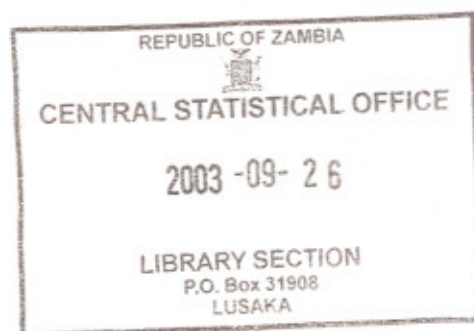


CENSUS OF POPULATION, HOUSING AND AGRICULTURE

1990



VOLUME 1

CENTRAL PROVINCE ANALYTICAL REPORT

**CENTRAL STATISTICAL OFFICE
P. O. BOX 31908,
LUSAKA, ZAMBIA.**

14TH SEPTEMBER, 1994

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 local 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 Central 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 thousands senior secondary school boys and girls who took leave from their studies to act as 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.

David S. Diangamo
DIRECTOR OF CENSUS & STATISTICS

Lusaka, ZAMBIA
September 14th, 1994.

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CONTENTS

PREFACE	(i)
LIST OF TABLES	(v)
LIST OF FIGURES	(x)
EXECUTIVE SUMMARY	(xii)
MAP OF ZAMBIA	(xiii)

CHAPTER 1: BACKGROUND

1.1	Geography	1
1.2	People	1
1.3	Economy	2
1.4	Education	5
1.5	Health	6

CHAPTER 2: EVALUATION OF COVERAGE AND CONTENT ERRORS

2.1	Introduction	8
2.2	Definition of Concepts	8
2.3	Methods of Evaluation	9
2.4	Conclusion	21

CHAPTER 3: POPULATION SIZE, GROWTH AND COMPOSITION

3.1	Introduction	22
3.2	Population Size and Growth	22
3.3	Population Composition	24
3.4	Conclusion	30

CHAPTER 4: LANGUAGE OF COMMUNICATION

4.1	Introduction	31
4.2	Predominant Language of Communication	31
4.3	Predominant Language Group	32
4.4	Second Language of Communication	34
4.5	Conclusion	36

CHAPTER 5: EDUCATIONAL CHARACTERISTICS

5.1	Introduction	37
5.2	Concepts and Definitions	37
5.3	Literacy Status	38
5.4	School Attendance	41
5.5	Previously Attended School	49
5.6	Highest Level of Education Completed	50
5.7	Selected Fields of Study	53
5.8	Conclusion	53

CHAPTER 6: ECONOMIC CHARACTERISTICS

6.1	Introduction	54
6.2	Working-Age Population	54
6.3	Economically Active Population	55
6.4	Economically Inactive Population	58
6.5	Labour Force Participation Rates	59
6.6	Employment Status	61
6.7	Working Population by Occupation	62
6.8	Working Population by Industry	63
6.9	Unemployment	66
6.10	Conclusion	69

CHAPTER 7: CHILDREN, YOUTH AND WOMEN

7.1	Introduction	70
7.2	Population Change Composition & Distribution of Children and the Youth	70
7.3	Economic Activities of the Youth	73
7.4	Women in Development	78
7.5	Conclusion	81

CHAPTER 8: NUPTIALITY AND FERTILITY

8.1	Introduction	82
8.2	Concepts and Definitions	82
8.3	Nuptiality	83
8.4	Fertility	88
8.5	Conclusion	93

CHAPTER 9: MORTALITY

9.1	Introduction	94
9.2	Definitions and Concepts	94
9.3	Crude Death Rate (CDR)	95
9.4	Period Measures	95
9.5	Selected Background Characteristics	99
9.6	Adult Mortality	102
9.7	Conclusion	105

CHAPTER 10: DISABILITY

10.1	Introduction	106
10.2	Concepts and Definitions	106
10.3	Distribution of Disabled Persons	107
10.4	Characteristics of Disabled Persons	109
10.5	Conclusion	112

CHAPTER 11: HOUSEHOLDS AND HOUSING CHARACTERISTICS

11.1	Introduction	113
11.2	Concepts and Definitions	113
11.3	Housing Characteristics	114
11.4	Household Size and Composition	125
11.5	Conclusion	133

REFERENCES	134
-----------------------------	------------

APPENDIX I: PERSONS INVOLVED IN THE ANALYSIS	138
---	------------

APPENDIX II: 1990 CENSUS INSTRUMENT	139
--	------------

LIST OF TABLES

CHAPTER 1: BACKGROUND

Table 1.1	Population, Area, Density, Percentage and Annual Growth Rate by Province, 1969, 1980 and 1990	1
Table 1.2	Production and Marketing of Major Crops, Central Province, 1982-90	2
Table 1.3	Livestock by Sector, Central Province, 1980, 1985-89	3
Table 1.4	Production of Lead and Zinc in Central Province, 1985-1990	4
Table 1.5	Estimated Annual Fish Output in Lusiwasi and Lukanga, Central Province 1985-1990	4
Table 1.6	Schools, Teachers and Enrolment, Central Province, 1980, 1983 and 1986	6
Table 1.7	Enrolment Ratios of Primary Schools, Central Province, 1980, 1983, 1986 and 1987	6
Table 1.8	Health Facilities by District and Year, Central Province, 1986-90	7
Table 1.9	Immunisations of Children Below 1 Year, Central Province, 1985-1988	7

CHAPTER 2: EVALUATION OF COVERAGE AND CONTENT ERRORS

Table 2.1	Population Growth Rates by Rural/Urban Areas and Districts Central Province, 1980-1990	9
Table 2.2	Population Distribution by Broad Age Groups, 1980 and 1990	10
Table 2.3	Dependency Ratios and Child-Woman Ratio for Central Province, 1980 and 1990	11
Table 2.4	Crude Birth Rate by Reverse Survival Method, Central Province, 1990	11
Table 2.5	Myers' Index for Digit Preference in Age Data, Central Province, 1980 and 1990	12
Table 2.6	Summary of Myers' Indices for Digit Preference in Age Data, Central Province, Rural/Urban, 1980 and 1990	13
Table 2.7	Preference Pattern Index in Age Data (PPI), Central Province, 1980 and 1990	13
Table 2.8	Summary of Preference Pattern Indices for Digit Preference in Age Data, Central Province, Rural/Urban, 1980 and 1990	14
Table 2.9	Most Preferred Digits, 1980 and 1990	14
Table 2.10	Sex Ratios for Central Province, 1980 and 1990	17
Table 2.11	Population by Five Year Age Group, Sex, Age Ratio and the United Nations Age-Sex Accuracy Index, Central Province, 1990	18
Table 2.12	Population by Five Year Age Group, Sex, Age Ratio and the United Nations Age-Sex Accuracy Index, Central Province, 1980	19
Table 2.13	Cohort Survival Ratios by Sex, Central Province, 1980-1990	20
Table 2.14	Overall Survival Ratios, Central Province, 1980 - 1990	20

CHAPTER 3: POPULATION SIZE, GROWTH AND COMPOSITION

Table 3.1	Population and Growth Rates by Rural/Urban and Districts, Central Province, 1969, 1980 and 1990	22
Table 3.2	Area and Population Density by District and Population Census Year, Central Province, 1969, 1980 and 1990	24
Table 3.3	Population by Age, Sex, Rural/Urban and Districts, (Percent), Central Province, 1990	26
Table 3.4	Ethnic Composition of the Population of Central Province, 1990	26

Table 3.5	Foreign Population of Central Province by Citizenship, 1990 and Percentage Foreign Citizens, 1980	27
Table 3.6	Crude Activity Ratio, Central Province, 1990	28
Table 3.7	Age-Sex Specific Activity Ratio (ASSAR), Central Province, 1990	28

CHAPTER 4: LANGUAGE OF COMMUNICATION

Table 4.1	Predominant Language of Communication by Districts, (Percent), Central Province, 1990	32
Table 4.2	Predominant Language Groups by Sex and Rural/Urban, (Percent) Central Province, 1990	33
Table 4.3	Predominant Language Groups, (Percent), Central Province, 1980 and 1990 . .	33
Table 4.4	Second Language of Communication by Districts, (Percent), Central Province, 1990	34
Table 4.5	Second Language Groups by Sex and Rural/Urban, (Percent), Central Province, 1990	35
Table 4.6	Second Language Groups, (Percent), Central Province, 1980 and 1990	35
Table 4.7	Rank Order of Predominant and Second Language of Communication by District, Central Province, 1990	36

CHAPTER 5: EDUCATIONAL CHARACTERISTICS

Table 5.1	Literate Population by Age Group, Sex and Residence, Central Province, 1990	39
Table 5.2	Population Presently Attending School by Age Group, Sex and Residence, Central Province, 1990	42
Table 5.3	Population Presently Attending School by Age Group, Sex and Residence, Central Province, 1980	44
Table 5.4	Population Presently Attending School by Age (5 Years and Older) Sex, Education Level Completed and Residence, Central Province, 1990	46
Table 5.5	Population Presently Attending School by Age (5 Years and Older) Sex, Education Level Completed and Residence, Central Province, 1980	48
Table 5.6	Population Previously Attended School by Sex, Age and Residence, Central Province, 1990	49
Table 5.7	Population Previously Attended School by Sex, Age and Residence, Central Province, 1980	50
Table 5.8	Population 15 Years and above by Highest Level of Education Completed, Sex and Age Group, Central Province, 1990	51
Table 5.9	Population 15 Years and above by Highest Level of Education Completed, Sex and Age Group, Central Province, 1980	52
Table 5.10	Selected Fields of Study by Educational Level Completed, Central Province, 1990	53

CHAPTER 6: ECONOMIC CHARACTERISTICS

Table 6.1	Population 12 Years and Over by Broad Age Groups, Sex and Residence (Percent), Central Province, 1980 and 1990	55
Table 6.2	Economically Active Population 12 Years and Over by Residence and Sex, (Percent), Central Province, 1980 and 1990	56
Table 6.3	Current Economically Active Population 12 Years and Over by Age and Sex, (Percent), Central Province, 1990	57
Table 6.4	Economically Inactive Population by Reason on Inactivity, Residence and Sex, (Percent), Central Province, 1990	58

Table 6.5	Current Economically Inactive Population by Reason of Inactivity, Residence and Sex, (Percent), Central Province, 1990	58
Table 6.6	Current Labour Force Participation Rates by Age Sex and Residence, (Percent), Central Province, 1980 and 1990	60
Table 6.7	Usually Working Population 12 Years and Over by Employment Status, Sex and Residence, (Percent), Central Province, 1980 and 1990	62
Table 6.8	Usually Working Population by Occupation, Sex and Residence, (Percent), Central Province, 1990	63
Table 6.9	Working Population by Occupation, Sex and Residence, (Percent), Central Province, 1980	63
Table 6.10	Usually Working Population 12 Years and Over by Employment Status and Industry, (Percent), Central Province, 1980 and 1990	64
Table 6.11	Usually Working Population 12 Years and Over by Employment Status and Industry, (Percent), Central Province, 1980 and 1990	65
Table 6.12	Current Unemployment Rates by Sex and Residence, (Percent), Central Province, 1980 and 1990	66
Table 6.13	Current Unemployment Rates by Age, Sex and Residence, (Percent), Central Province, 1990	67
Table 6.14	Usually Unemployed by Level of Education Completed, (Percent), Central Province, 1990	67
Table 6.15	Current Unemployed by Marital Status, (Percent), Central Province, 1990	68

CHAPTER 7: CHILDREN, YOUTH AND WOMEN

Table 7.1	Population Size and Growth Rates of Children and the Youth by Broad Age Group, Central Province, 1980 and 1990	70
Table 7.2	Population Under 24 Years as a Proportion of the Total Population by Sex and Broad Age Group, Central Province, 1990	71
Table 7.3	Population Distribution and Sex Ratios of Children and Youth by Districts, Central Province, 1990	72
Table 7.4	Age-Sex Ratio of Children and Youth, Central Province, 1990	73
Table 7.5	Youth by Age, Sex and Marital Status, Central Province, 1990	73
Table 7.6	Age-Specific Fertility Rates of Female Youths by Rural/Urban, Central Province, 1990	74
Table 7.7	Usually Working Children and Youth Population (12-24 Years) by Age, Sex and Highest level of Academic Education Completed, Central Province, 1990	75
Table 7.8	Usually Working Children and Youth (12-24 Years) by Age, Sex and Economic Activity, Central Province, Rural/Urban, 1990	76
Table 7.9	Female Heads as a Proportion of Total Household Heads by Marital Status and Residence, Central Province, 1990	78
Table 7.10	Female Household Heads by Level of Education Completed and Rural/Urban, Central Province, 1990	79
Table 7.11	Usually Working Females (12 Years and Older) as a Proportion of the Total Usually Working Population by Employment Status and Rural/Urban, Central Province, 1990	79
Table 7.12	Usually Working Females (12 Years and Older) as a Proportion of the Total Usually Working Population by Occupation and Employment Status, Central Province, 1990	80
Table 7.13	Usually Working Females (12 Years and Older) as a Proportion of Total Usually Working Population by Industrial Category and Employment Status Province, 1990	81

CHAPTER 8: NUPTIALITY AND FERTILITY

Table 8.1	Adult Population Classified by Age, Sex and Marital Status, (Percent), Central Province, 1990	84
Table 8.2	Adult Male Population by Age and Marital Status, Rural-Urban Areas, (Percent), Central Province, 1990	85
Table 8.3	Adult Female Population by Age and Marital Status, Rural-Urban Areas, (Percent), Central Province, 1990	85
Table 8.4	Total Adult Population (15-49) by Sex and Marital Status, Rural-Urban Areas and Districts, (Percent), Central Province, 1990	86
Table 8.5	Singulate Mean Age at Marriage (Years) Classified by Sex and Residence, Central Province, 1990	87
Table 8.6	Singulate Mean Age at First Marriage by Educational Attainment and Residence, (Females), Central Province, 1990	87
Table 8.7	Summary Fertility Measures, Central Province, 1980 and 1990	89
Table 8.8	Age-Specific Fertility Rates (ASFR), (Observed), Central Province, 1990	89
Table 8.9	Gross Reproduction Rate (GRR), (Observed), Central Province, 1990	90
Table 8.10	Net Reproduction Rate (NRR) for Central Province, 1990	91
Table 8.11	Average Parities, (Observed), Central Province, 1990	91
Table 8.12	Completed Family Size by Level of Education of Women, Central Province, 1990	92

CHAPTER 9: MORTALITY

Table 9.1	Crude Death Rate by Sex, Central Province, 1980-1990	95
Table 9.2	Estimates of Probabilities of Dying and Surviving by Sex, Implied Mortality Levels and Reference Dates, North Model Central Province, 1990	96
Table 9.3	Estimates of Probabilities of Dying and Surviving by Sex, Implied Mortality Levels and Reference Dates, North Model Central Province, 1980	96
Table 9.4	Infant and Child Mortality Rates by Five Year Period Preceding the Census, Central Province, 1980 and 1990	97
Table 9.5	Infant and Child Mortality Rates for the 5 Year Period Preceding the Census, by Selected Background Characteristics, Central Province, 1980 and 1990	100
Table 9.6	Expectation of Life at Birth for the 5 Year Period Preceding the Census, by Selected Background Characteristics, Central Province, 1980 and 1990	102
Table 9.7	Coale and Demeny North Model Life Table for Central Province - Males, 1990	103
Table 9.8	Coale and Demeny North Model Life Table for Central Province - Females, 1990	104

CHAPTER 10: DISABILITY

Table 10.1	Disabled Persons by Type of Disability and Residence, (Percent), Central Province, 1990	107
Table 10.2	Disabled Persons as a Proportion of Total Population by Residence and Type of Disability, (Percent), Central Province, 1990	108
Table 10.3	Disabled Persons in Rural and Urban Areas, (Percent), Central Province, 1990	109
Table 10.4	Sex Ratio of Disabled Persons by Residence and Type of Disability, Central Province, 1990	110

Table 10.5	Disabled Persons by Type of Disability and Age Group, (Percent) Central Province, 1990	110
Table 10.6	Disabled Persons (12 Years and Older) by Type of Disability and Usual Economic Activity, (Percent), Central Province, 1990	111
Table 10.7	Disabled Household Heads Usually Active by Disability and Employment Status, (Percent), Central Province, 1990	112
Table 10.8	Disabled Persons (5 Years and Older) by Type of Disability and Educational Level Completed, (Percent), Central Province, 1990	112

CHAPTER 11: HOUSEHOLDS AND HOUSING CHARACTERISTICS

Table 11.1	Households by Number of Rooms, Rural, Urban and Districts	114
Table 11.2	Households by Household Size, Number of Rooms and Residence, Central Province, 1990	115
Table 11.3	Occupied Housing Units by Construction Materials of Walls and Roof, Central Province, 1990	116
Table 11.4	Occupied Housing Units by Construction Materials of Walls and Roof, Central Province, 1990	118
Table 11.5	Occupied Housing Units by Construction Materials of Walls and Floor, Central Province, 1990	119
Table 11.6	Occupied Housing Units by Construction Materials of Walls and Floor, Central Province, 1990	119
Table 11.7	Occupied Housing Units by Ownership Status, Central Province, 1990	120
Table 11.8	Households in Occupied Rented Housing Units by Residence and Ownership, Central Province, 1990	121
Table 11.9	Households by Main Source of Water Supply, Central Province, 1980 and 1990	122
Table 11.10	Households by Type of Toilet and Residence, Central Province, 1990	123
Table 11.11	Households by Main Source of Energy used for Cooking and Type of Occupied Housing Unit, Central Province, 1990	124
Table 11.12	Households by Main Source of Energy used for Cooking, Central Province, 1980 and 1990	125
Table 11.13	Housing Units by Main Source of Energy used for Lighting, Central Province, 1990	125
Table 11.14	Households by Size and Sex of Head, Central Province, 1990	126
Table 11.15	Average Household Size by Residence and Sex of Head, Central Province, 1980 and 1990	127
Table 11.16	Household Size, Central Province, 1980 and 1990	127
Table 11.17	Household Heads by Marital Status, Sex and Residence, Central Province, 1990	128
Table 11.18	Household Heads by Marital Status, Age and Sex, Central Province, 1990 . .	129
Table 11.19	Household Heads by Level of Education Completed, Central Province, 1990	129
Table 11.20	Households by Size and Number of Members Economically Active, Central Province, 1990	130
Table 11.21	Households by Relationship to Household Head and Number of Persons, Central Province, 1990	131
Table 11.22	Households by Sex of Head and Number of Members Below 12 Years of Age, Central Province, 1990	132
Table 11.23	Age-Sex Specific Headship Rates, Central Province, 1980 and 1990	132

LIST OF FIGURES

CHAPTER 1: BACKGROUND

Figure 1.1	Livestock by Sector, Central Province, 1989	3
Figure 1.2	Estimated Fish Output from Lusiwasi and Lukanga	5

CHAPTER 2: EVALUATION OF COVERAGE AND CONTENT ERRORS

Figure 2.1	Population Distribution by Broad Age Groups, 1980 and 1990	10
Figure 2.2	1980 Percentage Population Distribution of Central Province in Single Years	15
Figure 2.3	1990 Percentage Population Distribution of Central Province in Single Years	15
Figure 2.4	1980 Percentage Population Distribution of Central Province by 5 Year Age Groups	16
Figure 2.5	1990 Percentage Population Distribution of Central Province by 5 Year Age Groups	16
Figure 2.6	Percentage Population Distribution of Central Province by Age Ratio	18

CHAPTER 3: POPULATION SIZE, GROWTH AND COMPOSITION

Figure 3.1	Population Distribution by Districts, Central Province	23
Figure 3.2	Population Pyramid, Central Province, 1980	25
Figure 3.3	Population Pyramid, Central Province, 1990	25
Figure 3.4	Age-Sex Specific Activity Ratio (Rural), Central Province, 1990	29
Figure 3.5	Age-Sex Specific Activity Ratio (Urban), Central Province, 1990	29

CHAPTER 5: EDUCATIONAL CHARACTERISTICS

Figure 5.1	Literate Population by Age Group, (Rural), Central Province, 1990	40
Figure 5.2	Literate Population by Age Group, (Urban), Central Province, 1990	40
Figure 5.3	Population Presently Attending School, (Rural), Central Province, 1990	43
Figure 5.4	Population Presently Attending School, (Urban), Central Province, 1990	43
Figure 5.5	Population Presently Attending School, (Rural), Central Province, 1980	45
Figure 5.6	Population Presently Attending School, (Urban), Central Province, 1980	45
Figure 5.7	Population 15 Years and above by Highest Level of Education Completed, Central Province, 1980	51
Figure 5.8	Population 15 Years and above by Highest Level of Education Completed, Central Province, 1990	52

CHAPTER 6: ECONOMIC CHARACTERISTICS

Figure 6.1	Economically Active Population 12 Years and Over, Central Province, 1990	56
Figure 6.2	Economically Active Population 12 Years and Over, Central Province, 1980	57
Figure 6.3	Current Economically Inactive Population, Central Province, 1990	59
Figure 6.4	Current Labour Force Participation Rates, (Rural), Central Province, 1990	60
Figure 6.5	Current Labour Force Participation Rates, (Urban), Central Province, 1990	60
Figure 6.6	Usually Working Population 12 Years and above by Employment Status Central Province	65
Figure 6.7	Usually Unemployed, Central Province, 1990	68
Figure 6.8	Current Unemployed by Marital Status, Central Province, 1990	69

CHAPTER 7: CHILDREN, YOUTH AND WOMEN

Figure 7.1	Population of Children and the Youth, Central Province, 1990	71
Figure 7.2	Population Distribution of Children and Youth, Central Province, 1990	72
Figure 7.3	Usually Working Children and Youth by Highest level of Academic Education Completed, Central Province, 1990	75
Figure 7.4	Economic Activity of Children and Youth, (Active), Central Province, 1990	77
Figure 7.5	Economic Activity of Children and Youth, (Inactive), Central Province, 1990	77
Figure 7.6	Usually Working Females (12 Years and Older) by Employment Status, Central Province, 1990	80

CHAPTER 8: NUPTIALITY AND FERTILITY

Figure 8.1	Adult Population by Marital Status, Central Province, 1990	84
Figure 8.2	Age-Specific Fertility Rates, (Observed), Central Province, 1990	90
Figure 8.3	Average Parities, Central Province, 1990	92

CHAPTER 9: MORTALITY

Figure 9.1	Infant Mortality Rates, Central Province, 1974 - 1990	98
Figure 9.2	Child Mortality Rates, Central Province, 1974 - 1990	98
Figure 9.3	Expectation of Life at Exact Age, Central Province, 1990	104

CHAPTER 10: DISABILITY

Figure 10.1	Disabled Persons, Central Province, 1990	108
Figure 10.2	Usual Economic Activity of Disabled Persons, Central Province, 1990	111
Figure 10.2	Disabled Household Heads Usually Active by Disability and Employment	

CHAPTER 11: HOUSEHOLDS AND HOUSING CHARACTERISTICS

Figure 11.1	Households by Districts, Central Province, 1990	114
Figure 11.2	Households by Household Size, Central Province, 1990	115
Figure 11.3	Occupied Housing Units by Construction Materials of Walls, Central Province, 1990	116
Figure 11.4	Occupied Housing Units by Construction Materials of Roof, Central Province, 1990	117
Figure 11.5	Housing Units by Ownership Status, Central Province, 1990	120
Figure 11.6	Households in Occupied Rented Housing Units, Central Province, 1990	121
Figure 11.7	Households by Main Source of Water Supply, Central Province, 1990	123
Figure 11.8	Household Heads by Marital Status, Central Province, 1990	128
Figure 11.9	Age Specific Headship Rates, Central Province, 1980 and 1990	133

EXECUTIVE SUMMARY

The Central Province is one of the Zambia's 9 provinces centrally located and has an area of 94,394 square kilometers. In 1990, the province had five administrative districts namely Kabwe Rural, Kabwe Urban, Mkushi, Mumbwa and Serenje. The province's economy was based mainly on agriculture, mining and fishing.

The evaluation of 1990 Census coverage within the province showed an improvement over the 1980 Census. Generally, accuracy in age reporting showed an improvement over the 1980 Census. However, Myers' Index of Digit Preference indicated that the most preferred digits by respondents in reporting age were 0, 2 and 8 in 1990. The reverse survival method employed in the calculation of under enumeration yielded the average crude birth of 36.8 per 1000 population for the age group 0 - 4 between 1985 and 1990 as compared to the crude birth rate of 42.6 for the age group 5 - 9 during the same period. These rates could indicate under enumeration of children aged between 0 - 9 years.

The 1990 Census of Population and Housing returned a resident total population of 720,627 in Central province, of which 362,231 were females. This results shows that the province has changed from being an area of excess males in 1980 to that of excess females in 1990. The rural areas within the province had a share of 507,430 persons while the urban areas accounted for 213,197 persons. Between 1980 and 1990, the district population growth rates ranged between 1.7 in Kabwe Urban to 4.3 percent per year in Mumbwa District. The provincial growth rate was recorded as 3.5 percent per year during the same period. Almost half the population in Central Province was aged below 15 years in 1990, thus the provincial population was very youthful.

In 1990, there were over 22 languages spoken in the Central Province with Bemba as the most common major language of communication closely followed by Lala. At provincial level, Bemba as a predominant language of communication is used by 21.7 percent of the people while in Kabwe Urban District, it is used by almost two-thirds of the residents. Lala language is spoken by 20.8 percent of the population in the province, however it is mostly spoken in Serenje (86.3 percent) and Mkushi (43.0 percent). The 1990 Census results have shown that Central Province is heterogeneous with regard to languages of communication.

In terms of literacy, about 56 percent of the population in the province were able to read and write in 1990. The literacy rates were almost 51 percent for females and 62 percent for males. There were observable disparities between rural and urban areas as well as between the districts with regard to literacy rates. The urban areas had higher literacy rates (70 percent) than the rural areas (50.3 percent). Consequently, Kabwe urban district ranked the highest with literate population accounting for 71 percent. Serenje District recorded only 46 percent of the population as being literate.

School attendance in the province comprised 40.5 percent of the total population. Males had a higher attendance rate (45.5 percent) than females (36.1 percent). Attendance by rural and urban areas showed that persons in urban areas had higher school attendance rate (57.2 percent) than those in rural areas (34.5 percent). The five year age groups with high rates of school attendance were those between 10 and 19 years. The majority of persons were attending lower primary school grades 1 to 4. At this educational level female attendance rate was higher (49.2 percent) than that of males (45.2 percent). School attendance rates generally increased in 1990 as compared to those in 1980. However, the increase in the level of school attendance lagged behind the school going age population growth.

The working age population (12 years and older) in the Central Province increased by 51.5 percent between 1980 and 1990. The dependence burden declined from 77 dependants per 100 persons in the working age population in 1980 to 65 in 1990. The labour force grew by 35.3 percent during the same period. The female labour force grew much higher (49.1 percent) than that of males (29.1 percent). However, the distribution of workers among the various occupational categories remained more or less the same between 1980 and 1990. The unemployment was recorded to be higher among the younger persons and the unemployed persons had little or no education.

The average annual growth rate for children aged 0 - 14 years between 1980 and 1990 was 2.7 percent per year and that for the youths aged 15 to 24 years was 5.2 percent per year. The proportion of female youths between 15 and 24 years who are in marriage or have ever been married is higher than their male counterparts. Marriage in Central Province is universal. By the ages between 25 and 29 over one half of both males and females would have married. The singulate mean age at marriage for females is 21.4 years as compared to 26.4 years for the males. The province recorded a drop in Total Fertility Rate from 7.5 in 1980 to 6.3 children per woman in 1990. Completed family sizes by education show that women with primary level of education have higher family size than those with no education or secondary and higher education.

Using the Life Table Models, the infant, child and under-five mortality have increased between 1980 and 1990 in the Central Province during the five years preceding each census. The infant mortality rate has increased from 81 in 1980 to 105 deaths per 1,000 infants in 1990 while the child mortality rate has also risen from 54 to 76.7 deaths per 1,000 children during the same period. Consequently, the overall under-five mortality in Central Province increased from 99.7 to 129.3 deaths per 1000 under 5 population during 1980-1990 period. The overall effects of these measures have led to a reduction in the life expectancy at birth during the five year period preceding the 1990 Census. Life expectancy in the Central Province has dropped from 56.1 in 1980 to 50.6 in 1990. Both sexes have experienced the drop in life expectancy with that of the females declining from 57.8 in 1980 to 51.6 years in 1990 and that of the males from 54.4 to 49.8 years over the same period.

The 1990 Census results also show that infant, child and under-five mortality rates decrease with the increasing levels of education of the mothers. Mortality rates have been found to be highest for the widowed females whereas the never married females have the least followed by the married and separated.

The number of disabled persons recorded during the 1990 Census was 5,376 of whom 2,424 were females. The disabled persons in the province constituted 0.7 percent of the population. The most common form of disability among both sexes was that of a cripple accounting for 30.5 percent and 26.2 percent of disabled males and females, respectively. The crippled males and females are proportionally and numerically higher in rural than in urban areas of the province. About 35 percent of all the disabled persons were recorded as being not available for work while 34 percent were working. The crippled constituted 40.5 percent of the working disabled persons followed by the deaf/dumb with 39.1 percent. The majority of the disabled persons (57.4 percent) in Central Province had no education in 1990, 32 percent had primary while those with secondary and higher education constituted 7.7 percent.

In 1990, there were 119,464 households in Central Province of which 81,624 were found in the rural areas while 37,840 were in urban areas. The household size increased from 5.7 persons in 1980 to 6.0 persons per household in 1990. The majority of households had an average household size of at least 7 members in 1990.

The most used materials for construction of housing units in Central Province were unburnt bricks for walls, with mud floors (83.1 percent). Most of the housing units were owned by individuals (81.4 percent). Ownership of housing units by individuals came high in both rural (91.4 percent) and urban areas (59.8 percent). The second most important suppliers of housing units in the urban areas of the province were quasi-government agencies (14.0 percent).

The major sources of water supply for households in Central Province were wells and boreholes. The pit latrines were the most common form of toilets in both rural and urban areas of the province. The proportion of households using wood fuel as a source of energy for heating and cooking was 88 percent and almost same proportion used paraffin as the major source of energy for lighting.

MAP OF ZAMBIA



CHAPTER 1

BACKGROUND

1.1. GEOGRAPHY

Central Province as the name suggests is centrally located and is the fourth largest in terms of area. The province is located between longitudes 27 and 31 degrees East and latitudes 13 and 16 degrees South; covering an area of 94,394 square kilometres. In 1990, there were five administrative districts in the province namely, Kabwe Rural, Kabwe Urban, Mkushi, Mumbwa and Serenje. Central province borders North-Western, Copperbelt, Luapula and Northern province on the north; Eastern province on the east; Lusaka and southern provinces on the south; and western province on the west.

Three of the four main agro-ecological zones identified in Zambia are found in this province. These are:- Northern High Rainfall Zone which is characterised by high rainfall ranging between 1000-1500 millimetres and poor leached and veld soils; Central and Southern Plateau Zone characterised by the most fertile soils in the province suitable for cotton and maize cultivation; and the Luangwa-Zambezi Rift Valley Zone characterised by low rainfall. The main soil types are red clays and red-brown loams, suitable for commercial farming.

The climate of Central Province is determined by its location and altitudes. Maximum temperatures of 24°C occur in October while minimum temperatures of 16°C occur in July. Annual rainfall varies from over 1100mm in the North-East to under 800mm in the Southern areas of Luangwa Valley and Kafue Flats.

1.2. PEOPLE

The population in Central Province has increased from 511,905 in 1980 to 720,627 in 1990. This represents an average annual growth rate of 3.5 percent. Of the 720,627 persons enumerated in 1990, 49.7 percent and 50.3 percent are males and females, respectively. The average population density for the province has also increased from 5.4 in 1980 to 7.6 persons per square kilometre in 1990.

Table 1.1

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

Province	Population			Area (Sq.Km)	Density			Percentage			Growth Rate (%)	
	1969	1980	1990		1969	1980	1990	1969	1980	1990	1969-80	1980-90
Central	358,655	511,905	720,627	94,394	3.8	5.4	7.6	8.8	9.0	9.8	3.3	3.5
Copperbelt	816,309	1,251,178	1,427,528	31,328	26.1	39.9	45.6	20.1	22.1	19.3	4.0	1.3
Eastern	509,515	650,902	965,967	69,106	7.4	9.4	14.0	12.6	11.5	13.1	2.3	4.0
Luapula	335,584	420,966	525,160	50,567	6.6	8.3	10.4	8.3	7.4	7.1	2.1	2.2
Lusaka	353,975	691,054	987,102	21,896	16.2	31.7	45.1	8.7	12.2	13.4	6.3	3.6
Northern	545,096	674,750	855,177	147,826	3.7	4.6	5.8	13.5	11.9	11.6	2.0	2.4
North-Western	231,733	302,668	387,468	125,826	1.8	2.4	3.1	5.7	5.4	5.2	2.5	2.5
Southern	496,041	671,923	907,150	85,283	5.8	7.9	10.6	12.2	11.9	12.3	2.8	3.0
Western	410,087	486,455	606,813	126,386	3.3	3.9	4.8	10.1	8.6	8.2	1.6	2.2
Zambia Total	4,056,995	5,661,801	7,382,992	725,612	5.6	7.8	10.2	100.0	100.0	100.0	3.1	2.7

Source: CSO (1973): Census of Population and Housing 1969; Final Report, Vol.II (a) Central Province
CSO (1985): 1980 Census of Population and Housing; General Population and Migration Tables, Vol.I

The provincial share of the population has increased from 9 percent in 1980 to slightly less than 10 percent in 1990. Compared to other provinces, the Central Province ranks sixth in population size. Table 1.1 compares population distributions between the provinces.

1.3. ECONOMY

The major economic activities in Central Province include agriculture, mining and fishing. Agriculture can be said to be the most dominant in most of the districts of the province. Mkushi, Serenje and Kabwe Rural have scores of large scale commercial farmers whose production is generally high on account of employing mechanised farming techniques. Fishing by private individuals is mainly undertaken in the Lusiwasi and Lukanga swamps in Serenje and Kabwe Rural districts, respectively.

The Central province serves as a focal point of road and railway network. The Great North Road which links Zambia to East Africa traverses the province. The provincial capital, Kabwe is the headquarters of Zambia Railways, whose network links Copperbelt and Zaire. The province is also linked to Copperbelt by road. The Tanzania - Zambia Railways (TAZARA) has its origin within this province at Kapiri Mposhi.

A number of important factories which produce various commodities also exist in the province. Notable among these include the Glass Factory at Kapiri Mposhi; Mulungushi Textiles, Kabwe Milling, General Pharmaceuticals Limited in Kabwe Urban District; and Cotton Ginnery in Mumbwa District.

Agriculture

Agriculture constitute the dominant economic activity in the province and most of the marketed crops in Zambia are produced in the province. The major cash crops grown include maize, sunflower, cotton, soyabeans, wheat, tobacco and groundnuts. As in many other parts of the country, maize is the staple crop in the province.

In terms of crop production, the Central Province contributes significantly to the national production. Production of maize, sunflower, groundnuts, seed cotton and virginia tobacco range between 20 to 30 percent to the national total per crop. Other crops contribute less than 15.0 percent each. Production and marketing/sales of some crops in the province for selected years is shown in Table 1.2.

Table 1.2

Production and Marketing of Major Crops, Central Province, 1982-90

Crops	Units	Production and Marketing (90kg Bags)							
		1982		1988		1989		1990	
		Produced	Marketed	Produced	Marketed	Produced	Marketed	Produced	Marketed
Maize	90 Kg bags	2,168,000	1,685,000	4,391,311	4,177,057	4,870,434	4,494,674	2,572,794	1,860,290
Tobacco	Kgs	-	-	-	-	1,856,999	1,856,999	1,068,087	1,081,313
Cotton	Kgs	6,730,000	3,971,000	27,609,301	27,609,301	11,139,717	11,139,717	10,939,609	10,939,609
Sunflower	50 Kg bags	187,000	100,000	54,704	50,474	34,400	26,545	116,433	41,756
Soyabean	90 Kg bags	13,000	6,000	73,045	67,175	54,409	1,380	61,315	15,235
Groundnut	80 Kg bags	19,000	1,000	32,473	44	14,554	2	34,716	0
Wheat	90 Kg bags	-	-	80,450	67,570	36,850	35,850	37,180	35,438

Note: * 1990 Tobacco production figures were underestimated.
- Figures not available

Source: 1989/90 Agricultural Statistics Bulletin, 1990 Pages 8-17
Fourth National Development Plan Volume II, 1989 Page 590

In addition to crop production the province is also engaged in livestock production. The livestock mainly raised are cattle, sheep, goats and pigs. Table 1.3 gives details on livestock.

Table 1.3

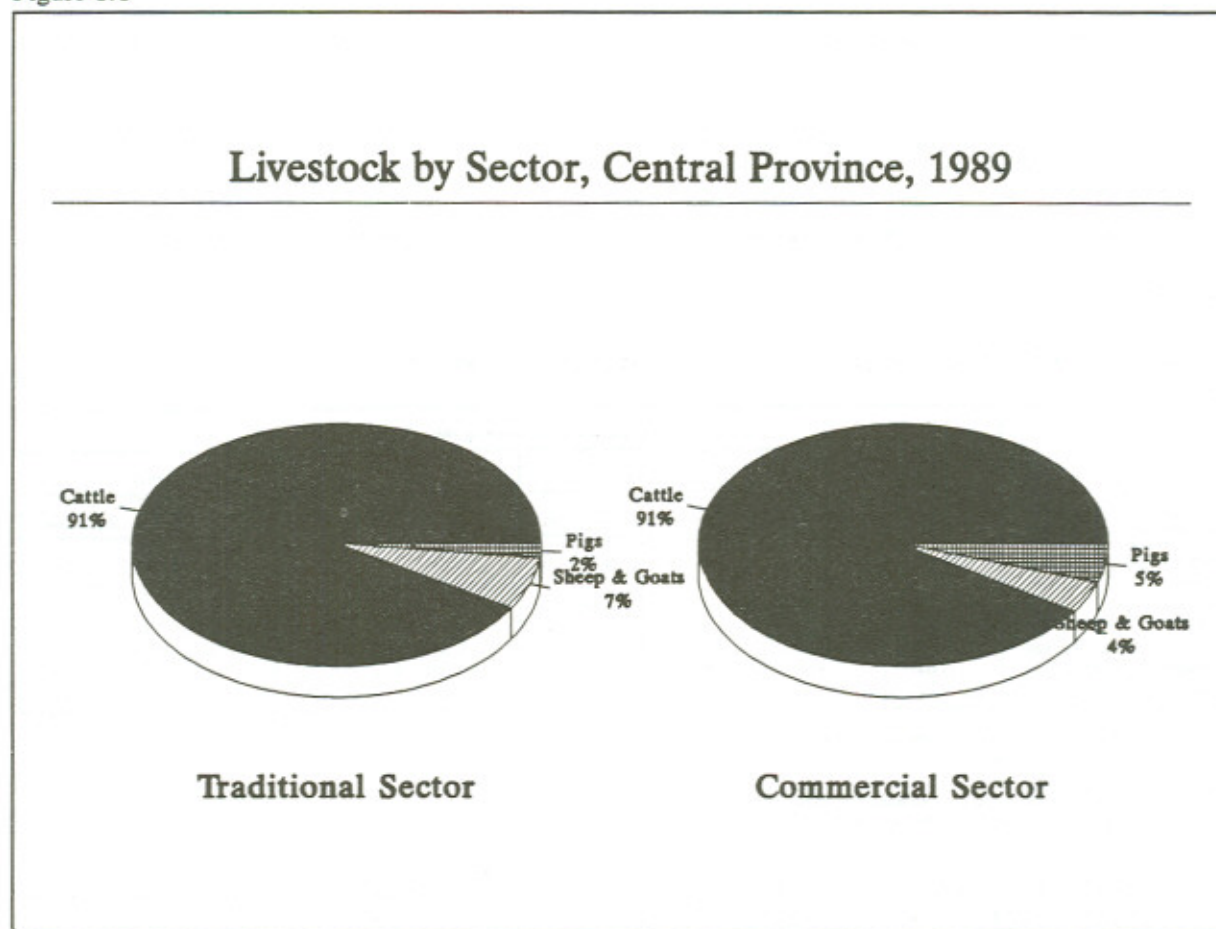
Livestock by Sector, Central Province, 1980, 1985-89

Sector	Year					
	1980	1985	1986	1987	1988	1989
Traditional						
Cattle	156,269	258,367	264,826	271,447	291,814	308,555
Sheep & Goats	11,005	19,569	21,017	22,572	24,243	23,611
Pigs	4,929	4,777	5,255	5,781	6,359	6,033
Commercial						
Cattle	-	157,569	165,448	173,720	186,793	174,864
Sheep & Goats	-	8,075	8,883	9,771	10,748	8,049
Pigs	-	6,288	6,917	7,609	8,369	9,632

Note : - Figures not Available

Source: 1989/90 Agricultural Statistics Bulletin, 1990 Pages 23-24

Figure 1.1



Mining

After Agriculture the second major economic activity in Central Province is mining. Mineral deposits found in the province include those of lead, zinc, copper, gold, iron ore and tin. Others are those of aquamarine, phosphate, sulphides and carbonates. Copper deposits are found in Kabwe, Mumbwa and Mkushi districts. It is important to note that most of the copper deposits in the country are found on the Copperbelt and very small deposits are found in Central Province. Gold reserves are found at Luiri-Matala mine in Mumbwa District. These reserves, however, constitute very small deposits and are only suitable for small scale mining. At Nampundwe Mine, in Mumbwa District, mining of copper ore and pyrites are done.

Table 1.4

Production of Lead and Zinc in Central Province, 1985-1990

Year	Zinc			Lead		
	Metric Tonnes ('000)	Price (Kwacha)	Amount (K'Million)	Metric Tonnes ('000)	Price (Kwacha)	Amount (K'Million)
1985	24.2	2,329	55	9.0	1,335	10
1986	22.0	6,003	127	6.4	3,288	19
1987	21.0	7,568	135	8.0	5,548	38
1988	20.2	18,961	196	6.5	7,214	33
1989	12.9	38,032	224	3.9	9,461	34
1990	10.7	83,111	486	3.5	44,455	92

Source: C.S.O. (1994) : Mineral and Electricity Production Statistics - Quarterly Bulletin

Fishing

As already stated, the main areas in which fishing activities take place in the province are the Lukanga and Lusiwasi swamps. Another area with small fishing activities is the Mukuku-Lulimala which is part of Lake Bangweulu. The output of fish has been on an increase in the Lukanga swamps rising steadily from 900 tonnes in 1985 to 2613 tonnes in 1990. Table 1.5 below shows the output of fish in the Lusiwasi and Lukanga swamps between 1985 and 1990.

Table 1.5

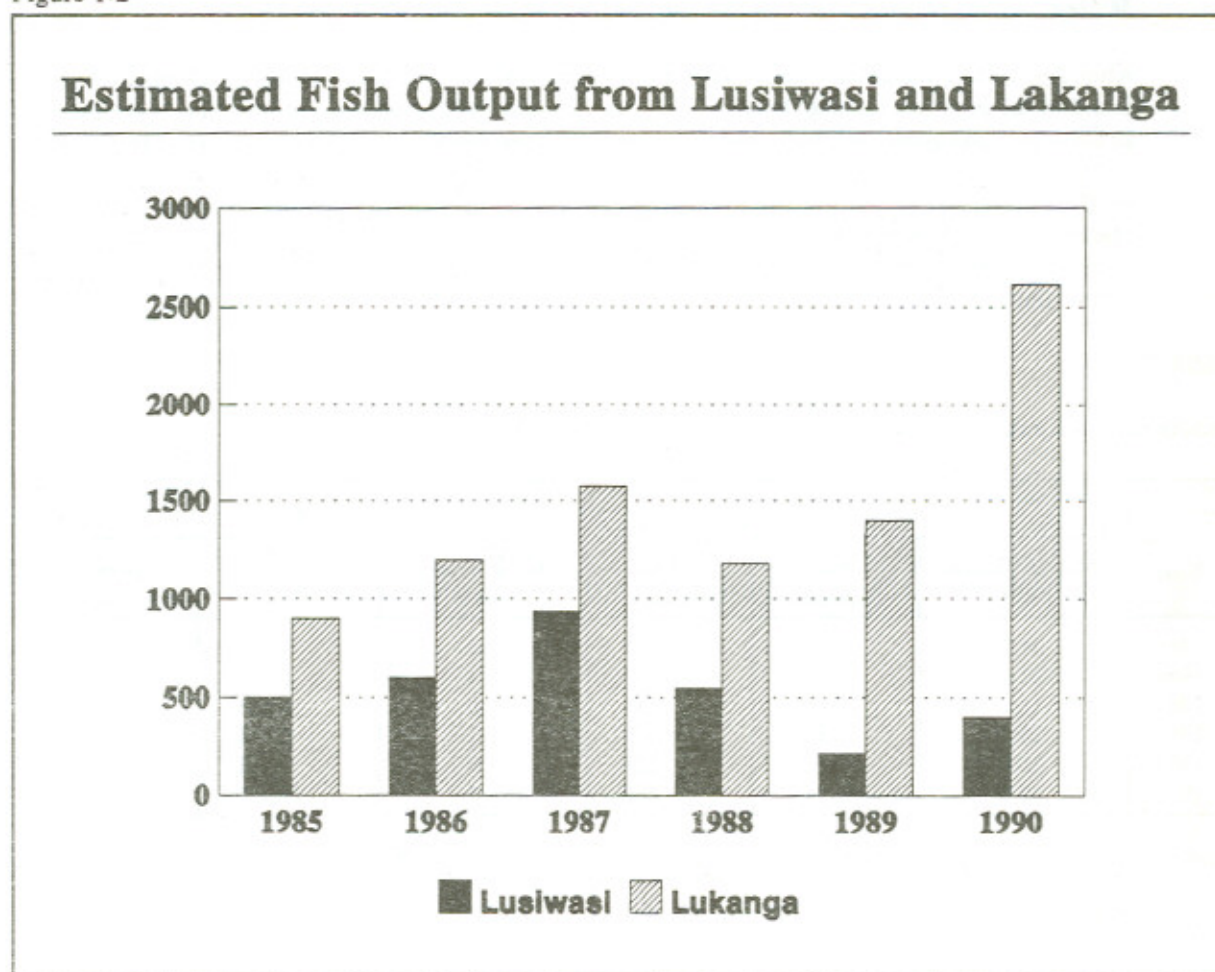
Estimated Annual Fish Output in Lusiwasi and Lukanga, Central Province, 1985-1990

Year	Lusiwasi	Lukanga	Total
1985	500	900	1,400
1986	600	1,200	1,800
1987	936	1,572	2,508
1988	547	1,183	1,730
1989	218	1,401	1,619
1990	403	2,613	3,016

Note: Excludes Mukuku-Lulimala which is part of Bangweulu.

Source: 1989/90 Agricultural Statistics Bulletin, 1990

Figure 1.2



Communication

The province is served by relatively good road and railway networks. The Great North Road passes through four districts namely Kabwe Rural, Kabwe Urban, Mkushi and Serenje districts. Mumbwa district is well linked to Lusaka by the Lusaka-Mongu road. The Old-Line-of-Rail to Copperbelt passes through Central Province at Kapiri-Mposhi and Kabwe. In addition, the Tanzania-Zambia railway line also transverses the Central Province through Serenje, Mkushi districts and terminates at Kapiri-Mposhi.

