alive)

CHILDREN BORN IN LAST 12 months

Of the children born to you/live since.......... 1989 ?

SERIAL NUMBER	Have you had any live birth since.......... 1989 ? 1 - Yes GO TO next person otherwise go to M-1 (Enter Code)	a. How many are still living today ? How many of these are male and how many are females ?		b. How many are living elsewhere in some other household ? How many of these are male and how many are female ?		c. How many died ? How many of these are male and how many are female ?		
		Male	Female	Male	Female	Male	Female	
	F - 5	F - 6						
	93	94	95	96	97	98	99	
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MORTALITY

M-1 Has there been any death in this household since...1989 ?
1 : Yes 2 : No - Go to H-1 24

M-2 How many died ?
How many of these are -
Female ? 25
Male ? 26

HOUSEHOLD CHARACTERISTICS

HH-1 What is the main source of energy used for energy used for lighting by this household ?
1 - Electricity
2 - Paraffin/Kerosene
3 - Candle
5 - Other 27

HH-2 What is the main source of energy used for cooking by this household ?
1 - Electricity
2 - Gas
3 - Paraffin/Kerosene
4 - Wood
5 - Charcoal
6 - Coal
7 - Other 28

HH-3 What type of toilet is used by members of this household ?
1 - Flush
2 - Pit latrine
3 - Aqua privy
4 - Bucket
5 - Other - Go to HH-6 29

HH-4 Is this toilet inside or outside this housing unit ?
1 - Yes
2 - No 30

HH-5 Is this toilet exclusively used by members of this household ?
1 - Yes
2 - No 31

HH-6 Is this housing unit owned by any member of this household ?
1 - Built by any member of this household ?
2 - Bought ?
3 - Inherited/given 32

HH-7 Was this housing unit -
1 - Yes-No - Go to HH-10
2 - No - Go to HH-6 33

HH-8 Is this housing unit provided free by the employer/friend or relative of any member of this household ?
1 - Yes-Employer - Go to HH-10
2 - Yes-By friend or relative-Go to HH-13 34
3 - No

HH-9 Is this housing unit rented from the employer of any member of this household ?
1 - Yes
2 - No - Go to HH-11 35

HH-10 Is the employer -
1 - The Central Govt?
2 - The District Council?
3 - A Parastatal ?
4 - A Private Organ.?
5 - GO to HH-12 36

HH-11 Is this housing unit rented from -
1 - The Central Govt?
2 - The District Council?
3 - A Parastatal ?
4 - A Private Organ. ?
5 - An Individual ? 37

HH-12 Is this housing unit owned by -
1 - The Central Govt?
2 - The District Council?
3 - A Parastatal ?
4 - A Private Organ. ?
5 - An Individual ? 38

HH-13 a. How many radios does this household/institution or have ?
39 41
40

b. How many television sets does this household/institution have ?
42
44

HOUSING CHARACTERISTICS

H-1 Type of housing
1 - Single Structure
2 - Several Structures
3 - Part of a structure
4 - Improvised/makeshift
5 - Collective
7 - Institutional
8 - Other 45

H-2 Type of roofing material
1 - Concrete/Cement
2 - Asbestos sheet
3 - Iron sheet/corrugated
4 - Iron sheet
5 - Tiles
6 - Tiles/thatch
7 - Grass
8 - Other 46

H-3 What are the walls of this housing unit made of ?
1 - Burnt bricks
2 - Unburnt/mud bricks
3 - Concrete blocks/slab
4 - Stone
5 - Iron sheet
6 - Asbestos/ha.dboard/wood
7 - Pole and daggamud
8 - Grass
9 - Other 47

H-4 What is the floor of this housing unit made of ?
1 - Concrete/cement
2 - Mud
3 - Wood/not wooden tiles)
4 - Marble
5 - Other 48

H-5 Occupancy
1 - Single household
2 - One household in several housing units
3 - Shared (enter number of households sharing in box 50)
4 - Vacant
5 - Non-residential - END HERE 49

50

H-6 How many living rooms and bedrooms does this housing unit have ?
Living rooms 51
bedrooms 52 - 53

H-7 Does this housing unit have a kitchen ?
1 - Yes
2 - No 54

H-8 What is the main source of water supply for this house ?
1 - Piped water inside the housing unit
2 - Piped water outside the housing unit and within distance of 100 metres
3 - Piped water outside the housing unit and beyond 100 metres
4 - Well or borehole
5 - River/Streams
6 - Other 55

AGRICULTURAL ACTIVITY

A-1 Has any member of this household been engaged in any agricultural activity for this household since 1st October 1989 ?
1 - Yes
2 - No - Go to A-3 56

A-2 Is this holding managed by someone else who is not a member of this household ?
1 - Yes
2 - No 57

A-3 Has any member of this household been managing any holding which does not belong to this household since 1st October 1989 ?
1 - Yes - COMPLETE AGRICULTURE SUPPLEMENT
2 - No - End interview & thank respondent 58

ENUMERATOR - Complete an Agriculture supplement questionnaire for each of the responses: "NO" in A-2 and "Yes" in A-3.

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