The province is also linked to the telecommunication system of the country and communication is possible between districts within and outside the province.

1.4. EDUCATION

The enrolment in primary schools has increased from 98,531 in 1980 to 138,948 in 1986. The enrolment in secondary schools has also been increasing over the years. For instance, enrolment in secondary schools was 7,525 in 1980 and 12,444 in 1986.

Generally, the enrolment of both boys and girls has also increased. The table below shows the development of the educational sector in Central Province.

Table 1.6

Schools, Teachers and Enrolment, Central Province, 1980, 1983 and 1986

	Year		
	1980	1983	1986
Schools			
Primary	249	280	334
Secondary	15	15	18
Teachers			
Primary	2,042	2,568	3,237
Secondary	343	327	494
Enrolment			
Primary			
Total	98,531	116,913	138,948
Boys	51,819	61,126	72,820
Girls	46,712	55,787	66,128
Secondary			
Total	7,525	9,211	12,444
Boys	4,749	5,649	7,670
Girls	2,776	3,562	4,774

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

The enrolment ratios below show how the primary education has evolved over the years. The table shows higher enrolment ratio for boys than girls for all years.

Table 1.7

Enrolment Ratios of Primary Schools, Central Province, 1980, 1983, 1986 and 1987

	Year			
	1980	1983	1986	1987
Primary				
- Total	93.8	97.3	104.3	97.0
- Boys	97.8	101.3	107.9	94.8
- Girls	89.3	93.3	100.6	99.3

Source: C.S.O (1994, 1992), Educational Statistics (1982, 1987, 1991)

1.5. HEALTH

Various types of health facilities exist in Central Province. In all, there are 6 hospitals and 84 health centres with a capacity of 1,920 beds/cots. There is one hospital in each of the districts except Mkushi which is serviced by Mkushi Health Centre. It should be noted that although Government is the major supplier of health facilities in the province, other institutions supplement Government efforts. Of the 84 health centres, 4 are run by Missionaries whereas 7 health centres are run by private or quasi-Government institutions. As a matter of fact, one hospital is run by the Zambia Consolidated Copper Mine (ZCCM) located in Kabwe Urban District. There are 28 health centres in Kabwe Rural District and the rest are distributed among the other districts.

The data in Table 1.8 below indicates that the number of hospitals in the province has remained at 6 for the period 1986 to 1990. The number of beds/cots has increased from 1,161 in 1986 to 1,282 in 1988 and in 1990. Although the population size of the province has increased by 40.8 percent in the same period, health facilities have not correspondingly increased by similar proportions. Similarly, health centres have not increased in the last five years, 1986-1990. It is suspected that health services have not improved in the same period, considering that the population of Central Province has increased by 40.8 percent without an equivalent percentage increase in number of health institutions. Even though Kabwe Urban District has a few health institutions, it has a high proportion of beds and cots with 40.6 percent of them at Kabwe General and Kabwe Mine Hospitals.

Table 1.8

Health Facilities by District and Year, Central Province, 1986-90

	Hospitals		Health Centres		Total	
	Number	Beds/Cots	Number	Beds/Cots	Number	Beds/Cots
Year						
1986	6	1,161	87	442	93	1,603
1988	6	1,282	84	632	90	1,914
1990	6	1,282	84	638	90	1,920
Districts - 1990						
Kabwe Rural	1	200	27	234	28	434
Kabwe Urban	2	780	15	11	17	791
Mkushi	-	-	16	265	16	265
Mumbwa	1	97	16	58	17	155
Serenje	2	105	10	170	12	275

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

Diseases

Major diseases that affect the population in Zambia have not changed over time. According to Ministry of Health, respiratory diseases, diarrhoea, malaria, injuries and accidents, eye diseases, diseases of skin, ear disorders and malnutrition affect more than 70 percent of children below 14 years in Central Province. Similarly, the same type of diseases affect between 50 and 60 percent of adults. Malnutrition and diarrhoea diseases usually trigger off other diseases among children and are major causes of deaths. Health institutions often receive serious cases of malnutrition and diarrhoea.

Child deaths that occur among children below 5 years are mainly due to preventable diseases such as polio, tuberculosis, diphtheria, measles, pertussis and tetanus. There are vaccines available for these diseases. Information on immunisations is provided in Table 1.9 below.

Table 1.9

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

Year	BCG	Polio Third Dose	DPT Third Dose	Measles
1985	19,242	13,773	13,904	15,558
1986	24,379	14,741	15,526	16,263
1987	26,013	16,922	16,550	19,610
1988	25,397	20,487	21,369	18,200

Source: MOH (1989): 1987/1988 Bulletin of Health Statistics

CHAPTER 2

EVALUATION OF COVERAGE AND CONTENT ERRORS

2.1. INTRODUCTION

Evaluation means to measure what is achieved against the goals that were set. In general data is evaluated for the purpose of ensuring that the data meets minimum acceptable standards and for having a basis upon which adjustments to the data can be made.

Data from the following topics in the Census questionnaire are subject for quality evaluation:

- 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).
- Children dead.

2.2. DEFINITION OF CONCEPTS

Before undertaking a detailed discussion of the actual evaluation of the coverage and content errors, some of the major concepts and definitions used in this chapter are discussed.

Coverage Error

Under or over-enumeration in a population census due to either omission or duplication.

Content Error

Mistake made in the recorded information in the census questionnaire either by the respondent or by the interviewer.

Sex Ratio

Number of males per 100 females in a population.

Child-Woman Ratio

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

Age Dependency Ratio

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

Digit Preference

Reporting of age by respondents often ending in certain digits rather than their real ages. This results in heaping of population in ages ending with certain digits.

2.3. METHODS OF EVALUATION

In spite of the checks and controls instituted during enumeration, the data may still be subjected to errors and biases and there is, therefore, a need for evaluation and appraisal of the data. Broadly speaking, there are two groups of methods of evaluating data available, direct and indirect methods.

The direct methods involve the comparison of census data with other sources, such as the post enumeration survey (PES). Because of the small sample size, PES data can only be used at national level. Therefore, indirect methods have been used for the evaluation of provincial data. The indirect methods can also be split into external and internal consistency checks. External checks involve comparing census data with data from other sources such as the administrative records (e.g. education, health, etc.). Internal checks are those using relationships between age-sex groups of cohorts over a period of time.

Coverage Error

Evaluative studies explore both quantitative and qualitative aspects of the data. The types of errors being probed fall into two categories - coverage and content errors. This section deals with coverage errors.

A census implies a complete coverage of all persons at a specified time and in a demarcated geographical area. The question which arises after enumeration is, "Were all the people in the covered area enumerated?" The possibilities for errors are numerous. Some people could have been omitted or enumerated more than once resulting to the errors in coverage. People may be omitted due to geographical barriers, lack of public co-operation, lack of communication due to poor boundary demarcation and language.

Growth Rate

One way of examining the consistency of the enumeration of population over a period of time is by studying growth rates. This information is contained in Table 2.1.

Table 2.1

Population Growth Rates by Rural/Urban Areas and Districts, Central Province, 1980 - 1990

Residence/District	Annual Growth Rate in per cent 1980 - 1990 Intercensal Period		
	Male	Female	Both Sexes
Central Province			
- Total	3.4	3.6	3.5
- Rural	3.4	3.6	3.5
- Urban	3.3	3.6	3.5
Districts			
Kabwe Rural	4.0	4.2	4.1
Kabwe Urban	1.6	1.9	1.7
Mkushi	4.0	4.3	4.2
Mumbwa	4.2	4.5	4.3
Serenje	3.6	3.4	3.5

Table 2.1 shows that the population growth rate for Central Province between 1980 and 1990 is 3.5 percent. Among the districts, the rate of growth ranges from 1.7 percent in Kabwe Urban to 4.3 percent in Mumbwa. The low annual growth rate for Kabwe Urban may be attributed to the slump in the mining industry and likely outflow of people from the district. The growth rate of females is higher than that of males in all districts except Serenje.

Age Composition

Table 2.2 below shows the age composition of the population of the province for the 1980 and 1990 Censuses.

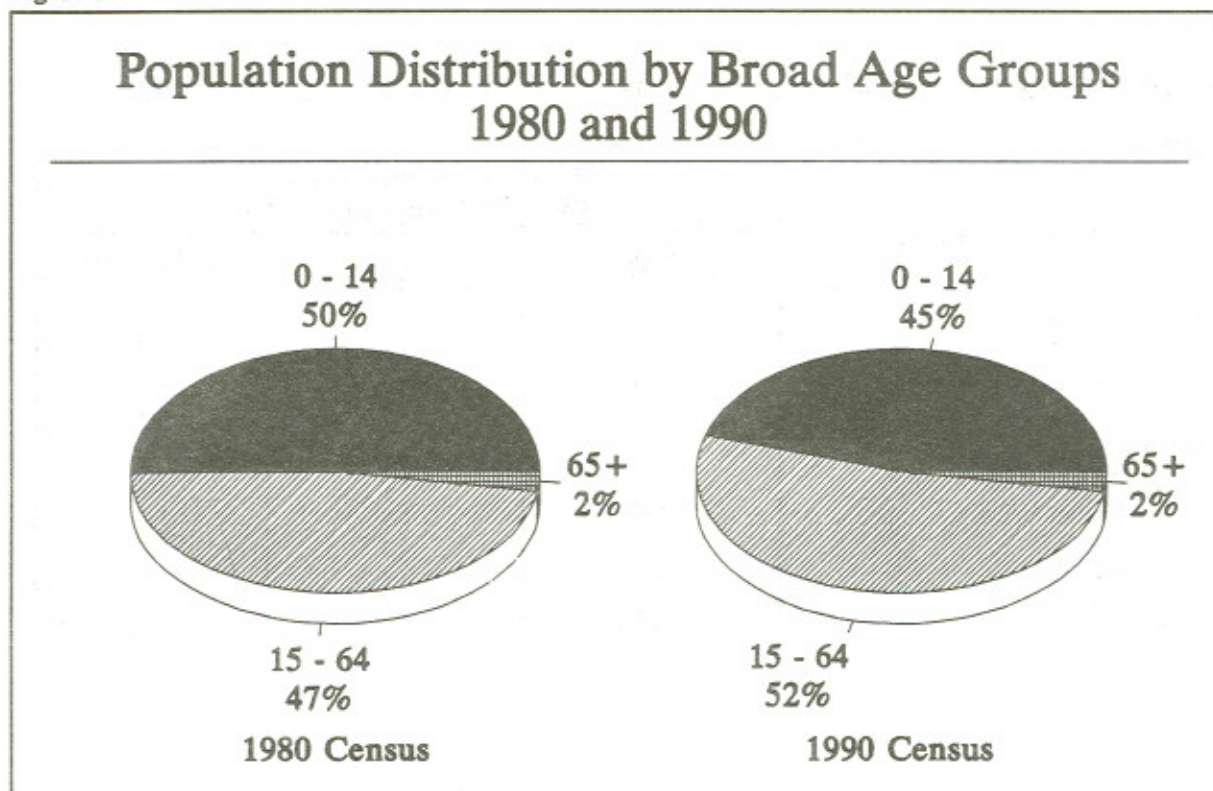
Table 2.2

Population Distribution by Broad Age Groups, 1980 and 1990

Age Group	Population Distribution			
	1980	Percentage	1990	Percentage
0 - 14	249,302	48.7	324,916	45.1
15 - 64	236,093	46.1	375,667	52.1
65 +	12,338	2.4	17,690	2.5
Age N/S	14,172	2.8	2,354	0.3
Total	511,905	100.0	720,627	100.0

The percentage of the 0-14 years age group in 1990 is less than in 1980. This result is in agreement with the observed decline in fertility and general increase in child mortality in the province. Not stated cases in 1980 comprised 2.8 percent as compared to only 0.3 percent in 1990. This factor would have an impact on the age structure in 1980. In the older age group (65 years and over) the proportion of persons to the overall population remained almost static in 1980 and 1990. However, the age group 15 - 64 years increased by 6 percentage points for the same period.

Figure 2.1



Child - Woman Ratio

The child - woman ratio has declined from 876 per 1000 in 1980 to 674 in 1990. This is in line with the decline in the percentage of the population in the 0-14 year age group. The decline in both the proportion of the population 0 - 14 years and child - woman ratio lends support to the notion that child mortality has risen between 1980 and 1990.

Age Dependency Ratio

The dependency ratios for the population in Central Province declined from 110.8 persons in 1980 to 91.2 persons per 100 persons in age group 15-64 years. This means that for every 100 producers, there were 91.2 dependants in 1990. The proportion of population 65 years and older has changed slightly between 1980 and 1990. Age dependency ratio for population aged 65 years and over to that of 15-64 years is 5.2 for 1980 and 4.7 in 1990 while that of children declined from 105.6 in 1980 to 86.5 in 1990. In both instances, the decline in dependency ratios could be attributed to either an increase in population aged 15-64 years, an increase in child mortality or a decline in fertility.

Table 2.3

Dependency Ratios and Child-Woman Ratio for Central Province, 1980 and 1990

Dependency Ratios	1990	1980
Central Province		
- Overall Dependency Ratio	91.2	110.8
- Child Dependency Ratio	86.5	105.6
- Aged Dependency Ratio	4.7	5.2
- Child-Woman Rat	674	876

Under-enumeration of Children

In order to determine under-enumeration of children in the age-group 0-4 years, the crude birth rate has been computed for age-groups 0-4 and 5-9 years using the reverse survival method. The computed crude birth rate for the 0 - 4 year age group is markedly lower than that of the 5 - 9 year age group (refer to Table 2.4). This could be due to either an under-enumeration of children aged 0 - 4 years in the 1990 population census or the increase in infant mortality. The under-enumeration of children 0 - 4 years old may explain lower crude birth rate calculated on the basis of 0 - 4 years age group. As mentioned earlier, the crude birth rate for children aged 0 - 4 is lower than that aged 5 - 9. This may be attributed to the speculation that fertility is on the decline in Zambia.

Table 2.4

Crude Birth Rate By Reverse Survival Method, Central Province, 1990

Average Crude Birth Rate	1980 Female Population	Survival Ratios 1980-85 North Model level 14	1985 Female Population	Survival Ratios 1985-90 North Model level 15	1990 Female Population	Age Group
	(59165)	-	(61015)	-	-	Births
36.8(1985-90)	53499	.93701	55438	.94668	57762	0 - 4
42.6(1980-85)	-	.97692	52264	.98024	54343	5 - 9
	-	-	-	.98336	51394	10 - 14
	-	-	-	-	-	
Total	-	-	-	-	362231*	

Note: * includes all females residing in Central Province.

Content Error

Content error is common in censuses and surveys. In many instances, persons are usually omitted altogether. Another type of error is age misclassification. This arises from either the respondent or enumerator misclassifying age. For instance, question of age in censuses can be solicited from asking either "date of birth" or "completed number of years". These two sources of responses may yield different ages. The 1990 Census asked for and recorded age in completed years as at last birthday.

Digit Preference

The way ages are reported by respondents may lead to age heaping (see figures 2.2 and 2.3). This varies from one culture to another and is usually more prevalent in illiterate populations who do not know the exact ages.

An assessment of age heaping in Central Province is done through the calculations of both Myers' Blended Method and Reference Pattern Index (PPI). For more details on how to calculate Myers' Index the reader may refer to Shryock, H. S., et. al. (1976). These indices have been calculated for 1980 and 1990 Censuses and are presented in Table 2.5.

A high Myers' Index implies poor age reporting whereas a low Myers' Index indicates good age reporting. The same is true for the Preference Pattern Index. The maximum value of Myers Index and Preference Pattern Index is 90.

The result of using Myers' Index yield a similar pattern of digit preference in the two Censuses of 1980 and 1990. For Central Province Myers' Index for males is 6.3 for 1980 and 6.4 for 1990 implying that no major differences exist in digit preferences between the two Censuses for males. However, a slight difference between the two Censuses exists in the case of females, since Myers' Index for females is 6.6 for 1980 as compared to 6.1 for 1990. A similar pattern emerges in rural areas while the opposite is the case in urban areas for females only. The Myers' Index for females for 1990 of 6.1 is higher as compared to 5.7 for 1980, see Tables 2.5 and 2.6.

Table 2.5

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

Digit	Male				Female			
	1980		1990		1980		1990	
	Percent	Deviation From 10%	Percent	Deviation From 10%	Percent	Deviation From 10%	Percent	Deviation From 10%
0	12.9	2.9	12.5	2.5	13.1	3.1	12.1	2.1
1	8.9	-1.1	8.8	-1.2	9.3	-0.7	8.5	-1.5
2	11.1	1.1	11.0	1.0	11.5	1.5	11.0	1.0
3	8.9	-1.1	8.6	-1.4	8.6	-1.4	8.1	-1.9
4	8.9	-1.1	9.1	-0.9	9.4	-0.6	9.2	-0.8
5	10.2	0.2	10.4	0.4	10.0	0.0	9.8	-0.2
6	10.4	0.4	10.5	0.5	10.2	0.2	10.4	0.4
7	8.1	-1.9	8.8	-1.2	7.9	-2.1	8.3	-1.7
8	11.7	1.7	11.9	1.9	11.8	1.8	11.4	1.4
9	8.8	-1.2	8.3	-1.7	8.2	-1.8	11.3	1.3
Myers' Index		6.3		6.4		6.6		6.1

Table 2.6

Summary of Myers' Indices For Digit Preference in Age Data, Central Province, Rural/Urban, 1980 and 1990

Central Province		1980	1990
Total	Male	6.3	6.4
	Female	6.6	6.1
Rural	Male	6.6	6.4
	Female	7.1	6.7
Urban	Male	5.7	6.4
	Female	5.7	6.1

The Preference Pattern Index (PPI) is another useful index that is used to evaluate the quality of age data. Results from the 1990 Census show that for both sexes as a whole, the quality of age data has slightly improved as compared to 1980 Census. This is also true in the case of male data. Presumably, the male data are better because men are usually the main respondents in censuses and surveys. The PPI for males decreases from 9.3 in 1980 to 8.1 in 1990. A similar observation is made for female age data. The PPI for females in 1990 Census is 8.7 as compared to 9.4 for 1980 Census. Refer to Tables 2.7 and 2.8 for details.

Table 2.7

Preference Pattern Index in Age Data (PPI) Central Province, 1980 and 1990

Digit	Male				Female			
	1980		1990		1980		1990	
	Percent	Deviation From 10%	Percent	Deviation From 10%	Percent	Deviation From 10%	Percent	Deviation From 10%
0	14.5	4.5	13.6	3.6	14.2	4.2	14.5	4.5
1	8.4	-1.6	8.6	-1.4	8.5	-1.5	8.5	-1.5
2	11.3	1.3	11.2	1.2	11.7	1.7	11.5	1.5
3	7.8	-2.2	8.3	-1.7	7.6	-2.4	7.9	-2.1
4	7.9	-2.1	8.4	-1.6	8.7	-1.3	9.0	-1.0
5	9.8	-0.2	10.2	0.2	10.4	0.4	10.2	0.2
6	11.5	1.5	10.3	0.3	10.6	0.6	11.4	0.4
7	7.5	-2.5	8.0	-2.0	7.4	-2.6	7.8	-2.2
8	12.1	2.1	12.7	2.7	12.6	2.6	12.2	2.2
9	9.3	-0.7	8.8	-1.2	8.4	-1.6	8.1	-1.9
PPI		9.3		8.1		9.4		8.7

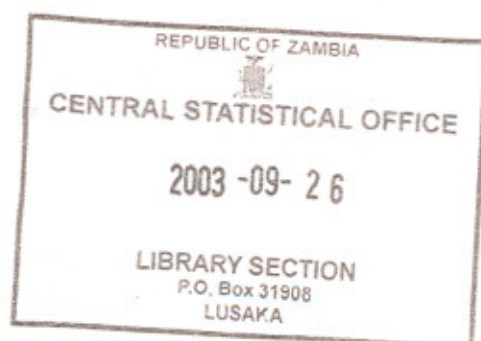


Table 2.8

Summary of Preference Pattern Indices For Digit Preference in Age Data, Central Province, Rural/Urban, 1980 and 1990

Central Province		1980	1990
Total	Male	9.3	8.1
	Female	9.4	8.7
Rural	Male	9.5	7.9
	Female	10.1	8.6
Urban	Male	8.5	8.3
	Female	10.2	8.4

Table 2.9 below shows the four most preferred digits in decreasing order of preference in the two censuses.

Table 2.9

Most Preferred Digits, 1980 and 1990

Sex/Year	Myers	PPI
Central Province		
Male - 1980	0, 8, 2	0, 8, 6, 2
	0, 8, 2	0, 8, 2
Female - 1980	0, 8, 2	0, 8, 2
	0, 8, 9, 2	0, 8, 2
Rural - Male - 1980	0, 8, 2	0, 8, 6, 2
	0, 8, 2	0, 8, 2
Female - 1980	0, 8, 2	0, 8, 2
	0, 8, 2	0, 8, 2
Urban - Male - 1980	0, 8, 2	0, 8, 6, 2
	0, 8, 2	0, 8, 2
Female - 1980	0, 2, 8	0, 8, 2
	0, 8, 2, 6	0, 8, 2

Rounding of ages is observed in both 1980 and 1990 as indicated by the relatively high preference for digits 0, 2 and 8 among males and females. The preference for these digits among males could be due in part to a greater tendency to estimate the age from the year of birth whilst for females the age itself could have been subjected to the rounding. There is rounding of ages in the case of females due to proxy respondents.

Using Myers' Index in assessing preferred digits shows that digits 0, 2, and 8 are the most preferred for both males and females in both the 1980 and 1990 Censuses. The fourth digit 9 appears in the 1990 Census for females at the provincial level. The same appear in rural and urban areas, except that the digit 6 emerges for females in urban areas for 1990 Census. Age misreporting errors are also presented in Figures 2.2, 2.3, 2.4 and 2.5.

Figure 2.2

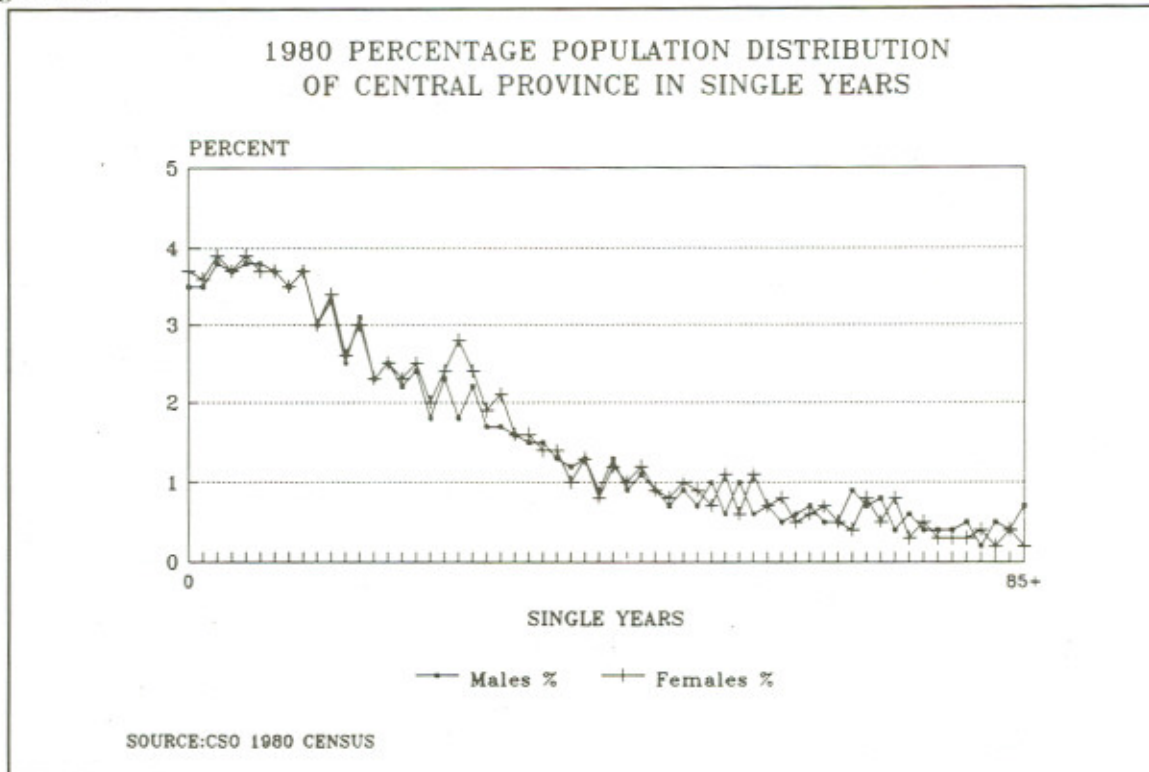


Figure 2.3

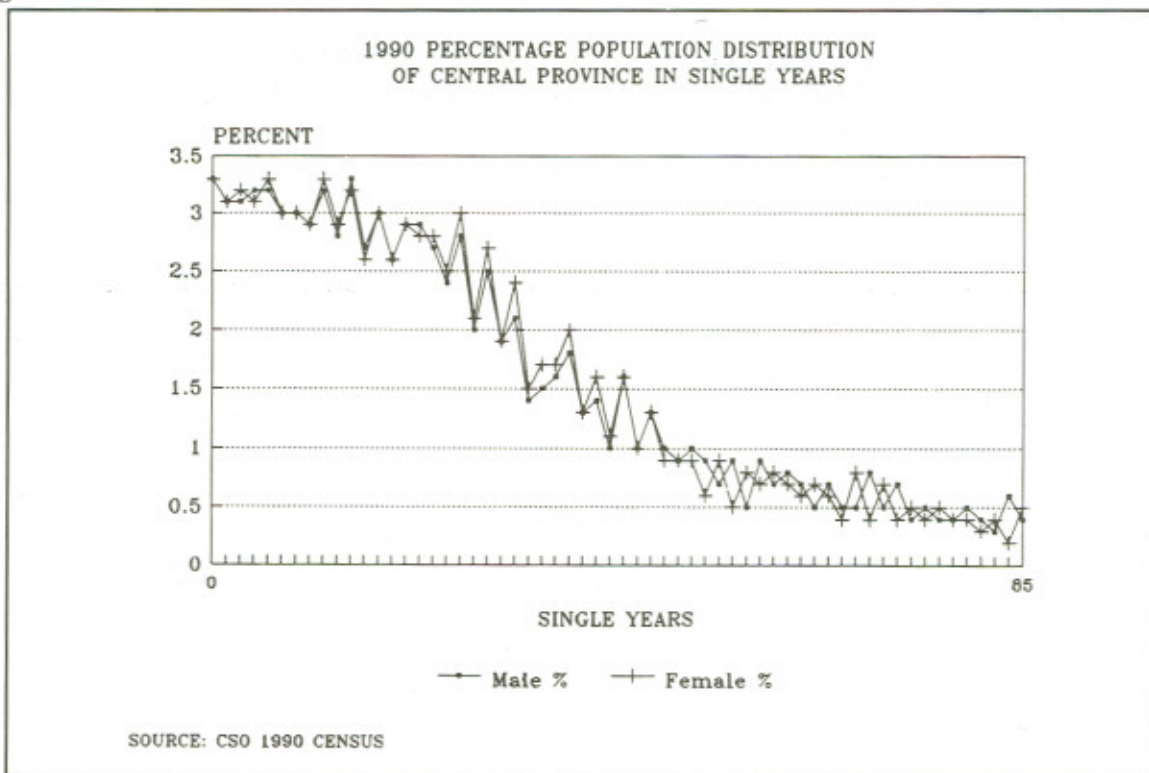


Figure 2.4

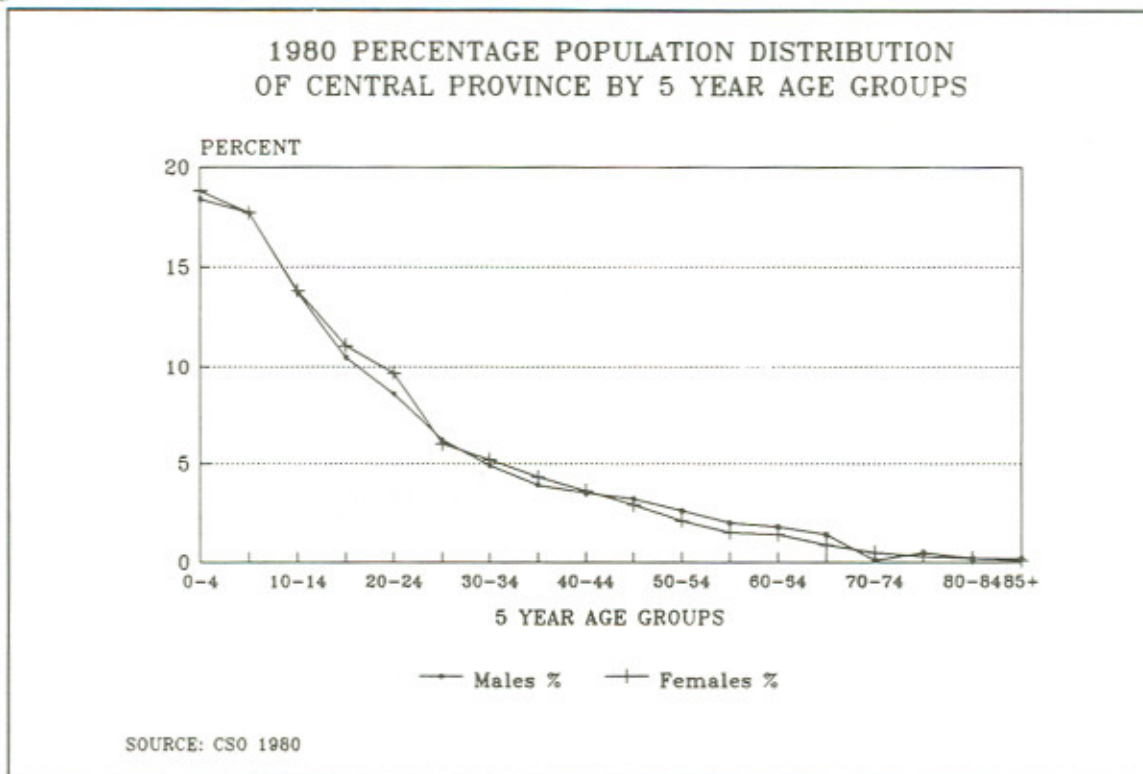
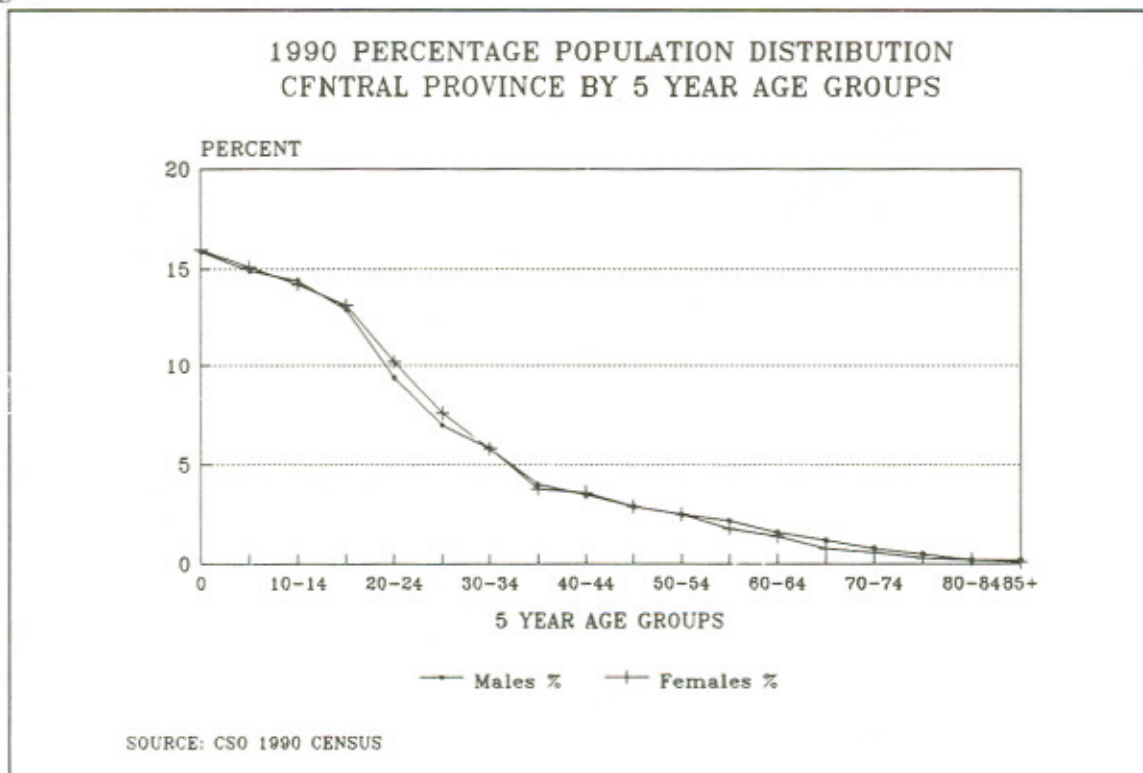


Figure 2.5



Sex Ratios

The presence of errors of omission, age misreporting and out-migration, etc. are detected by the use of sex and age ratios. The overall sex ratio for Central Province using 1980 and 1990 Censuses data show a decline from 101.2 to 98.9 males per 100 females. Refer to Table 2.10 for details. Central Province has changed from being an area of excess males in 1980 to an area of excess females in 1990. This could be attributed to either out-migration of males, high male child mortality at ages below 5 years or high male adult mortality in age group 15-45 years or recording errors.

Table 2.10

Sex Ratios for Central Province, 1980 and 1990

	1980	1990
Central Province		
- Total	101.2	98.9
- Rural	100.4	98.4
- Urban	103.1	100.1

An analysis of age specific sex ratios reveal a deficit of male children in age groups 0-9 years. There are many possible causes of this. High male mortality rate could explain the shortfall in age group 0-4 years. In the case of 5-9 year age group, the possible reason could be shifting of male children to 10 - 14 year age group due to digit preference.

Sex ratios for the middle age groups 15-54 years are less than 100. This could be due to out-migration of economically active adult males to other provinces or high male mortality. Sex ratios for older age groups 55-84 years are higher than those for younger age groups. This observation is a subject for further investigation. For more details refer to Tables 2.11 and 2.12 below.

Age Ratios

The quality of age data can also be evaluated by looking at age ratios. These age ratios are calculated by dividing the population in an age group by the average of adjacent age groups. In normal circumstances, when there are no major changes in fertility, mortality or migration, the age ratios do not deviate from 100. Results from the 1990 Census show that age groups with low age ratios are 20-24 and 25-29 years. Age ratios less than 100 are also found in age groups 35-39, 45-49 and 65-69 years for both sexes. Other male age groups with low age ratios are 5-9, 50-54, 60-64 and 70-74 years. Additionally, female age groups with low age ratios are 55-59 and 75-79 years.

In summary, the average age ratio deviations for males and females for 1980 and 1990 Censuses are the same. The Age-Sex Accuracy Index was reduced from 48 in 1980 to 42 in 1990. Thus, the quality of the 1990 Census data show an improvement over the 1980 Census. Tables 2.11, 2.12 and Figure 2.6 below show this information.

Table 2.11

Population by Five Year Age Group, Sex, Age Ratio and the United Nations Age-Sex Accuracy Index, Central Province, 1990

Age Group	Population		Age Ratio		Deviation		Sex Ratio	Difference
	Male	Female	Male	Female	Male	Female		
0-4	56,801	57,762					98	
5-9	53,325	54,343	99	100	-1	0	98	2
10-14	51,291	51,394	102	101	2	1	100	-3
15-19	46,069	47,422	104	104	4	4	97	-6
20-24	33,637	36,981	97	99	-3	-1	91	0
25-29	25,030	27,406	96	97	-4	-3	91	8
30-34	20,746	20,925	103	101	3	1	99	5
35-39	14,418	13,855	93	90	-7	-10	104	-8
40-44	12,376	12,862	100	103	0	3	96	0
45-49	10,199	10,547	98	98	-2	-2	97	1
50-54	8,886	9,090	99	103	-1	3	98	23
55-59	7,892	6,549	103	97	3	-3	121	0
60-64	5,890	4,879	98	102	-2	2	121	31
65-69	4,322	2,853	99	90	-1	-10	151	-10
70-74	2,965	2,091	97	103	-3	3	142	41
75-79	1,962	1,073	103	89	3	-11	183	-54
80-84	743	577	-	-	-	-	129	-

Average Age Ratio Deviation for males = 3
 Average Age Ratio Deviation for females = 4
 Average Sex Ratio Deviation Difference = 12
 Average Accuracy Index = 42

Figure 2.6

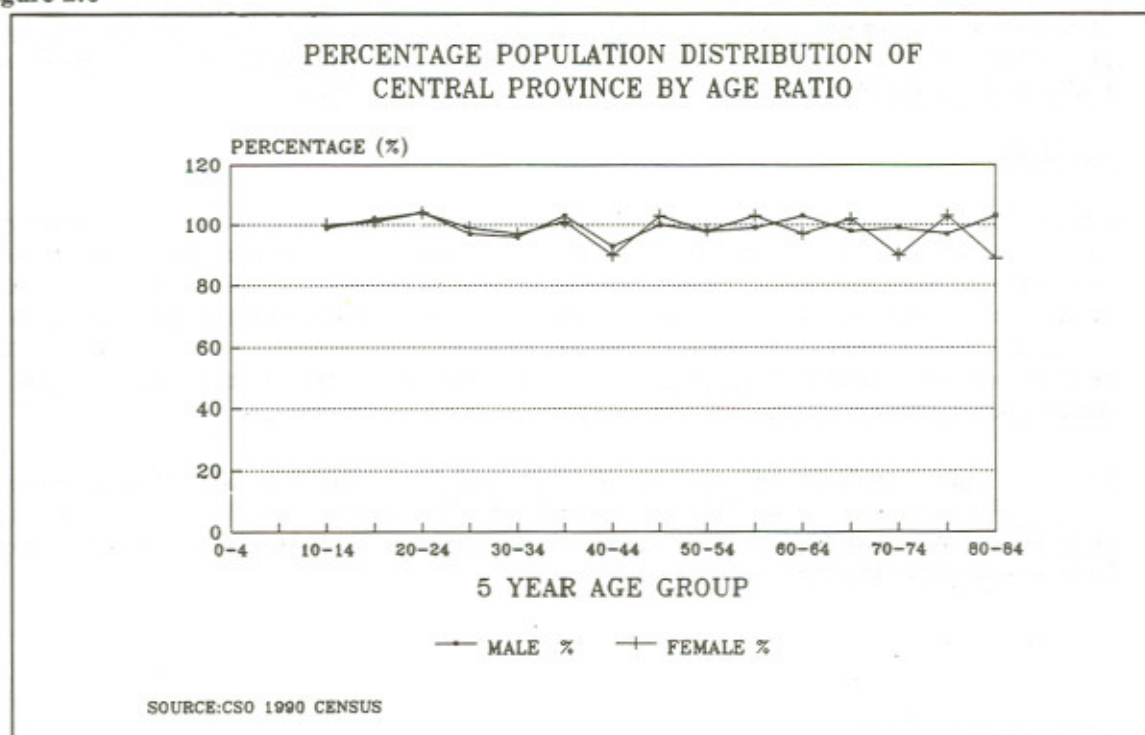


Table 2.12

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

Age Group	Population		Age Ratio		Deviation		Sex Ratio	Difference
	Male	Female	Male	Female	Male	Female		
0-4	46,001	46,541					99	3
5-9	44,386	43,711	105	104	5	4	102	-1
10-14	34,446	34,217	99	98	-1	-2	101	-5
15-19	26,332	27,489	97	97	-3	-3	96	-6
20-24	21,530	23,864	101	106	1	6	90	15
25-29	15,547	14,800	96	89	-4	-11	105	-10
30-34	12,179	12,766	98	100	-2	0	95	-4
35-39	9,649	10,538	96	99	-4	-1	92	6
40-44	8,675	8,863	99	100	-1	0	98	15
45-49	8,138	7,223	103	101	3	1	113	12
50-54	6,580	5,294	100	99	0	-1	124	15
55-59	5,124	3,674	96	92	-4	-8	139	-9
60-64	4,437	3,391	102	108	2	8	131	30
65-69	3,395	2,108	104	95	4	-5	161	-15
70-74	1,868	1,279	88	95	-12	-5	146	33
75-79	1,313	735	105	94	5	-6	179	-42
80-84	525	383	-	-	-	-	137	-

Average Age Ratio Deviation for Males = 3

Average Age ratio Deviation for Females = 4

Average Sex Ratio Deviation Difference = 14

Average Accuracy Index = 48

Survival Ratios

Survival ratios represent the probability that individuals of the same birth cohort or group of cohorts will still be alive "*n*" years later, where "*n*" represents number of years. Evaluation of the quality of age and sex data from two censuses may be done only under certain assumptions. The population is assumed to be closed to migration and influence of abnormal mortality through wars, disasters, diseases, etc., over the 10 year period. The more erratic the census survival ratios are, the more inconsistent the accuracy of age and sex data.

Results from 1980 and 1990 Censuses show that the Central Province may have experienced movements of people from other provinces. This is reflected by survival ratios that are above 1.0 in age groups 40 - 54 years for both sexes. Presumably, they might also have migrated together with their children, considering that age groups 10-14 and 15-19 years have survival ratios above 1.0. Above age group 50-54, the survival ratios decline systematically from one age group to another. Another feature is that young adults in age groups 25-29, 30-34 and 35-39 years may have migrated from Central Province to other provinces or may have been subjected to forces of mortality.

Table 2.13

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

Age Group	Male	Female
0-4	-	-
5-9	-	-
10-14	1.1150	1.1043
15-19	1.0379	1.0849
20-24	0.9765	1.0808
25-29	0.9505	0.9970
30-34	0.9636	0.8767
35-39	0.9274	0.9362
40-44	1.0162	1.0075
45-49	1.0570	1.0008
50-54	1.0243	1.0265
55-59	0.9698	0.9067
60-64	0.8951	0.9216
65-69	0.8435	0.7765
70-74	0.6682	0.6166
75-79	0.5779	0.5090
80-84	0.3977	0.4511
85+	0.2915	0.3117

The male overall survival ratios show that the quality of age data has improved over time. Survival ratios decline systematically by age. In the case of female cohort survival ratios, age distortions surface at 35 - 44 years. Thereafter, survival ratios reduce accordingly. Refer to Tables 2.13 and 2.14 for details.

Table 2.14

Overall Survival Ratios, Central Province, 1980-1990

Age Group	Male	Female
10+	0.9862	1.0071
15+	0.9572	0.9846
20+	0.9348	0.9567
25+	0.9234	0.9221
30+	0.9162	0.9005
35+	0.9032	0.9084
40+	0.8971	0.9011
45+	0.8682	0.8701
50+	0.8232	0.8287
55+	0.7683	0.7569
60+	0.6990	0.6939
65+	0.6235	0.5924
70+	0.5292	0.5100
75+	0.4472	0.4350
80+	0.3396	0.3775
85+	0.2915	0.3116

2.4. CONCLUSION

This chapter has dealt with the evaluation of content and coverage errors in the 1990 Census data for Central Province. Among the notable observations made is the possibility of under-enumeration of children aged between 0-9 years. The other observation is that there was digit preference in age reporting with the most preferred digits being 0, 2, and 8 for both males and females. Furthermore, the province has experienced a change in that it had an excess of males according to the 1980 Census data but recorded an excess of females in the 1990 Census.

CHAPTER 3

POPULATION SIZE, GROWTH AND COMPOSITION

3.1. INTRODUCTION

The size, growth and composition of a population are the major demographic parameters derived from a census and are important in planning for the economy. Given the fact that only a few reliable surveys have been conducted in Zambia, the demand for census data has increased over time.

The 1990 Census of Zambia adopted both types of counting rules namely, the de facto and de jure counts. De facto count is the number of people present at census date, (usual members and visitors). De jure count is the number of usual members present and temporarily absent at census date. In this report, all tables show the de facto population. The de facto population excludes foreign diplomatic personnel accredited to Zambia and Zambian Diplomats accredited to embassies and their families, Zambian migrant workers and students residing in other countries.

Population composition may be 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. These are:

- Demographic characteristics, e.g. population growth rates, mortality, fertility, etc.
- Social characteristics, e.g. educational, marital status, etc.
- Economic characteristics, e.g. labour force participation, economic activity, etc.

3.2. POPULATION SIZE AND GROWTH

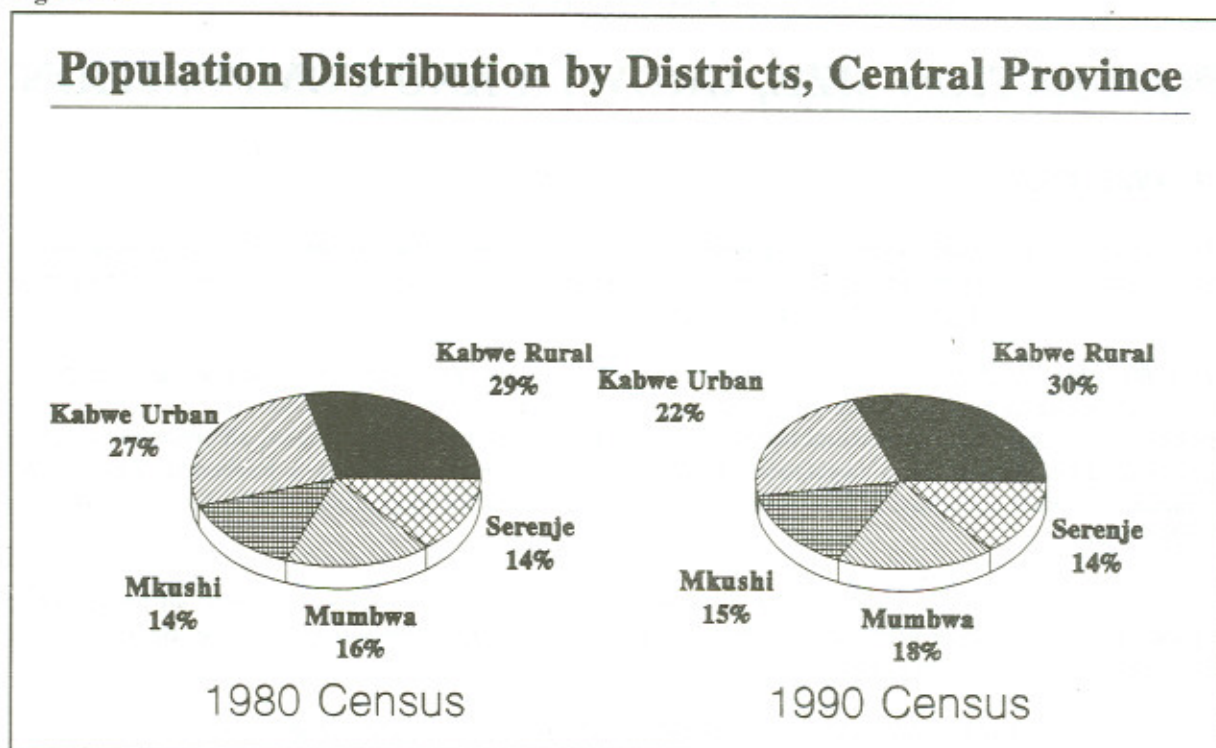
Table 3.1 below shows how the population size of Central Province has evolved during the last two intercensal periods of 1969-1980 and 1980-1990.

Table 3.1

Population and Growth Rates by Rural/Urban and Districts, Central Province, 1969, 1980 and 1990

District	1969	Annual Growth Rate 1969-80	1980	Annual Growth Rate 1980-90	1990
Central Province - Total	358,655	3.3	511,905	3.5	720,627
- Rural	-	-	360,486	3.5	507,430
- Urban	-	-	151,419	3.5	213,197
Districts					
Kabwe Rural	122,570	1.6	146,295	4.1	219,339
Kabwe Urban	65,974	6.8	136,033	1.7	161,455
Mkushi	56,992	2.2	72,190	4.2	108,466
Mumbwa	60,138	3.1	83,907	4.3	127,895
Serenje	52,981	3.0	73,480	3.5	103,472

Figure 3.1



The preceding table shows that the population of Central Province is growing at a high rate. This is evidenced by the growth rates found at province, district, rural and urban levels. Kabwe Urban District is the only district whose annual growth rate declined between 1980 and 1990. This may be attributed to a decline in mining activity during the period, triggering off out-migration to other districts within the province and to other provinces.

Generally, the growth rate in the province has increased from 3.3 percent during 1969 - 1980 to 3.5 percent during the 1980 - 1990 intercensal period. Most other districts have recorded marked increases in the population growth rates during the period under discussion. A notable increase shown in Table 3.1 is seen for Kabwe Rural District. Perhaps, this rural district with rich soils may have been a focal point of in-migration.

Population change is often referred to as "population growth" and can be negative or positive. Zambia has had three post-independence Censuses conducted in 1969, 1980 and 1990. The Geometric Growth Rate method is used to calculate the intercensal growth rates for the two intercensal periods. This information is given in Table 3.1.

In the intercensal period 1969-1980 the growth rate for Central Province was high at 3.3 percent, yet it increased in the following intercensal period, 1980-1990 to 3.5 percent.

The proportion of children (aged 0 - 14 years) at 45.1 percent is very large. This has implications for future population growth as the number of persons entering the reproductive ages is very high. This is an in-built population growth momentum whereby even if fertility was to fall instantly, the population of the Province will keep on growing for a long time to come. The consequence of high population growth is the pressure put on the land due to overcrowding.

Table 3.2

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

District	Area (Sq Km)	Population Density/Census Year (Population Per sq.km)		
		1969	1980	1990
Total Central	94,394	3.8	5.4	7.6
Kabwe Rural	25,760	4.8	5.7	8.5
Kabwe Urban	1,572	42.0	86.5	102.7
Mkushi	22,608	2.5	3.2	4.8
Mumbwa	21,103	2.8	4.0	6.1
Serenje	23,351	2.3	3.1	4.4

Population growth may also be examined alongside population density. Density is defined as the number of persons per square kilometre of land. Table 3.2 shows that the population density has been increasing since 1969.

3.3. POPULATION COMPOSITION

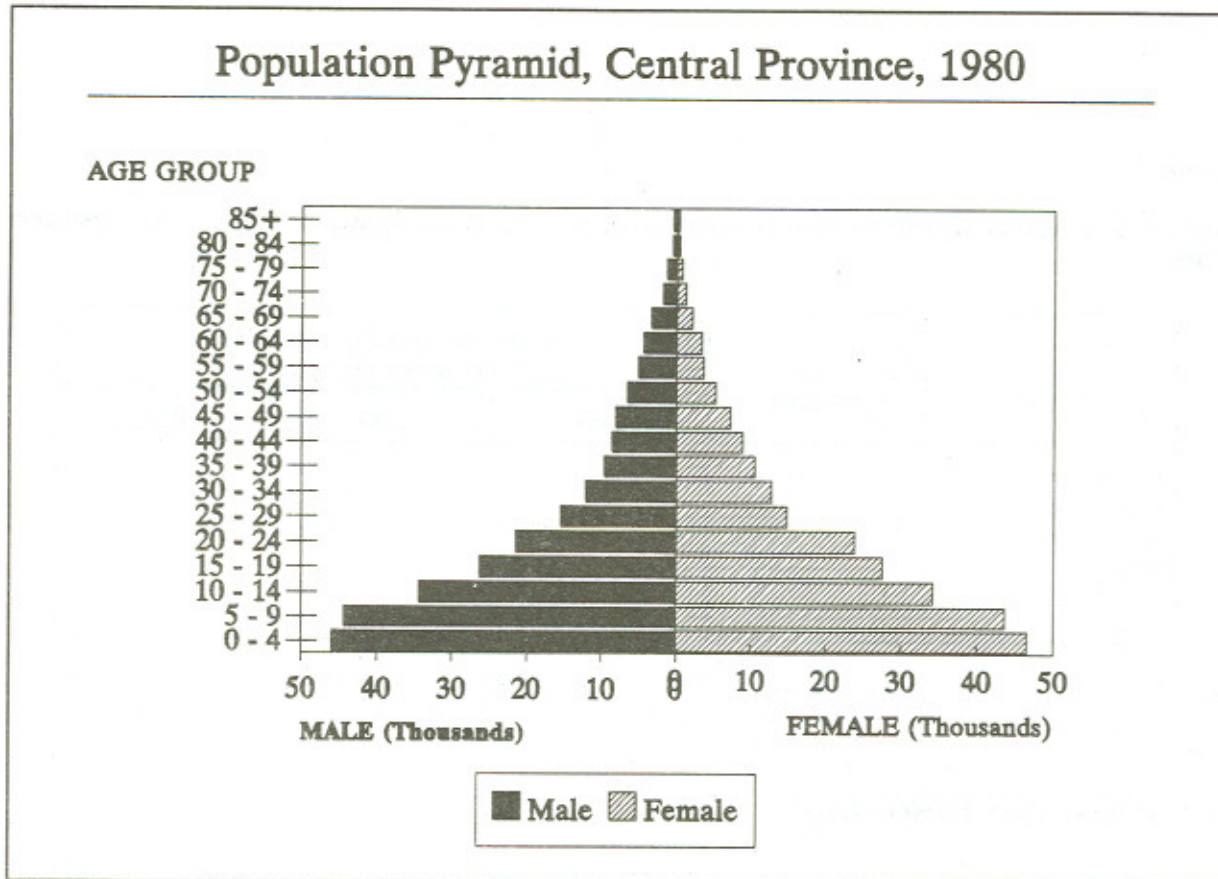
For population composition, age, ethnicity, citizenship and economic characteristics of the population is analysed.

Age is an important aspect in the population as it has a lot of influence on demographic and social processes. For example, the number of births depend on the number of women of child-bearing age 15-49 years. Migration is also age-selective, while the school-going population and labour force are concentrated in specific age groups.

The median age is often used as a basis for describing a population as young or old. The median age is defined as the age which divides the population into two equal parts. These are "young" and "old" population groups. According to the 1990 Census data, the median age for Central Province is 16.9 years, which implies that the population is very young (refer to Figure 3.3).

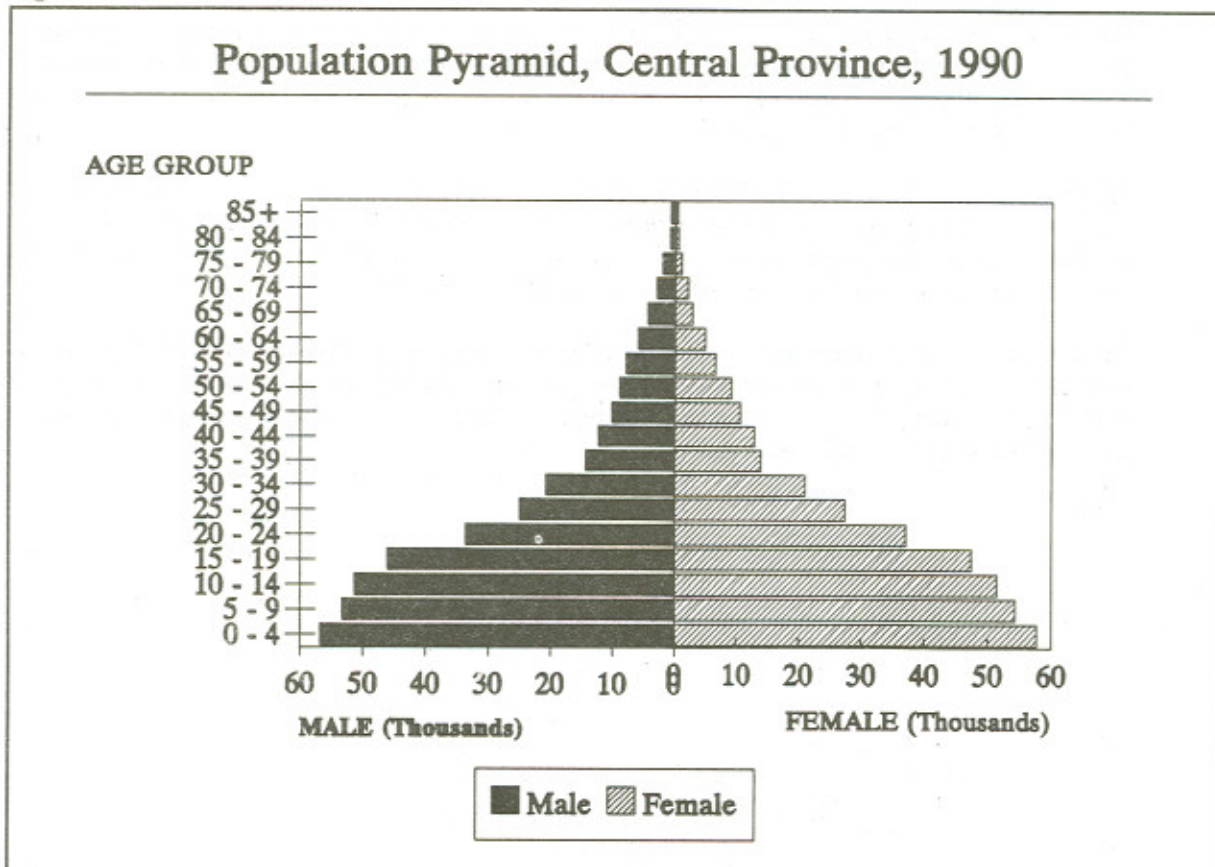
The effect of this very young population is better inferred with the use of the population pyramid. For Central Province, the pyramid is of a broad base, indicating that the child population in the province is very large. This has serious implications with regard to the provision of social amenities and services such as schools and hospitals, etc.

Figure 3.2



Source: CSO, 1980 Census

Figure 3.3



Source: CSO, 1990 Census

Table 3.3 below gives additional information covering districts as well. It may be noted that the age group 0 - 4 followed by age group 5 - 9 years are leading in percentage share of the population. The data shows that the population is young for all districts in the province.

Table 3.3

Population by Age, Sex, Rural/Urban and Districts, (Percent), Central Province, 1990

Age Group	Central		Urban		Rural		Kabwe Rural	Kabwe Urban	Mikushi	Mumbwa	Serenje
	Male	Female	Male	Female	Male	Female	Both Sexes	Both Sexes	Both Sexes	Both Sexes	Both Sexes
0 - 4	15.8	15.9	16.2	16.2	15.0	15.4	16.0	15.1	15.5	16.5	16.7
5 - 9	14.9	15.0	15.1	15.0	14.4	15.1	14.7	14.7	15.2	15.0	15.5
10 - 14	14.3	14.2	14.4	13.8	14.1	15.1	13.8	14.5	14.3	14.0	14.8
15 - 19	12.9	13.1	12.8	12.7	13.0	14.1	12.7	13.6	13.2	12.3	13.0
20 - 24	9.4	10.2	9.2	9.9	9.9	11.0	9.8	10.6	9.8	9.7	8.7
25 - 29	7.0	7.6	6.7	7.2	7.6	8.3	7.0	8.0	7.4	7.2	6.7
30 - 34	5.8	5.8	5.3	5.4	6.9	6.7	5.4	6.9	5.5	5.5	5.3
35 - 39	4.0	3.8	3.5	3.6	5.4	4.3	3.5	4.9	3.7	3.7	3.6
40 - 44	3.5	3.6	3.1	3.7	4.4	3.2	3.4	3.8	3.6	3.2	3.5
45 - 49	2.8	2.9	2.8	3.2	3.0	2.2	3.1	2.6	3.0	2.9	2.8
50 - 54	2.5	2.5	2.6	2.9	2.2	1.6	2.8	1.9	2.7	2.5	2.6
55 - 59	2.2	1.8	2.5	2.1	1.5	1.0	2.3	1.3	2.2	2.1	2.4
60 - 64	1.6	1.3	1.9	1.6	1.0	0.8	1.8	0.9	1.6	1.7	1.6
65 - 69	1.2	0.8	1.5	0.9	0.6	0.4	1.2	0.5	1.1	1.3	1.0
70 - 74	0.8	0.6	1.0	0.7	0.4	0.3	0.8	0.3	0.6	1.0	0.7
75 - 79	0.5	0.3	0.7	0.4	0.2	0.1	0.4	0.2	0.4	0.6	0.6
80 - 84	0.2	0.2	0.3	0.2	0.1	0.1	0.2	0.1	0.1	0.3	0.2
85 +	0.2	0.1	0.2	0.2	0.1	0.0	0.2	0.1	0.1	0.2	0.1
N/Not Stated	0.3	0.3	0.3	0.4	0.4	0.2	0.5	0.2	0.1	0.3	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total Pop.	358,396	362,231	251,725	255,705	106,671	106,526	198,769	161,455	108,466	127,895	103,472

Ethnicity and Citizenship

The African population is dominant in Central Province. Other ethnic groups comprise only a negligible proportion. Ethnicity in the context of 1990 Census was defined as the continent of origin in the case of the non-Zambians, but for Zambians, it was in reference to indigenous Zambian tribes. There are few persons coming from other continents (1,209) apart from Africa. Slightly more than 99.0 percent (714,559) of the population in Central Province are of African origin.

Table 3.4

Ethnic Composition of the Population of Central Province, 1990

ETHNIC GROUP							
Sex	African	American	Asians	European	Other	Not Stated	Total
Male	355,142	50	245	282	73	2,604	358,396
Female	359,417	49	224	228	58	2,255	362,231
Total	714,559	99	469	510	131	4,859	720,627
% of Total Population	99.16	0.01	0.07	0.07	0.02	0.67	100.0

Disaggregation of population by citizenship status shows that 2.0 percent (14,428) of the population in Central Province are non-Zambians whilst Zambians constitute 98.0 percent (706,199).

It may be of interest to show the population of the province by country/continent of citizenship. This information is provided in Table 3.5.

Table 3.5

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

Country/Region	Population 1990	Percent 1990	Percent 1980
Central Africa	202	1.4	3.6
Tanzania	635	4.4	9.5
Other (Eastern Africa)	72	0.5	0.4
Northern African	54	0.4	0.0
Angola	53	0.3	0.6
Botswana	16	0.1	15.6
Malawi	892	6.2	8.4
Mozambique	66	0.5	0.5
Zimbabwe	8,942	62.0	53.7
Other (Southern Africa)	90	0.6	1.3
West Africa	104	0.7	0.2
America	48	0.3	0.2
Asia & Oceania	243	1.7	3.7
Europe	300	2.1	2.1
Not Stated	2,711	18.8	0.2
% Total	-	100.0	100.0
Total Foreign Citizen	14,428		21,528
% of Foreign Pop.		2.0	4.2

Table 3.5 shows that Zimbabwean citizens in Central Province out-number those from any other countries by over 60 percent. This is followed by Malawians and Tanzanians. Generally, the number of foreign nationals in Central Province declined in relative terms by half from 4.2 percent in 1980 to 2.0 percent in 1990. In both 1980 and 1990 Censuses, Zimbabweans are by far the predominant group of foreign nationals in the province. The liberation struggle for independence in Zimbabwe has had little impact on the Zimbabweans living in Central Province. Perhaps, the Zimbabwean nationals in the province are more of settlers rather than short term migrants.

Economic Characteristics

Measures used in analysing persons who are economically active have been described in detail in the chapter on Economic Activity. In this chapter, only crude activity ratio by age is included. The Crude Activity Ratio (CAR) is defined as "number of economically active persons divided by the total population".

The Crude Activity Ratios of below 33 percent imply that few economically active persons have to support a large population. In the case of Central Province, the CAR was recorded as 31.1 percent in 1990. Urban areas had even lower crude activity ratio of 27.7 as compared to rural areas which recorded 32.7 percent. The CAR is a more refined measure than the age dependency ratio (ADR) in that crude activity ratio does exclude inactive persons in the age group 12 years and over.

Table 3.6

Crude Activity Ratio, Central Province, 1990

Province/Residence	Crude Activity Ratio (%)
Central Province - Total	31.1
- Rural	32.7
- Urban	27.7

Analysis of age specific activity ratios reveal some important results. Firstly, activity ratios for females are below 40.0 percent in both rural and urban areas. The only exception is found in age group 20-24 years for rural areas where the activity ratio is 40.5 percent. This seems to contradict the generally held view that women were more active than men economically. Secondly, activity ratios for males are above 80.0 percent in age group 25-64 years. The activity ratios for ages below 25 years are less than 70.0 percent because some persons in this age could still be in school. Even though formal employment retiring age in Zambia is 55 years for males, activity ratios are reasonably higher at age group 65 years and above possibly due to change of jobs and the life long employment in agriculture sector. This is especially true in rural areas where retirees settle after formal employment in urban areas.

Table 3.7

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

Age-Specific Activity Ratio (%)						
	Central		Rural		Urban	
Age	Male	Female	Male	Female	Male	Female
12-14	25.9	23.8	31.9	29.7	11.5	11.2
15-19	37.6	33.3	44.1	39.6	22.7	19.8
20-24	67.3	37.0	70.1	40.5	61.1	29.4
25-29	84.6	36.1	85.0	38.0	83.7	32.0
30-34	88.8	35.2	88.8	36.3	88.9	33.2
35-39	90.6	35.8	89.8	35.8	92.0	35.9
40-44	90.8	36.0	89.8	36.2	92.4	35.2
45-49	89.8	35.2	89.6	35.5	90.2	34.0
50-54	87.6	36.3	87.9	37.7	87.0	30.4
55-59	85.4	37.4	86.5	39.1	81.0	28.7
60-64	80.5	36.8	82.2	38.9	72.5	26.5
65-69	77.3	36.2	79.6	38.3	62.6	25.4
70-74	68.7	32.0	70.9	33.7	55.8	21.7
75+	58.6	29.1	60.1	31.0	46.4	15.5
N/S	42.7	21.9	44.1	21.5	39.9	23.7

Figure 3.4

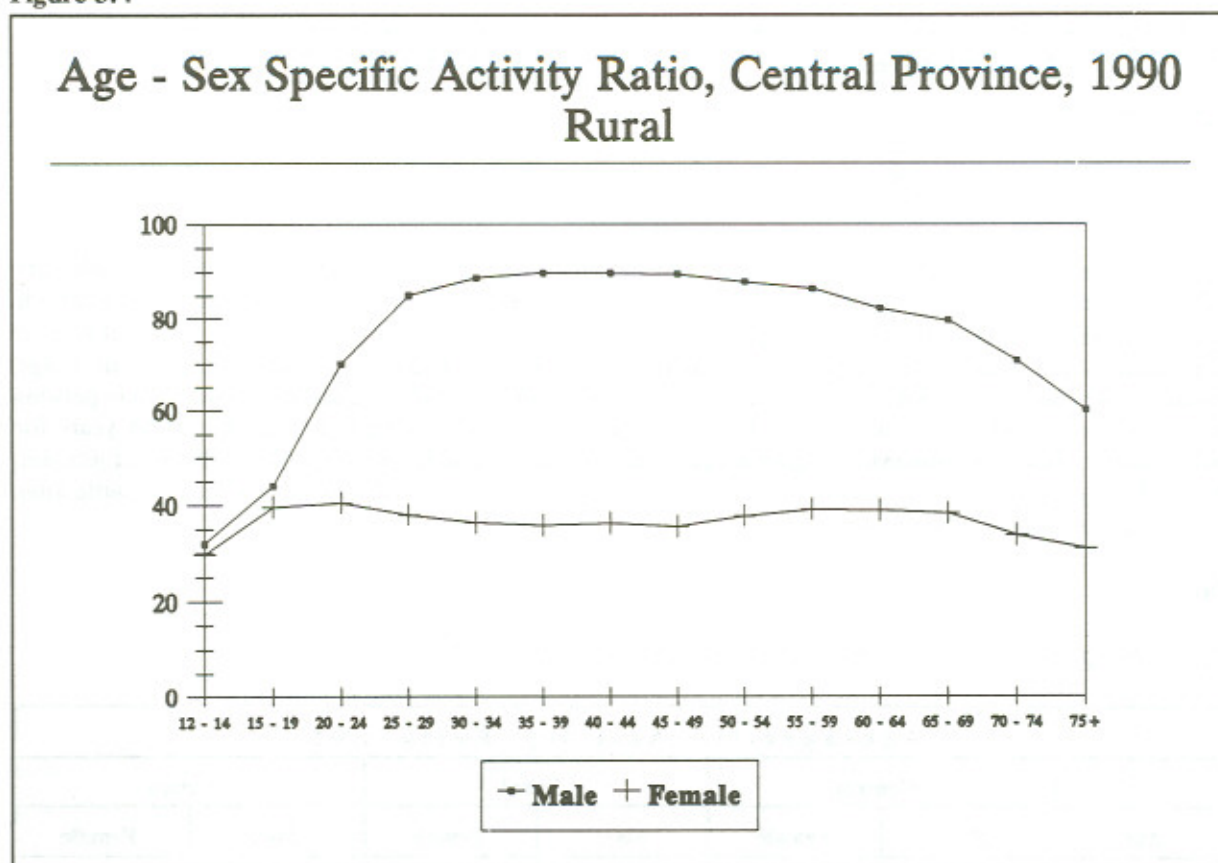
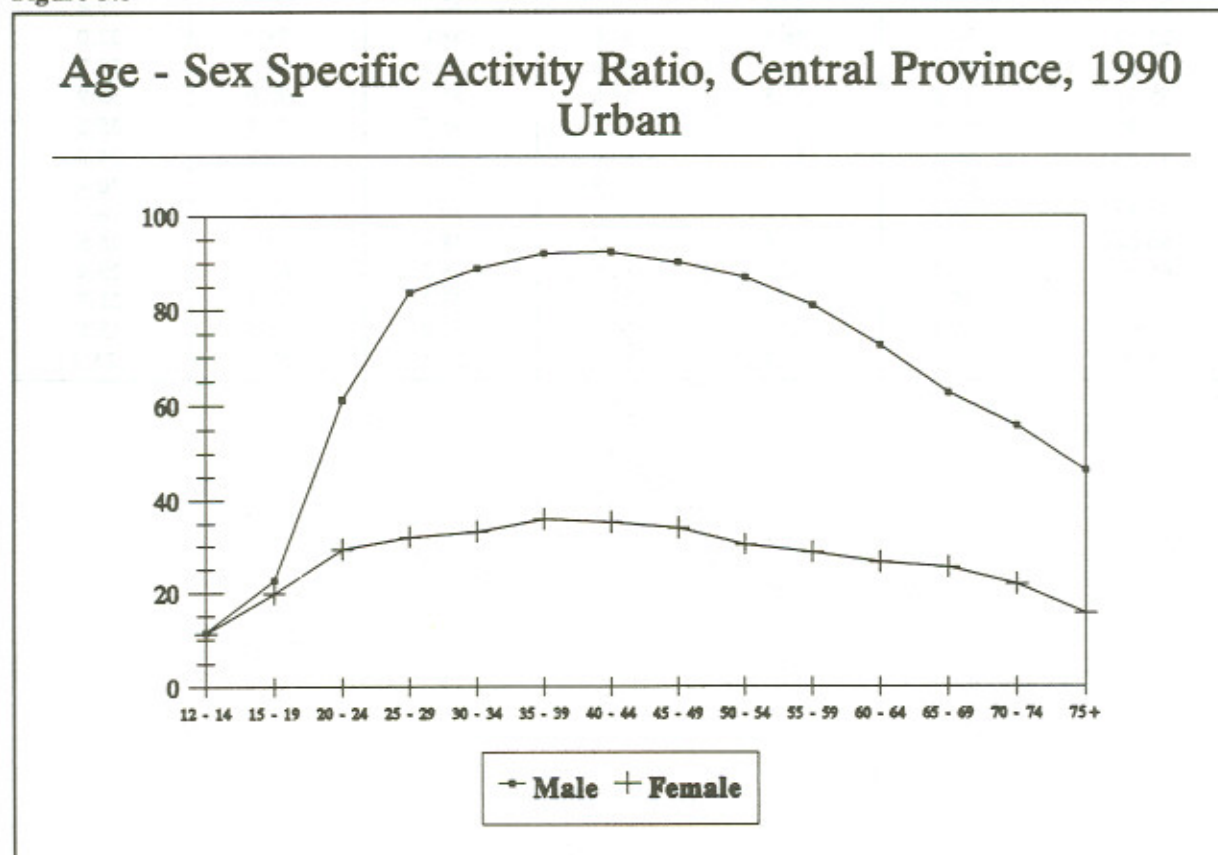


Figure 3.5



Rural-urban differences in activity ratios exist for males rather than for females. Male activity ratios in urban areas are lower than those in rural areas in age group 12-29, 50-74 and, 75 years and over. Activity ratios are higher in urban areas as compared to rural areas for females aged 30-49 years. Caution should be taken here, the 1990 Census classified full-time housewives as economically inactive segment of the population.

3.4. CONCLUSION

The population of Central Province has grown from 358,655 in 1969, 511,905 in 1980 to 720,627 in 1990. Intercensal growth rates of 3.3 percent and 3.5 percent are registered between 1969-1980 and 1980-1990, respectively. A reduced population growth rate of 1.7 percent is registered in Kabwe Urban between 1980-1990 intercensal period. All other districts have recorded high population growth rates of between 3.5 to 4.3 percent in the same period. There are no differences in population growth rates between rural and urban areas.

Nearly half of the population is aged below 15 years implying that Central Province has a young population. This also implies that Central Province has high prospects of population increase in future. There is therefore, a need to increase the supply of goods and services such as health, education, employment opportunities, etc.

CHAPTER 4

LANGUAGE OF COMMUNICATION

4.1. INTRODUCTION

There are many languages and dialects spoken in Zambia. It is estimated that there are 72 tribes in the country with each tribe consisting of unique languages and dialects. However, seven major languages have been designated as Zambian languages because they are generally widely spoken and for that reason are taught in the Zambian Educational System particularly in primary and secondary schools. The seven languages are Bemba, Nyanja, Tonga, Lozi, Kaonde, Lunda and Luvale. It should however be noted that English is the official language in the country and is used as a medium of instruction in schools and work places. It must be mentioned that English as a subject is compulsory both at primary and secondary school levels.

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

This chapter presents data on languages of communication in Central Province as at the time of the 1990 Census. For easy presentation in certain cases, the languages have been classified by major language groups. Seven major language groups used here comprise the Bemba, Tonga, North-Western group, Barotse, Nyanja, Mambwe and Tumbuka. The other category shown in the data include other languages not commonly spoken in the province. It should be noted here that these language groups have been formed for convenience in presenting the data as they may contain other equally powerful languages. For example, in the North-Western group, the Kaonde, Luvale and Lunda are distinct languages with their own dialects. Barotse language group comprises Lozi, Nkoya, Subiya, Nyengo, etc. Similarly, the North-Western group comprises Kaonde, Luvale, Lunda, etc.

4.2. PREDOMINANT LANGUAGE OF COMMUNICATION

In Central Province the indigenous major ethnic groups include the Lenje, Lala and Tonga. However, internal movements of people since the early 1960's has brought about integration of various ethnic and language groups in the province.

Table 4.1 presents data on major predominant languages. In all, over 22 languages are represented in Central Province, with Bemba being the most spoken language followed by Lala, Lenje and Tonga. The same table also shows how these three major languages in Central Province have selective dominance over others in each district. The Bemba language is spoken by over 57 percent of people in Kabwe Urban District. While Lala comes third with only 4.4 percent. The second most spoken language in Kabwe Urban District is Nyanja with about 7 percent. Lala is dominant in Serenje and Mkushi while Lenje is mostly spoken in Kabwe Rural District. Tonga language dominates in Mumbwa District and is the second predominant language of communication in Kabwe Rural District.

English, the official language is not used very much in Central Province and is mostly confined to Kabwe Urban District where only 3 percent of the people use it for communication.

The "other" category shown in Table 4.1 attracts a sizeable population in Central Province particularly in Mkushi (24.5 percent), Mumbwa (20.4 percent) and Kabwe Rural (13.4 percent). This is a result of many languages not predominantly spoken put together.

Table 4.1

Predominant Language of Communication by Districts, (Percent), Central Province, 1990

Major Languages	Province Level	Kabwe Rural	Kabwe Urban	Mkushi	Mumbwa	Serenje
Bemba	21.7	13.9	57.5	16.0	4.6	9.3
Lala	20.8	2.4	4.4	43.0	0.5	86.3
Bisa	0.5	0.5	0.9	0.4	0.1	0.5
Lamba	2.1	4.9	1.1	1.4	2.5	0.1
Tonga	10.4	15.5	4.0	4.0	23.6	0.3
Lenje	12.6	35.9	2.1	0.8	6.3	0.1
Soli	0.3	0.5	0.3	0.2	0.5	0.0
Ila	3.0	0.3	0.3	0.0	16.1	0.0
Luvale	0.4	0.5	0.5	0.1	0.9	0.0
Lunda	0.2	0.5	0.4	0.1	0.2	0.0
Kaonde	2.1	0.8	0.7	0.2	9.5	0.1
Lozi	2.2	1.6	2.6	0.8	5.4	0.2
Nkoya	0.2	0.3	0.1	0.0	0.7	0.0
Chewa	1.3	1.7	2.1	1.0	0.7	0.1
Nsenga	1.9	2.3	4.0	1.5	0.6	0.1
Ngoni	1.2	1.4	2.1	0.9	0.6	0.1
Nyanja	5.0	3.6	6.8	1.9	5.7	0.2
Mambwe	0.5	0.2	0.9	0.8	0.1	0.1
Namwanga	0.9	0.4	1.3	1.7	0.2	0.1
Tumbuka	0.9	0.4	1.8	0.4	0.4	0.1
Senga	0.2	0.1	0.3	0.1	0.1	0.0
English	0.9	0.2	3.0	0.2	0.3	0.1
Other	10.1	13.4	3.0	24.5	20.4	2.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Size	687,721	208,277	154,580	104,240	121,450	99,174

None of the districts in Central Province is homogeneous with respect to the predominant language spoken although data contained in Table 4.1 seem to suggest that Serenje District is least heterogeneous and Mumbwa District is most heterogeneous than any other district in the province.

4.3. PREDOMINANT LANGUAGE GROUP

The seven major language groups for purposes of the 1990 Census were Bemba, Tonga, North-Western, Barotse, Nyanja, Mambwe and Tumbuka as already explained in the introduction section. Table 4.2 presents data for the language groups for rural and urban areas of Central Province.

Table 4.2

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

Language Group	Central Province			Central Province Rural			Central Province Urban		
	Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females
Bemba	50.0	49.7	50.4	44.9	44.8	45.0	62.0	61.1	63.1
Tonga	28.8	28.3	29.2	37.0	36.7	37.5	9.2	8.9	9.4
North-Western	3.2	3.2	3.1	3.4	3.4	3.3	2.7	2.7	2.7
Barotse	2.5	2.6	2.4	2.0	2.1	1.9	3.7	3.7	3.7
Nyanja	9.6	10.0	9.3	7.5	7.8	7.2	14.8	15.1	14.4
Mambwe	1.4	1.5	1.4	1.0	1.0	0.9	2.5	2.5	2.5
Tumbuka	1.0	1.1	1.0	0.6	0.6	0.6	2.1	2.1	2.0
English	0.9	1.2	0.6	0.3	0.3	0.2	2.4	3.2	1.6
Other	2.6	2.5	2.6	3.4	3.3	3.4	0.6	0.6	0.6
Total	100	100	100	100	100	100	100	100	100
Size	687,721	341,813	345,908	483,630	239,766	243,864	204,091	102,047	102,044

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

The data in the table shows that the Bemba language group is spoken by half of the population in Central Province and nearly two-thirds in urban areas. The Tonga language group is second after the Bemba group in the Province. However, the Tonga group is still second in importance in rural areas of Central Province while the Nyanja group comes second in the urban areas. There are no significant differences in the predominant language groups of communication between males and females in both the urban and rural areas.

Table 4.3

Predominant Language Groups, (Percent), Central Province, 1980 and 1990

Predominant Language Groups	Percentage of Total Population	
	1980	1990
Bemba	44.9	50.0
Tonga	25.9	28.8
North-Western	4.0	3.2
Barotse	3.0	2.5
Nyanja	11.0	9.6
Mambwe	2.2	1.4
Tumbuka	1.8	1.0
English	0.2	0.9
Other	7.0	2.6
Total	100	100
Size	510,992	687,721

Table 4.3 above shows changes in the share of each language group during the intercensal period 1980-1990. Over the 10 year period, the Bemba speaking group has increased its share from about 45 percent in 1980 to 50 percent in 1990. The Tonga group is shown to have increased its share by about 3 percentage points during the intercensal period. Apart from Bemba, Tonga and English the remaining four language groups have declining proportional shares of the population.

The individual languages and language groups found in Central Province are heterogeneous, though, Bemba as a language and as a language group is widely spoken. Although, English is the official language, it is not frequently used as a predominant language of communication. However, as shown in Table 4.3, English has increased its proportionate share from 0.2 percent in 1980 to 0.9 percent in 1990.

4.4. SECOND LANGUAGE OF COMMUNICATION.

In a multilingual country like Zambia, many people speak several languages. However, there is always one language in which an individual is most proficient. It may be the case that individuals will also communicate in another language or other languages in their day-to-day activities. The Census also captured the second language in importance used for communication. Table 4.4 below shows the percentage distribution of the second language of communication by districts and province in 1990.

Table 4.4

Second Language of Communication by Districts, (Percent), Central Province, 1990

Major Languages	Province Level	Kabwe Rural	Kabwe Urban	Mkushi	Mumbwa	Serenje
Bemba	30.9	25.7	37.5	44.7	7.0	64.0
Lala	4.8	1.6	4.0	18.2	0.1	10.0
Bisa	0.6	0.4	1.1	0.5	0.0	1.5
Lamba	3.3	6.9	1.3	2.1	2.5	0.3
Tonga	6.1	7.1	3.1	1.7	10.4	1.2
Lenje	9.0	21.1	2.9	1.1	7.1	0.4
Soli	0.5	0.8	0.5	0.2	0.5	0.1
Ila	4.4	0.3	0.3	0.2	20.0	0.0
Kaonde	2.0	0.7	0.8	0.2	7.1	0.3
Lozi	1.6	1.2	2.2	0.6	2.6	0.6
Chewa	0.8	0.8	1.5	0.7	0.4	0.2
Nsenga	1.5	1.1	3.6	1.1	0.3	0.6
Ngoni	0.9	0.7	1.7	0.8	0.6	0.2
Nyanja	16.8	23.1	14.5	5.8	22.3	5.6
Mambwe	0.5	0.4	1.0	0.3	0.1	0.4
Namwanga	0.7	0.5	1.3	0.5	0.1	0.3
Tumbuka	0.8	0.6	1.7	0.3	0.2	0.5
English	7.5	3.0	16.7	2.9	2.5	12.5
Other	7.3	4.0	4.3	17.6	18.6	1.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Size	687,721	208,277	154,580	104,240	121,450	99,174

Table 4.4 is similar to Table 4.1 but refers to second language of communication. It will be recalled that Bemba was recorded as the predominant language of communication in Central Province. Table 4.4 indicates that Bemba is also the highest ranked second language of communication in Central Province with nearly 31 percent share over other languages. In fact, the data shows that Bemba has the highest percentage distribution as the second language of communication in all the districts in the province except Mumbwa District. For the whole province, Bemba and Nyanja taken together account for nearly half of the population who speak the languages as the second language of communication. As for the remaining languages, their percentage share range from 0.6 percent for Bisa to 9.0 percent for Lenje. It should be mentioned that the second language of communication in the province displays a somewhat similar heterogeneous pattern as that shown in the case of the predominant language of communication.

With regard to the language groups, the comparative position in respect of second language of communication is presented in Tables 4.5 and 4.6. Actually Table 4.6 presents the comparative percentage distribution of the second language groups for 1980 and 1990.

Table 4.5

Second Language Groups by Sex and Rural/Urban, (Percent), Central Province, 1990

Language Group	Central Province			Rural			Urban		
	Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females
Bemba	42.7	41.7	43.8	42.3	41.5	43.2	43.5	42.1	45.0
Tonga	22.3	21.4	23.2	29.4	28.5	30.3	8.3	7.7	9.0
North-Western	2.8	2.6	2.9	2.9	2.8	3.0	2.5	2.4	2.7
Barotse	1.8	1.9	1.8	1.5	1.5	1.4	2.5	2.4	2.6
Nyanja	20.3	20.4	20.2	18.7	19.2	18.3	23.4	22.9	24.0
Mambwe	1.2	1.2	1.3	0.6	0.6	0.5	2.5	2.3	2.6
Tumbuka	0.9	0.8	0.9	0.4	0.4	0.4	1.7	1.6	1.9
English	7.5	9.5	5.4	3.6	5.0	2.3	15.1	18.1	11.8
Other	0.5	0.5	0.5	0.2	0.5	0.5	0.5	0.4	0.5
Total	100	100	100	100	100	100	100	100	100
Size	351,586	179,084	172,502	233,276	118,081	115,195	118,310	61,003	57,307

Table 4.6

Second Language Groups, (Percent), Central Province, 1980 and 1990

Second Language Groups	Percentage of Total Population	
	1980	1990
Bemba	32.0	42.7
Tonga	23.3	22.3
North-Western	2.6	2.8
Barotse	2.5	1.8
Nyanja	19.7	20.3
Mambwe	0.8	1.2
Tumbuka	0.6	0.9
English	15.0	7.5
Other	3.5	0.5
Total	100.0	100.0
Size	172,829	351,586

As can be seen from Table 4.6, the Bemba language group has increased in its percentage share by over 10 percent from 32.7 percent in 1980 to 42.7 percent in 1990. It must be noted that Bemba still maintains the highest share among the major language groups in both 1980 and 1990 Censuses. The North-Western language group and the Nyanja, have each increased their shares slightly in 1990 over their respective positions in 1980. Similarly, the Mambwe and Tumbuka had their proportions increased between 1980 and 1990. It should be noted, however, that the contribution of the English language as a second language of communication has decreased from 15.0 percent in 1980 to 7.5 percent in 1990 for the entire Central Province.

Table 4.7

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

Rank Order	Central Province	Kabwe Rural	Kabwe Urban	Mkushi	Mumbwa	Serenje
1	Bemba	Lenje Bemba	Bemba	Lala Bemba	Tonga Nyanja	Lala Bemba
2	Lala Nyanja	Tonga Nyanja	Nyanja	Bemba Lala	Ila	Bemba Lala
3	Lenje	Bemba Lenje	Lala	Tonga Nyanja	Kaonde Tonga	Bisa Nyanja
4	Tonga	Nyanja Tonga	Nsenga	Nyanja Lamba	Nyanja Lenje	Tonga Bisa
5	Nyanja Lala	Lamba	Tonga	Namwanga Tonga	Lozi Bemba	Nyanja Tonga

The languages have been ranked according to their proportionate shares and the five highest ranking in each district are shown in Table 4.7. The table emphasises that Bemba language ranks high both as a predominant and second language of communication in Central Province. The ranking of the major five languages in Table 4.7 is such that the language on top in each cell represents the predominant language of communication. The language below is the second language of communication. Where the cell has only one language, it signifies that the language has the same indicated rank order for both predominant and second language of communication.

4.5. CONCLUSION

In summary, the population in Central Province is heterogeneous in the languages spoken and is represented by the seven language groups as well as English. There are also over 22 languages spoken either as predominant or as second languages in Central Province. English as a second language of communication has declined from 15.5 percent in 1980 to 7.5 percent in 1990. As a second language, English is the second most important in Kabwe Urban District (16.7 percent) and Serenje District (12.5 percent) after Bemba. Refer to Table 4.4 for details.

CHAPTER 5

EDUCATIONAL CHARACTERISTICS

5.1. INTRODUCTION

The acquisition of skills and knowledge by individuals through formal established schooling system constitutes formal education. Non-formal education is acquired through the interaction with one's society or community. In the development of human resources, education is probably the most important consideration that has an overt impact on the quality of human resources in terms of their skills and knowledge. Formal education implies age-specific, full-time classroom attendance in a linearly graded system geared towards acquiring certificates, diplomas, degrees or other formal credentials. In contrast, non-formal education involves activities that are aimed at a wider range of goals. Such activities tend to be heterogenous, 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.

The 1990 Census of Population, Housing and Agriculture included the following topics 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.
- Highest professional/vocational education completed.

Information on current 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. Similarly, repetition of grades cannot be computed.

5.2. CONCEPTS AND DEFINITIONS

Education System

Formal education 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. Secondary education, lasts for 5 years, with a selection point at the end of second year. At the end of five years of secondary education another selection takes place such that only a small number of graduates proceed to institutions of higher learning.

Since the 1980's, there has been an expansion of part of the secondary level 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. All institutions whether public or private are included.

School Attendance

Any persons reporting to be attending school constituted school attendance. This included all forms of attendance such as full-time, part-time and correspondence. It should be noted here, that school attendance is synonymous with school enrolment which refers to 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 education 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.

In many instances, there exists an age-grade mismatch in the education system. Sometimes, this is caused by lack of school places in specific grades, especially in urban areas. An example is the enrolment in grade one which includes children aged 8 years and over.

Literacy

This refers to the ability to read and write in any language. Individuals who can read and write are considered to be literate. Those who have reached a certain age and grade and cannot read and write are considered illiterate.

Academic Education

The highest level of formal education that an individual has attained or completed regardless of duration in school. Educational qualifications attained such as certificates, diplomas are included in the educational outputs.

Professional/Vocational Education Completed.

Highest qualification attained after formal school (grades 1 - 12) either at college or university. Inclusive are specified fields of study.

5.3. LITERACY STATUS

Information on literacy status was collected from all individuals aged 5 years and over in the 1990 Census. However, no such information was collected during the 1980 Census. Thus, no comparisons on literacy status can be made over the 1980-1990 intercensal period.

Results from the 1990 Census have shown that more males are literate than females. Comparisons by broad age groups and residence yield similar conclusions. Overall, 56.2 percent of the population in Central Province is literate. Percentages for males and females are 61.9 and 50.6 percent, respectively. The assessment of literacy status by age and sex reveal a normal distribution pattern where proportions of literate populations are low in age group 5 - 9 years and those 45 years and over. Free education system was introduced in Zambia after the attainment of independence in 1964; hence low literate proportion at older age groups. The five year age group that have high literacy proportions range between 15 and 44 years. These age groups have average literate proportions of above 60.0 percent. In urban areas, percentages of literates are more than 80.0 percent for the age groups under discussion.

The distribution of literate population by districts shows that Kabwe Urban and Mumbwa have 71.2 and 58.6 percent, respectively. Serenje District has the least percentage with 46.3 percent of its population who can read and write. Kabwe Rural and Mkushi Districts have 50.5 and 49.5 percent, respectively. For details refer to Table 5.1.

Table 5.1

Literate Population by age group, sex and residence, Central Province, 1990

	Age Group								
	Total	5-9	10-14	15-19	20-24	25-29	30-44	45+	Not Stated
Central Province									
- Total	56.2	15.6	59.4	74.6	75.0	74.7	69.7	41.7	23.9
- Male	61.9	15.2	58.4	76.7	79.6	81.7	82.6	60.6	33.0
- Female	50.6	16.1	60.4	72.6	70.9	68.2	56.8	20.2	14.7
Residence									
Rural									
- Total	50.3	12.4	52.9	69.2	69.7	68.8	62.4	38.1	20.8
- Male	56.5	12.0	51.8	71.7	75.0	77.0	76.7	56.5	30.1
- Female	44.3	12.7	53.9	66.8	64.8	61.2	49.3	18.1	12.7
Urban									
- Total	70.0	23.6	74.4	86.6	86.7	87.0	83.5	56.0	32.6
- Male	74.5	23.0	74.1	88.4	89.5	91.8	92.5	74.7	39.1
- Female	65.5	24.2	74.7	85.0	84.0	82.7	73.0	29.9	22.4
District									
Kabwe Rural									
- Total	50.5	12.4	53.0	68.9	70.5	68.8	62.0	38.2	24.4
- Male	56.3	12.3	51.7	70.9	75.0	77.0	76.1	55.0	35.1
- Female	44.7	12.5	54.2	66.9	66.4	61.2	48.9	19.1	14.9
Kabwe Urban									
- Total	71.2	24.8	75.3	87.5	87.6	87.9	84.7	51.7	37.3
- Male	75.6	24.0	75.0	89.3	90.1	92.4	93.3	76.1	48.7
- Female	66.7	25.6	75.6	85.8	85.3	83.8	74.6	30.8	21.6
Mkushi									
- Total	49.5	12.6	51.1	65.6	66.0	66.7	61.7	39.6	20.4
- Male	55.7	12.0	50.4	68.5	72.5	74.9	75.6	56.6	31.5
- Female	43.2	13.2	51.8	62.7	59.7	58.7	47.6	19.1	9.5
Mumbwa									
- Total	58.6	17.9	66.7	81.1	79.5	77.6	69.7	38.8	16.0
- Male	63.9	17.2	65.6	82.2	82.1	82.9	82.5	58.4	21.0
- Female	53.4	18.6	67.8	80.1	77.0	72.8	57.7	18.8	11.8
Serenje									
- Total	46.3	7.9	44.3	65.1	64.3	65.3	62.0	38.9	17.1
- Male	53.3	7.8	43.7	69.3	73.0	76.7	77.9	61.1	21.7
- Female	39.6	8.0	45.0	61.2	57.5	56.0	48.1	16.1	11.4

Figure 5.1

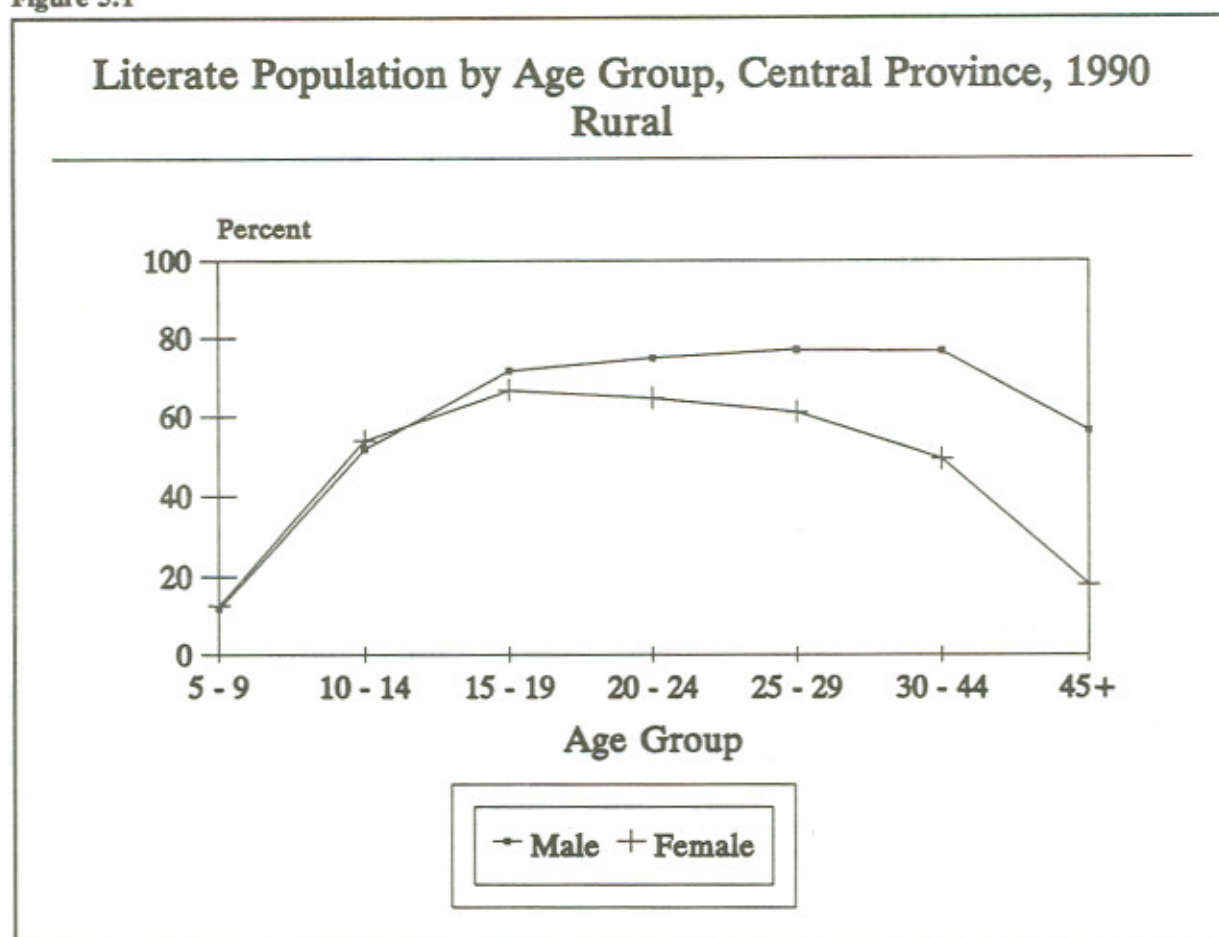
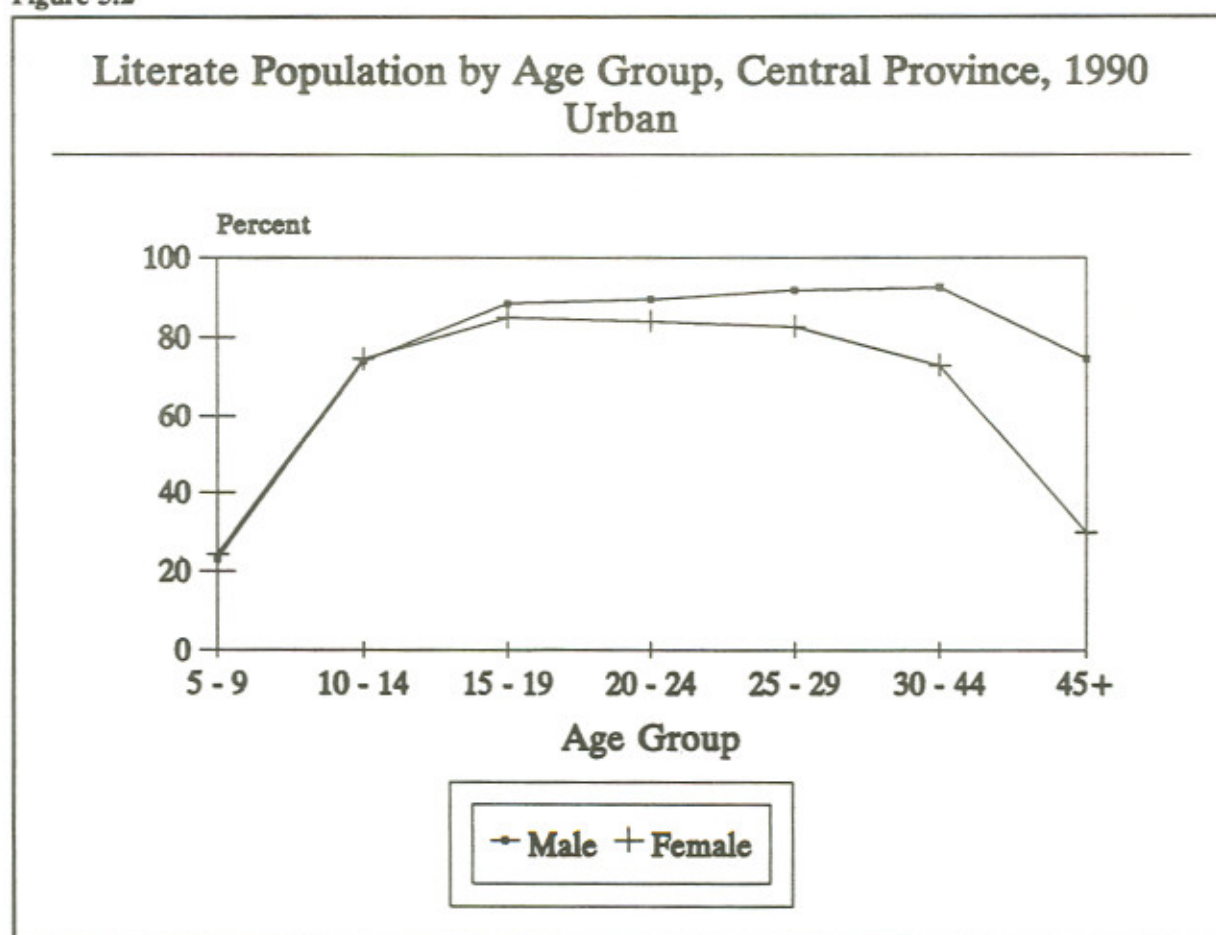


Figure 5.2



5.4. SCHOOL ATTENDANCE

Table 5.2 below shows the population that is presently attending school by age, sex and residence. Primary school attendance for higher grades 4 - 7 is shown in age group 10 - 14 years. Age group 10 - 14 years has 72.0 percent who are presently attending school. There are more female pupils at primary school level as compared to male pupils. Attendance rate for female pupils aged 10 - 14 years is 72.3 percent as compared to 71.5 percent for male pupils. However, secondary school going age group 15 - 19 years has very high attendance rate for male pupils as compared to female pupils. It seems more girls drop out of school in grade 7. School attendance rate of 71.4 percent for boys is achieved in age group 15-19 years as compared to that of girls with 59.2 percent. The decrease in school attendance is substantial in age groups 20 - 24 and 25 - 29 years. Correspondence students are most likely to be found in age groups 25 - 29 and 30 years or over. Less than 5.0 percent of students are aged 30 years and over. Overall, 40.5 percent of pupils attend school in Central Province. Rates for male and female pupils are 45.5 and 36.1 percent, respectively.

Differences exist between rural and urban areas. In urban areas, school attendance rates at both primary and secondary school levels are higher than those for rural areas. The differences are more pronounced in age groups 10-14, 15-19 and 20-24 years. Total school attendance rate in rural areas is 34.5 percent as compared to 57.2 percent in urban areas.

Primary school attendance rates are low for age groups 5-9 and 10-14 years in Kabwe Rural, Mkushi and Serenje Districts. Similarly, these three districts have low school attendance rates for secondary school going population. The total school attendance rates for Kabwe Rural, Mkushi and Serenje districts are 35.2, 32.9 and 31.9 percent, respectively. Higher school attendance rates are recorded in Kabwe Urban and Mumbwa Districts with 58.9 and 43.5 percent, respectively.

Table 5.2:

Population presently attending school by age group, sex and residence, Central Province 1990

	Age Group							Total
	5-9	10-14	15-19	20-24	25-29	30+	Not Stated	
Central Province								
- Total	30.8	71.9	65.7	33.2	12.5	3.3	6.3	40.5
- Male	29.9	71.5	71.4	45.6	19.1	5.5	7.5	45.5
- Female	31.6	72.3	59.2	21.2	8.2	2.0	5.2	36.1
Residence								
Rural								
- Total	25.8	66.2	58.6	27.2	10.0	2.8	6.8	34.5
- Male	25.1	65.7	65.2	39.1	14.9	4.4	9.0	39.4
- Female	26.5	66.7	51.0	16.2	6.8	1.8	5.2	30.1
Urban								
- Total	42.8	84.8	81.5	51.8	23.0	5.8	4.4	57.2
- Male	41.8	85.1	85.4	63.9	36.2	11.0	3.7	62.0
- Female	43.7	84.4	77.1	38.3	14.3	2.9	5.2	52.9
District								
Kabwe Rural								
- Total	26.9	66.6	59.5	28.8	9.9	2.9	8.0	35.2
- Male	26.6	66.0	64.7	39.1	14.1	4.4	10.5	39.6
- Female	27.2	67.2	53.5	19.1	7.1	1.9	6.2	31.2
Kabwe Urban								
- Total	44.2	85.9	82.7	55.0	26.0	6.3	4.9	58.9
- Male	43.0	86.2	86.5	66.4	39.6	12.2	5.4	63.6
- Female	45.3	85.6	78.4	41.7	16.7	3.2	4.5	54.5
Mkushi								
- Total	24.4	62.1	54.8	25.1	9.9	3.0	4.9	32.9
- Male	23.4	61.6	61.8	36.1	13.7	4.7	9.1	37.3
- Female	25.5	62.6	46.7	14.9	7.2	1.9	1.5	28.9
Mumbwa								
- Total	33.2	79.5	73.3	37.8	14.7	2.2	3.3	43.5
- Male	32.3	79.1	77.8	51.8	23.8	3.4	3.0	49.2
- Female	34.1	79.8	67.7	22.3	8.5	1.5	3.5	38.4
Serenje								
- Total	22.2	61.6	54.2	20.7	7.4	3.3	6.0	31.9
- Male	21.5	61.5	63.7	34.1	12.9	6.0	6.0	37.7
- Female	23.0	61.7	44.0	10.9	4.6	2.0	6.0	27.0

Figure 5.3

Population Presently Attending School, Central Province, 1990 Rural

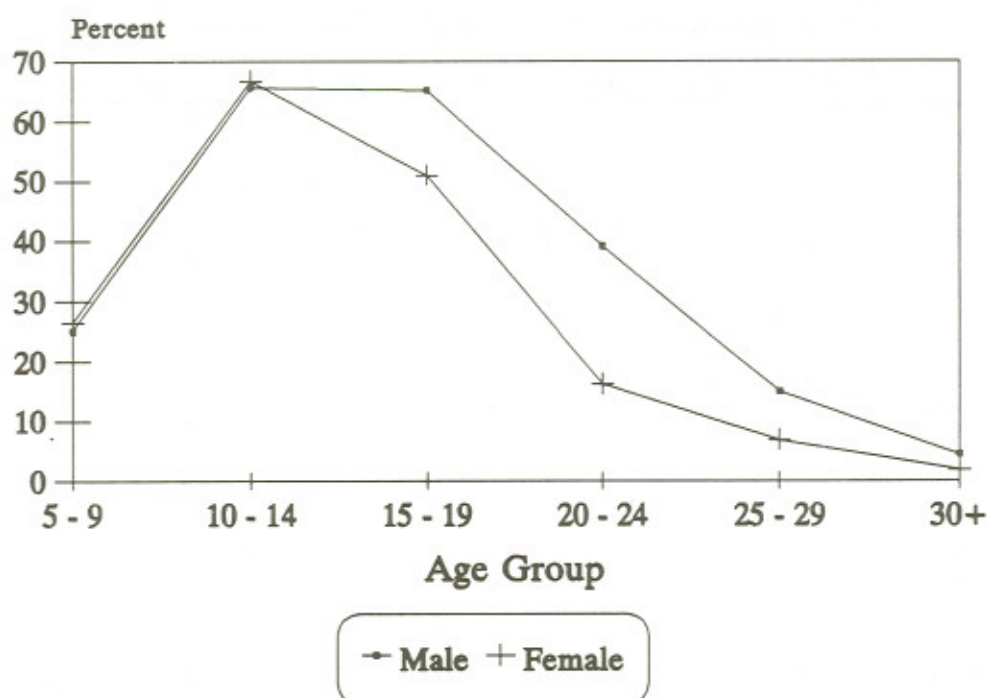
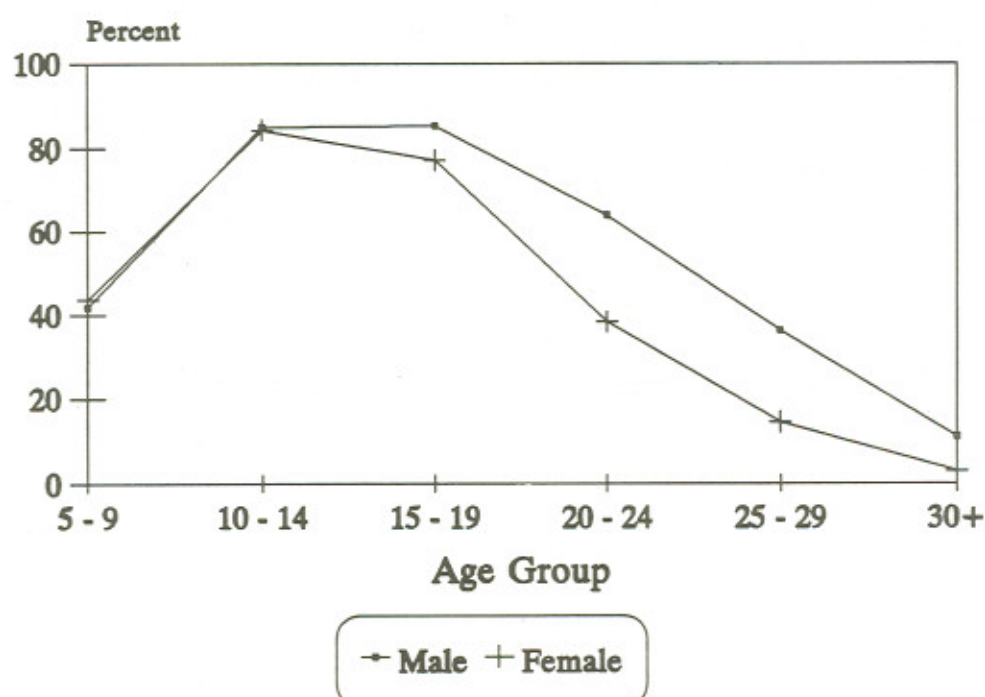


Figure 5.4

Population Presently Attending School, Central Province, 1990 Urban



Results from the 1980 Census have shown an increasing trend when compared with the 1990 Census results. Overall, the school attendance rate increased from 36.0 percent in 1980 to 40.5 percent in 1990. Similarly, the male and female school attendance rates showed an upward trend. Male attendance rate increased from 42.1 percent in 1980 to 45.5 percent in 1990. Female school attendance rate increased from 30.6 percent in 1980 to 36.1 percent in 1990. Table 5.3 provides information on population that was attending school in 1980.

Table 5.3

Population presently attending school by age group, sex and residence, Central Province, 1980

	Age Group						
	5-9	10-14	15-19	20-24	25+	Not Stated	Total
Central Province							
- Total	22.6	77.3	75.1	29.5	2.0	5.6	36.0
- Male	21.8	78.0	83.9	53.6	4.3	8.8	42.1
- Female	23.4	76.7	63.6	10.2	0.7	3.6	30.6
Residence							
Rural							
- Total	18.3	72.0	67.9	22.4	1.0	5.0	30.2
- Male	18.0	72.9	79.4	44.1	1.8	7.4	36.4
- Female	18.6	70.9	53.1	6.5	0.5	3.4	24.8
Urban							
- Total	32.6	89.6	91.1	52.9	7.6	8.7	52.5
- Male	31.0	90.4	95.0	80.0	18.1	14.4	58.1
- Female	34.2	88.8	86.0	22.7	2.1	4.6	47.3
District							
Kabwe Rural							
- Total	19.3	74.1	71.4	22.3	0.8	5.5	31.0
- Male	18.6	74.3	80.4	44.1	0.8	8.7	36.0
- Female	20.0	74.0	59.8	7.0	0.8	3.3	26.5
Kabwe Urban							
- Total	31.9	88.0	90.0	51.1	6.7	8.4	50.2
- Male	30.3	88.7	93.6	76.7	16.0	13.6	56.4
- Female	33.5	87.3	85.1	22.8	1.7	4.6	46.0
Mkushi							
- Total	18.3	67.5	63.0	23.0	1.7	4.5	29.2
- Male	17.8	68.7	76.9	45.1	2.8	5.9	35.1
- Female	18.8	66.2	45.6	5.5	0.9	3.5	23.8
Mumbwa							
- Total	21.1	82.4	79.2	30.2	1.2	6.7	35.6
- Male	20.6	82.8	87.2	50.9	2.6	8.0	42.1
- Female	21.6	82.1	68.2	11.4	0.4	5.8	29.8
Serenje							
- Total	18.0	66.5	59.5	20.3	1.2	4.5	29.5
- Male	17.9	69.5	75.4	45.7	2.8	9.0	37.4
- Female	18.1	63.4	40.2	4.8	0.5	2.2	23.0

Figure 5.5

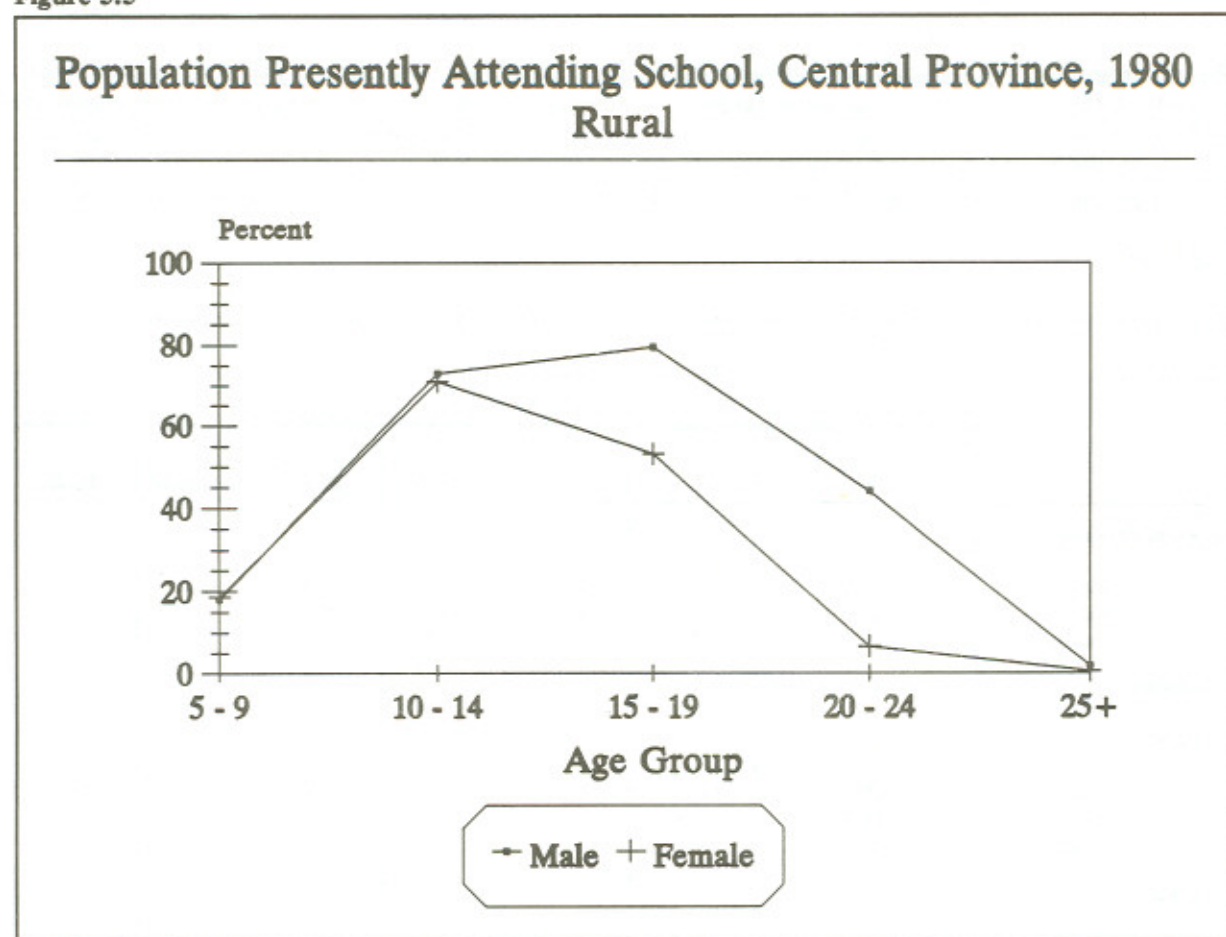
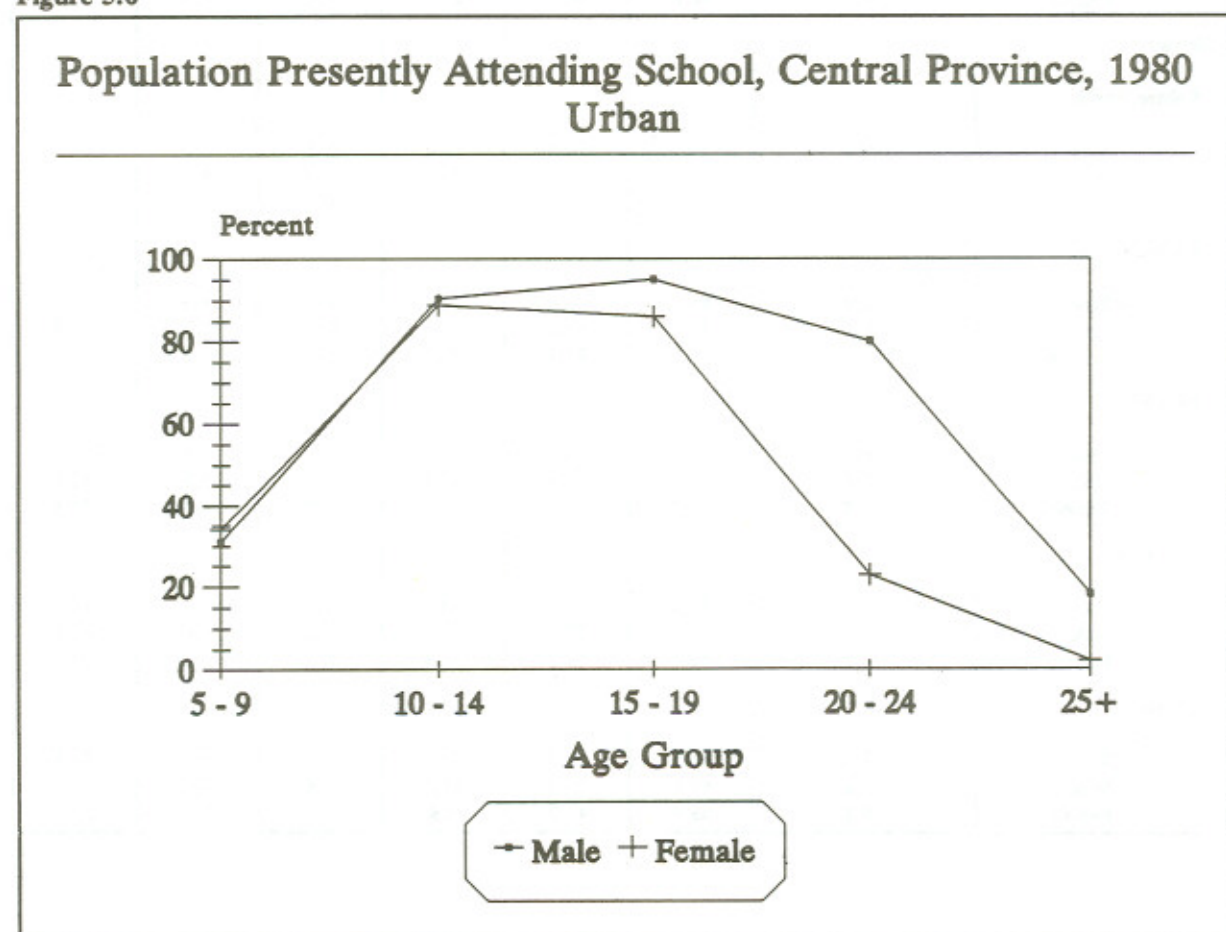


Figure 5.6



Age groups that recorded a declining trend are 10-14 and 15-19 in the 1980-1990 intercensal period. School attendance rates for 10-14 years declined from 77.3 percent in 1980 to 72.0 percent in 1990. In the case of age group 15-19 years, the school attendance rate declined from 75.1 percent in 1980 to 65.7 percent 1990. For more details refer to Table 5.3. This declining phenomenon in school attendance rates for age groups 10-14 and 15-19 years is found in both rural and urban areas of Central Province. The decline in the proportions of the school population for some age groups during the 1980-1990 intercensal period could be a pointer that expansion of education has not been matched with the increasing school going population in the province.

Table 5.4

Population presently attending school by age (5 years and older), sex, educational level completed and residence, Central Province, 1990

Residence and age group	Educational level completed							Total	Size
	1 - 4	5 - 7	8 - 9	10 - 12	A' level	Degree	Not Stated		
Central Province									
Total	47.1	32.3	7.7	4.3	0.0	0.0	8.5	100	160,162
Both Sexes									
5 - 9	74.7	0.0	0.0	0.0	0.0	0.0	25.3	100	32,657
10 - 14	63.4	30.8	0.9	0.0	0.0	0.0	4.9	100	69,980
15 - 19	12.3	59.2	20.2	6.2	0.0	0.0	2.1	100	43,743
20 - 24	6.5	29.8	26.8	32.5	0.2	0.0	4.2	100	9,072
25 - 29	9.6	36.6	12.3	32.6	0.2	0.1	8.5	100	1,973
30+	18.7	35.1	9.4	24.0	0.7	0.3	11.9	100	2,617
Not Stated	33.3	26.7	4.2	6.7	0.0	0.0	29.2	100	120
Male Total	45.2	33.0	8.2	5.4	0.0	0.0	8.1	100	84,949
5 - 9	74.0	0.0	0.0	0.0	0.0	0.0	26.0	100	15,732
10 - 14	65.0	29.2	0.7	0.0	0.0	0.0	5.0	100	34,835
15 - 19	13.6	60.0	18.3	5.9	0.0	0.0	2.2	100	25,427
20 - 24	5.4	28.0	28.6	33.8	0.2	0.0	4.1	100	6,111
25 - 29	5.7	32.8	12.9	38.7	0.3	0.2	9.3	100	1,182
30+	15.0	32.0	10.7	32.6	0.9	0.3	8.5	100	1,596
Not Stated	33.3	25.8	6.1	6.1	0.0	0.0	28.8	100	66
Female Total	49.2	31.6	7.2	3.2	0.0	0.0	8.9	100	75,213
5 - 9	75.3	0.0	0.0	0.0	0.0	0.0	24.7	100	16,925
10 - 14	6.2	3.2	0.1	0.0	0.0	0.0	0.5	100	35,145
15 - 19	10.5	58.1	22.8	6.6	0.0	0.0	2.1	100	18,316
20 - 24	8.9	33.5	23.2	29.7	0.1	0.0	4.4	100	2,961
25 - 29	15.5	42.4	11.4	23.5	0.0	0.0	7.2	100	791
30+	24.4	40.0	7.4	10.5	0.4	0.2	17.1	100	1,021
Not Stated	33.3	27.8	1.9	7.4	0.0	0.0	29.6	100	54

Table 5.4: Continued

Population presently attending school by age (5 years and older), sex, educational level completed and residence, Central Province, 1990

Residence and age group	Educational level completed							Size
	Grades 1 - 4	Grades 5 - 7	Grades 8 - 9	Grades 10 - 12	A' level	Degree	Not Stated	
Rural male Total	48.1	33.0	6.5	3.9	0.0	0.0	8.5	53,802
5 - 9	73.4	0.0	0.0	0.0	0.0	0.0	26.6	9,410
10 - 14	69.2	24.8	0.4	0.0	0.0	0.0	5.5	22,565
15 - 19	17.5	62.9	13.4	3.8	0.0	0.0	2.4	16,079
20 - 24	6.8	33.2	27.0	27.1	0.1	0.0	5.7	3,880
25 - 29	6.4	40.3	13.2	26.2	0.3	0.1	13.6	745
30 +	18.9	38.6	9.8	20.9	0.2	0.2	11.4	1,066
Not Stated	35.1	26.3	5.3	5.3	0.0	0.0	28.1	57
Rural female Total	52.7	31.0	5.1	2.0	0.0	0.0	9.2	46,185
5 - 9	75.1	0.0	0.0	0.0	0.0	0.0	24.9	9,992
10 - 14	66.6	27.6	0.5	0.0	0.0	0.0	5.3	22,278
15 - 19	13.8	63.3	16.3	4.2	0.0	0.0	2.4	10,833
20 - 24	11.8	41.1	21.0	20.4	0.1	0.0	5.5	1,749
25 - 29	17.8	48.4	11.0	14.0	0.0	0.0	8.9	529
30 +	26.3	41.3	5.5	6.7	0.3	0.0	19.9	760
Not Stated	34.1	29.5	0.0	4.5	0.0	0.0	31.8	44
Urban Male Total	40.2	33.2	11.2	7.9	0.1	0.0	7.4	31,147
5 - 9	75.0	0.0	0.0	0.0	0.0	0.0	25.0	6,322
10 - 14	57.4	37.4	1.2	0.0	0.0	0.0	4.0	12,270
15 - 19	6.7	55.1	26.8	9.6	0.0	0.0	1.9	9,348
20 - 24	2.9	18.8	31.3	45.4	0.4	0.0	1.2	2,231
25 - 29	4.3	20.1	12.6	60.2	0.5	0.2	2.1	437
30 +	7.4	18.5	12.3	56.0	2.5	0.6	2.8	530
Not Stated	22.2	22.2	11.1	11.1	0.0	0.0	33.3	9
Urban Female Total	43.7	32.5	10.5	4.9	0.0	0.0	8.4	29,028
5 - 9	75.5	0.0	0.0	0.0	0.0	0.0	24.5	6,933
10 - 14	53.5	40.4	1.9	0.0	0.0	0.0	4.2	12,807
15 - 19	5.6	50.6	32.2	9.9	0.0	0.0	1.7	7,483
20 - 24	4.8	22.7	26.3	43.2	0.2	0.1	2.8	1,212
25 - 29	11.1	30.2	12.2	42.7	0.0	0.0	3.8	262
30 +	18.8	36.0	13.0	21.5	0.8	0.8	9.2	261
Not Stated	30.0	20.0	10.0	20.0	0.0	0.0	20.0	10

Table 5.4 shows the population currently attending school alongside the educational grade completed. According to the 1990 Census, the grade completed did not mean the current grade one was attending in 1990, but the grade completed in 1989. For example, a person attending grade 6 in 1990 was recorded as having completed grade 5.

Information on education level completed by age from the 1990 Census show that the presently attending population are mostly found in primary and secondary schools. Very few students have completed 'A' level and degree courses. In age group 20 - 24 years, one third of them have completed senior secondary grades 10 - 12. The age-grade mismatch is more prevalent for age groups 20-24 and 25-29 years. This trend is common in both rural and urban areas. Refer to Table 5.4 for details.

Table 5.5 shows that in 1980, there were more persons who completed grades 1 - 4 and 5 - 7 as compared to 1990. This could mean a declining trend in educational attainment at both primary and secondary levels in Central Province.

Table 5.5

Population presently attending school by age (5 years and older), sex, educational level completed and residence, Central Province, 1980

Residence and age group	Educational level completed							Size
	Grades 1 - 4	Grades 5 - 7	Grades 8 - 9	Grades 10 - 12	A' level	Degree	Not Stated	
Central Province								
Total	56.1	31.4	5.6	3.6	0.0	0.0	3.3	97,084
5 - 9	88.5	0.5	0.0	0.0	0.0	0.0	11.0	19,791
10 - 14	67.3	29.9	0.9	0.1	0.0	0.0	1.9	49,664
15 - 19	12.4	61.5	17.4	8.4	0.1	0.0	0.3	23,500
20 - 24	4.1	24.6	28.2	42.1	0.3	0.3	0.3	2,993
25 +	24.6	29.8	12.3	30.3	0.2	0.3	2.6	578
Not Stated	56.6	28.1	4.1	4.3	0.0	0.0	6.8	558
Male Total	52.9	33.1	6.2	4.6	0.0	0.0	3.2	53,172
5 - 9	87.9	0.6	0.0	0.0	0.0	0.0	11.6	9,617
10 - 14	68.2	29.0	0.7	0.1	0.0	0.0	2.0	25,392
15 - 19	13.6	62.7	15.6	7.7	0.0	0.0	0.3	14,924
20 - 24	3.1	24.1	28.5	43.3	0.2	0.3	0.4	2,507
25 +	16.7	28.4	12.2	40.3	0.3	0.5	1.8	395
Not Stated	51.3	31.2	5.0	6.2	0.0	0.0	6.2	337
Female Total	59.9	29.3	4.9	2.4	0.0	0.0	3.5	43,912
5 - 9	89.1	0.5	0.0	0.0	0.0	0.0	10.4	10,174
10 - 14	66.4	30.8	1.0	0.1	0.0	0.0	1.7	24,272
15 - 19	10.3	59.3	20.4	9.6	0.1	0.0	0.3	8,576
20 - 24	9.5	27.2	26.5	36.0	0.6	0.2	0.0	486
25 +	41.5	32.8	12.6	8.7	0.0	0.0	4.4	183
Not Stated	64.7	23.5	2.7	1.4	0.0	0.0	7.7	221
Rural								
Male Total	55.9	31.8	5.0	3.6	0.0	0.0	3.6	34,177
5 - 9	86.4	0.4	0.0	0.0	0.0	0.0	13.2	5,612
10 - 14	73.4	23.7	0.4	0.0	0.0	0.0	2.5	16,781
15 - 19	17.4	64.2	12.2	5.8	0.0	0.0	0.4	9,802
20 - 24	24.0	29.2	28.5	37.7	0.3	0.1	0.3	1,542
25 +	26.3	34.6	9.3	26.8	0.0	0.5	2.4	205
Not Stated	58.7	27.7	3.4	3.8	0.0	0.0	6.4	235
Female Total	63.9	26.9	3.5	1.7	0.0	0.0	4.0	26,602
5 - 9	87.3	0.4	0.0	0.0	0.0	0.0	12.4	5,692
10 - 14	72.6	24.8	0.4	0.0	0.0	0.0	2.1	15,262
15 - 19	14.3	62.8	15.6	6.8	0.0	0.0	0.5	5,069
20 - 24	13.7	31.3	24.1	30.9	0.0	0.0	0.0	291
25 +	49.6	31.9	8.8	3.5	0.0	0.0	6.2	113
Not Stated	68.0	19.4	1.7	1.1	0.0	0.0	9.7	175
Urban								
Male Total	47.4	32.7	8.3	6.4	0.0	0.0	2.6	18,995
5 - 9	89.9	0.0	0.0	0.0	0.0	0.0	9.3	4,005
10 - 14	58.2	33.8	1.4	0.2	0.0	0.0	1.1	8,611
15 - 19	6.3	59.9	22.2	11.3	0.1	0.0	0.2	5,122
20 - 24	1.8	16.1	28.5	52.3	0.1	0.6	0.6	965
25 +	6.3	21.6	15.3	54.7	0.5	0.5	1.1	190
Not Stated	34.3	39.2	8.8	11.8	0.0	0.0	5.9	102
Female Total	53.9	33.0	7.0	3.4	0.0	0.0	2.6	17,310
5 - 9	91.3	0.7	0.0	0.0	0.0	0.0	7.9	4,482
10 - 14	55.8	41.0	2.1	0.1	0.0	0.0	1.0	9,010
15 - 19	4.5	54.3	27.2	13.7	0.1	0.5	0.2	3,507
20 - 24	3.1	21.0	30.3	43.6	1.5	0.0	0.0	195
25 +	28.6	34.3	18.6	17.1	0.0	0.0	1.4	70
Not Stated	52.2	39.1	6.5	2.2	0.0	0.0	0.0	46

5.5. PREVIOUSLY ATTENDED SCHOOL

Results from the 1990 Census show that most of the population who previously attended school are in the age groups 20-24, 25-29 and 30 years and over. The total percentage for these age groups is 83.8 percent. Percentages for the age groups 5-9, 10-14 and 15-19 years are lower than 15 percent because most of the population is still in school. The trend is the same for both rural and urban areas.

Table 5.6:

Population previously attended school by sex, age and residence, Central Province, 1990

Residence and sex	Age Group						Not Stated	Total	Size
	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 +			
Central Province									
- Total	0.7	2.5	12.7	20.5	17.4	45.9	0.2	100	210,730
- Male	0.6	2.2	9.1	17.6	16.4	53.8	0.3	100	114,915
- Female	0.8	2.9	17.1	24.0	18.5	36.5	0.1	100	95,815
Residence									
Rural									
- Total	0.7	2.9	13.8	20.5	16.8	45.4	0.2	100	135,101
- Male	0.6	2.6	10.1	17.6	16.1	52.8	0.2	100	74,502
- Female	0.9	3.3	18.3	24.0	17.7	35.8	0.1	100	60,599
Urban									
- Total	0.7	1.9	10.9	20.6	18.4	47.5	0.2	100	75,629
- Male	0.6	1.6	7.3	17.5	16.9	56.1	0.3	100	40,413
- Female	0.7	2.2	15.1	24.2	20.0	37.7	0.1	100	35,216
Districts									
Kabwe Rural									
- Total	0.8	2.9	13.1	20.7	16.8	45.4	0.3	100	58,845
- Male	0.7	2.5	9.8	17.7	16.0	53.0	0.4	100	32,413
- Female	0.9	3.3	17.1	24.4	17.8	36.2	0.2	100	26,432
Kabwe Urban									
- Total	0.7	1.8	10.6	20.6	18.3	47.8	0.2	100	58,216
- Male	0.6	1.5	7.0	17.6	17.0	56.0	0.3	100	31,176
- Female	0.8	2.2	14.7	24.0	19.9	38.2	0.1	100	27,040
Mkushi									
- Total	0.8	2.8	13.4	20.3	17.3	45.3	0.1	100	28,549
- Male	0.7	2.5	9.7	17.8	16.7	52.6	0.1	100	16,208
- Female	1.0	3.3	18.3	23.5	18.2	35.6	0.0	100	12,341
Mumbwa									
- Total	0.5	2.1	13.3	21.8	17.8	44.3	0.1	100	37,925
- Male	0.4	2.0	9.6	18.9	16.8	52.2	0.1	100	20,346
- Female	0.7	2.2	17.7	25.1	19.0	35.2	0.1	100	17,579
Serenje									
- Total	0.7	3.6	15.2	18.5	15.9	46.0	0.2	100	27,195
- Male	0.6	3.2	10.9	15.4	15.2	54.5	0.3	100	14,772
- Female	0.8	4.0	20.3	22.2	16.7	35.9	0.1	100	12,423

The assessment of population who previously attended school by district gives an indication that less number of males have completed school as compared to females. This is especially true for five year age groups ranging between 15 and 29 years. However, it should be noted that Kabwe Urban, Mkushi and Mumbwa have more of their population who previously attended school in ages 25 years and over. The result that there were more

females than males who previously attended school, could confirm the notion that migration is sex and education selective favouring educated middle-aged males.

If we compare the population who previously attended school from the 1980 Census with 1990 Census one finds that Central Province recorded declines in all age groups except 5-9 years. The same applies to all districts in Central Province. The concentration of people who were previously attending school in 1980 was in age groups 20-24 and 25 years or over.

Percentage distribution by districts shows that Kabwe Urban District had more persons who previously attended school in age group 25 years and over. In this age group, Kabwe Urban District has the highest percentage with 58.5 percent followed by Kabwe Rural with 55.6 percent.

Table 5.7

Population previously attended school by sex, age and residence, Central Province, 1980

Residence and sex	Age Group						Total	Size
	5 - 9	10 - 14	15 - 19	20 - 24	25 +	Not Stated		
Central Province								
Total	0.2	3.0	15.2	23.3	55.4	2.8	100	145,290
Male	0.2	2.3	10.1	19.9	63.9	3.6	100	82,259
Female	0.3	4.0	21.8	27.7	44.3	1.9	100	63,031
Residence								
Rural								
Total	0.3	3.5	16.9	22.7	53.8	2.7	100	93,418
Male	0.2	2.6	11.8	20.6	61.5	3.3	100	53,602
Female	0.3	4.7	23.9	25.7	43.4	2.0	100	39,816
Urban								
Total	0.2	2.1	12.1	24.3	58.3	3.0	100	51,853
Male	0.1	1.5	7.3	18.7	68.4	4.0	100	28,738
Female	0.2	2.8	18.1	31.4	45.9	1.7	100	23,115
Districts								
Kabwe Rural								
Total	0.3	3.1	16.3	22.2	55.6	2.6	100	38,606
Male	0.2	2.5	11.1	19.2	63.8	3.0	100	22,149
Female	0.3	4.0	23.2	26.2	44.4	2.0	100	16,457
Kabwe Urban								
Total	0.2	2.1	12.2	24.3	58.5	2.7	100	46,190
Male	0.1	1.6	7.5	18.9	68.3	3.6	100	25,771
Female	0.2	2.8	18.3	31.2	46.1	1.5	100	20,419
Mikushi								
Total	0.2	3.6	17.4	23.7	51.4	3.7	100	19,284
Male	0.2	2.6	11.9	23.0	57.7	4.5	100	11,526
Female	0.2	5.1	25.4	24.8	41.9	2.6	100	7,758
Mumbwa								
Total	0.3	2.5	15.9	25.0	54.3	2.0	100	21,599
Male	0.2	1.7	11.4	22.1	62.1	2.4	100	12,370
Female	0.3	3.6	21.9	28.9	43.8	1.4	100	9,229
Serenje								
Total	0.4	4.8	17.2	20.9	53.0	3.8	100	19,569
Male	0.3	3.7	11.7	17.7	61.8	4.8	100	10,530
Female	0.5	6.0	23.6	24.6	42.8	2.6	100	9,039

5.6. HIGHEST LEVEL OF EDUCATION COMPLETED

Educational achievements are usually assessed by looking at the highest levels of education completed. Sometimes it is equally very useful to provide information on those who obtain certificates, diplomas and degrees. In this section, population aged 15 years or over is considered because by that age, most of the persons would have completed at least primary school level.

Table 5.8 shows that one third of population aged 15 years and over in Central Province has no formal schooling. The percentage without formal schooling increases in the older age groups. Similarly, the highest proportion of those without formal schooling are women. Overall 32.9 percent of the population aged 15 years and over in Central Province have no formal schooling. Percentages of males and females without formal schooling are 24.8 and 41.0 percent, respectively. Results shown in Table 5.8 also show that one third of

persons (33.3 percent) in Central province have attained grades 5 - 7. Less than 10.0 percent have completed grades 8-9. A slightly higher percentage (11.6 percent) have completed grades 10-12. Those who have completed 'A' level or degree constitute only 0.2 percent.

Table 5.8:

Population 15 years and above by highest level of education completed, sex and age group, Central province, 1990

Age Group	Sex	Total Population	No Schooling	Highest level of Education Completed					
				Grade 1 - 4	Grade 5 - 7	Grade 8 - 9	Grade 10 - 12	'A' level & Degree	Not Stated
15+	Both	388869	32.9	11.5	33.3	9.2	11.6	0.2	1.3
	Male	193666	24.8	12.2	35.0	10.3	16.0	0.3	1.5
	Female	195203	41.0	10.8	31.6	8.1	7.2	0.1	1.3
15 - 19	Both	92358	23.6	11.3	46.8	13.0	3.8	0.0	1.6
	Male	45563	21.2	12.5	47.9	12.6	4.0	0.0	1.7
	Female	46795	25.9	10.1	45.7	13.3	3.6	0.0	1.4
20 - 24	Both	69641	24.9	6.9	38.0	15.3	13.5	0.0	1.3
	Male	33163	20.6	6.2	36.7	17.9	17.0	0.1	1.5
	Female	36478	28.7	7.6	39.3	13.0	10.3	0.0	1.1
25 - 29	Both	51847	25.6	7.3	36.8	8.1	21.0	0.1	1.1
	Male	24753	19.2	5.6	35.8	9.6	28.4	0.2	1.1
	Female	27094	31.5	8.9	37.8	6.7	14.2	0.1	1.0
30 - 44	Both	94245	30.6	10.8	29.4	7.5	20.1	0.3	1.2
	Male	47079	18.9	8.5	30.9	9.2	30.8	0.5	1.2
	Female	47166	42.3	13.1	27.9	5.8	9.4	0.2	1.3
45+	Both	80778	57.9	19.1	15.9	2.3	3.0	0.3	1.6
	Male	43108	41.4	24.1	3.9	3.7	4.8	0.4	1.7
	Female	37670	76.8	13.4	6.7	0.8	0.8	0.1	1.4

Figure 5.7

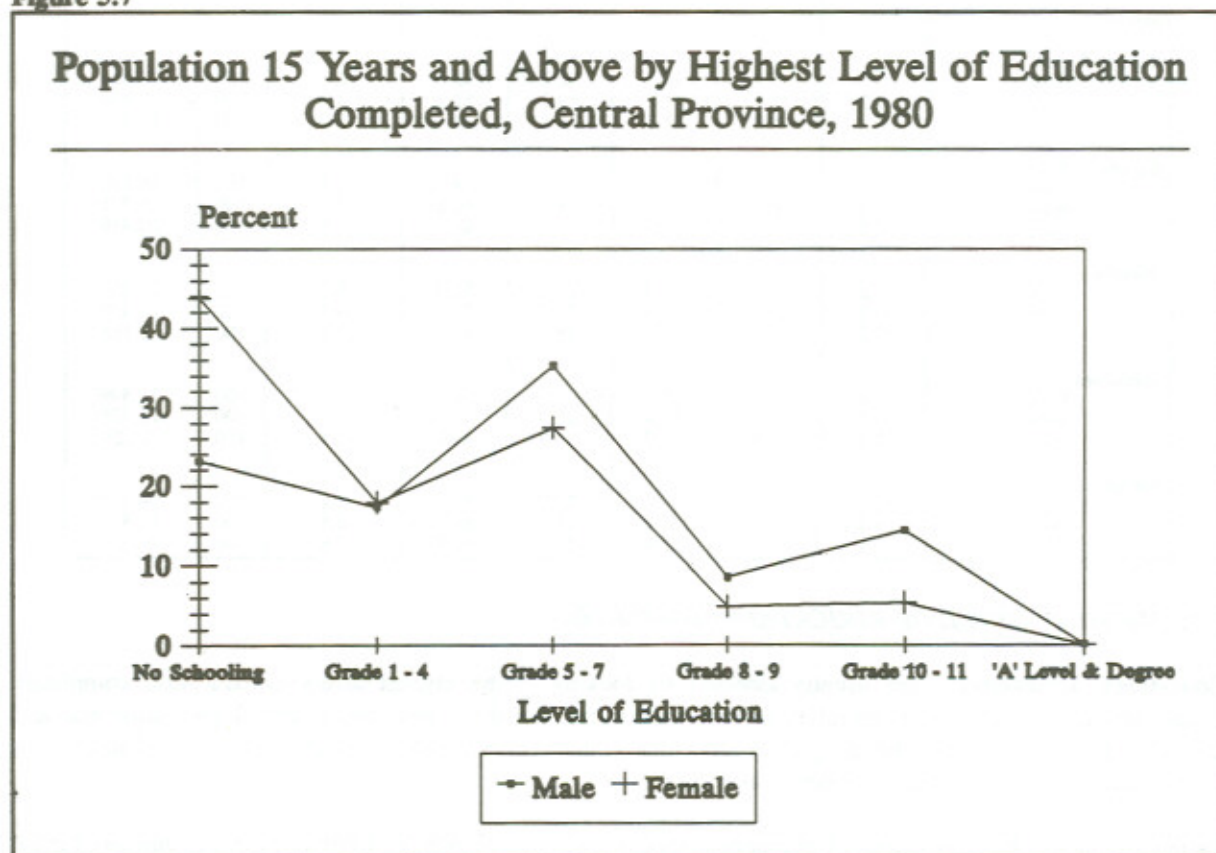
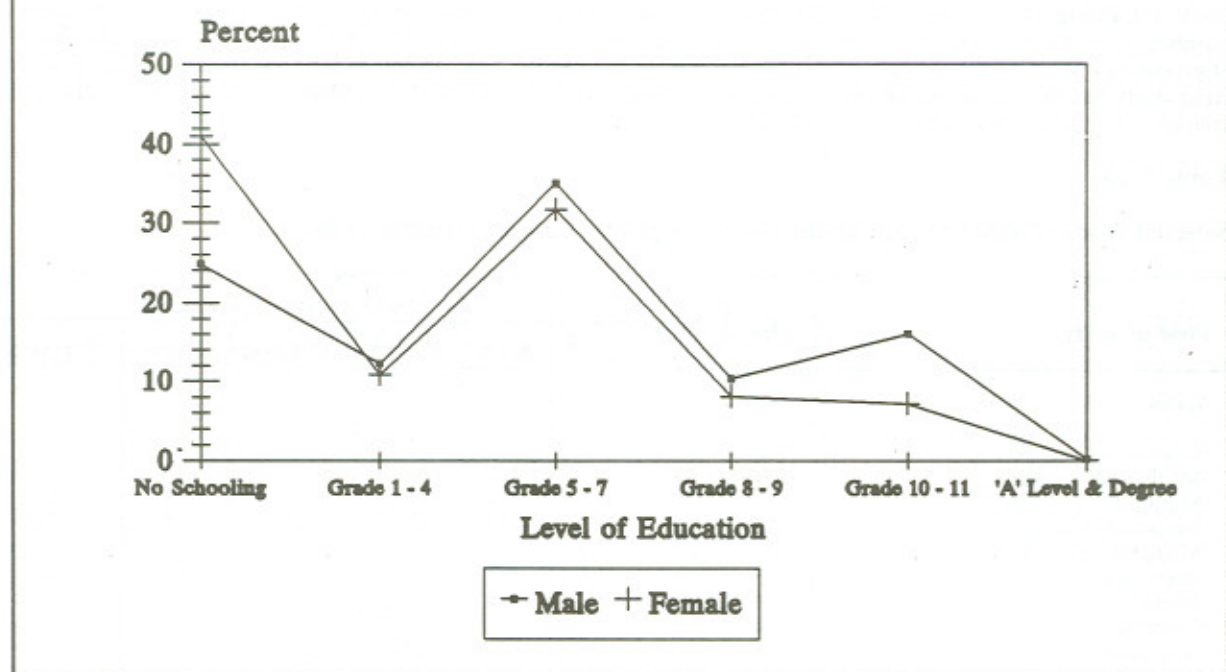


Figure 5.8

Population 15 Years and Above by Highest Level of Education Completed, Central Province, 1990



The assessment of highest level of education completed by age groups reveal that females in all age groups have the highest percentage share of no formal schooling. Age group 30 - 44 has the highest percentage of females without formal schooling with 42.3 percent as compared to 18.9 percent for males. In the case of highest grades completed, age group 15 - 19 years has 46.8 percent with grades 5 - 7. Males and females aged 15 - 19 years with grades 5 - 7 have percentages of 47.9 and 45.7 respectively. Relatively high percentages are recorded in five year age groups between 25 and 44 years for those who completed grades 10 - 12.

Comparison with the 1980 Census results have shown slight changes in the overall percentage of population without formal schooling. In 1980, 33.4 percent of population had no formal schooling as compared to 32.9 percent in 1990. Significant differences are recorded in age groups 15 - 19 and 20 - 24 years for grades 1 - 4 and grades 8 - 9. These age groups have also recorded high percentage declines for persons without formal schooling during 1980 - 1990 intercensal period.

Table 5.9:

Population 15 years and above by highest level of education completed, sex and age group, Central Province, 1980

Age Group	Sex	Total Population	No Schooling	Highest level of Education Completed					
				Grade 1 - 4	Grade 5 - 7	Grade 8 - 9	Grade 10 - 12	'A' level & Degree	Not Stated
15+	Both	248431	33.4	17.6	31.4	6.7	10.0	0.1	0.8
	Male	125711	23.2	17.3	35.3	8.5	14.4	0.2	0.9
	Female	122720	43.8	17.9	27.4	4.9	5.4	0.1	0.6
15 - 19	Both	53821	14.7	15.8	52.8	9.7	6.6	0.0	0.5
	Male	26332	10.7	15.6	55.7	10.2	7.3	0.0	0.4
	Female	27489	18.5	16.0	49.9	9.2	5.9	0.0	0.5
20 - 24	Both	45394	17.8	12.4	40.9	7.6	20.7	0.1	0.5
	Male	21530	10.9	8.3	40.3	9.0	30.8	0.2	0.5
	Female	23864	24.0	16.0	41.3	6.4	11.6	0.2	0.5
25 - 44	Both	93017	33.9	19.2	26.2	7.4	11.9	0.4	1.0
	Male	46050	18.5	16.1	33.1	11.0	19.5	0.5	1.2
	Female	46967	49.0	22.2	19.5	3.9	4.5	0.2	0.7
44+	Both	56199	63.2	20.8	11.8	1.9	1.2	0.1	1.0
	Male	31799	48.9	26.4	18.3	3.1	1.9	0.1	1.3
	Female	24400	81.9	13.4	3.3	0.3	0.4	0.1	0.6

5.7. SELECTED FIELDS OF STUDY

There are various professions in the Central Province that are important in assessing the services being offered to the general public. The major fields studied by many professionals have been engineering (various types), teacher training, agricultural/forestry/fisheries and accountancy. These fields of study employ a substantial number of workers both in the formal and informal sectors. However, very few women take up studies in engineering. Most of the women prefer taking studies in nursing, teacher and secretarial training. The data on field study has been categorised into broad professional classifications and hence has limited scope for detailed analysis. For more details refer to Table 5.10.

Table 5.10:

Selected fields of study by educational level completed, Central Province, 1990

Field of study	Size	Total	Level of Education Completed					
			1 - 7	8 - 9	10 - 12	'A' Level	Degree	Not Stated
Males								
Electronic Engineering	517	100	15.3	5.8	75.2	1.9	0.8	1.0
Mechanical Engineering	917	100	17.4	9.6	68.8	1.6	1.0	1.5
Mining Engineering	113	100	46.9	5.3	41.6	4.4	1.8	0.0
Industrial Engineering	172	100	54.1	12.8	30.2	0.6	0.0	2.3
Medicine and Surgery	199	100	56.6	10.1	61.8	5.0	5.0	1.5
Pharmacy	119	100	7.6	4.2	84.9	3.5	0.0	0.0
Nursing	74	100	12.2	6.8	75.7	5.4	0.0	0.0
Economics	72	100	8.3	6.9	59.7	8.3	13.9	2.8
Accountancy	766	100	4.7	7.4	83.3	2.5	0.9	1.2
Teacher training	2164	100	9.3	8.0	78.1	2.0	1.2	1.3
Law/Jurisprudence	226	100	19.9	12.8	60.2	4.9	1.3	0.9
Business Administration	473	100	8.9	6.6	77.2	4.2	1.9	1.3
Secretarial Training	145	100	16.6	9.7	69.7	2.1	0.0	2.1
Agricultural/forestry/Fisheries	844	100	21.7	11.4	59.2	3.2	1.8	2.7
Wood working	389	100	50.9	14.1	31.9	0.3	0.0	2.8
Females								
Electronic Engineering	8	100	0.0	0.0	100	0.0	0.0	0.0
Mechanical Engineering	9	100	0.0	11.1	77.8	0.0	11.0	0.0
Mining Engineering	2	100	100	0.0	0.0	0.0	0.0	0.0
Industrial Engineering	74	100	75.7	14.9	8.1	0.0	0.0	1.4
Medicine and Surgery	40	100	7.5	12.5	52.5	12.5	12.5	2.5
Pharmacy	44	100	4.5	2.3	90.9	2.3	0.0	0.0
Nursing	729	100	6.9	7.0	83.5	1.2	0.5	0.8
Economics	59	100	16.9	16.9	64.4	0.0	1.7	0.0
Accountancy	154	100	3.2	2.6	89.6	3.9	0.0	0.6
Teacher training	1341	100	7.8	12.9	76.2	2.0	0.4	0.7
Law/Jurisprudence	21	100	4.8	4.8	85.7	4.8	0.0	0.0
Business Administration	57	100	7.0	7.0	84.2	1.8	0.0	0.0
Secretarial Training	701	100	5.7	11.3	80.2	1.6	0.0	1.3
Agricultural/Forestry/Fisheries	84	100	13.1	6.0	70.2	6.0	0.0	4.8
Wood working	5	100	80.0	0.0	20.0	0.0	0.0	0.0

5.8. CONCLUSION

The 1990 Census results have shown that more males are literate than females in Central Province. Percentages of males and females are 61.9 and 50.6 percent, respectively. An assessment of literacy status by broad age groups reveal high literacy proportions in ages ranging between 15-44 years. Low proportions are recorded in ages below 15 and those 45 years and over. Information on school attendance has shown an excess of female pupils at primary school level as compared to male pupils. Attendance rate for female pupils aged 10-14 years is 72.3 percent as compared to 71.5 percent for male pupils. At secondary school level, male pupils dominate. Overall, 40.5 percent of pupils attend school in Central Province.

It should be noted that 33 percent of the population aged 15 years and over in Central Province has no formal schooling. In addition, percentages without formal schooling increases in the older age groups, especially for women. Percentages of males and females without formal schooling are 24.8 and 41.0 percent, respectively. Most common fields studied by many professionals are engineering (various types), teacher training, agricultural/forestry/fisheries and accountancy. These fields employ a substantial number of workers both in the formal and informal sectors. However, most women prefer taking studies in nursing, teacher and secretarial training.

CHAPTER 6

ECONOMIC CHARACTERISTICS

6.1. INTRODUCTION

Information on economic characteristics of the population can be utilised for monitoring, evaluating and formulation of plans on income generation, poverty alleviation and redistribution of income. Moreover, it can also be used for the assessment of the effectiveness of economic programmes and their effects on employment and incomes of the working population. It is also true that labour force data can be used as indicators on undesirable socio-economic conditions in a country such as child labour, sex biases in work opportunities and participation.

This Chapter attempts to discuss the economic characteristic of the population in Central Province on the basis of the 1990 Census results and where possible making comparison with the 1980 Census results. In so doing, the main aspects to be discussed will include the economically active and inactive population, working population by employment status, occupation and industry.

6.2. WORKING-AGE POPULATION

The 1990 Census regarded only persons who were aged 12 years and over as the working-age population and accordingly only those individuals were asked questions on economic activity.

Table 6.1 below shows the percentage distribution of working-age population by broad age groups, sex and residence for Central Province for 1980 and 1990. According to the data in the table, the total working-age population or the total population who were eligible to be asked questions on economic activity has grown by 51.5 percent between 1980 and 1990 from 301,067 to 456,197. For 1990 there were 227,104 males as against 229,093 females. The distribution of this population by age reveals that there are more young people in the province than adults. In general, the percentage of working-age population declines with the increase in age. Overall, there is a slight increase in the percentage share in the age group 12 - 19 years from 31 to 34 percent between 1980 and 1990. Moreover, there are no noticeable differences in the age group above 20 - 24 years. Proportions of broad older age group 30 - 59 years are similar to those in age group 12 - 19 years.

The table also shows that the working-age population in rural areas is higher than in urban areas of the province. Specifically there were 319,436 working age population in rural areas in 1990 compared to 136,761 in urban areas. These figures can be contrasted with 213,296 and 87,771 for rural and urban areas, respectively, for 1980.

The population distribution patterns in both rural and urban areas are similar. In rural and urban areas, the age group 12-19 years has grown by 3.0 and 5.0 percent, respectively, during the intercensal period.

Table 6.1

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

	Size	Total	12-19	20-24	25-29	30-59	60+	Not Stated
Central Province								
- Total - 1990	456,197	100	34	16	12	31	6	1
- 1980	301,067	100	31	16	11	32	5	5
- Male - 1990	227,104	100	33	15	11	32	8	1
- 1980	152,356	100	31	12	10	36	6	5
- Female - 1990	229,093	100	34	16	12	33	5	-
- 1980	147,711	100	33	17	11	30	5	4
Residence								
Rural								
- Total - 1990	319,436	100	34	15	11	30	9	1
- 1980	213,296	100	31	14	8	34	8	5
- Male - 1990	157,966	100	34	15	11	30	9	1
- 1980	106,916	100	31	14	9	32	9	5
- Female - 1990	161,470	100	33	16	11	33	6	1
- 1980	106,380	100	31	14	9	34	7	5
Urban								
- Total - 1990	136,761	100	35	16	12	34	3	-
- 1980	87,771	100	31	17	13	32	2	4
- Male - 1990	69,138	100	33	15	12	36	3	1
- 1980	45,440	100	29	15	13	36	3	4
- Female - 1990	67,623	100	37	17	13	30	3	-
- 1980	42,331	100	34	20	13	28	2	3

6.3. ECONOMICALLY ACTIVE POPULATION

The employed and unemployed population is usually referred to as the labour force. Going by that definition and from the data contained in Table 6.2 below, it can be noticed that the labour force in Central Province has increased from 166,479 in 1980 to 225,287 in 1990, representing a 35.3 percent increase. The male labour force has increased by 29.1 percent while that for females has increased by 49.1 percent during the same period.

Employed persons have increased by 82.1 percent from 107,976 in 1980 to 196,663 in 1990. A 58.8 and 156.7 percent increases for males and females, respectively, were recorded with respect to employed persons. The high percent increase in the case of females could be due to the inclusion of working housewives from the informal sector during the 1990 Census.

As for the unemployed persons a decline was actually registered during the 1980-90 intercensal period. Unemployed persons in the province in 1980 stood at 58,503 but dropped to 28,624 in 1990, a decline of 51.1 percent. Unemployed males also declined by 46.6 percent as compared to a decline of 56.5 percent for females during the same period.

The contribution of rural areas to the total provincial labour force is high as compared to urban areas. Results from the 1990 Census show that more than 70.0 percent of females are economically active in the rural areas. Urban areas have less than 30.0 percent of females in the economically active category. These percentages are similar to total labour force and employed categories. There are more economically active and unemployed persons in rural as compared to urban areas.

Table 6.2

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

Activity and Sex	Residence							
	1990				1980			
	Total Number	Total	Rural	Urban	Total Number	Total	Rural	Urban
Population								
- Total	456,197	100	70	30	301,067	100	71	29
- Male	227,104	100	70	30	152,356	100	70	30
- Female	229,093	100	71	29	148,711	100	72	28
Labour Force								
- Total	225,287	100	74	26	166,479	100	72	28
- Male	147,935	100	72	28	114,605	100	71	29
- Female	77,352	100	77	23	51,874	100	75	25
Employed								
- Total	196,663	100	74	26	107,976	100	72	28
- Male	130,683	100	72	28	82,275	100	70	30
- Female	65,980	100	79	21	25,701	100	77	23
Unemployed								
- Total	28,624	100	70	30	58,503	100	73	27
- Male	17,252	100	72	28	32,330	100	72	28
- Female	11,372	100	67	33	26,173	100	74	26
Inactive								
- Total	222,862	100	66	34	134,036	100	69	31
- Male	75,057	100	64	36	37,318	100	69	31
- Female	147,805	100	67	33	96,718	100	69	31
Not Stated								
- Total	8,048	100	74	26	552	100	63	37
- Male	4,112	100	74	26	433	100	66	34
- Female	3,936	100	74	26	119	100	51	49

Assessment of the current economically active population in Table 6.3 shows that more persons are economically active in age group 12-54 years. Percentages of less than 10.0 are recorded above 55 years. Concentration of unemployed persons is found in young age group 12-29 years. Nearly 80.0 percent of males are unemployed in this age group. In the case of females, the percentage of unemployed is 83.0.

Figure 6.1

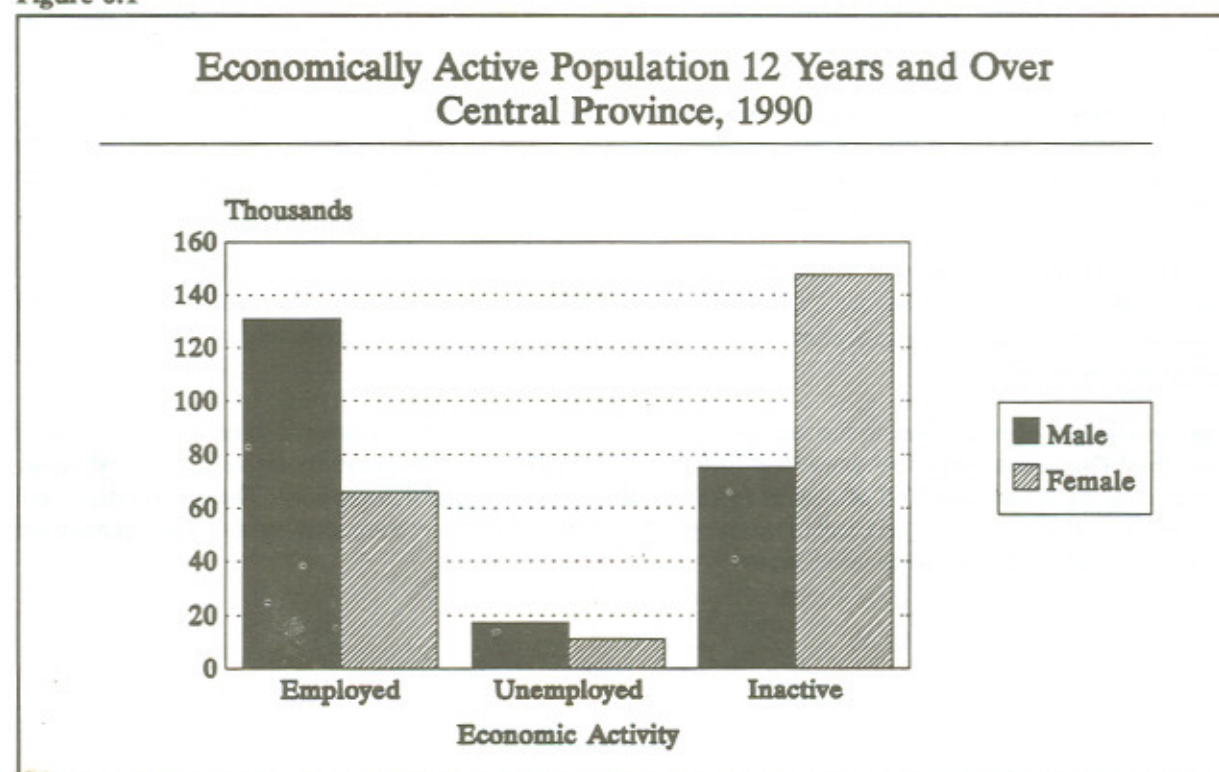


Figure 6.2

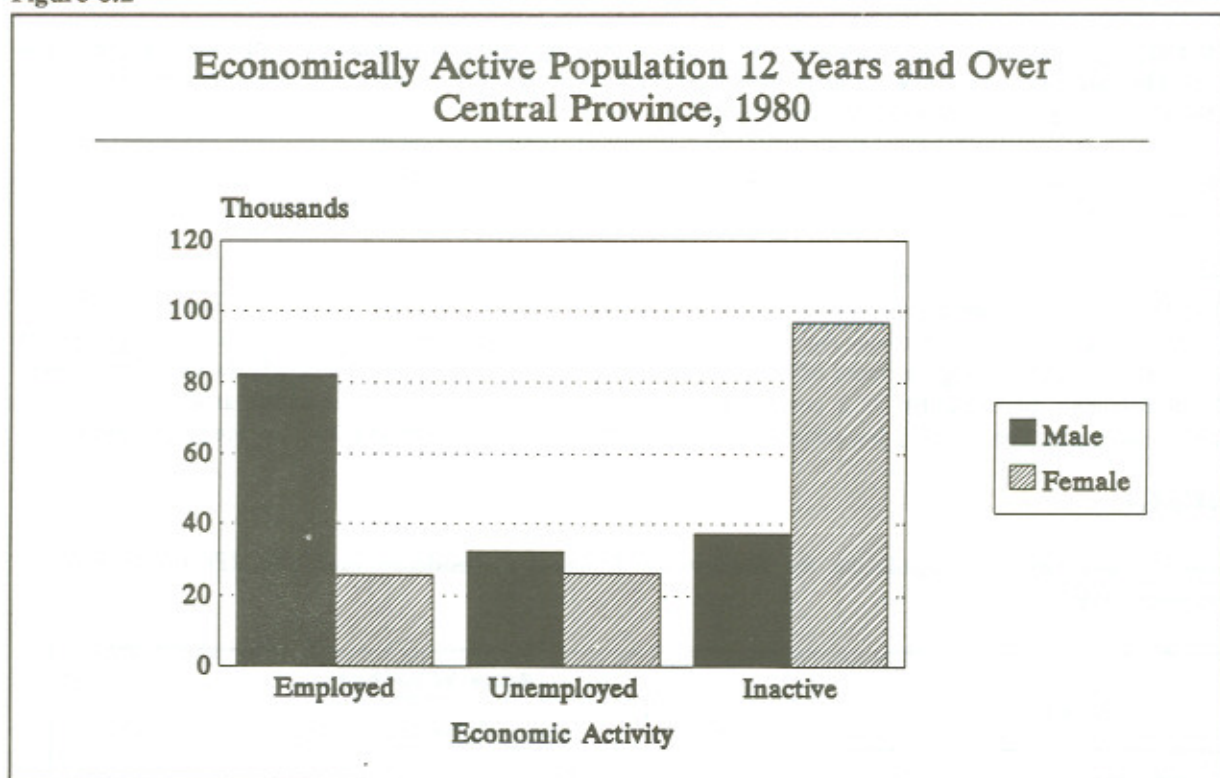


Table 6.3

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

	Total Number	Total	Age Group							Not Stated
			12-19	20-24	25-29	30-34	35-54	55-64	65+	
Labour Force										
- Total	225,287	100	21	16	14	11	26	7	4	0
- Male	147,935	100	16	15	14	12	28	8	5	1
- Female	77,352	100	30	18	13	10	21	5	3	0
Employed										
- Total	196,663	100	19	15	14	12	28	7	5	0
- Male	130,683	100	15	14	14	13	30	8	5	1
- Female	65,980	100	27	16	13	10	24	7	3	0
Unemployed										
- Total	28,624	100	38	27	14	7	11	2	2	0
- Male	17,252	100	33	28	15	8	11	3	2	0
- Female	11,372	100	46	25	12	6	8	2	1	0
Inactive										
- Total	222,862	100	46	15	9	7	15	4	4	0
- Male	75,057	100	65	14	5	3	5	3	4	1
- Female	147,805	100	36	15	12	9	20	5	3	0
Not Stated										
- Total	8,048	100	48	19	9	5	9	2	3	5
- Male	4,112	100	48	21	9	5	7	3	2	5
- Female	3,936	100	49	17	8	5	10	4	3	4

6.4. ECONOMICALLY INACTIVE POPULATION

It has already been stated that the labour force includes the employed and unemployed population 12 years and over. The category regarded as being outside the labour force includes homemakers, students, etc. This is the category which is also referred to as economically inactive.

Although the labour force grew by 35.3 percent between 1980 and 1990, the economically inactive male population rose by 101.1 percent as compared to 52.8 percent for females during the same period.

Table 6.4, shows percentages of economically inactive population by reason of inactivity. Overall, the percentages of homemakers and students are 38.9 and 33.1 percent, respectively. The "other" economically inactive category has 28.0 percent. An increase of 66.1 percent is recorded in rural areas and 33.9 percent in urban areas. The percentage increase of homemakers is 70.7 in rural areas and 29.3 in urban areas. The number of students has increased by 58.2 percent in rural areas and 41.8 percent in urban areas. The "other" economically inactive category has increased by 69.1 percent in rural areas and 30.9 percent in urban areas.

Table 6.4

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

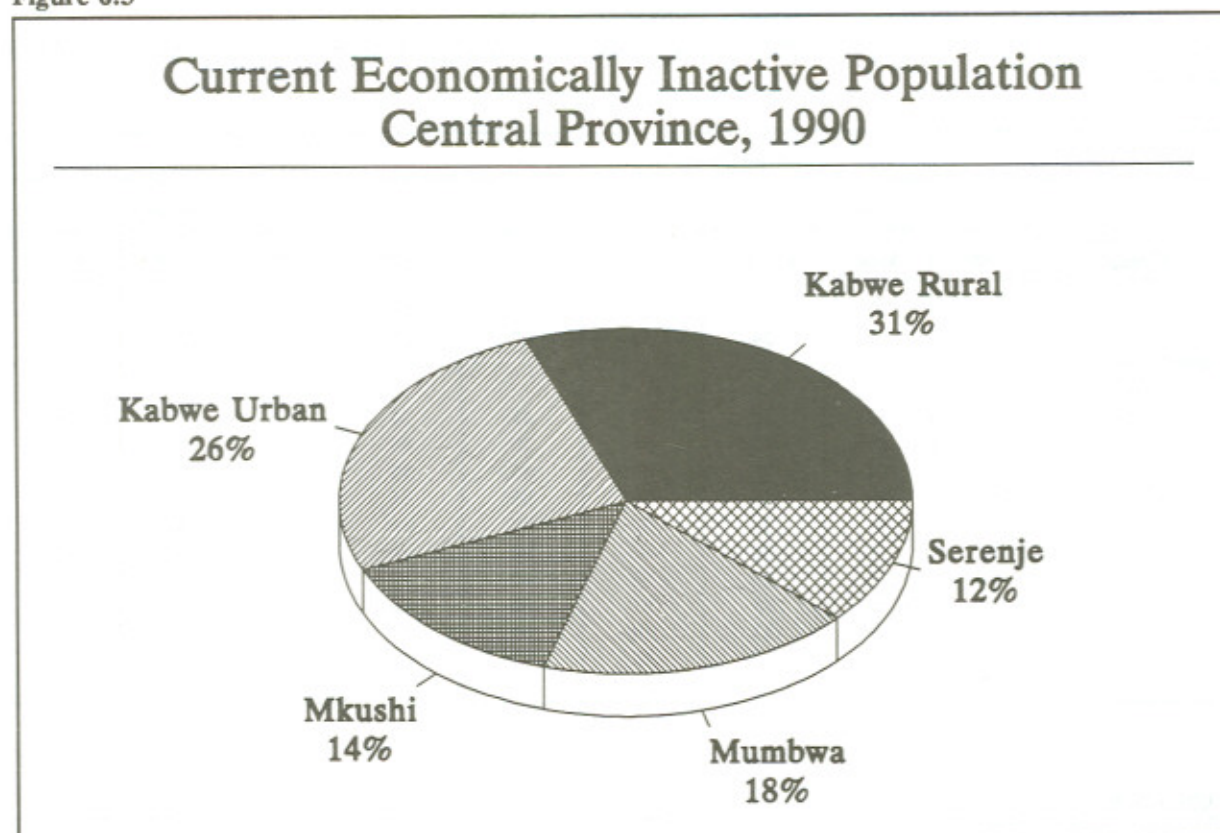
Residence and Sex	Reason for Inactivity				
	Size	Total	Homemaker	Student	Other
Central Province - Inactive Persons	222,862	100	39	33	28
Residence					
- Total	147,312	100	42	29	29
- Rural	75,550	100	34	41	26
- Urban					
Sex					
- Male	75,057	100	5	54	41
- Female	147,805	100	56	22	22

Table 6.5

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

Residence and Sex	Total	Homemaker	Student	Other
Central Province				
- Size	222,862	86,632	73,801	62,429
- Total	100	100	100	100
- Rural	66	71	58	69
- Urban	34	29	42	31
Sex				
- Male	34	4	55	49
- Female	66	96	45	51
Districts				
- Kabwe Rural	31	32	26	36
- Kabwe Urban	26	22	33	22
- Mkushi	14	14	13	15
- Mumbwa	18	19	17	17
- Serenje	12	13	12	11

Figure 6.3



Out of 222,862 inactive persons, one third of them are males and two thirds are females. In the case of males, only 4.8 percent are outside the labour force due to household duties. Male students constitute 54.5 percent. The percentage of inactive males having other reasons for being outside the labour force is 40.7. Percentage of females having household duties as reasons for not participating in the labour force is 56.2. Female students and category of "other" have 22.3 and 21.6 percent, respectively.

6.5. LABOUR FORCE PARTICIPATION RATES

Table 6.6 gives labour force participation rates by age, sex and residence. The labour force participation rate is the proportion of persons of a particular age-group in the labour force expressed as a percentage. The overall labour force participation rate has declined from 55.0 to 49.0 percent over the ten year period, 1980-1990. Male labour force participation rate has also declined from 75.0 to 65.0 percent while the female participation rate has remained the same at 34.0 percent. Thus, participation of males in the labour force has remained high during the 1980-1990 intercensal period.

Labour force participation rates are equally high in rural than in urban areas. The participation rate for rural areas is 52.0 percent as compared to 43.0 percent in 1990. Similarly, participation rates for 1980 are 56.0 percent in rural and 53.0 percent in urban areas.

The female participation rate in the labour force remains lower in all age-groups than that of males. For more details refer to Table 6.6.

Table 6.6

Current Labour Force Participation Rates by Age Sex and Residence, (Percent), Central Province, 1980 and 1990

Labour Force (Age 12 years and Above)									
Year, Age Group	Total			Rural			Urban		
	Both	Male	Female	Both	Male	Female	Both	Male	Female
1980	55	75	34	56	76	37	53	74	30
1990	49	65	34	52	67	37	43	60	26
1990 Census Age Groups									
12 - 19	31	33	30	37	39	36	17	18	16
20 - 24	51	67	37	55	70	40	44	61	29
25 - 29	59	84	36	60	85	38	57	84	32
30 - 34	62	89	35	62	89	36	61	89	33
35 - 39	64	91	36	62	90	36	67	92	36
40 - 44	63	91	36	60	90	36	68	92	35
45 - 49	62	90	35	60	90	35	67	90	34
50 - 54	62	88	36	61	88	38	63	87	30
55 - 59	64	85	37	64	86	39	60	81	29
60 - 64	61	80	37	63	82	39	52	72	26
65+	55	69	33	57	71	35	42	56	22

Figure 6.4

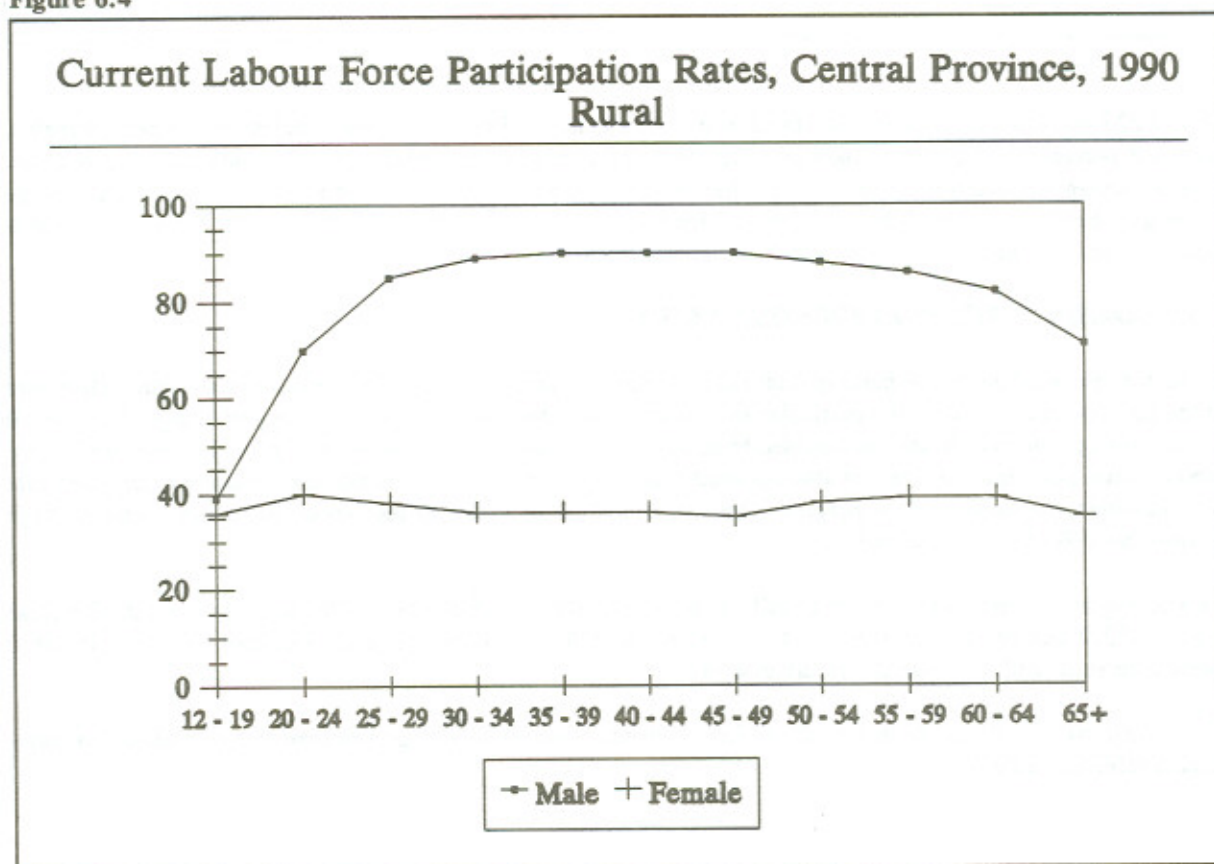
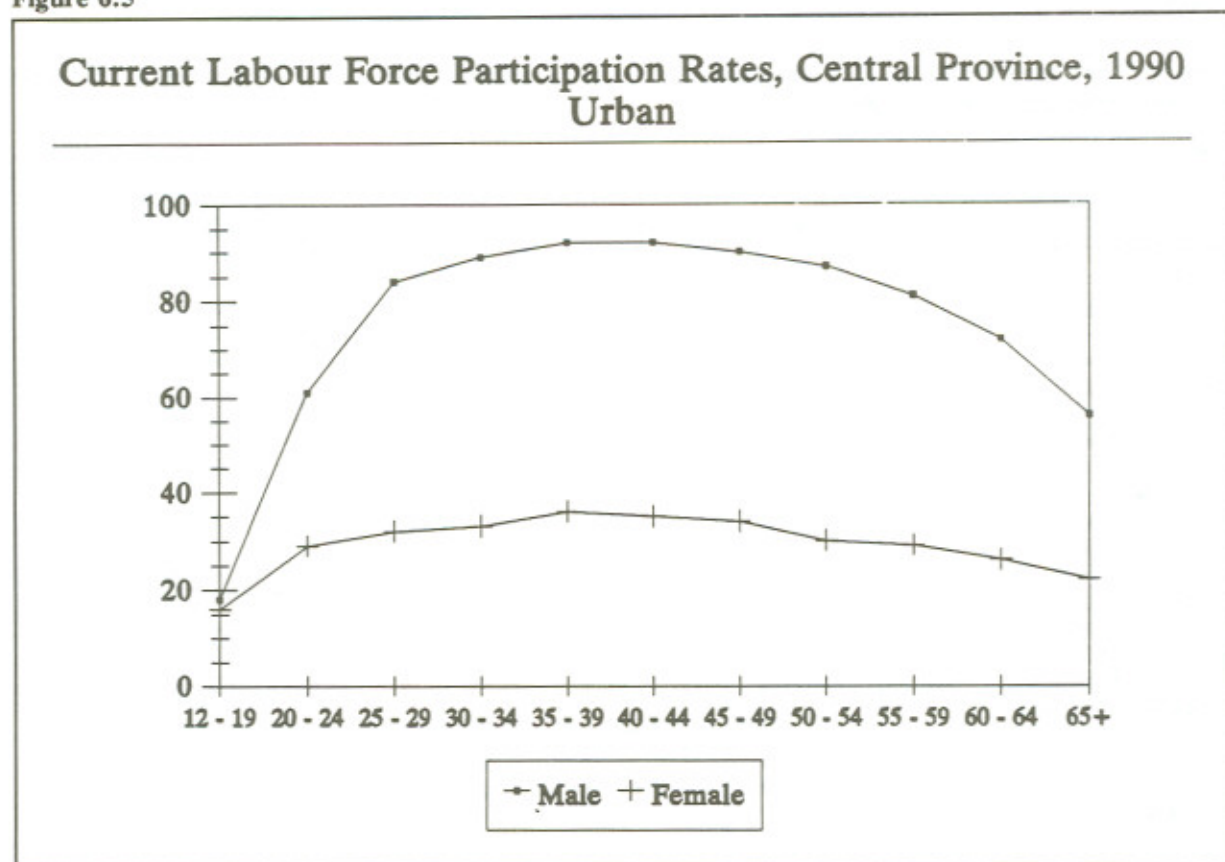


Figure 6.5



6.6. EMPLOYMENT STATUS

Table 6.7 shows that the usually working population in the province consist of 67.3 percent males and 32.7 percent females in 1990. Similarly, 76.2 and 23.8 percent are males and females in 1980, respectively. Thus, females have increased their percentage share in the total working population.

In rural areas 65.1 percent of the working population are males and 34.9 percent are females in 1990. Results from the 1980 Census show that 74.4 percent of the working population are males and 25.6 percent are females. A similar percentage increase for females is found in rural areas.

The same pattern exists in urban areas. The male working population is 73.5 percent and females constitute 26.5 percent in 1990. Rates for 1980 Census are 81.0 and 19.2 percent, for males and females, respectively.

Most workers in urban areas are either engaged as employees or self-employed. Less than 15.0 percent are unpaid family workers. A very small proportion (1.0 percent) constitute employers. A similar pattern exists from the 1980 Census.

In rural areas, self-employed males have reduced in proportion over the 10 year period from 53.0 percent in 1980 to 37.0 percent in 1990. The proportion for females has reduced from 40.0 percent in 1980 to less than 30.0 percent in 1990. The number of male employees has reduced from 37.0 to 20.0 percent during the same period. Rates of less than 10.0 percent are recorded for females in both censuses.

Table 6.7

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

	Total		Rural		Urban	
	1980	1990	1980	1990	1980	1990
Total						
- Both Sexes	100	100	100	100	100	100
- Male	100	100	100	100	100	100
- Female	100	100	100	100	100	100
Self-Employed						
- Total	41	31	50	33	18	24
- Male	41	32	53	37	12	19
- Female	41	28	40	26	46	37
Employee						
- Total	44	27	30	15	81	62
- Male	52	34	37	20	88	70
- Female	19	14	9	7	51	40
Employer						
- Total	1	2	0	1	0	3
- Male	1	2	1	1	0	3
- Female	0	1	0	1	0	2
Unpaid-Family Workers						
- Total	14	38	19	49	1	9
- Male	6	30	9	40	0	6
- Female	39	55	50	65	3	17
Not Stated						
- Total	0	2	1	2	0	3
- Male	0	2	0	2	0	2
- Female	1	2	1	2	0	4
Sizes						
- Both Sexes	107,976	182,898	77,544	134,860	30,432	48,038
- Male	82,275	123,119	57,687	87,830	24,588	35,289
- Female	25,701	59,779	19,857	47,030	5,844	12,749

Unpaid family workers have increased substantially in rural areas for both males and females. In the case of females, the percentage has increased from 50.0 in 1980 to 65.0 in 1990. Proportionately, the males have increased from 9.0 percent in 1980 to 40.0 percent in 1990. Thus, a new trend seems to be emerging in both rural and urban areas where both males and females are drifting into either "unpaid family workers" or "self-employed" categories.

6.7. WORKING POPULATION BY OCCUPATION

Majority of the working population in Central Province are engaged in agriculture, forestry and fishing. Central Province is predominantly rural with 60.0 percent of the population engaged in agriculture, forestry and fishing. A large proportion of usually working population did not state their occupations. Otherwise, the next occupations of importance are production, transport and related work categories. These occupations have percentages ranging between 3.0 and 22.0 for both males and females.

There are not much changes in the distribution of the population by occupation and sex between the 1980 and 1990 Censuses in both urban and rural areas. Moderate increases in agriculture and related occupations of 13.0 percent for males and 11.0 percent for females are recorded in 1990. Percentages of lower than 10.0 are observed in this category for 1980 Census data. Apart from agriculture, animal husbandry, forestry and fishing, the remaining occupations have relatively high proportions in urban areas. There are more females who are working as sales, professional and technical workers as compared to their male counterparts. Refer to Tables 6.8 and 6.9 below for more details.

Table 6.8

Usually Working Population By Occupation, Sex and Residence, (Percent), Central Province, 1990

Occupation	Percentage of Working Population								
	Total			Rural			Urban		
	Both	Male	Female	Both	Male	Female	Both	Male	Female
Total Number of Workers	182,898	123,119	59,779	134,860	87,830	47,030	48,038	35,289	12,749
Total	100	100	100	100	100	100	100	100	100
Professional Technical and Related Workers	5	5	5	3	3	2	12	11	15
Administrative and Managerial Workers	0	0	0	0	0	0	1	1	1
Clerical and Related Workers	2	2	3	0	1	1	6	6	9
Sales Workers	5	4	8	2	2	2	15	10	29
Service Workers	5	6	3	2	2	1	13	15	7
Agriculture Animal Husbandry									
Forestry, Fisheries Workers	59	57	62	75	74	76	13	13	11
Production and Related Workers									
Transport Equipment Workers	7	9	2	3	4	1	17	21	6
Unclassified	1	2	2	1	1	1	3	3	2
Not Stated	16	15	17	14	13	16	20	20	20

Table 6.9

Working Population By Occupation, Sex and Residence, (Percent), Central Province, 1980

Occupation	Percentage of Working Population								
	Total			Rural			Urban		
	Both	Male	Female	Both	Male	Female	Both	Male	Female
Total Number of Workers	107,976	82,275	25,701	77,544	57,687	19,857	30,432	24,588	5,844
Total	100	100	100	100	100	100	100	100	100
Professional Technical and Related Workers	5	5	7	3	3	3	11	9	19
Administrative and Managerial Workers	1	1	0	0	0	0	2	2	1
Clerical and Related Workers	3	3	4	2	2	1	8	6	13
Sales Workers	6	4	13	2	2	4	15	8	45
Service Workers	7	8	3	3	4	1	15	17	9
Agriculture Animal Husbandry									
Forestry, Fisheries Workers	57	53	70	77	73	88	7	7	6
Production and Related Workers									
Transport Equipment Workers	13	16	1	7	9	1	27	33	3
Unclassified	3	4	0	2	2	0	7	9	1
Not Stated	5	6	2	4	5	2	8	9	3

The province appears to have relatively more workers distributed in low-skill than high skill intensive occupations. The observed negligible increase in the distribution of workers over occupations is a reflection of economic stagnation in the province, leading to lack of expansion in employment opportunities.

6.8. WORKING POPULATION BY INDUSTRY

The majority of workers in Central Province have remained in agricultural industry during the 1980-1990 intercensal period. Results from both the 1980 and 1990 Censuses have shown that 60.0 percent of the working population in Central Province are in agricultural industry. Workers in community service sector comprise the second most important industry with 11.0 percent in 1990. Remaining industries comprise less than 5.0 percent of the working population.

In 1990, 13.0 percent did not state industries in which they belong. However, most of them belong to "unpaid family worker" category. Among those who did not state their industries 58.6 percent were unpaid family workers.

Table 6.10

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

Industry	Total Number Working	Self Employed	Employee	Employer	Unpaid Family Worker	Not Stated
Size						
- 1990	182,898	56,068	50,571	2,893	69,615	3,751
- 1980	107,976	44,073	47,857	434	15,173	439
Central Province						
- 1990	100	100	100	100	100	100
- 1980	100	100	100	100	100	100
Agriculture						
- 1990	60	75	25	38	77	25
- 1980	60	86	25	64	98	43
Mining						
- 1990	2	0	5	2	0	1
- 1980	3	0	6	0	0	2
Manufacturing						
- 1990	4	3	9	8	0	3
- 1980	2	1	3	2	0	0
Electricity						
- 1990	1	0	2	2	0	1
- 1980	0	0	1	0	0	0
Construction						
- 1990	1	1	4	3	0	1
- 1980	2	1	5	2	0	1
Trade						
- 1990	3	6	4	5	1	2
- 1980	6	10	3	18	1	2
Transport						
- 1990	3	0	10	8	0	2
- 1980	6	0	13	1	0	2
Finance						
- 1990	1	2	2	2	0	1
- 1980	1	0	1	1	0	0
Community						
- 1990	11	6	28	21	1	6
- 1980	17	1	37	3	0	3
Other						
- 1990	1	1	2	2	1	0
- 1980	0	0	0	0	0	0
Not Stated						
- 1990	13	6	9	9	20	58
- 1980	3	1	6	9	1	47

An assessment of working population by employment status shows that 86.7 percent of the working population in agriculture industry are self-employed and unpaid family workers. These two employment status groups form a major part of the informal sector. In the community service sector, 70.4 percent of the workers are employees. Community service sector comprise mostly Government ministries while employees form the major part of the formal sector. For more details refer to Table 6.11 below.

Figure 6.6

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

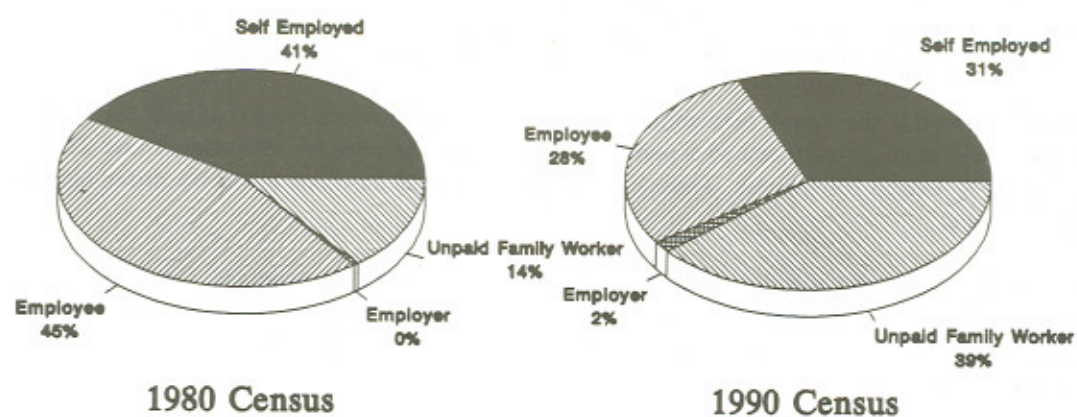


Table 6.11

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

Year/Industry	Size	Total	Self Employed	Employee	Employer	Unpaid Family Worker	Not Stated
Central Province							
- 1990	182,898	100	31	28	2	38	2
- 1980	107,976	100	41	44	1	14	0
Agriculture							
- 1990	110,139	100	38	12	1	48	1
- 1980	64,963	100	58	19	0	23	0
Mining							
- 1990	2,647	100	2	95	2	0	1
- 1980	3,117	100	0	100	0	0	0
Manufacturing							
- 1990	6,543	100	22	69	3	4	1
- 1980	2,125	100	19	80	0	1	0
Electricity							
- 1990	911	100	3	89	6	1	1
- 1980	342	100	1	99	0	0	0
Construction							
- 1990	2,694	100	16	76	3	3	2
- 1980	2,379	100	8	92	0	0	0
Trade							
- 1990	5,805	100	56	34	3	6	1
- 1980	6,294	100	72	24	1	3	0
Transport							
- 1990	5,375	100	3	90	5	1	1
- 1980	6,193	100	3	97	0	0	0
Finance							
- 1990	2,167	100	43	49	2	4	2
- 1980	734	100	12	87	1	0	0
Community							
- 1990	19,583	100	17	74	3	5	1
- 1980	18,189	100	3	97	0	0	0
Other							
- 1990	2,682	100	16	47	2	32	3
- 1980	-	100	-	-	-	-	-
Not Stated							
- 1990	24,352	100	15	19	1	56	9
- 1980	3,640	100	14	73	1	6	6

In economic development, economic advances are always accompanied by a shift in most of the workforce from primary industries to secondary and tertiary industries. Information derived from Tables 6.10 and 6.11 show that the distribution of workers among the various industries in Central Province has not changed in the last 10 years. This might mean that no significant development has taken place between the two censuses.

6.9. UNEMPLOYMENT

Unemployment problems arise when the demand for labour is less than its supply. A high level of unemployment means that employment opportunities are limited and many people are out of work, i.e. the economy as a whole is not functioning as it should. The number of unemployed persons when measured in relation to the total labour force is called the unemployment rate. Its trend over time is an indicator of the ability of the economy to provide work for the country's labour force under changing conditions.

Table 6.12 shows that the overall unemployment rate for Central Province is 13.0 percent for 1990. For males and females, the rates are 12.0 and 15.0 percent, respectively. The rates for 1980 Census are 28.0 percent for males and 51.0 percent for females. Thus, the unemployment rate has been lower for males than for females in both censuses.

In rural areas, females have had a lower unemployment rate than in urban areas. The 1990 Census female unemployment rate is 13.0 percent in rural areas as compared to 21.0 percent in urban areas. Results from the 1980 Census have shown that female unemployment rate in urban areas is high at 54.0 percent as compared to 49.0 percent in rural areas.

The 1990 Census current unemployment rates might be a true reflection of the existing situation concerning the lack or presence of job opportunities in Central Province. Generally, current unemployment rates in rural areas are less than 15.0 percent because the majority of persons in the labour force are in agricultural industry. Unemployment rate of females in urban areas is 21.0 percent which is still high as compared to their male counterparts with 12.0 percent.

Table 6.12

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

	1990	1980
Central Province		
- Total	13	35
- Male	12	28
- Female	15	51
Rural		
- Total	12	36
- Male	12	29
- Female	13	49
Urban		
- Total	14	34
- Male	12	27
- Female	21	54
Districts		
- Kabwe Rural	13	-
- Kabwe Urban	15	-
- Mkushi	9	-
- Mumbwa	16	-
- Serenje	9	-

The distribution of current unemployment rates by 5 year age groups shown in Table 6.13 reveal high rates for ages between 12 and 29 years. In these age groups current unemployment rates range between 11.0 and 44.0 percent. Thereafter, current unemployment rates decline substantially. Rates of less than 10.0 percent are recorded above 29 years in both rural and urban areas.

Table 6.13

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

Current Unemployment Rates									
Age Group	Total			Rural			Urban		
	Both	Male	Female	Both	Male	Female	Both	Male	Female
Total	13	12	15	12	12	13	14	12	21
12 - 19	23	22	23	19	19	19	40	37	43
20 - 24	21	21	21	18	17	17	27	25	32
25 - 29	12	12	13	13	13	13	12	11	14
30 - 34	8	7	9	9	9	9	5	5	7
35 - 39	6	5	7	7	7	7	4	3	6
40 - 44	5	4	6	5	5	6	3	3	5
45 - 49	5	5	5	5	5	4	4	3	6
50 - 54	4	4	4	5	5	4	4	3	6
55 - 59	5	5	5	5	4	5	5	5	6
60 - 64	5	5	6	4	4	5	8	8	8
65 +	5	5	5	4	4	5	7	6	8
Not Stated	13	13	12	11	12	10	16	16	17

Educational Level of the Unemployed

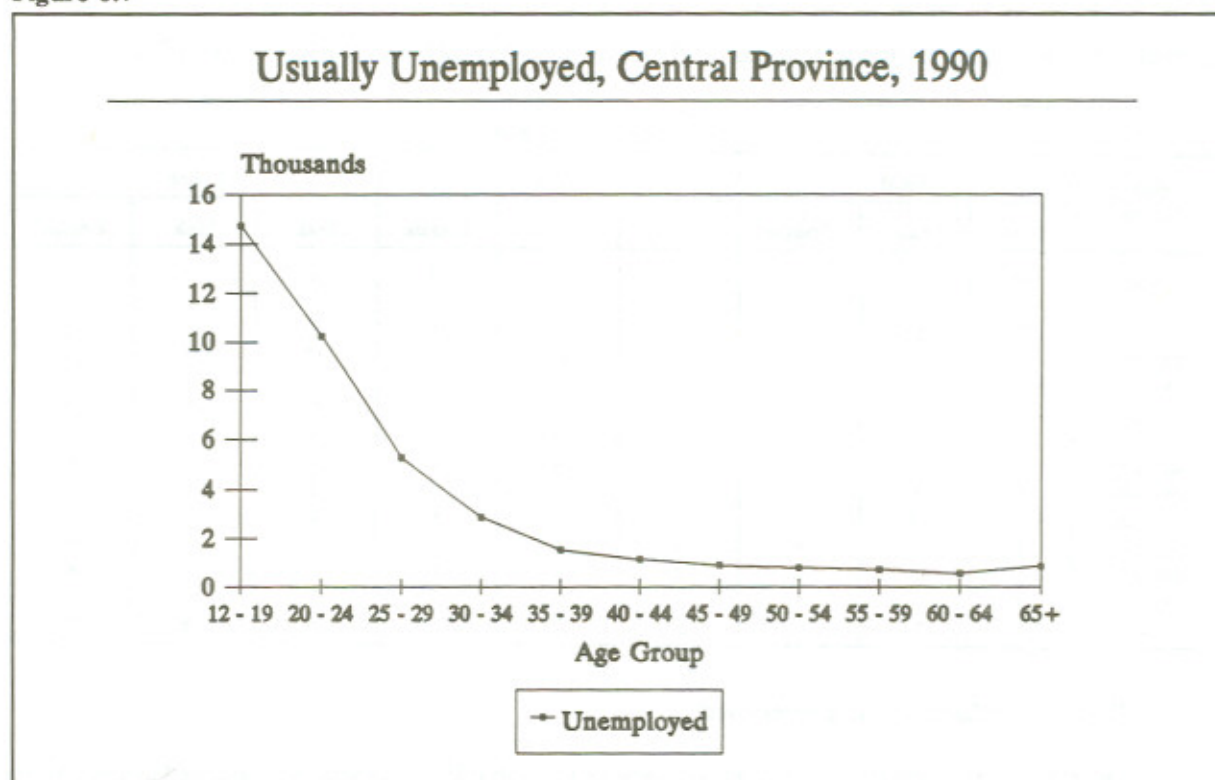
The percentage of the usually unemployed persons in Central Province who have attained primary level education is 40.0 while 16.0 percent of them have attained secondary level of education. Similarly, about 40.0 percent of the usually unemployed persons in Central Province have no formal schooling. Table 6.14 shows more details.

Table 6.14

Usually Unemployed by Level of Education Completed, (Percent), Central Province, 1990

Age Group	Total Number Unemployed	Total	None	Grade 1-7	Grade 8-12	"A" Level	Degree	Not Stated
Total	40,061	100	38	40	16	0	0	6
12 - 19	14,739	100	45	42	7	0	0	6
20 - 24	10,220	100	26	43	27	0	0	4
25 - 29	5,262	100	28	42	26	0	0	4
30 - 34	2,874	100	32	40	23	0	0	5
35 - 39	1,531	100	35	39	21	0	0	5
40 - 44	1,135	100	46	34	14	0	0	6
45 - 49	888	100	47	37	9	0	0	7
50 - 54	794	100	55	32	6	0	0	7
55 - 59	711	100	55	36	3	0	0	6
60 - 64	549	100	63	28	2	0	0	7
65 +	838	100	67	23	1	0	0	9
Not Stated	520	100	25	4	1	0	0	70

Figure 6.7



Marital Status of the Unemployed

Distribution of currently unemployed persons by marital status shows that more than 60.0 percent in both rural and urban areas have never married. The highest proportion is recorded in urban areas where 73.0 percent of unemployed persons have never married. Both males and females in urban areas have equal shares of 73.0 percent. The proportion of married unemployed persons range between 12.0 percent for females and 18.0 percent for males in urban areas. In the case of rural areas, shares of the unemployed are 30.0 percent and 19.0 percent for males and females, respectively.

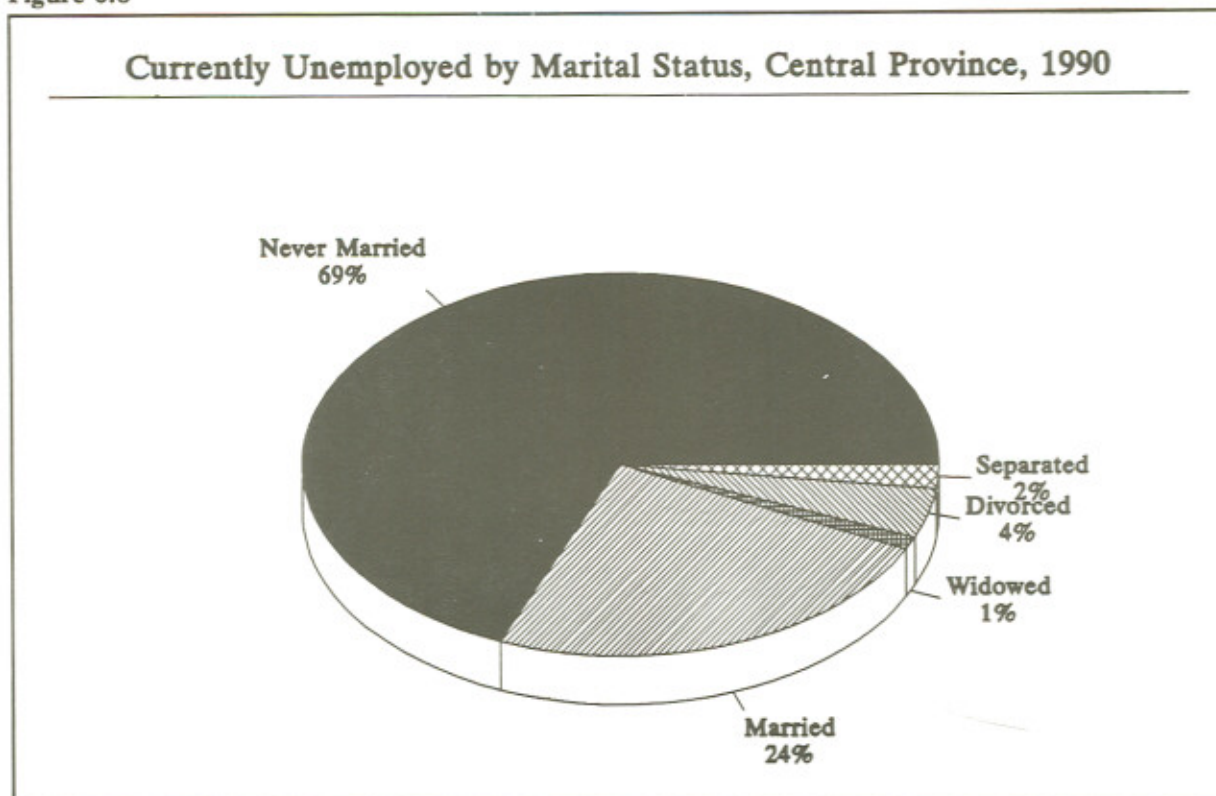
Overall, 66.0 percent of currently unemployed persons have never married while 23.0 percent are married. The never married and married males constitute 65.0 and 27.0 percent, respectively. Unemployed females constitute 68.0 percent with 16.0 percent married.

Table 6.15

Current Unemployed by Marital Status, (Percent), Central Province, 1990

Residence and Sex	Total Number Unemployed	Marital Status						
		Total	Never Married	Married	Widowed	Divorced	Separated	Not Stated
Total								
Both Sexes	28,624	100	66	23	1	4	2	4
Males	17,252	100	65	27	0	2	1	5
Females	11,372	100	68	16	3	6	4	3
Rural								
Both Sexes	20,063	100	64	25	1	4	2	4
Males	12,425	100	62	30	1	2	1	4
Females	7,638	100	66	19	3	6	4	2
Urban								
Both Sexes	8,561	100	73	16	1	4	1	5
Males	4,827	100	73	18	0	2	1	6
Females	3,734	100	73	12	2	7	3	3

Figure 6.8



6.10. CONCLUSION

The working age population (aged 12 years and older) in the province increased by 51.5 percent over the ten-year period, 1980-1990.

The labourforce in the province grew by 35.3 percent. The most noticeable feature of this growth was an increase of 49.1 percent in the female labourforce, as compared to 29.1 percent growth for the male labourforce. The high increase in the female labourforce was a result of the 156.7 percent rise in the number of the employed females. However, participation rates remained low during the intercensal period.

The distribution of the workers among the various occupational categories has remained more or less the same between 1980 and 1990. This is a reflection of the economic stagnation of the 1980's which led to lack of change in employment opportunities.

Unemployment rates were higher among younger persons, implying that job opportunities are limited for new entrants into the labour force. Many unemployed persons had little or no education. Most of the unemployed persons in Central Province have never been married.

CHAPTER 7

CHILDREN, YOUTH AND WOMEN

7.1. INTRODUCTION

The subject of children, the youth and women has been discussed in a number of both domestic and international fora for some time now. In the discussion below, an attempt is made to examine and analyse the situation of the children, youth and women with regard to their:

- Distribution within the province
- Composition and Change overtime
- Marital Status in the case of the youth and women
- Fertility
- Education and Economic Activity

In this chapter, 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 DISTRIBUTION OF CHILDREN AND THE YOUTH

Population Change

The child population in Central Province increased from 249,000 in 1980 to about 325,000 in 1990 or about 30 percent. This increase is equivalent to an annual growth rate of 2.7 percent for the same period.

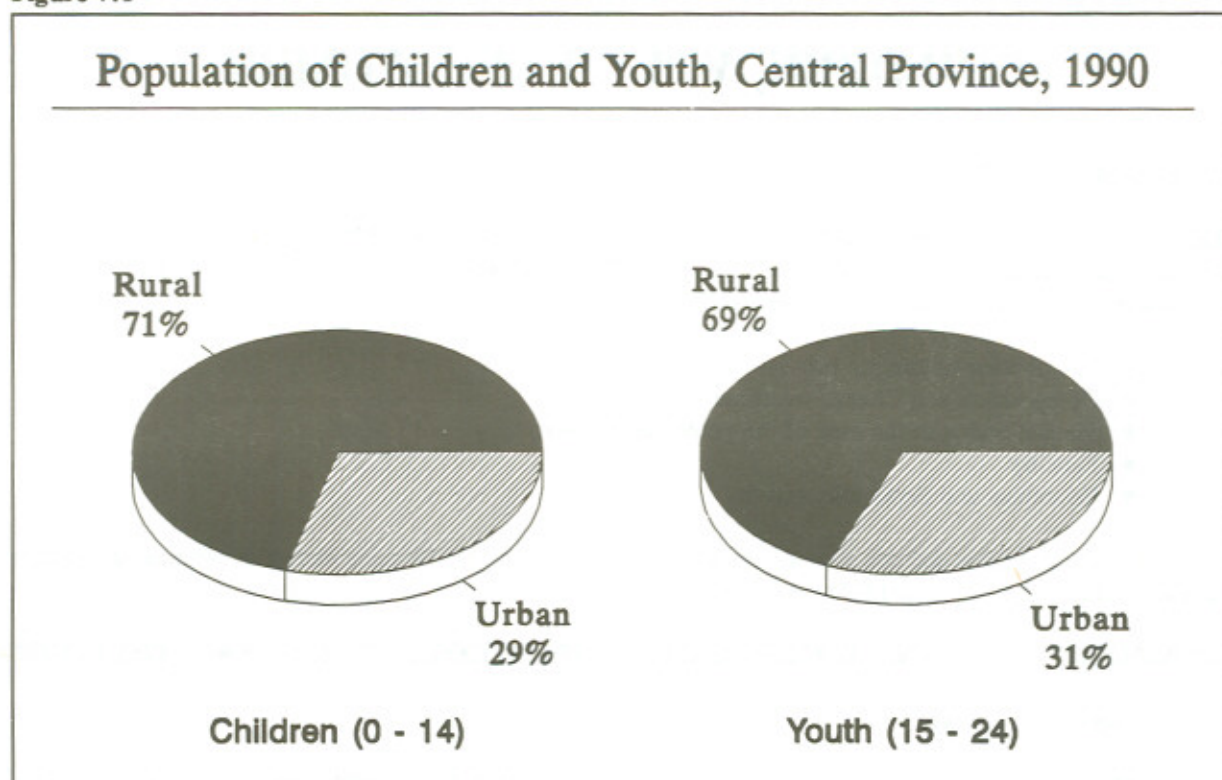
Table 7.1

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

	Age Group	Residence	Total Population 1980	Total Population 1990	Average Annual Growth Rate(%) 1980 - 1990
Children	0 - 14	Total	249,302	324,916	2.7
		Rural	173,937	229,923	2.8
		Urban	75,365	94,993	2.3
Youth	15 - 24	Total	99,215	164,109	5.2
		Rural	68,059	112,938	5.2
		Urban	31,156	51,171	5.1

The bulk of the increase has been in the rural areas which recorded an annual growth rate of 2.8 percent as compared to 2.3 percent in urban areas. The results in Table 7.1 show that the child population growth rate was less than the entire population of Central Province (3.5 percent) and that of the youth (5.2 percent). The table also shows that the growth rate of children is half that of the youths. The growth rate of children is 2.7 percent while that of the youth is 5.2 percent. This means that during the period 1980-1990, the increase in population of the children has been less than that of the youth. The low growth rate observed for the child population as compared to the youth population and the entire population in the province lends support to the notions that fertility is on the decline but also there have an increase in child mortality.

Figure 7.1



Population Composition and Distribution

Central Province recorded a total population of 720,627, of which 358,396 and 362,231 are male and female, respectively. This population comprises about 45.1 percent of the children under 14 years. The youth, aged 15-24 years, represent a further 22.8 percent of the population. The children and youth together make up 67.9 percent of the Central Province population. This proportion of under 24 years population exerts pressure on financial resources which have to sustain the social services such as education, health and nutrition.

Table 7.2

Population Under 24 Years as a Proportion of the Total Population by Sex and Broad Age Group, Central Province, 1990

	Age Group	Sex	Population Size	Proportion
Children	0 - 14	Both Sexes	324,916	45.1
		Male	161,417	45.0
		Female	163,499	45.0
Youth	15 - 24	Both Sexes	164,109	22.8
		Male	79,706	22.2
		Female	84,403	23.3

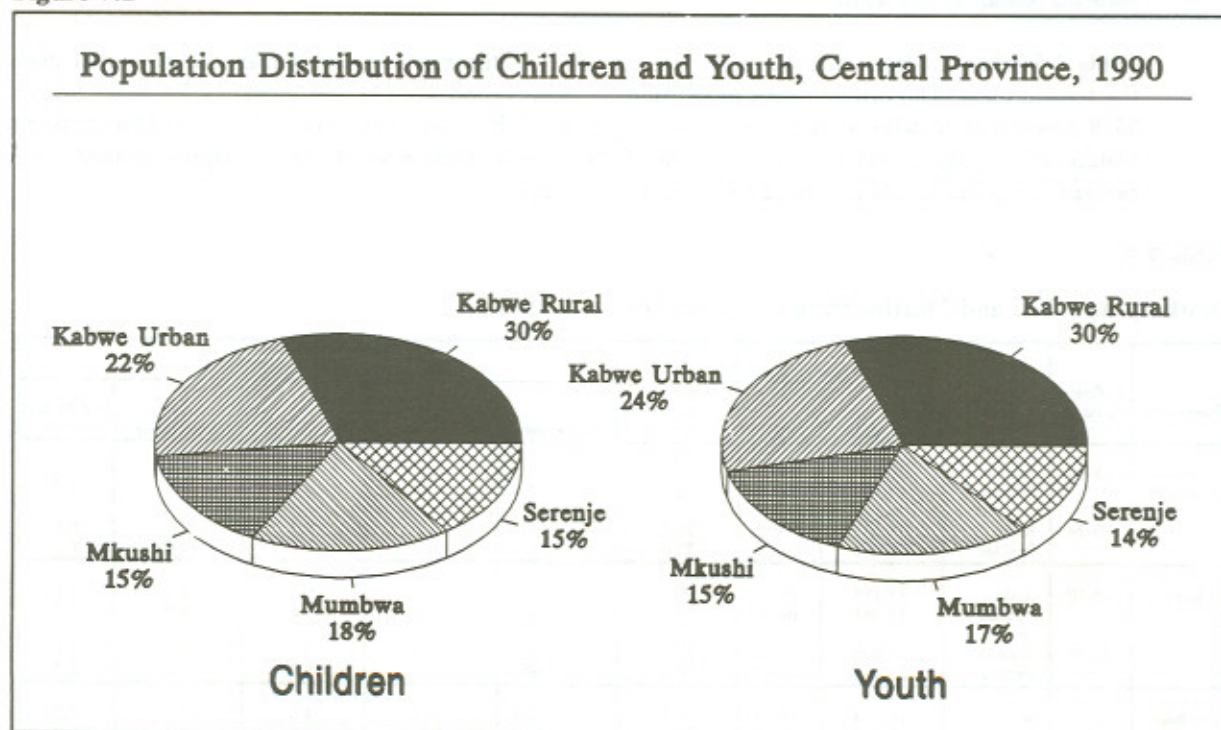
The contribution of child and youth population in the Central province is shown in Table 7.2. Whereas, the child population comprise 45.1 percent of the total population, the youth population contributes a further 22.8 percent. The large proportion of the child population tends to increase dependency ratio. Furthermore, a large proportion of child population has economic implications in that enormous amounts of resources are diverted to providing social services such as health and education, leaving little resources for investment and saving. The child and the youth population determine the extent of the momentum for the future population growth. Although the child growth rate has been recorded as declining, the large proportion of the child and the youth population observed will stimulate further growth.

Table 7.3

Population Distribution and Sex Ratios of Children and Youth by Districts, Central Province, 1990

Residence	Population	Total	Male	Female	Sex Ratio
Central	Children	324,916	161,417	163,499	98.7
	Youth	164,109	79,706	84,403	94.4
Kabwe Rural	Children	98,066	48,819	49,247	99.1
	Youth	49,645	24,265	25,380	95.6
Kabwe Urban	Children	71,401	34,882	36,519	95.5
	Youth	38,963	18,781	20,182	93.1
Mkushi	Children	48,777	24,455	24,322	100.5
	Youth	24,969	12,431	12,538	99.1
Mumbwa	Children	58,090	28,867	29,223	98.8
	Youth	28,163	13,881	14,282	97.2
Serenje	Children	48,582	24,394	24,188	100.9
	Youth	22,369	10,348	12,021	86.1

Figure 7.2



Using the data presented in Table 7.3, sex ratios for the children and youth of Central Province have been calculated. The sex ratios in the province, show that there are more female children and youth than the male ones. This is true in almost all the districts apart from Mkushi and Serenje which have an excess of males (100.5 and 100.9, respectively).

Table 7.4

Age-Sex Ratio of Children and Youth, Central Province, 1990

Age Group	Male	Female	Sex Ratio
0-4	56,801	57,762	98.3
5-9	53,325	54,343	98.1
10-14	51,291	51,394	99.8
15-19	46,069	47,422	97.1
20-24	33,637	36,981	91.0

Table 7.4 above shows the sex ratio of the children and youth of Central Province by five year age groups. In all age groups, the sex ratios are below 100 although in the age group 10-14 years is almost 100. The age group 20-24, has the least sex ratio. This may be due to out-migration of young men to other parts of the country.

7.3. ECONOMIC ACTIVITIES OF THE YOUTH

As shown earlier, Central Province has a very youthful population. Unfortunately, the participation of the youth in the development of the province's economy is being hampered by scarcity of job opportunities in various sectors. Consequently, unemployment rates are high among the youth coupled with low education levels completed.

The overall 1990 Census current unemployment rates for the youths aged 12-19 and 20-24 years are 23.0 and 21.0 percent, respectively. For the same age groups, urban areas have high unemployment rates of 40.0 and 27.0 percent, respectively. However, rural areas have low unemployment rates of less than 20.0 percent due to agriculture being the main economic activity. For further information on youth economic activity see Chapter 6.

Marital Status of the Youth

Table 7.5 below indicates that the proportions of male youths who have never married are higher than the female ones. The difference in proportions is more pronounced at age group 20-24 years where 32.8 percent of females as opposed to 70.1 percent of the males have never married. One striking feature in this age group is the proportion of the married female youth who comprise almost 60.0 percent compared to about a third recorded for the male.

Table 7.5

Youth by Age, Sex and Marital Status, Central Province, 1990

Residence	Age Group	Sex	Total		Marital Status					
			Absolute	%	Never Married	Married	Widowed	Divorced	Separated	Not Stated
Central Province	15-19	Male	46,069	100.0	91.1	1.5	0.0	0.1	0.1	7.2
		Female	47,422	100.0	73.0	21.7	0.2	0.7	0.7	3.7
	20-24	Male	33,637	100.0	70.1	22.2	0.1	0.5	0.5	6.6
		Female	36,981	100.0	32.8	58.3	0.6	3.1	2.0	3.2
Rural	15-19	Male	32,185	100.0	90.8	1.7	0.0	0.1	0.1	7.2
		Female	32,369	100.0	70.1	24.1	0.2	0.8	0.9	3.9
	20-24	Male	23,069	100.0	67.1	24.9	0.1	0.5	0.6	6.8
		Female	25,315	100.0	30.5	60.1	0.6	3.2	2.2	3.3
Urban	15-19	Male	13,884	100.0	91.6	1.1	0.0	0.0	0.1	7.2
		Female	15,053	100.0	79.4	16.4	0.1	0.5	0.4	3.2
	20-24	Male	10,568	100.0	76.7	16.3	0.1	0.5	0.3	6.1
		Female	11,666	100.0	37.8	54.4	0.5	2.9	1.5	2.8

It will be shown in Chapter 8 that female youth marry at the average age of 21.4 years while their male counterparts marry at the average age of 26.4 years.

In rural areas, marriage rates for the youth are higher than those in urban areas. Generally female youths marry more often than their male counterparts. On the whole, less than 10.0 percent of the youth comprises the divorced, widowed and separated.

Fertility of the Female Youth

Table 7.6 below shows that the female youth in Central Province contribute highly to the overall current fertility level. For instance, the number of children born to those in the age group 20-24 years is 250 live births per 1000 females, in the last 12 months prior to 1990 Population Census. The age specific fertility rates shown in table 7.6 are generally higher in rural than urban areas of Central Province for both age groups 15-19 and 20-24.

Table 7.6

Age-Specific Fertility Rates of Female Youths by Rural/Urban, Central Province, 1990

Age Group	Age Specific Fertility Rate		
	Total Province	Rural	Urban
15-19	0.093	0.103	0.071
20-24	0.250	0.265	0.216

Education of Economically Active Children and Youth

Table 7.7 below shows that about two thirds (58 percent) of working children in age group 12-14 years have never been to formal school. Another 37 percent of children have only reached primary level of education. Secondary education in the age group 12 - 14 attracts only 0.4 percent. This result is obvious as the age group 12 - 14 correspond mainly to primary cycle of education.

An assessment of the table shows that there is no marked difference in the proportions of male and female children with or without formal schooling.

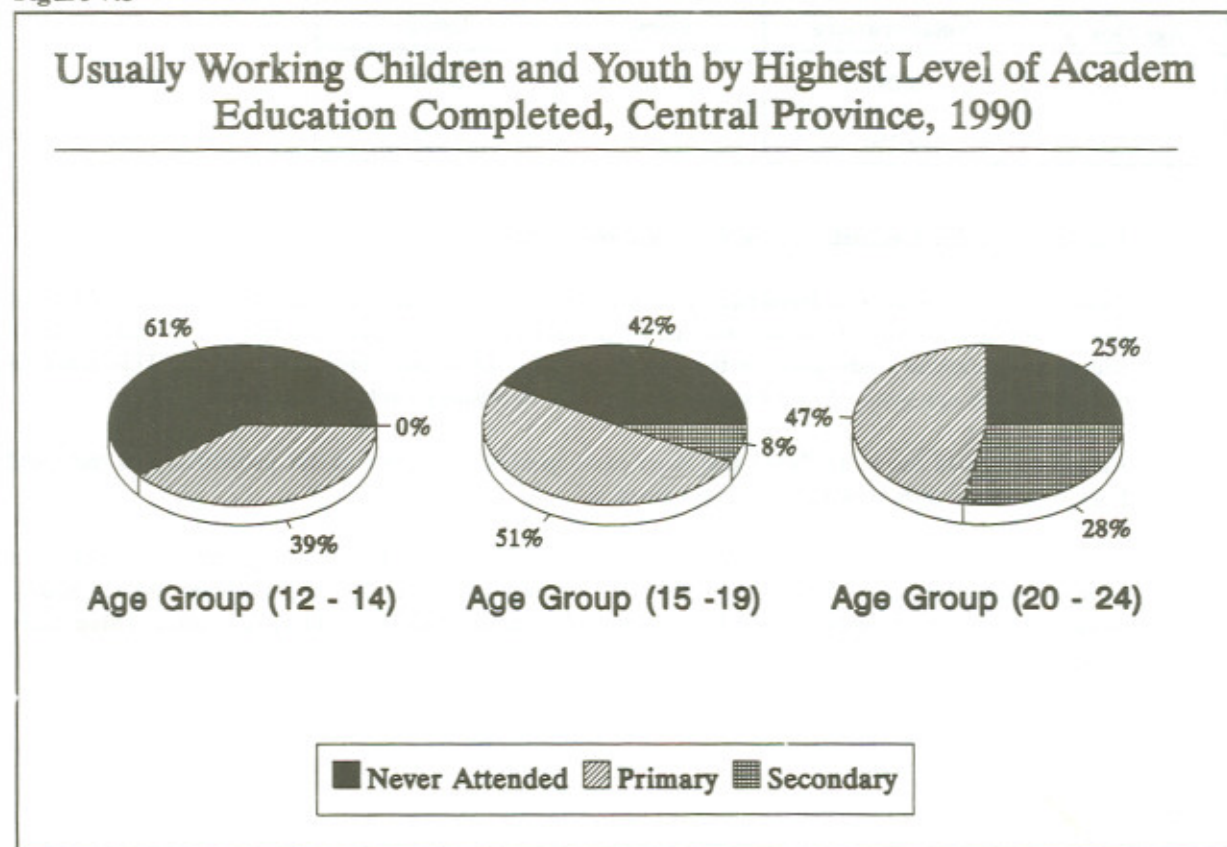
It can be inferred from Table 7.7 that 95 percent of working children in age group 12-14 years are without formal education or have only completed primary education. The highest proportion of usually working youths in age group 15-19 Years have only reached primary level of education. These make up almost 50 percent of the youths in this group.

Table 7.7

Usually Working Children and Youth Population (12-24 years) by Age, Sex and Highest level of Academic Education Completed, Central Province, 1990

Age Group	Sex	Total Usually Working Population	Academic Education Level Completed						
			Total Percentage	Never Attended	Primary	Secondary	Higher		Not Stated
							A Level	Degree	
12-14	Both Sexes	8,349	100.0	58.0	37.0	0.4	-	-	4.7
	Male	4,388	100.0	58.3	36.6	0.3	-	-	4.8
	Female	3,961	100.0	57.6	37.3	0.4	-	-	4.7
15-19	Both Sexes	20,007	100.0	40.2	49.1	7.5	-	-	3.1
	Male	10,234	100.0	39.5	49.7	7.5	-	-	3.3
	Female	9,773	100.0	40.8	48.6	7.6	-	-	3.0
20-24	Both Sexes	26,814	100.0	24.6	46.1	27.3	0.0	0.0	1.9
	Male	16,619	100.0	21.0	47.1	29.9	0.1	0.0	1.8
	Female	10,195	100.0	30.4	44.4	23.1	0.0	-	2.1

Figure 7.3



In age group 20-24, unlike the working youths in the previous age group, only about 25 percent of them have never been to formal school. However, the highest proportion of working youths in this age group have only completed primary education.

From the results presented in the table above, a very small proportion of the youths in the province have completed higher levels of education. This may indicate that the working children and youths in the province are engaged in occupations/industries which may not require some form of education. The majority are likely to be employed as unskilled workers. For further details on the education of economically active children and youth refer to Chapter 6.

Economically Active Children and Youths

Table 7.8 shows that in Central Province, economically active male and female children aged 12-14 years constitute proportions of 13.8 and 12.3 percent, respectively. As expected, the majority of economically inactive children are full-time students, representing 63.6 and 63.3 percent for males and females, respectively. In the age group 15-19 years, whereas about 50 percent of males are full-time students, only 36 percent of the females are in school. A good proportion of female youths in this age group (16.8 percent) are already housewives, as opposed to their male counterparts (1.2 percent). This pattern continues to the next age group (20-24 years) where the differences are much more pronounced. However, whereas almost 50 percent of youths in age group 20-24 years are employed, only about 25 percent of the females are employed. The majority of female youths (42.6 percent) are housewives. This shows that in Central Province, whereas male youths opt for work after school, their female counterparts opt for marriage. Consequently, the proportion of male youths who are unemployed is higher than that of their female counterparts.

Table 7.8

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

Residence	Age Group	Sex	Total Population	Total Percentage	Economically Active		Economically Inactive			Not Stated
					Employed	Unemployed	Full Time Housewife/Homemaker	Full time Student	Others	
Central	12-14	Male	30,125	100.0	13.8	5.1	0.9	63.6	14.7	1.8
		Female	30,361	100.0	12.3	4.7	2.3	63.3	15.5	1.8
	15-19	Male	46,069	100.0	21.5	10.1	1.2	50.9	14.6	1.7
		Female	47,422	100.0	19.9	9.1	16.8	36.0	16.3	1.9
	20-24	Male	33,637	100.0	48.7	16.3	1.6	16.7	14.6	2.1
		Female	36,981	100.0	26.9	9.1	42.6	6.5	13.2	1.8
Rural	12-14	Male	21,225	100.0	18.2	6.0	1.0	56.6	16.1	2.0
		Female	20,704	100.0	16.7	5.4	2.6	56.7	16.7	2.0
	15-19	Male	32,185	100.0	26.7	10.9	1.3	44.1	15.1	1.9
		Female	32,369	100.0	25.8	9.2	17.4	29.6	15.9	2.0
	20-24	Male	23,069	100.0	51.3	16.6	1.8	14.7	13.4	2.2
		Female	25,315	100.0	30.8	8.8	41.4	5.1	12.1	1.9
Urban	12-14	Male	8,900	100.0	3.2	3.1	0.6	80.3	11.4	1.4
		Female	9,657	100.0	3.1	3.4	1.6	77.7	12.9	1.4
	15-19	Male	13,884	100.0	9.3	8.3	1.0	66.5	13.6	1.3
		Female	15,053	100.0	7.2	8.8	15.5	49.8	17.2	1.5
	20-24	Male	10,568	100.0	42.8	15.7	1.2	21.1	17.3	1.9
		Female	11,666	100.0	18.4	9.9	45.1	9.6	15.5	1.5

Figure 7.4

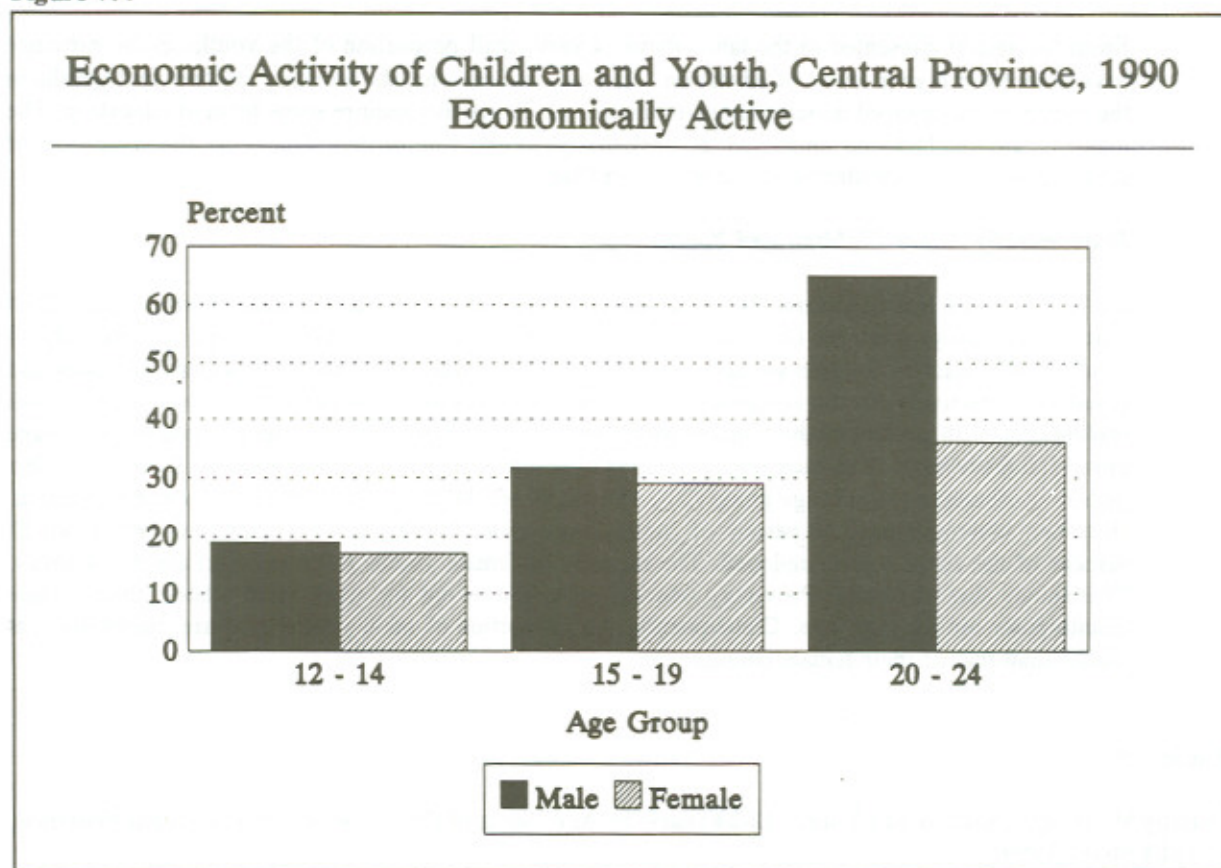
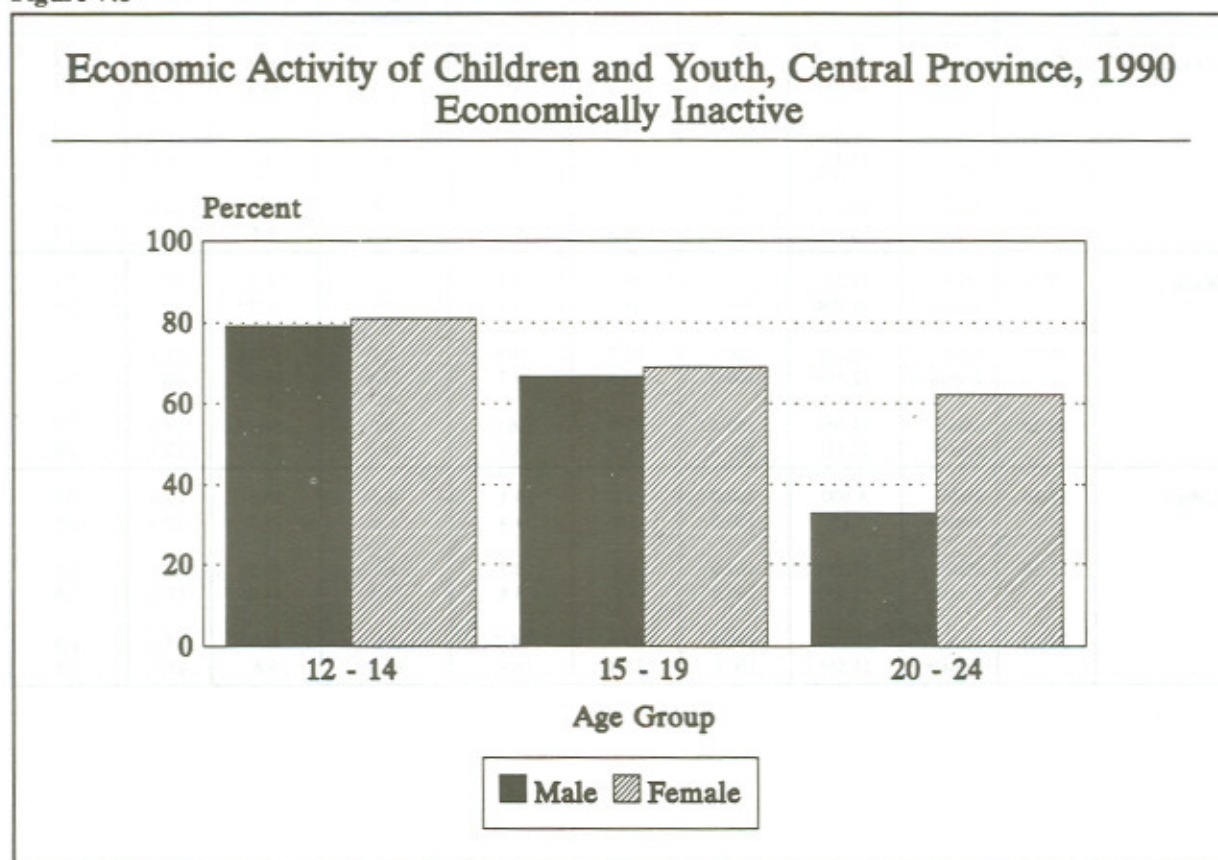


Figure 7.5



Disparities exist between rural and urban areas of Central Province. Table 7.8 above shows that the proportions of economically active children and total number of children are higher in rural than urban areas. Within the economically inactive category, the proportion of children in rural areas who are full-time students is 57 percent as compared to about 80 percent of their counterparts in urban areas. This may be due to inadequate school places to cater for all the children in rural areas. This is also an issue of economic value or benefit of having children. In this case, most parents in rural areas would rather encourage their children to get employment than send them to school where costs have to be incurred. Similarly, the proportion of youths in urban areas who are students is higher than that of their counterparts in rural areas.

7.4. WOMEN IN DEVELOPMENT

Generally, the contribution of women in the development of the economy is usually under valued by both policy makers and planners. This is due to the fact that in male headed households, the majority of our womenfolk do not control the means of production in primary, secondary and tertiary industries. Of the usually working population in the province, females constitute 62.0 percent as compared to 57 percent for males in the agricultural industry. In Chapter 5, it has been shown that female participation in secondary and higher education is lower than that of males.

Marital Status of Female Heads of Households

Female household heads in Central Province constitute 15.3 percent. Urban areas have slightly a high percentage of female household heads with 15.6 percent as compared to 15.1 percent in rural areas. At district level, the highest proportion of female household heads is found in Serenje with 19.8 percent. Mumbwa and Kabwe Urban Districts also have high proportions of female household heads with 15.6 and 15.2 percent, respectively.

Table 7.9

Female Heads as a Proportion of Total Household Heads by Marital Status and Residence, Central Province, 1990

Residence		Marital Status					
		Total	Never Married	Married	Widowed	Divorced	Separated
Central Province							
	Total	15.3	25.1	3.2	83.7	72.4	66.6
	Rural	15.1	22.6	3.4	83.8	70.8	66.2
	Urban	15.6	27.9	2.8	83.3	75.3	67.5
Districts							
	Kabwe Rural	14.1	24.9	2.8	81.2	67.9	62.0
	Kabwe Urban	15.2	25.9	2.9	83.3	73.9	65.8
	Mkushi	13.2	19.1	2.6	83.6	68.6	70.6
	Mumbwa	15.6	28.2	3.2	80.6	70.2	57.6
	Serenje	19.8	28.6	5.3	90.5	87.6	84.1

Overall proportions of widowed, divorced and separated are 83.7, 72.4 and 66.6 percent, respectively. The highest proportions of female household heads are either widowed, divorced or separated. Percentages in the category of widowed range from 83.3 for urban areas to 83.8 for rural areas. Slightly lower percentages are found in the category of divorced as compared to widowed. In the divorced category, rural and urban areas have 70.8 and 75.3 percent, respectively. Table 7.9 implies that the married females have less chance of being household heads than the other categories of marital status.

Educational Status of Female Household Heads

In total, 119,518 households are recorded in Central Province. Of these, 18,247 are headed by females. The majority (12,354) of the female headed households are found in the rural part of the province.

Table 7.10

Female Household Heads by Level of Education Completed and Rural/Urban, Central Province, 1990

Level of Education	Total	Rural	Urban
Never Attended	59.3	68.4	40.3
Primary	25.0	23.0	29.2
Secondary	13.8	6.7	28.8
Higher Education	0.1	0.1	0.3
Not Stated	1.8	1.9	1.5
Total (%)	100.0	100.0	100.0
Total Female Household Heads	18,247	12,354	5,893
Total Household Heads	119,518	81,668	37,850

Table 7.10 shows that almost 60 percent of the female heads have never attended school. A further 25.0 percent have completed primary level of education. A negligible proportion of the female heads of households have completed higher levels of education. This shows that the proportion of female household heads in Central Province declines with increasing level of education. This pattern is similar to that of rural and urban areas of the province. However, in rural areas, there is a marked difference in the proportions of female household heads between those who completed primary level and secondary level of education. On the contrary, there are almost equal proportions of female household heads with primary and secondary education.

Economic Status of Women

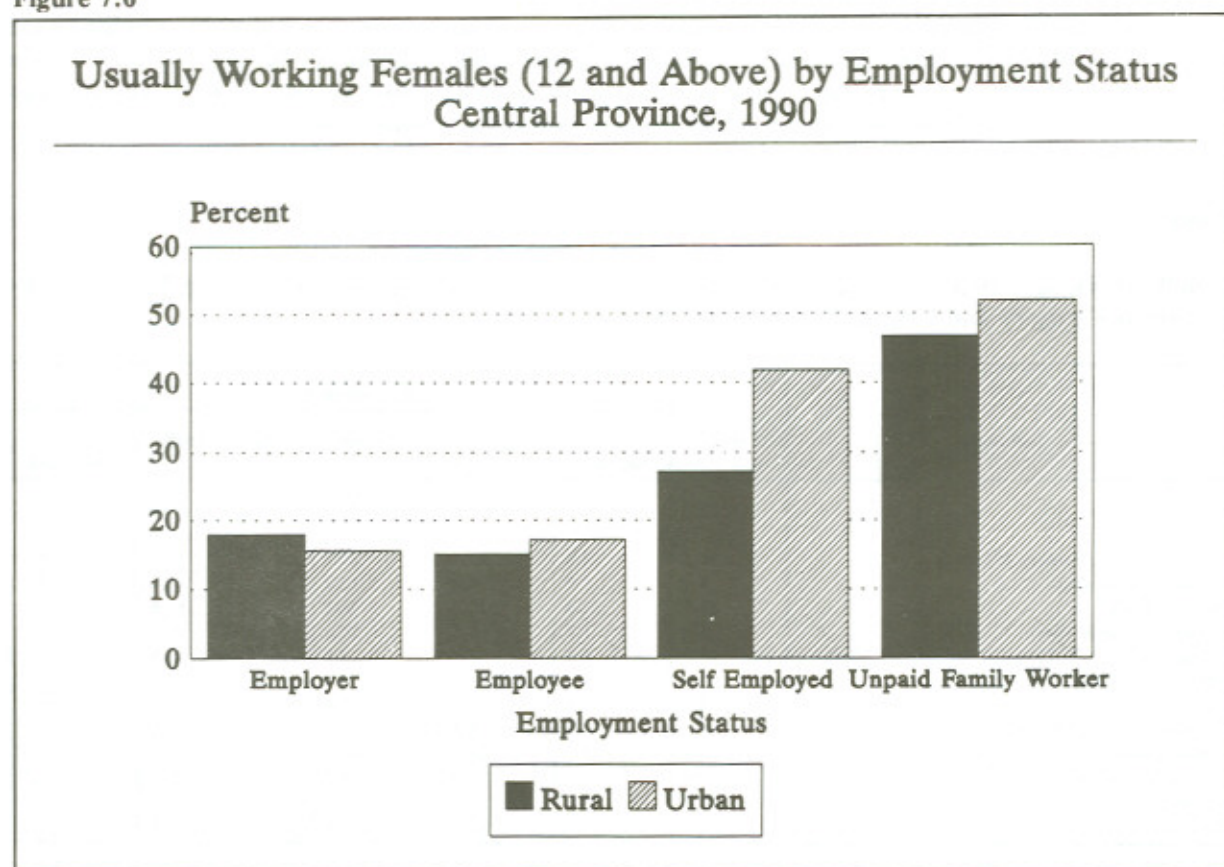
Working women are mostly found in the informal sector. In all, there are 32.7 percent of working women in Central Province. Rural and urban areas account for 34.9 and 26.5 percent, respectively. An assessment of working women by employment status shows that the majority (47.0 percent) of them are unpaid family workers. Urban areas have a high proportion of 51.9 percent as compared to 46.7 percent in rural areas. A large proportion of the self employed women are found in urban areas with a share of 41.8 percent. An overall percentage of self employed women is 30.1.

Table 7.11

Usually Working Females (12 Years and Older) as a Proportion of the Total Usually Working Population by Employment Status and Rural/Urban, Central Province, 1990

Employment Status	Total	Rural	Urban
Total	32.7	34.9	26.5
Employer	16.8	17.9	15.6
Employee	16.3	15.1	17.1
Self Employed	30.1	27.1	41.8
Unpaid Family Worker	47.0	46.7	51.9
Not Stated	39.4	39.2	39.8

Figure 7.6



Results from Tables 7.11 and 7.12 confirm that majority of working females are unpaid family workers. Another important result from the 1990 Census is that most working women are sales workers. The majority of female sales workers are self employed accounting for 52.3 percent. Overall, 47.4 percent of all sales workers are females. Other equally important occupations for women are clerical and agricultural/forestry/fishery with 35.7 and 34.7 percent, respectively.

Table 7.12

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

Occupation	Total	Employment Status				
		Employer	Employee	Self-Employed	Unpaid Family Worker	Not Stated
Total	32.7	16.8	16.3	30.1	47.0	39.4
Professional/Technical and Related Workers	30.3	23.1	30.8	18.2	41.6	28.0
Admin. Managerial Workers	10.8	10.4	10.5	25.0	0.0	16.7
Clerical and related Workers	35.7	25.0	36.3	23.5	31.6	40.0
Sales Workers	47.4	31.2	29.1	52.3	48.4	58.3
Service Workers	15.8	14.2	12.5	31.3	79.0	20.5
Agric., husbandry, Forestry & Fishery	34.7	19.1	14.2	26.2	45.7	29.3
Production, Transport & Labourers	11.1	8.4	6.7	28.3	44.1	10.0
Workers Unclassified	28.2	15.2	10.2	35.0	53.2	31.6
Not Stated	35.5	9.1	7.0	34.1	50.9	45.9

There are three major industries in which the majority of women are found namely: wholesale and retail trade; restaurants and hotels; and finance, insurance and real estates. The proportion of women in wholesale and retail trade; restaurants and hotels constitute 49.2 percent of all workers in this industry. Similarly, 36.0 percent of all workers in finance, insurance and real estates are women. There are 34.1 percent of female workers in agriculture/forestry/fishery industry.

Table 7.13

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

Industry	Total	Employment Status				
		Employer	Employee	Self-Employed	Unpaid Family Worker	Not Stated
Total	32.7	16.8	16.3	30.1	47.0	39.4
Agric., Hunting, Forestry & Fishery	34.1	18.6	13.6	26.2	45.7	28.7
Mining & Quarrying	4.7	9.5	4.4	13.2	18.8	3.6
Manufacturing	17.3	12.0	12.3	26.3	57.6	13.8
Electricity, Gas & Water	4.2	1.7	3.6	24.1	20.0	0.0
Construction & Allied Repairs	2.3	4.3	1.7	2.6	11.6	7.3
Wholesale & Retail Trade, Restaurants & Hotels	49.2	33.6	32.1	59.0	60.1	59.7
Transport, Storage & Communication	6.2	4.9	6.4	2.7	8.8	5.2
Finance, Insurance & Real Estates	36.0	27.7	24.8	47.0	58.2	18.0
Community, Social & Personal Service	28.6	19.7	24.9	39.4	49.9	37.4
Unclassified Industry	30.1	8.2	15.6	31.9	51.1	32.1
Not Stated	43.1	17.3	17.6	43.4	51.4	47.3

7.5. CONCLUSION

In summary, 32.7 percent of the total working population in the province are women. Proportions for rural and urban areas are 34.9 and 26.5 percent, respectively. Results from the 1990 Census also show that most of the working women are unpaid family workers with 47.0 percent. The prominent occupation groups for women are sales, agriculture, forestry, fishery, professional and technical fields. Lastly, women participate mostly in finance, insurance, and real estate industries with 49.2 percent of all workers being women.

CHAPTER 8

NUPTIALITY AND FERTILITY

8.1. INTRODUCTION

Zambia has rich sources of fertility and nuptiality data that can be used by planners and policy makers in evaluating some of the existing population policies and programmes. For instance, the Ministry of Community Development and Social Welfare can use information on divorces and separations to explain the existing problem of distressed children at household level. In general, majority of distressed children come from homes where parents have divorces or separated. Information on female headed households cross-classified with marital status is equally useful in explaining existing problems of distressed children at household level.

Fertility issues have been addressed fully at many levels in Zambia. For example, the 1980 Census of Population and Housing data were used in the formulation of the National Population Policy by the Government.

The topics in fertility and nuptiality were covered in the 1990. In order to derive nuptiality and fertility patterns in Zambia, the 1990 Census collected data for all persons aged 12 years and over on the following:-

- Marital Status, i.e. whether a person is married, separated, divorced, widowed or never married.
- Age at first marriage as at last birthday.

For only females aged 12 years and over, the following additional information was also solicited:-

- Whether they have had a live birth,
- Age at the first live birth,
- Number of children ever born and are still living elsewhere,
- Number of children born but died by sex.

The last two sets of variables were repeated for those females who had given birth in the last 12 months.

8.2. CONCEPTS AND DEFINITIONS

Fertility

Fertility refers to the childbearing performance of individuals, groups, couples or populations. Measures of fertility normally refer to live births.

Nuptiality

The frequency, characteristics and dissolution of marriages in a population. Marriage is an important event in one's life and together with birth and death could be conceived to complete the cycle of the individual. Nuptiality does not directly affect the increase or decrease of population. However, it has a close link with fertility.

Singulate Mean Age at Marriage (SMAM)

The Singulate Mean Age at Marriage (SMAM) is the mean age at first marriage among those who ever marry. It is computed from the proportions who are single, that is, never married, in each age group. Computation of SMAM on this chapter is based on the UN Manual X, Annex 1, (1983).

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 1000 persons.

General Fertility Rate (GFR)

Ratio of live births in a specified period (usually a calendar year) to the average number of women of childbearing age (taken as 15-49 years). Commonly expressed as per 1000 women of childbearing period 15-49 years.

Total Fertility Rate (TFR)

Average number of children that a woman would have at the end of her childbearing period 15-49 years.

Gross Reproduction Rate (GRR)

Average number of daughters that would be born to a woman during her childbearing period 15-49 years. Only female children ever born are taken into consideration when calculating the rate.

Net Reproduction Rate (NRR)

Average number of daughters that would be born to a woman during her childbearing period. The prevailing fertility and mortality patterns are assumed to persist during the mentioned period. Here, consideration of living daughters is done when calculating the NRR. This provides a measure of the way in which a generation of women replaces itself, given a particular combination of fertility and mortality patterns.

8.3. NUPTIALITY

This section is concerned with differences in marital status and age at first marriage between sub-groups of Central Province as at the time of 1990 Census. Knowledge of the marital characteristics of respondents is essential in an analysis meant to establish their effects and potential impact on fertility behaviour of a population. The background variables shed some light on the type of population being analysed, since the various disparities observed within the population have a bearing on the characteristics.

Marital Status

Marital status is an important factor in population dynamics. Although it mostly affects fertility, it also affects mortality and migration to a lesser extent. Basic categories of marital status as recommended by the United Nations are "never married", "married", "widowed" and "separated/divorced".

In 1990, 1.8 percent of the males and 24.2 percent of the females aged 15-19 years in Central Province had ever been married (see Table 8.1).

The data in the table confirm the universality of marriage in Central Province. For example, by age 28 years, almost 75.0 percent of the females and 61.0 percent of males had married. Marriage is therefore, still seen as an important and obligatory institution in Central Province.

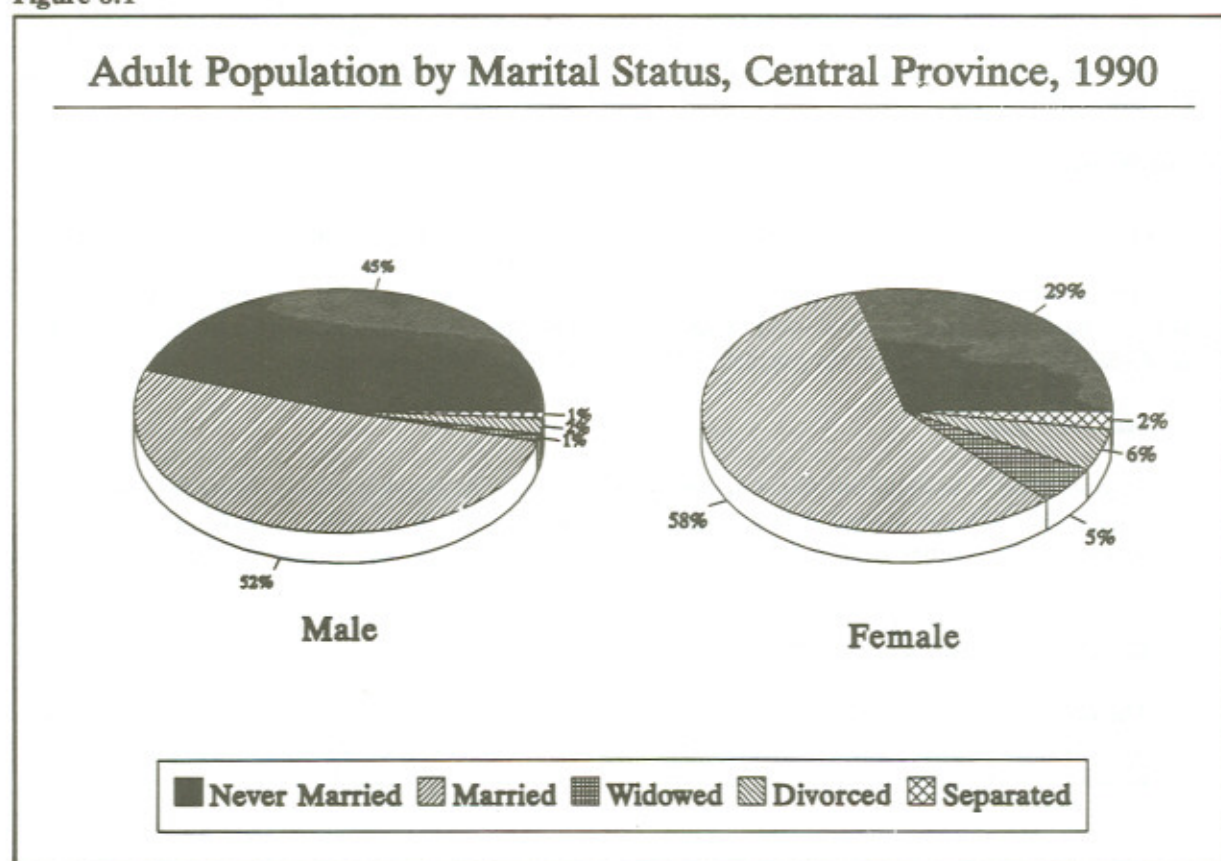
Table 8.1

Adult Population Classified by Age, Sex and Marital Status, (Percent), Central 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	98.2	75.8	1.6	22.5	0.0	0.2	0.1	0.7	0.1	0.8	42,743	45,669
20 - 24	75.1	33.9	23.8	60.2	0.1	0.6	0.5	3.2	0.5	2.1	31,432	35,803
25 - 29	36.6	15.9	60.6	74.7	0.2	1.1	1.6	5.5	1.0	2.8	24,012	26,881
30 - 34	16.2	8.4	79.5	79.2	0.5	2.0	2.4	7.5	1.3	3.0	20,166	20,583
35 - 39	9.7	5.5	85.5	79.5	0.7	3.4	2.7	8.4	1.4	3.2	14,132	13,644
40 - 44	6.4	3.9	78.0	78.0	0.9	5.6	3.1	9.2	1.4	3.2	12,112	12,700
45 - 49	4.7	3.5	76.3	76.3	1.0	8.5	3.2	8.8	1.7	3.0	10,019	10,396
50 - 54	4.3	3.7	68.7	68.7	1.9	14.0	3.9	9.8	1.6	3.5	8,718	8,945
55+	4.1	6.2	48.1	48.1	4.7	30.7	4.6	11.2	1.9	3.8	23,897	18,030
Total	43.5	29.0	52.6	58.0	1.0	5.1	1.9	5.5	1.0	2.4		
Size	81,562	55,854	94,420	111,718	1,818	9,867	3,605	10,626	1,826	4,586	187,231	192,651

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

Figure 8.1



By age 34 years, 91.6 percent of the females enumerated in 1990 had ever been married as compared to a figure of 95.6 percent in 1980 (CSO, 1985). The increasing age at marriage has meant a shift in the peak of marriage for females from age group 30-34 years in 1980 to 35-39 years in 1990. Marriage is still universal in Zambia, particularly in Central Province despite an increasing age at first marriage.

After reaching a peak in the age group 35-39 years for the currently married females, the proportion of widowed, divorced and separated increase substantially, especially after the age of 40 years. The divorce and separated ratios are higher for females probably because they do not prefer to remarry after the age of 40 years. The higher rate of increase of widowhood among females is due to higher male mortality especially among unions where age differences between spouses are wide. The relatively low proportions of currently divorced/separated women could mean more stability of marriages, especially in the middle age-groups.

Differentials by Residence

Rural-urban residence is a widely used factor in explaining the individual fertility variations. Tables 8.2 and 8.3 show rural-urban differentials in marriage pattern. In Central Province, proportions of never married are higher in urban than in rural areas, especially in age group 15-29 years for both sexes. This pattern is an indication of high school attendance by the youth especially in the urban areas.

Table 8.2

Adult Male Population by Age and Marital Status, Rural-Urban Areas, (Percent), Central 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	97.9	98.7	1.8	1.1	0.0	0.0	0.1	0.0	0.1	0.1	29,855	12,888
20 - 24	72.0	81.7	26.7	17.4	0.1	0.1	0.5	0.5	0.6	0.3	21,511	9,921
25 - 29	34.0	41.9	63.1	55.4	0.2	0.2	1.6	1.7	1.1	0.7	16,199	7,813
30 - 34	17.0	14.8	78.5	81.5	0.5	0.5	2.6	2.2	1.4	1.0	13,008	7,158
35 - 39	11.5	7.0	83.0	89.2	0.7	0.8	3.1	2.2	1.7	0.8	8,481	5,651
40 - 44	8.0	3.9	86.0	91.6	0.9	1.0	3.4	2.7	1.8	0.8	7,503	4,609
45 - 49	5.3	3.6	88.2	91.9	1.0	1.1	3.5	2.5	2.0	0.9	6,806	3,213
50 - 54	4.5	3.7	87.5	90.4	2.0	1.7	4.1	3.2	1.8	1.1	6,370	2,348
55+	4.0	4.2	84.8	84.3	4.7	4.8	4.6	4.7	1.9	1.9	19,977	3,920
Total	42.7	45.4	53.0	51.6	1.1	.7	2.1	1.6	1.1	.7	129,710	57,521

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

Table 8.3

Adult Female Population by Age and Marital Status, Rural- Urban Areas, (Percent), Central 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	73.0	82.0	25.1	17.0	0.2	0.1	0.8	0.6	0.9	0.4	31,101	14,568
20 - 24	31.6	38.9	62.1	56.0	0.7	0.5	3.3	3.0	2.3	1.6	24,468	11,335
25 - 29	15.7	16.2	74.8	74.7	1.1	1.0	5.3	6.0	3.1	2.1	18,146	8,735
30 - 34	8.8	7.7	78.9	79.8	1.9	2.1	7.0	8.2	3.4	2.2	13,494	7,089
35 - 39	6.1	4.4	79.7	79.2	3.3	3.6	7.7	9.9	3.3	2.9	9,089	4,555
40 - 44	4.2	3.1	79.0	75.4	5.0	7.4	8.4	11.3	3.4	2.7	9,353	3,347
45 - 49	3.3	4.2	77.8	70.9	7.6	11.5	8.3	10.4	3.0	2.9	8,127	2,269
50 - 54	3.5	4.2	70.5	51.7	13.0	31.8	9.4	9.8	3.6	2.5	7,275	1,670
55+	6.0	7.5	49.0	43.4	29.9	35.1	11.1	11.4	4.0	2.6	15,195	2,835
Total	27.0	33.7	59.3	54.9	5.6	4.1	5.5	5.5	2.6	1.8	136,248	56,403

The males in rural areas marry at earlier ages than their urban counterparts. The urban females show higher divorce and widowhood level than their rural counterparts. This could be due to increasing instability in marriages and higher male mortality in urban areas. Caution should, however be taken as these rural-urban differentials could arise with misclassification of marital status and age misreporting.

Table 8.4 shows the marital status of the population in Central Province and its districts. In general, urban areas of the province had a higher proportion of never married (52.1 percent for males and 42.8 percent for females) than the rural areas (50.1 percent for males and 36.0 percent for females). The urban areas also experience lower percentages of currently married, widowed, divorced and separated levels for both males and females than the rural areas.

Table 8.4.

Total Adult Population (15-49) by Sex and Marital Status, Rural-Urban Areas and Districts, (Percent), Central Province, 1990

Age Group	Never Married		Married		Widowed		Divorced		Separated	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Central Province										
Total	50.7	38.0	45.9	50.6	0.9	4.5	1.7	4.8	0.9	2.1
Urban	52.1	42.8	45.3	47.3	0.7	3.5	1.4	4.8	0.6	1.5
Rural	50.1	36.0	46.2	51.9	0.9	4.9	1.8	4.9	1.0	2.3
Districts										
Kabwe Rural	49.7	36.8	46.4	51.7	1.0	4.5	2.0	4.9	1.0	2.1
Kabwe Urban	52.3	42.9	45.2	47.7	0.7	3.6	1.4	4.4	0.5	1.4
Mkushi	49.7	36.3	47.2	53.2	0.8	4.6	1.5	3.8	0.8	2.0
Mumbwa	52.1	37.4	43.5	49.8	0.9	4.6	2.4	5.9	1.2	2.3
Serenje	49.4	35.3	48.0	51.0	0.8	5.7	1.0	5.1	0.8	2.9

Mkushi District has the lowest number of never married males and females. Rural areas, in general, have higher rates of divorced, widowed and separated women. The return of divorced or widowed females to their home districts and countryside might be a contributing factor to the high rural and district female widowhood, divorce/separation as indicated in the above tables.

Singulate Mean Age at Marriage (SMAM).

Two particular characteristics of African marriage have important implications for fertility, namely; universality of marriage and very early age at marriage, particularly for females. This is prevalent in the largely subsistence agricultural economy of Zambia. Age at marriage also plays an important role in the determination of the level of fertility. The lower the age at first marriage, the higher the fertility level. The SMAM figures for the province and districts are given in Table 8.5.

From Table 8.5, it can be noted that the average provincial SMAM is 26.4 years for males and 21.4 years for females. This is a significant increase from the 1980 Census results. The female SMAM figures for 1980 were 19.2, 19.1 and 19.5 years for the total province, rural and urban areas, respectively. For total province as well as for both rural and urban areas, an increase of 2.1 years in SMAM has been recorded from 1980 to 1990.

Table 8.5.

Singulate Mean Age at Marriage (Years) Classified by Sex and Residence,
Central Province, 1990

Province and Districts	S M A M	
	Males	Females
Central Province		
- Total	26.4	21.4
- Rural	26.3	21.2
- Urban	26.9	21.6
Districts		
Kabwe Rural	26.4	21.4
Kabwe Urban	27.0	21.6
Mkushi	26.0	20.9
Mumbwa	26.8	21.6
Serenje	25.7	21.0

Mkushi District indicates the lowest SMAM for females (20.9) while Mumbwa District has the same SMAM for females as that of Kabwe Urban District (21.6). From the same table, it is clear that there is little difference portrayed in SMAM between districts and rural-urban areas. The table also shows that SMAM values for males are generally higher than those of females.

Singulate Mean Age at Marriage by Education

The age at first marriage is influenced by one's level of education. It is generally accepted that the longer one stays in school, the longer he/she takes to experience first marriage. Hence, the value of SMAM for this group of persons will tend to be high.

Table 8.6

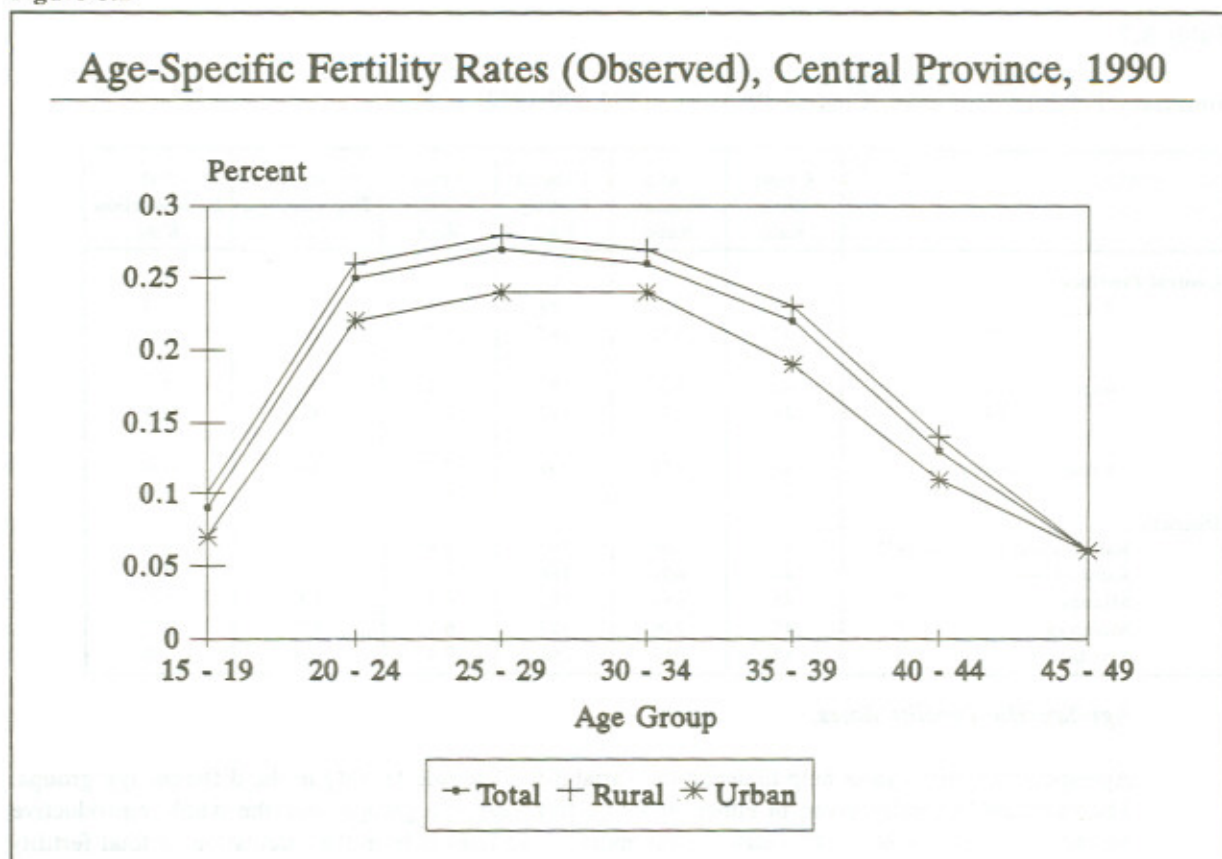
Singulate Mean Age at First Marriage by Educational Attainment and Residence, (Females), Central Province, 1990

Residence	All Levels of Education	Level of Education			
		No Schooling	Primary	Secondary	University
Central Province					
- Total	21.2	20.7	20.9	22.4	24.2
- Rural	21.0	20.7	20.9	23.3	25.5
- Urban	21.4	20.8	20.8	22.0	22.8
Districts					
Kabwe Rural	21.1	20.7	21.0	22.5	+
Kabwe Urban	21.4	20.7	20.7	22.3	22.5
Mkushi	20.7	20.2	20.7	23.3	+
Mumbwa	21.5	21.3	21.1	23.2	+
Serenje	20.8	20.6	20.6	+	+

Note: + indicates small number of cases.

Table 8.6 shows that total SMAM for Central Province steadily increases with education, from 20.7 years among women with no education to 24.2 years for women with University level of education. The same trend is portrayed by females in rural and urban areas of Central Province. There is no

Figure 8.2



Of 31,800 births in 1990, almost 43 percent occurred to women under 25 years. The Age Specific Fertility Rates generally decline with increasing age between the age groups 25 to 49 years. Refer to Table 8.8 for details.

Gross Reproduction Rate (GRR)

From Table 8.9, it is shown that a woman from Central Province bears 3.2 daughters to replace her. Rates for rural and urban areas are 3.4 and 2.8 daughters, respectively. The adjusted GRR's for the province, rural and urban areas confirm a decline in fertility during the 1980 and 1990 intercensal period in the province.

Table 8.9

Gross Reproduction Rate (GRR), (Observed), Central Province, 1990

Age Group	Central Province		Rural		Urban	
	Female Births	ASFR ^f	Female Births	ASFR ^f	Female Births	ASFR ^f
15 - 19	2,239	0.05	1,687	0.05	552	0.04
20 - 24	4,652	0.13	3,336	0.13	1,316	0.11
25 - 29	3,602	0.13	2,571	0.14	1,031	0.12
30 - 34	2,712	0.13	1,866	0.14	846	0.12
35 - 39	1,496	0.11	1,070	0.12	426	0.09
39 - 44	840	0.07	665	0.07	175	0.05
45 - 49	337	0.03	269	0.03	68	0.03
GRR		3.2		3.4		2.8

N.B: ASFR^f stands for Age-Specific Fertility Rates for Female Births.

Net Reproduction Rate (NRR)

According to Table 8.10, a woman in Central Province bears 2.9 daughters by the end of her reproductive period. Whereas, a woman in rural area bears 3.1 daughters, her counterpart in the urban area has only 2.6 daughters. The NRR's shown in Table 8.10 are adjusted and these are shown in Table 8.7 to be 2.6, 2.5 and 2.9 for the province, rural and urban areas, respectively.

Table 8.10

Net Reproduction Rate (NRR) for Central Province, 1990

Age Group	Central Province		Rural		Urban	
	Female Births still Alive	ASFR ^a	Female Births still Alive	ASFR ^a	Female Births still Alive	ASFR ^a
15 - 19	2,091	0.04	1,570	0.05	521	0.04
20 - 24	4,329	0.12	3,112	0.12	1,217	0.10
25 - 29	3,361	0.12	2,391	0.13	970	0.11
30 - 34	2,488	0.12	1,703	0.12	781	0.11
35 - 39	1,375	0.10	976	0.11	399	0.09
39 - 44	738	0.06	577	0.06	161	0.05
45 - 49	298	0.03	240	0.03	58	0.03
NRR		2.9		3.1		2.6

N.B: ASFR^a - Stands for Age-Specific Fertility Rates at current mortality rates.

Children Ever Born (CEB).

The measure "Children ever born" is defined as the number of children ever born by a group of women of a given age during their childbearing experience beginning from onset of reproductive life to the current ages.

The quotient of the number of children ever born in an age group and the number of women in the same group yields average parities. The average parity for the age group 45-49 years is usually referred to as completed family size and is mostly likened to total fertility rate under constant fertility, mortality and migration experiences.

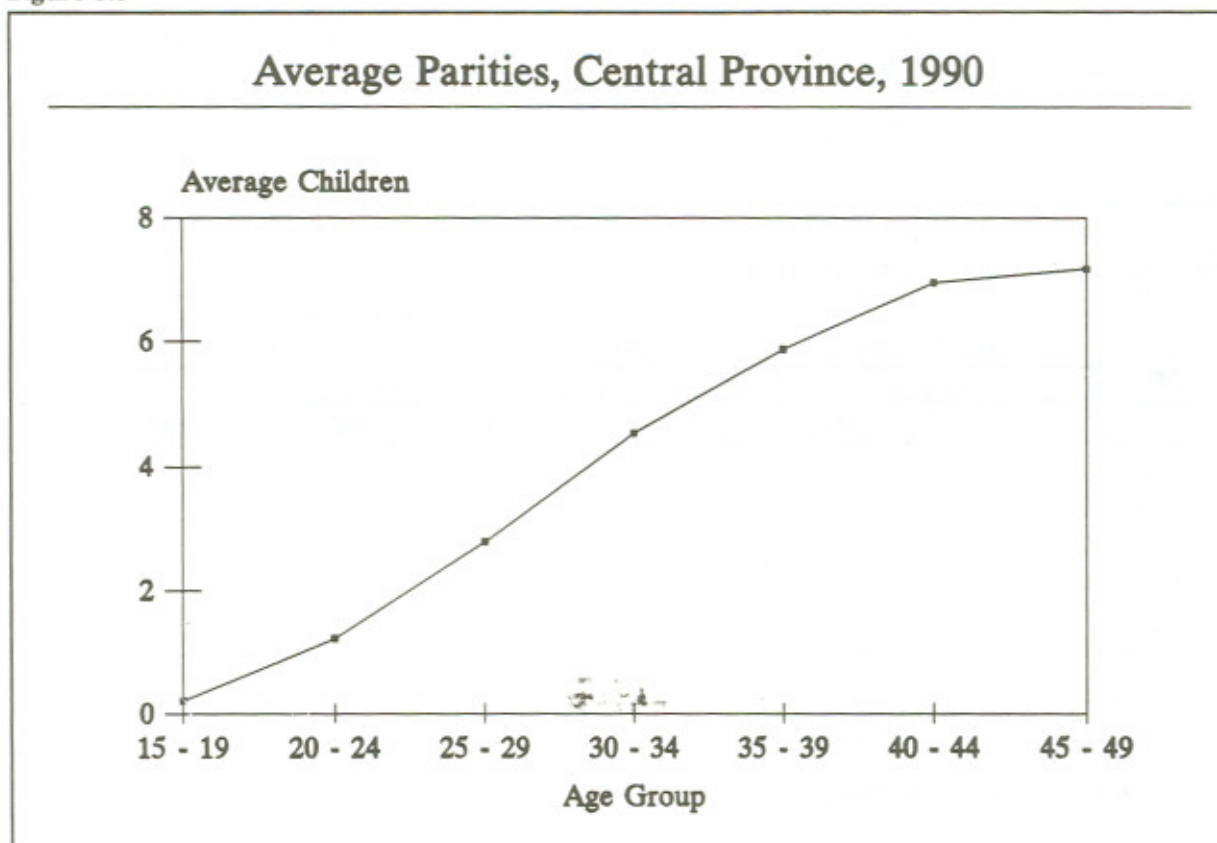
The completed family size for women aged 45-49 years is 7.2 children per woman (refer to Table 8.11).

Table 8.11

Average Parities, (Observed), Central Province, 1990

Age Group	Total Women	CEB	Average Parities Reported
15 - 19	47,422	10,099	0.21
20 - 24	36,981	45,618	1.23
25 - 29	27,406	76,524	2.79
30 - 34	20,925	94,942	4.54
35 - 39	13,855	81,276	5.87
40 - 44	12,862	89,443	6.95
45 - 49	10,547	75,698	7.18

Figure 8.3



Fertility Differentials

Fertility tends to vary among people in different societies and with different socio-economic backgrounds. The relationship between socio-economic characteristics of individuals and fertility performance is difficult to establish because they vary substantially.

From the Census data for Central Province, it is observable that rural-urban fertility differences do exist. Further, Table 8.12 shows fertility differences by level of education completed by women. Generally, those with primary level of education tend to exhibit higher fertility than those without education. Those with higher education have lowest fertility. While in all educational categories women in rural areas tend to have higher fertility than those in urban areas except for women with higher education.

Table 8.12

Completed Family Size by Level of Education of Women, Central Province 1990

	No Education	Primary	Secondary	Higher
Central Province				
Total	6.9	7.6	6.3	4.7
Rural	6.9	7.6	6.8	3.4
Urban	6.8	7.5	6.0	5.2

* Completed Family Size (CFS) is based on the age group 40-49 years.

8.5. CONCLUSION

Marriage in Central Province is universal. By age group 25-29 years, more than half of both males and females are married. However, females marry at earlier ages than males. The 1990 Census singulate mean ages at marriage (SMAM) for males and females are 26.4 and 21.4 years, respectively. This represents a significant drop from figures obtained in 1980 where both males and females had singulate mean ages at marriage of less than 20.0 years. One of the reasons that can explain for the high increase in mean age at marriage is the increase in the number of both males and females attaining at least primary level of education.

The level of fertility in Central Province shows a decline during the 1980-1990 intercensal period. Similar reductions are noticed both in rural and urban areas. An average total fertility rate (TFR) of 6.3 children per woman is recorded from 1990 Census data as compared to 7.5 children in 1980.

An assessment of completed family sizes by education show that women with primary level of education have a higher family size as compared to those with either "no education" or "secondary and higher" education levels.

CHAPTER 9

MORTALITY

9.1. INTRODUCTION

Direct estimation of mortality measures using 1990 Census data is not possible because it proved 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 use information on children ever born and surviving by age of mothers. The Brass Method employ probability measures and assumes the following relationship:-

$$q_{(x)} = D_{(x)} \cdot K_{(x)}$$

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 known as "Mortpak-Lite" was used.

Information on children ever born and children surviving yields mortality measures 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.

Information 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 respondents forget to register some of their dead children.

9.2. DEFINITIONS AND CONCEPTS

Mortality

Process whereby deaths occur in a population. It also refers implicitly to the underlying conditions or causes with regard to 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 aged between 1-4 years die. Child mortality refers to deaths of children aged between 1-4 years.

Under-Five Mortality Rate (UMR)

The rate at which children aged 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 aged 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 intercensal adjusted crude death rate obtained with the use of Coale and Demeny North Model Life Tables is 14.3 deaths per 1000 population for Central Province. The adjusted crude death rates for males and females are 15.4 and 13.8 deaths per 1000 population, respectively.

Table 9.1

Crude Death Rate by Sex, Central Province, 1980-1990

	Observed		Adjusted CDR
	Deaths	CDR	
Central Province			
- Total	23,707	32.9	14.3
- Male	12,380	34.5	15.4
- Female	11,327	31.3	13.8

Note: Used Coale and Demeny North Model Life Tables, Levels 14.5 for Males and 14.3 for Females.

However, the observed crude death rates are much higher than expected. Theoretically, plausible estimates should lie between 15 and 20 deaths per 1000 population, if population growth rates are in the range of 2.5 and 4.0 percent. Respondents might have included deaths which occurred more than one year prior to the 1990 Census.

9.4. PERIOD MEASURES.

Utilization of information on infant and child mortality is quite diverse. Infant and child mortality trends have been used to assess the standard of living. However, caution should always be exercised when using such data as a proxy for standard of living because infant mortality is affected by both exogenous (environmental) and endogenous (physiological) factors while child mortality is mostly affected by exogenous factors.

Period measures of infant and child mortality rate provide trends over time. The reference period spans over 14 years prior to the 1990 Census. The reference period for the 1990 Census regarding infant and child mortality rates falls between 1976 and 1990 while the reference period for the 1980 Census is between 1964 and 1980.

The age specific information on children ever born, surviving and proportion dead from 1980 and 1990 Censuses is used to estimate probabilities of dying for 1980 and 1990 at exact ages 1, 2, 3, 5, 10, 15 and 20. These probabilities are equally used in estimating levels of child mortality, ie. infant mortality rate (IMR), child mortality rate (CMR) and under-five mortality rate (UMR). Other indicators derived from probabilities of dying are levels of mortality and expectation of life at birth using either United Nations or Coale-Demeny models. In the case of Zambia, mortality and fertility patterns and conditions warrant the use of Coale and Demeny North model.

The life tables for males and females are derived from information on life expectancy at age 20 ($e_{(20)}$) and are used in the section on adult mortality.

Table 9.2

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

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	.114	.886	.107	.893	13.9	12.9	1988.5	1988.5
20-24	2	.139	.861	.130	.870	14.1	13.5	1987.3	1987.3
25-29	3	.150	.850	.133	.867	14.5	14.3	1985.8	1985.8
30-34	5	.156	.844	.138	.862	15.2	15.2	1983.9	1983.9
35-39	10	.165	.835	.154	.846	15.9	15.5	1981.8	1981.8
40-44	15	.191	.809	.178	.822	15.3	15.0	1979.2	1979.2
45-49	20	.198	.802	.197	.803	15.6	14.8	1975.8	1975.8

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

As measured by the $q_{(x)}$, the probability of dying is lower for females than for males in all the five year age groups between 15 - 49 years. Generally, the probabilities of dying in all the five year age groups have increased during the 1980-1990 intercensal period except for females in the age groups 35-49 years.

Table 9.3

Estimates of Probabilities of Dying and Surviving by Sex, Implied Mortality Levels and Reference Dates, North Model, Central 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	.089	.911	.065	.935	16.1	17.1	1978.6	1978.6
20-24	2	.118	.882	.100	.900	15.5	15.6	1977.4	1977.3
25-29	3	.116	.884	.110	.890	16.4	15.8	1975.5	1975.6
30-34	5	.130	.870	.117	.883	16.5	16.3	1973.0	1973.3
35-39	10	.162	.838	.167	.833	16.0	14.9	1970.1	1970.6
40-44	15	.173	.827	.190	.810	16.0	14.5	1966.9	1967.6
45-49	20	.194	.806	.225	.775	15.8	13.7	1963.3	1964.1

Note: Estimates are based on Trussell's Coefficients and the Reference Date is 25th August, 1980.

Infant Mortality Rate (IMR)

The level of infant mortality has increased over time. In the four year period (1985-1989) prior to the 1990 Census, infant mortality rate for Central Province was 105 deaths per 1000 live births. It was previously recorded at 87.5 deaths per 1000 live births during 1982-1985 period. The rate had even declined from 90.5 deaths per 1000 live births during 1971-1981 period. The rates were much lower than 95.0 deaths per 1000 live births prior to the 1980 Census. A similar pattern exists for both males and females. Male and female infant mortality rates in the four year period prior to the 1990 Census were 109 and 101 deaths per 1000 live births, respectively. In the periods 5-9 years and 10-14 years prior to the 1990 Census, infant mortality rate lay between 80 and 93 deaths per 1000 live births for both males and females. The rates derived from 1980 Census data were much lower than 100 deaths. For more details, refer to Table 9.4.

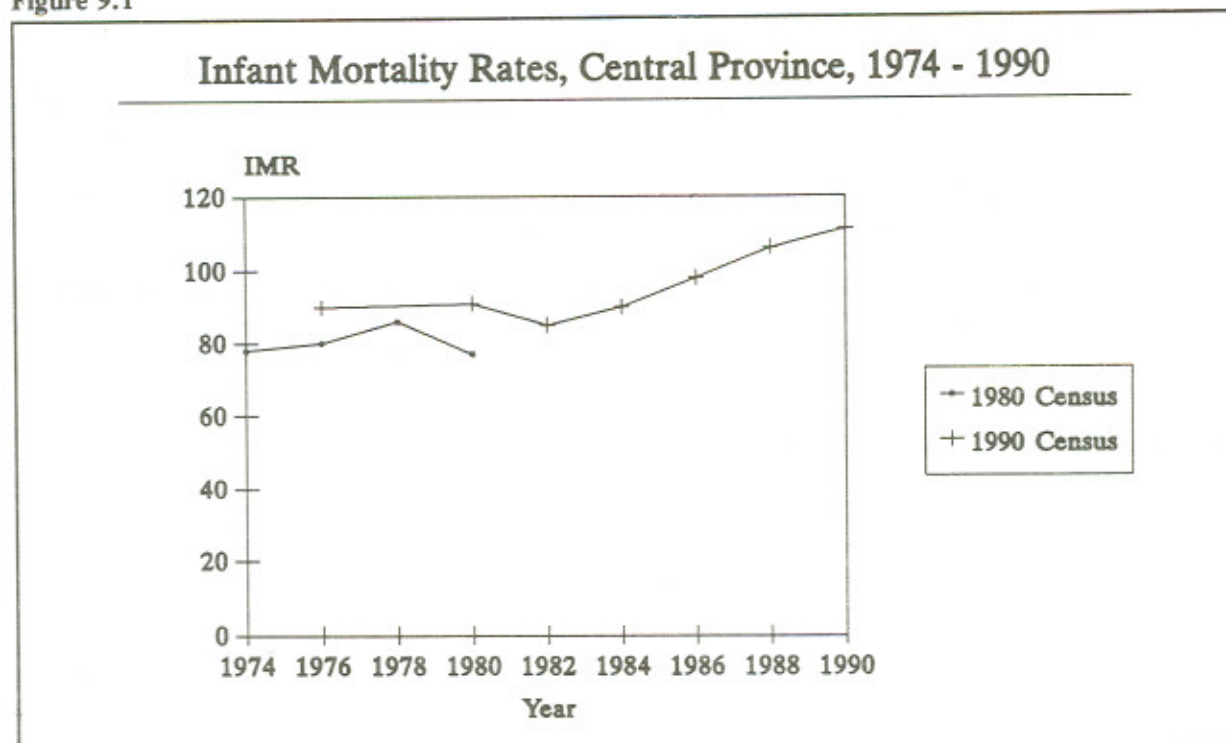
Table 9.4

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

Years Preceding Census	Infant Mortality (q_0)		Child Mortality (q_1)		Under-Five Mortality (q_5)	
	1980	1990	1980	1990	1980	1990
Central Province - Total						
0-4	81.0	105.0	54.0	76.7	99.7	129.3
5-9	83.0	87.5	55.0	59.5	144.0	153.5
10-14	92.0	90.5	64.0	62.5	195.0	191.0
Sex of Child - Male						
0-4	88.0	109.0	60.3	80.3	107.7	134.3
5-9	83.5	92.0	56.0	63.5	146.0	160.5
10-14	87.0	92.0	59.5	64.0	183.5	194.5
- Female						
0-4	74.0	100.7	47.3	72.3	91.7	123.3
5-9	81.5	84.0	54.0	56.0	142.0	146.0
10-14	97.0	89.0	69.0	61.0	207.5	187.5

The trend of Infant Mortality Rate shown in Figure 9.1 confirm that Infant Mortality Rate has increased over the last 15 years. Estimates of Infant Mortality Rate derived from 1980 Census range between 77 to 80 deaths per 1000 live births. Similarly, estimates derived from the 1990 Census range between 90 to 106 deaths per 1000 live births. However, the difference in Infant Mortality Rates for the year 1980 obtained from the two Censuses show a wider margin. This implies that the reporting of children everborn and surviving by females was better in 1990 Census as compared to 1980 Census.

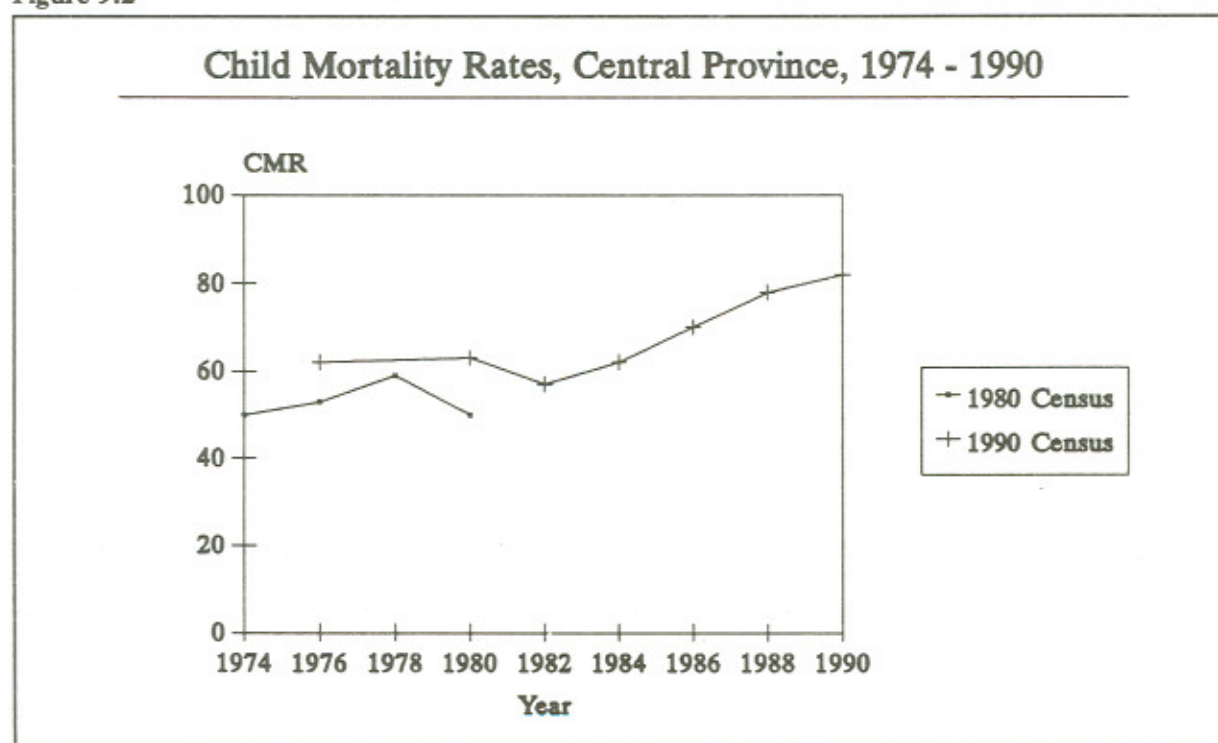
Figure 9.1



Child Mortality Rate (CMR)

Rates derived from 1990 Census are higher in the periods 0-4 and 5-9 years prior to the 1990 Census as compared to those from the 1980 Census. Child mortality rate is estimated at 76.7 deaths for the four year prior to the 1990 Census. The rates for males and females are 80.3 and 72.3 deaths, respectively, for the period 1986-1989. For the 5-14 year period prior to the 1990 Census, child mortality rates for both males and females were lower than 65.0 deaths per 1000 children. For details refer to Table 9.4.

Figure 9.2



Under-Five Mortality Rate (UMR)

The under-five mortality rate is an overall child mortality rate for those aged below 5 years. As such, it is affected by a combination of factors. Under-five mortality rates for the 14 year period prior to the 1990 Census have shown a decline from 191.0 to 129.3 deaths per 1000 children. Male under-five mortality reduced from 194.5 to 134.3 deaths during the same period. Similarly, female under-five mortality dropped from 187.5 to 123.3 deaths in the same period.

Reductions are recorded for the 14 year period prior to the 1980 Census. Overall, under-five mortality rate show a decline from 195.0 to 99.7 deaths. In the case of males and females, reductions are in the magnitude of 75.8 and 115.8 deaths per 1000 population, respectively. For details refer to Table 9.4.

9.5. SELECTED BACKGROUND CHARACTERISTICS

The infant, child and under-five mortality rates refer to five year period prior to the 1980 and 1990 Censuses. Selection of five year period is done because rates refer to recent years. It is believed that infant and child mortality rates have increased in the recent past. As such, there is need to show that these rates have actually increased in the last five years prior to the 1990 Census. Background characteristics are used in this chapter to explain the variations in infant and child mortality rates over the five year period prior to each of the two censuses. Table 9.5 shows results of infant mortality, child mortality and under-five mortality rates by selected background variables.

Infant Mortality Rate (IMR).

Estimates of IMR derived from 1990 Census show an increase over those of 1980. The overall infant mortality rate increased from 81.0 deaths in 1980 to 105.0 deaths in 1990. Male infant mortality rate at 109.0 deaths in 1990 is higher than that of females (100.7 deaths). Rates in 1980 fall between 70.0 and 90.0 deaths per 1000 children for both males and females.

The pattern of infant mortality for 1990 is such that rural areas (106.3 deaths) have high infant mortality rate as compared to urban areas (104.7 deaths).

Among the districts, Serenje has the highest infant mortality rate of 118.0 infant deaths followed by Mkushi with 108.0 deaths per 1000 live births as shown in Table 9.5.

Infant mortality rate for Kabwe Rural is 106.0 deaths and is close to the rate of Central Province. Even though Mumbwa has the lowest IMR, it recorded the highest increase over the ten year period (1980-1990). Wider margins (of over 30 infant deaths) are recorded in Mkushi, Mumbwa and Kabwe Rural Districts. Reasons pertaining to these sudden increases in infant mortality rates need to be investigated further.

Children born to females who are widowed or divorced are more likely to die in the first year of life. Those born to females who are married are more likely to survive in the first year of life. The never married category has a lower infant mortality rate.

Females who never had any form of education are associated with high infant mortality rates (110.7 deaths) followed by those with primary education (109.7 deaths). Children born to females with secondary and higher levels of education are more likely to survive the first year of life, and their mortality rate is 78.7 deaths per 1,000 live births.

Females who are unemployed and unpaid family workers are associated with higher infant mortality rates of above 100.0 deaths per 1,000 live births. Females who are working for the agricultural sector are also associated with higher infant mortality rate (107.3 deaths) than those in the non-agricultural sector with 87.0 deaths.

Table 9.5.

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

Background Characteristic	Infant Mortality (q_0)		Child Mortality (q_1)		Under-Five Mortality (q_5)	
	1980	1990	1980	1990	1980	1990
Central Province - Total	81.0	105.0	54.0	76.7	99.7	129.3
Sex of Child						
Male	88.0	109.0	60.3	80.3	107.7	134.3
Female	74.0	100.7	47.3	72.3	91.7	123.3
Residence						
Rural	78.3	106.3	51.0	77.3	97.0	130.7
Urban	88.7	104.7	60.3	76.3	106.7	128.3
District						
Kabwe Rural	71.7	106.0	45.3	77.7	91.3	129.7
Kabwe Urban	92.0	105.7	64.0	77.7	111.3	129.7
Mkushi	72.7	108.0	46.0	79.7	89.0	133.7
Mumbwa	54.7	91.3	30.0	63.3	65.7	112.0
Serenje	105.0	118.0	76.7	89.3	128.3	146.0
Education						
None	93.3	110.7	65.0	82.7	134.0	137.3
Primary	84.7	109.7	56.7	81.0	120.0	134.3
Secondary +	50.0	78.7	26.3	51.3	67.7	96.0
Marital Status						
Never Married	-	80.3	-	52.7	-	114.7
Married	83.0	89.3	55.3	61.3	118.7	129.0
Separated	-	97.0	-	68.7	-	141.7
Divorced	-	101.3	-	73.3	-	148.7
Widowed	-	116.0	-	87.3	-	168.7
Economic Activity						
Working	95.3*	90.3	68.0*	62.3	113.7*	111.3
Unpaid Family Worker	-	107.0	-	78.7	-	133.0
Unemployed	89.7*	102.0	53.3*	74.0	115.3*	151.0
Full-Time Housewife	83.0	90.0	55.3	62.0	118.7	130.0
Not Available for Work	-	95.7	-	68.0	-	122.3
Sector of Agriculture						
Agricultural Sector	-	107.3	-	78.7	-	132.7
Non-Agricultural Sector	-	87.0	-	59.3	-	108.7

Note: * includes Unpaid Family Workers,

includes those Not Seeking Work and Not Available for Work.

Child Mortality Rate (CMR)

Central Province recorded an increase in child mortality during 1980-1990 intercensal period. However, the CMRs are generally lower than infant mortality rates. The overall child mortality rate is 76.7 deaths for the province. As usual, female child death rate is lower than that of males by 10 percent. Rural areas experience higher child mortality rate of 77.3 deaths as compared to 76.3 deaths for urban areas.

The pattern established for child mortality rates is similar to that of infant mortality rate. Generally, all districts in Central Province experienced an increase in child mortality rates during the 1980-1990 intercensal period. Districts with high child mortality rates are Serenje (89.3 deaths), Mkushi (79.7 deaths), Kabwe Rural (77.7 deaths) and Kabwe Urban District with 77.7 deaths per 1,000 children aged 1-4 years. Mumbwa District has the lowest child mortality rate of 63.3 deaths.

Children of the widowed and divorced females are more likely to die during their first and fourth birthday. Child mortality rates for these females range between 70.0 - 90.0 deaths per 1,000 children.

Generally, children of females with secondary and higher levels of education are less likely to die during their first and fourth birthday. However, child mortality rates have also increased during the 1980 and 1990 intercensal period for this education category. The highest child mortality rate is recorded for mothers with no formal schooling followed by those with primary education.

It is generally accepted that children living in households with better standard of living are more likely to survive during their first and fourth birthday. Child mortality rates for children of mothers who are working, full-time housewives and those not available for work lie between 60.0 - 70.0 deaths. Those of full-time housewives and working women experience lower child mortality rates of 62.0 and 62.3 deaths per 1,000 children, respectively. In agricultural households, children are more likely to die during their first and fourth birthday. The child mortality rate is 78.7 deaths for the agricultural sector and 59.3 deaths for the non-agricultural sector.

Under-Five Mortality Rate (UMR)

As explained earlier, under-five mortality rate is an overall mortality rate affecting children below 5 years old. Central Province under-five mortality rate for 1990 is 129.3 child deaths while that for 1980 is 99.7 deaths per 1000 children. The pattern is the same for male and female children as established in infant and child mortality rates. Male children have higher under-five mortality rate of 134.3 child deaths as compared to 123.3 child deaths for females. Results from the 1990 Census show that rural areas also have higher under-five mortality rate than urban areas. The opposite is the case when the 1980 Census data is analysed.

Serenje, Mkushi, Kabwe Urban and Kabwe Rural Districts have relatively high under-five mortality rates ranging from 125.0 - 150.0 deaths per 1,000 children. Similarly, under-five mortality rates show increases in all districts between 1980-1990 intercensal period.

Information on under-five mortality rate for 1980 Census only exist for married females. The child mortality rate for married females show an increase from 118.7 deaths in 1980 to 129.0 deaths in 1990 per 1,000 children. Child mortality rates for widowed, divorced and separated females are relatively high and fall between 140.0 - 170.0 deaths per 1,000 children. Refer to Table 9.5 for details.

Children of females with no education experience high under-five mortality rate of 137.3 deaths per 1,000 children. Lower rates are recorded for mothers with secondary and higher levels of education. Primary school category has relatively high under-five mortality rates both in 1980 and 1990 Censuses.

Females who are unemployed and unpaid family workers have children who experience high under-five mortality rates. Rates range between 130.0 - 155.0 deaths per 1,000 children. Children of full-time housewives are more likely to survive the first 5 years of life as compared to other economic activity categories, apart from children of females who are not available for work. The females in agricultural sector have children who experience similar under-five mortality rates as those of the unemployed females. Under-five mortality rates are 132.7 and 108.7 deaths for the agricultural and non-agricultural sectors, respectively.

Life Expectancy

Expectation of life at birth is a refined measure that is used to assess the standards of living. An increase in the expectation of life at birth signals an improvement in the overall standard of living. Central Province overall expectation of life at birth in 1990 is 50.6 years while that of 1980 is 56.1 years. An assessment of expectation of life at birth with other background characteristics shows similar reductions in the 1980-1990 intercensal period. Refer to Table 9.6 for details.

Table 9.6

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

Background Characteristics	Expectation of Life at Birth (e_0)		Mortality Level
	1980	1990	1990
Central Province - Total	56.1	50.6	14.4
Sex of Child			
Male	54.4	49.8	13.9
Female	57.8	51.6	14.9
Residence			
Rural	56.8	50.4	14.3
Urban	54.4	50.7	14.7
District			
Kabwe Rural	58.7	50.5	14.5
Kabwe Urban	53.6	50.5	14.8
Mkushi	58.1	50.0	14.0
Mumbwa	62.8	53.6	15.4
Serenje	50.7	47.9	13.3
Education			
None	53.2	49.4	13.6
Primary	55.3	49.7	14.4
Secondary +	62.6	56.6	16.5
Marital Status			
Never Married	-	56.2	15.7
Married	55.7	54.1	14.9
Separated	-	52.5	13.0
Divorced	-	51.4	14.0
Widowed	-	48.4	13.4
Economic Activity			
Working	53.0*	53.9	15.1
Unpaid Family Worker	-	50.2	13.8
Unemployed	56.1 [#]	51.3	13.9
Full-Time Housewife	55.7	54.0	14.9
Not Available for Work	-	52.8	13.0
Sector of Agriculture			
Agricultural Sector	-	50.1	14.0
Non-Agricultural Sector	-	54.7	14.9

Note: * includes Unpaid Family Workers,

includes those Not Seeking Work and Not Available for Work.

9.6. ADULT MORTALITY

In the advent of non-availability of age-sex specific deaths, adult mortality is estimated by using model life tables. Model life tables for both males and females were derived using three mortality parameters of expectation of life at age 20 years (e_{20}), probabilities of surviving at ages 1 (l_1) and 5 (l_5) years. As mentioned earlier, the United Nations (1988) software package for mortality measurement called "MortPak-Lite" is used to generate the life tables for males and females in Central Province. Taking into consideration past trends of fertility and mortality patterns in Zambia, North Model Life tables are ideal for Zambia. Hence, utilization of North Model Life tables for Central Province. The generated life table columns are as follows:-

${}_x m_x$ = central death rates between ages x and $x+n$,

${}_x q_x$ = 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 $x+n$,
 ${}_nS_x$ = probability of surviving at exact ages x and $x+n$,
 T_x = total number of person years lived after age x ,
 oe_x = expectation of life at age x or the average number of years a person aged x has to live.

According to Tables 9.7 and 9.8, column headed oe_x , life expectancy at birth is 49.9 years for males and 52.9 years for females. For both sexes the peak in expectation of life is attained at exact age 5 years. However, the expectation of life for females is higher than that for males. The observed trend is the same for all the ages.

Table 9.7

Coale and Demeny North Model Life Table for Central Province - Males, 1990

Age	m_x	q_x	l_x	${}_nD_x$	${}_nL_x$	${}_nS_x$	T_x	oe_x	Age
0	.11376	.10570	100000.	10570.	92918.	.86481 /A/	4995893.	49.959	0
1	.02028	.07700	89430.	6886.	339486.	.93917 /B/	4902975.	54.825	1
5	.00652	.03208	82544.	2648.	406100.	.97509	4563489.	55.286	5
10	.00353	.01751	79896.	1399.	395982.	.98081	4157389.	52.035	10
15	.00442	.02187	78497.	1717.	388385.	.97346	3761406.	47.918	15
20	.00634	.03122	76780.	2397.	378079.	.96768	3373021.	43.931	20
25	.00664	.03268	74383.	2431.	365861.	.96634	2994942.	40.264	25
30	.00710	.03489	71952.	2510.	353547.	.96313	2629082.	36.539	30
35	.00802	.03934	69442.	2732.	340511.	.95694	2275535.	32.769	35
40	.00969	.04732	66710.	3157.	325848.	.94800	1935024.	29.007	40
45	.01183	.05749	63553.	3654.	308904.	.93421	1609176.	25.320	45
50	.01564	.07536	59899.	4514.	288580.	.91441	1300272.	21.708	50
55	.02051	.09772	55385.	5412.	263881.	.88406	1011692.	18.267	55
60	.02957	.13806	49973.	6899.	233287.	.83452	747811.	14.964	60
65	.04395	.19863	73074.	8556.	194683.	.75930	514524.	11.945	65
70	.06811	.29167	34518.	10068.	147823.	.65270	319841.	9.266	70
75	.10525	.41532	24450.	10155.	96484.	.43910 /C/	172017.	7.035	75
80	.18926	....	14295.	14295.	75533.	....	75533.	5.284	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: Pattern of the Male Sex Transformed to be Consistent With $e_{0m} = 43.931$, $l_{10} = 89430$. And $l_{50} = 82544$.

Figure 9.3

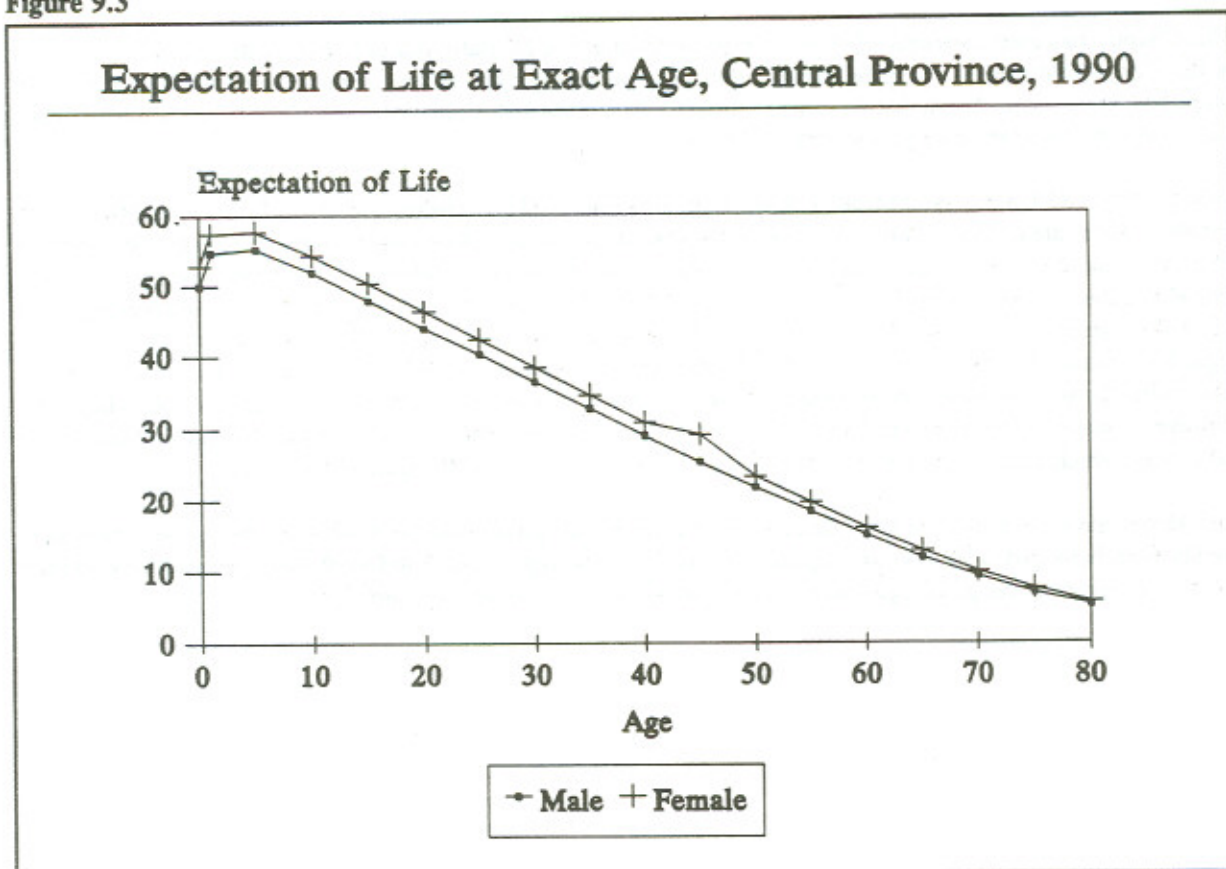


Table 9.8

Coale and Demeny North Model Life Table for Central Province - Females, 1990

Age	m_x	q_x	l_x	D_x	L_x	S_x	T_x	e_x	Age
0	.10329	.09670	100000.	9670.	93619.	.87729 /A/	5291514.	52.915	0
1	.01793	.06850	90330.	6188.	345025.	.94417 /B/	5137895.	57.543	1
5	.00633	.03117	84142.	2623.	414152.	.97547	4852870.	57.675	5
10	.00357	.01767	81519.	1441.	403993.	.98150	4438718.	54.450	10
15	.00399	.01976	80078.	1582.	396519.	.97838	4034725.	50.385	15
20	.00479	.02366	78496.	1857.	378946.	.97451	3638206.	46.349	20
25	.00554	.02735	76639.	2096.	378055.	.97067	3250260.	42.410	25
30	.00638	.03140	74543.	2340.	366967.	.96639	2872205.	38.531	30
35	.00732	.03594	72202.	2595.	354635.	.96145	2505237.	34.697	35
40	.00842	.04122	69607.	2869.	340962.	.95669	2150603.	30.896	40
45	.00940	.04595	66738.	3067.	326197.	.94819	1809640.	27.116	45
50	.01215	.05903	63671.	3759.	309298.	.93207	1483444.	23.299	50
55	.01637	.07878	59912.	4720.	288288.	.90469	1174146.	19.598	55
60	.02446	.11557	55192.	6379.	260812.	.85765	885858.	16.050	60
65	.03811	.17462	48814.	8524.	223685.	.78513	625046.	12.805	65
70	.06032	.26293	40290.	10593.	175621.	.68452	401361.	9.962	70
75	.09376	.37954	29696.	11271.	120217.	.46746 /C/	225741.	7.602	75
80	.17461	....	18425.	18425.	105524.	....	105524.	5.727	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: Pattern of the Female Sex Transformed to be Consistent With $e_{201} = 46.349$, $l_{10} = 90330$. And $l_{30} = 84142$.

9.7. CONCLUSION

This Chapter has used measures of Infant, Child and Under-five Mortality Rates to portray the mortality situation in the Central Province. The Life Table method has been employed to give indication of the level of Adult Mortality. It has been shown that the Infant Mortality Rate, Child Mortality Rate and Under-Five Mortality Rate have risen in the intercensal period 1980 - 1990.

Infant, Child and Under-five Mortality Rates were also examined by selected background characteristics of the females. Rural areas have exhibited higher rates than urban areas. Observation of mortality rates by level of education completed by females has shown that the higher the level of education of the females, the lower the mortality rates for their offspring. Mortality rates by marital status of females have shown an increasing trend when the categories are listed in the order: never married, married, separated, divorced and widowed. As regards economic activity, children born to full-time housewives have exhibited lowest infant and child mortality rates with those born to working females in second place. However, in respect of under-five mortality rate, children of working females experience the lowest rates. Children born to females in the non-agricultural sector have rates which are lower than their counterparts born to females in the agricultural sector.

Life tables have been used in this Chapter to give an overall picture of the health situation in the province. Newly born baby girls and boys are expected to live for an average of 52.9 and 49.9 years, respectively, if they were to experience the given age-specific death rates shown in Tables. 9.7 and 9.8.

CHAPTER 10

DISABILITY

10.1. INTRODUCTION

During 1990 Census, data pertaining to the disabled persons was also collected. Due to the complexity of identifying the levels of disability, only visible disabilities were considered. Therefore, in this vein, the following classifications of disabilities were adopted:-

- Totally Blind
- Totally Deaf/Dumb
- Crippled
- Mentally Retarded

The above classifications are simplistic and do not take into account the complex universal definition of disability which would include variations in the intensity of disability. For example, the partially blind and deaf can be identified with the use of medical instruments by qualified medical personnel. Clearly, such an approach would require a specialised separate survey.

There are also cultural factors which 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 have a visual contact with such persons and the respondent may not provide accurate information.

Notwithstanding the above limitations in the data, the results presented in this chapter provide useful information for the understanding of the disabled persons in Central 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/or mentally retarded. Hence, a disabled person may have one or more of the following attributes;

Totally Blind

One who has completely lost the sense of sight.

Totally Deaf/Dumb

Lacking the sense of hearing and devoid of the sense of speech.

Crippled

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

Mentally Retarded

Mentally retarded person is one whose psychological functioning is defective to any degree. This includes those persons with learning difficulties and mental disorders.

Multiple Disabilities

Having more than one of the above stated disabilities.

10.3. DISTRIBUTION OF DISABLED PERSONS

In total, 5,376 persons of both sexes and all ages in Central Province were identified as disabled. Table 10.1 shows the percentage distribution of the disabled by sex and type of disability and residence. There are more disabled males than females at provincial level in general and district level in particular. The largest number of disabled persons among the districts is found in Kabwe Rural with 1,910 while Mkushi has the least with 788.

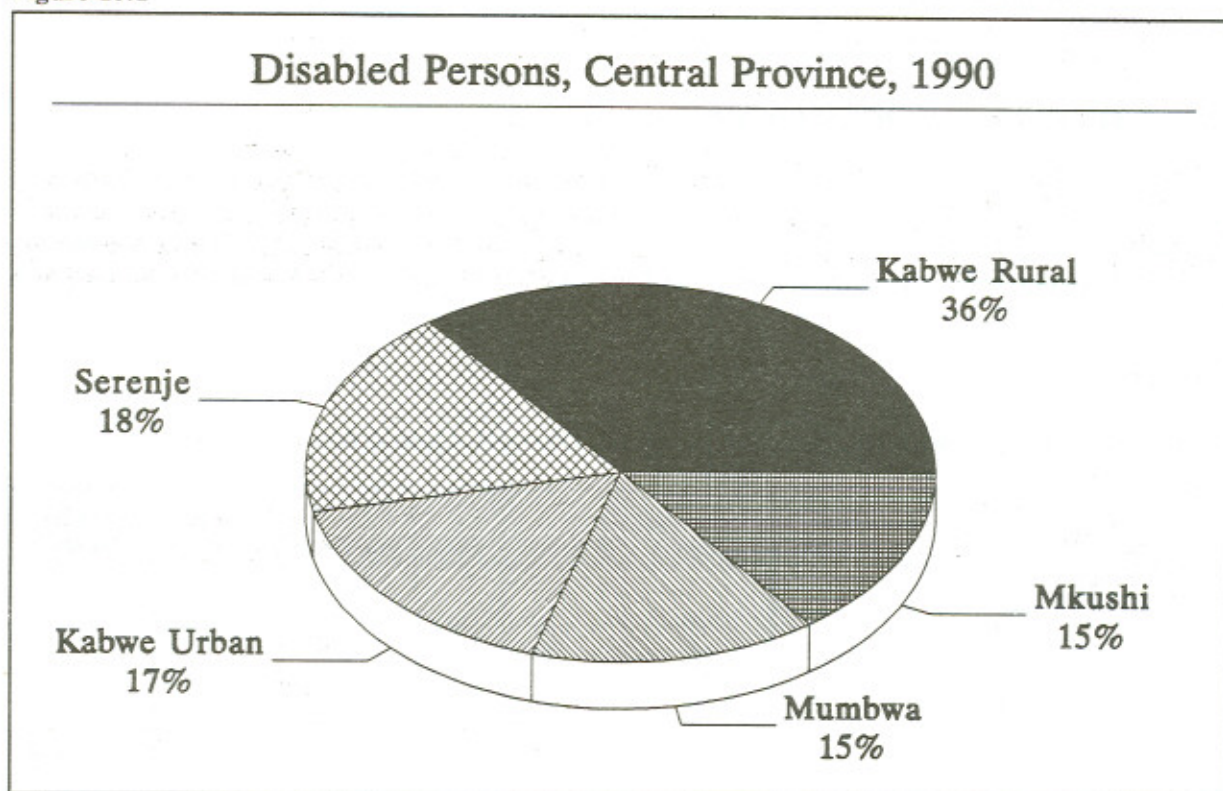
Table 10.1

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

Residence and Sex	Total Number	Percentage Total	Crippled	Blind	Deaf/Dumb	Mentally Retarded	Multiple Disabilities
Central Province							
- Total	5,376	100	28.6	16.2	14.9	14.0	26.3
- Male	2,952	100	30.5	15.3	14.4	14.6	25.1
- Female	2,424	100	26.2	17.3	15.5	13.2	27.8
Rural							
- Total	4,198	100	29.5	17.1	16.0	12.7	24.7
- Male	2,304	100	31.6	16.3	15.3	13.4	23.4
- Female	1,894	100	27.0	18.1	16.9	11.8	26.2
Urban							
- Total	1,178	100	25.2	13.1	8.6	8.6	32.3
- Male	648	100	9.1	4.1	3.8	6.5	10.6
- Female	530	100	23.4	14.3	10.6	17.9	33.8
Districts							
Kabwe Rural							
- Total	1,910	100	30.2	16.0	13.2	11.0	29.5
- Male	1,045	100	32.1	16.1	12.9	11.8	27.2
- Female	865	100	28.0	15.8	13.6	10.2	32.4
Kabwe Urban							
- Total	912	100	22.5	12.1	10.3	20.3	34.9
- Male	483	100	23.0	10.1	10.1	21.3	35.4
- Female	429	100	21.9	14.2	10.5	19.1	34.3
Mkushi							
- Total	788	100	30.5	17.5	16.6	12.1	23.4
- Male	429	100	33.3	17.0	15.4	11.4	22.8
- Female	359	100	27.0	18.1	18.1	12.8	24.0
Mumbwa							
- Total	799	100	35.2	17.9	15.1	13.9	17.9
- Male	469	100	36.0	16.6	15.4	14.7	17.3
- Female	330	100	33.9	19.7	14.8	12.7	18.8
Serenje							
- Total	967	100	24.1	18.2	20.9	15.4	21.4
- Male	526	100	27.2	16.2	19.6	16.7	20.3
- Female	441	100	20.4	20.6	22.4	13.8	22.7

Table 10.1 also shows that the crippled constitute the largest proportion of the disabled at provincial level with 28.6 percent followed by those with multiple disabilities accounting for 26.3 percent. This pattern is similar to all districts except Kabwe Urban in which the largest proportion (about one-third) of the disabled comprises those with multiple disabilities.

Figure 10.1



In the province, 0.7 percent of the population comprises disabled persons (as shown in Table 10.2) of whom 0.2 percent are crippled, 0.1 percent blind, 0.1 percent dumb and deaf, 0.1 percent mentally retarded and 0.2 percent with multiple disabilities.

Table 10.2

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

Residence	Total	Crippled	Blind	Deaf/Dumb	Mentally Retarded	Multiple Disabilities
Central Province						
- Total	0.7	0.2	0.1	0.1	0.1	0.2
- Rural	0.8	0.2	0.1	0.1	0.1	0.2
- Urban	0.6	0.1	0.1	0.1	0.1	0.2
Districts						
Kabwe Rural	0.9	0.3	0.1	0.1	0.1	0.3
Kabwe Urban	0.6	0.1	0.1	0.1	0.1	0.2
Mkushi	0.7	0.2	0.1	0.1	0.1	0.2
Mumbwa	0.6	0.2	0.1	0.1	0.1	0.1
Serenje	0.9	0.2	0.2	0.2	0.1	0.2

About 1 percent of the population of Kabwe Rural and about the same of that of Serenje comprise the disabled while Kabwe Urban, Mkushi and Mumbwa have 0.6, 0.7 and 0.6 percent of their population recorded as disabled, respectively.

It is possible to be born with one form of disability or another. Disability can also be acquired after birth and in older ages. The loss of a limb is brought about mostly by various forms of accidents. This could explain the high proportion of crippled persons. For the multiple disabled, it is likely that loss of a limb in conjunction with another form of disability could dominate this category. The crippled and the multiple disabled together comprise over 50 percent of the disabled persons in the province.

Rural-Urban Distribution

Table 10.3 below shows that only about one-fifth of the disabled persons reside in urban areas while the rest are in rural areas. All forms of disabilities are more prevalent in rural than urban areas.

Table 10.3

Disabled Persons in Rural and Urban Areas, (Percent), Central Province, 1990

Residence	Type of Disability					
	Total	Crippled	Blind	Deaf/Dumb	Mentally Retarded	Multiple Disabilities
Central Province - Total	100.0	100.0	100.0	100.0	100.0	100.0
- Rural	78.1	80.7	82.3	84.0	70.8	73.2
- Urban	21.9	19.3	17.7	16.0	29.2	26.8
Districts						
Kabwe Rural - Total	100.0	100.0	100.0	100.0	100.0	100.0
- Rural	93.0	92.9	91.5	94.5	91.5	93.8
- Urban	7.0	7.1	8.5	5.5	8.5	6.2
Kabwe Urban - Total	100.0	100.0	100.0	100.0	100.0	100.0
- Urban	100.0	100.0	100.0	100.0	100.0	100.0
Mkushi - Total	100.0	100.0	100.0	100.0	100.0	100.0
- Rural	94.8	92.9	94.9	95.4	95.8	96.2
- Urban	5.2	7.1	5.1	4.6	4.2	3.8
Mumbwa - Total	100.0	100.0	100.0	100.0	100.0	100.0
- Rural	93.6	91.5	95.8	95.0	92.8	95.1
- Urban	6.4	8.5	4.2	5.0	7.2	4.9
Serenje - Total	100.0	100.0	100.0	100.0	100.0	100.0
- Rural	95.9	95.7	97.2	96.0	97.6	93.7
- Urban	4.1	4.3	2.8	4.0	2.7	6.3

The table above also shows that in all the districts, over 90 percent of the disabled persons are found in rural areas.

10.4. CHARACTERISTICS OF DISABLED PERSONS

Sex Ratios

The sex ratios for the disabled are shown in Table 10.4. The sex ratio for all the disabled persons in the province is 122. Among all types of disabilities, there are more males than females. The sex ratio at provincial level ranges from 108 among the blind to 142 among the crippled. In both rural and urban parts of the province, male dominance over females among disabled persons is most pronounced among

the crippled at provincial level. However, the pattern is different in Kabwe Rural, Kabwe Urban and Mumbwa Districts. Male dominance over females is mostly pronounced among the mentally retarded in Kabwe Rural and Mumbwa; and the dumb and deaf in Kabwe Urban District.

Table 10.4

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

Sex Ratio and Residence	Total	Crippled	Blind	Deaf/Dumb	Mentally Retarded	Multiple Disabilities
Central Province						
- Total	122.0	142.0	108.0	113.0	135.0	109.0
- Rural	121.7	142.5	109.3	110.0	137.5	108.9
- Urban	122.3	139.5	102.6	128.6	130.5	112.3
Districts						
Kabwe Rural	120.8	138.4	122.6	114.4	139.8	101.4
Kabwe Urban	114.2	118.1	80.3	180.9	125.6	116.3
Mkushi	119.5	147.4	112.3	101.5	106.5	114.0
Mumbwa	142.1	150.9	120.0	146.9	164.3	130.7
Serenje	119.3	158.9	93.4	104.0	144.3	107.0

Age Structure

Table 10.5 shows the distribution of disabled persons in broad age groups. Among the disabled children aged between 0-14 years, the largest proportion (40.8 percent) comprises those with multiple disabilities. About one-third of those aged 15-59 years are crippled. This may be attributed to various forms of accidents.

The largest proportion of disabled persons aged 60 years and above is that of the blind who make up 41.6 percent. The loss of sense of sight increases with age.

Table 10.5

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

Type of Disability	Age Group			
	Total	0-14	15-59	60+
Total	100.0	100.0	100.0	100.0
Crippled	28.6	20.5	33.5	27.0
Blind	16.2	10.2	12.8	41.6
Dumb/Deaf	14.9	18.1	13.9	12.2
Mentally Retarded	14.0	10.4	17.9	6.8
Multiple Disability	26.3	40.8	21.9	12.5

Usually Economically Active Disabled Population

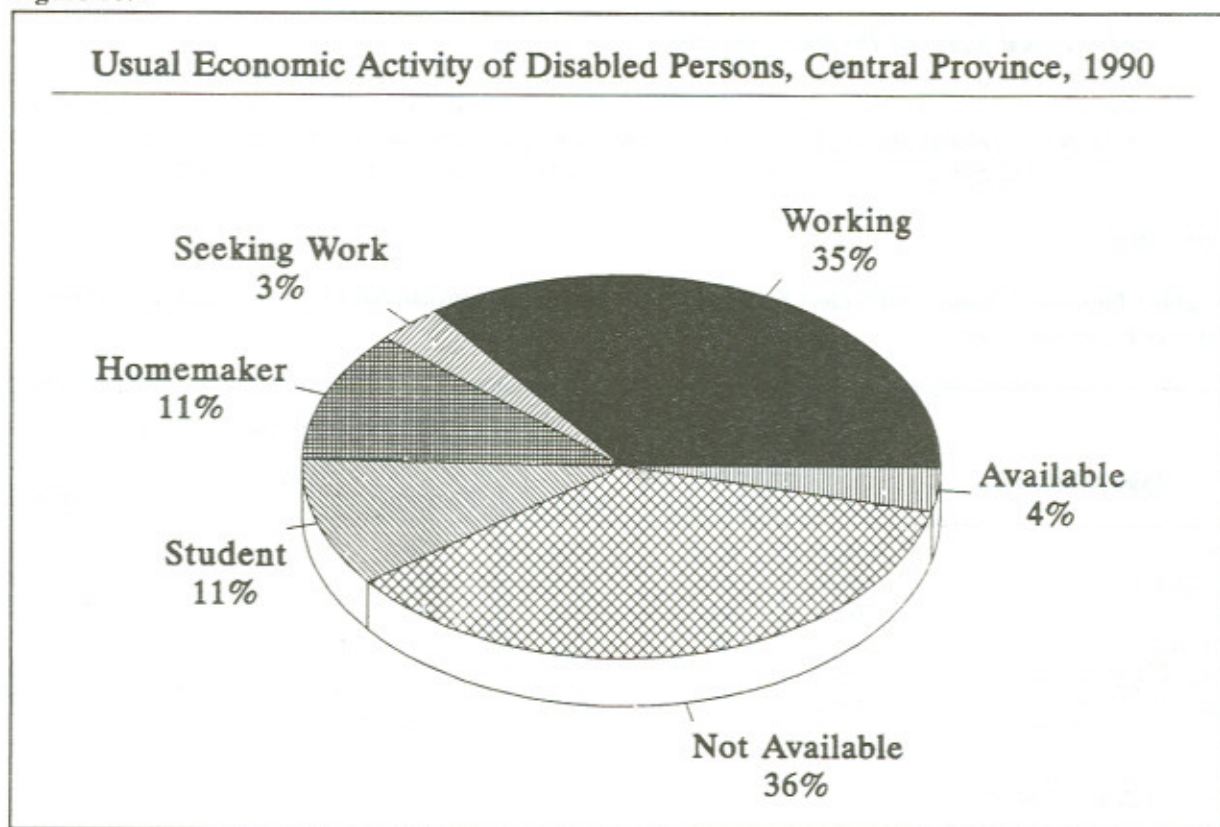
Table 10.6 shows the distribution of disabled persons by type of usual economic activity. The majority of the disabled persons are either working or not available for work and together account for almost 70 percent. A small percentage (3.2 percent) were seeking work while those available for work comprised 3.6 percent. Only 10.5 percent of the disabled reported to be students. Among the crippled persons over 40 percent were working and over 30 percent were not available for work. The large proportion of either working or not available for work among the disabled persons is evident in all types of disability.

Table 10.6

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

Usual Economic Activity	Type of Disability					
	Total	Crippled	Blind	Deaf/Dumb	Mentally Retarded	Multiple Disabilities
Total	100.0	100.0	100.0	100.0	100.0	100.0
Working	34.0	40.5	33.3	39.1	26.1	27.7
Seeking Work	3.2	3.2	1.2	4.1	3.8	3.7
Homemaker	10.9	10.6	10.1	11.6	7.4	14.4
Student	10.5	8.8	7.9	8.6	10.0	16.7
Not Available	34.9	31.4	42.9	31.0	43.8	29.3
Available	3.6	4.1	2.5	3.2	3.3	4.4
Not Stated	2.9	1.4	2.1	2.4	5.6	3.8

Figure 10.2



The employment status of the disabled persons is shown in Table 10.7. The majority of disabled persons are employed as family workers (45.8 percent). However, the majority of the crippled and blind are self employed. Among the crippled, 2.6 percent were employers while none was an employer among other types of disabilities.

Table 10.7

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

Type of Disability	Employment Status					
	Total	Employer	Employee	Self Employed	Family Worker	Not Stated
Total	100.0	0.8	20.2	29.6	45.8	3.6
Crippled	100.0	2.6	19.2	38.5	37.2	2.5
Blind	100.0	-	15.4	46.2	35.9	2.5
Deaf/Dumb	100.0	-	20.5	18.2	54.5	6.8
Mentally Retarded	100.0	-	27.1	16.7	54.2	2.0
Multiple Disabilities	100.0	-	18.2	25.0	52.3	4.5

Although being disabled may limit someone's participation in the economic activity, a sizeable proportion of the disabled persons in Central Province were engaged in some form of economic activity in 1990.

Educational Status of Disabled Population

Table 10.8 shows that the proportions of those who never received any formal education ranged from 51.1 percent among the crippled to 66.5 percent among the deaf and dumb. About 10 percent of the crippled and mentally retarded have attained secondary level of education in each case.

Table 10.8

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

Type of Disability	Level of Education					
	Total	No Education	Primary	Secondary	Higher Level	Not Stated
Total	100.0	57.4	32.0	7.6	0.1	2.9
Crippled	100.0	51.1	35.8	10.2	0.1	2.8
Blind	100.0	65.9	26.1	6.0	0.1	1.9
Deaf/Dumb	100.0	66.5	27.7	3.1	-	2.7
Mentally Retarded	100.0	60.4	27.4	10.0	-	2.2
Multiple Disabilities	100.0	51.8	36.8	7.0	-	4.4

10.5. CONCLUSION

The disabled population constitute a very small proportion to that of the whole population of Central Province. Out of 720,627 persons, only 5,376 have one or more types of disabilities. This constitute 0.7 percent. Rural and urban areas have 0.8 and 0.6 percent, respectively. Kabwe Rural and Serenje Districts have sizeable proportions of the disabled population in relation to other districts in Central Province. Most of the disabled persons are either crippled constituting 28.6 percent or have multiple disabilities with 26.3 percent.

An assessment of disabled persons aged 12 years and over by usual economic activity show high proportions of them as either working (34.0 percent) or not available for work (34.9 percent). In the case of those who reported as working, most of them were unpaid family workers and constituted 45.8 percent. Nearly 60 percent of the disabled persons have no formal education.

CHAPTER 11

HOUSEHOLDS AND HOUSING CHARACTERISTICS

11.1. INTRODUCTION

The 1990 Census collected data on housing characteristics, for every housing unit and household. 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 asked on household and housing characteristics.

11.2. CONCEPTS AND DEFINITIONS

Household

A group of persons who normally eat and live 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 head of the household.

Household Composition

Description of the household according to some aspect of its membership.

Headship Rate

Ratio of number of heads of households to the total population in a specified age and sex category. The measure also indicates the ratio of households in a population.

Housing Unit

An independent place of abode intended for habitation by at least one household.

Conventional Housing Unit

A structure(s) that has other facilities (e.g. kitchen, toilet, living room, pantry, etc.) in a permanent building intended for habitation by one household. The housing unit may be just one structure, several structures or part of a big structure. An unconventional housing unit is not intended for human habitation, although, it could have been habited at the time of interview.

Aqua Privy

A type of toilet that uses water in a bucket to sweep away human excreta in a gully that leads to the communal sewerage system.

11.3. HOUSING CHARACTERISTICS

Analysis of housing characteristics helps to gauge the standard of living of households. Provision of quality housing by both private organisations and government is essential if occurrence of diseases at household level is to be minimised. An unhealthy community does not contribute effectively to the overall development of the economy.

Number of Rooms Per Housing Unit

The number of rooms in a housing unit could be used to measure the quality of housing pertaining to various household sizes. Generally, in rural areas, several huts could belong to one household and these are treated, here, as rooms constituting one housing unit.

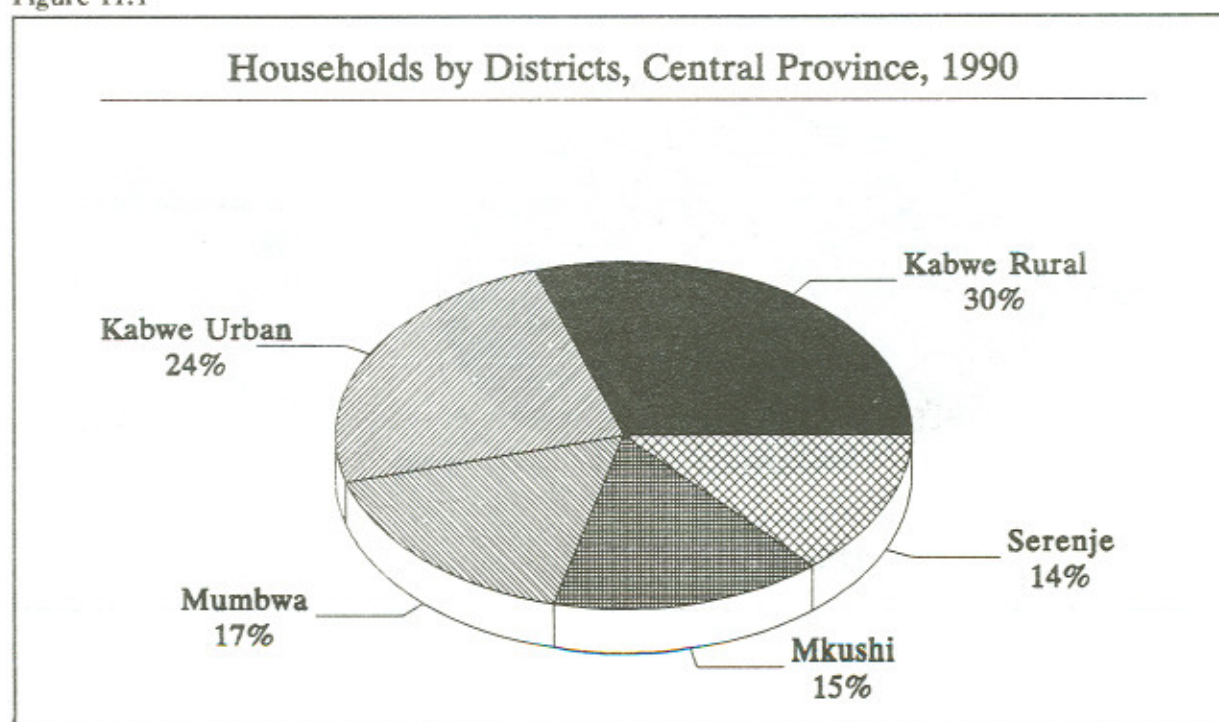
Table 11.1 shows that 45.6 percent of households in rural areas and 40.8 percent of those in urban areas occupy two-roomed housing units. Majority of households occupy 4 rooms or less in both rural and urban areas. In rural areas, the proportion of households occupying 4 roomed housing units or less is 91 percent altogether, while in urban areas, it is 92.7 percent.

Table 11.1

Households by Number of Rooms, Rural, Urban and Districts

	Total Households		Number of Rooms Per Housing Unit										Not Stated
			1	2	3	4	5	6	7	8	9	10+	
Central Province													
- Total	119,464	100	12.1	44.1	23.5	11.9	3.8	1.5	0.7	0.5	0.2	0.3	1.3
- Rural	81,624	100	13.9	45.6	21.4	10.0	3.9	1.5	0.8	0.7	0.2	0.4	1.4
- Urban	37,840	100	8.1	40.8	27.8	15.9	3.7	1.5	0.6	0.3	0.1	0.1	0.9
Districts													
- Kabwe Rural	35,884	100	12.2	48.0	20.6	10.2	3.9	1.4	0.7	0.5	0.2	0.5	1.8
- Kabwe Urban	29,022	100	8.1	41.1	27.7	16.0	3.6	1.6	0.7	0.2	0.1	0.1	0.7
- Mkushi	18,292	100	12.1	48.2	21.8	9.4	3.2	1.3	0.6	1.1	0.3	0.4	1.6
- Mumbwa	19,996	100	21.1	36.1	20.3	12.0	4.7	1.9	1.0	0.7	0.4	0.5	1.3
- Serenje	16,270	100	7.9	45.8	27.9	11.1	3.7	1.3	0.7	0.4	0.2	0.2	0.7

Figure 11.1



An assessment of number of rooms by districts shows that Mkushi and Kabwe Rural have the highest proportions of housing units with two rooms. The percentages of housing units with two rooms in Mkushi and Kabwe Rural Districts are 48.2 and 48.0 percent, respectively. Mumbwa District has the least proportion (36.1 percent) of housing units with less than two rooms.

Table 11.2

Households by Household Size, Number of Rooms and Residence, Central Province, 1990

Residence and Household Size	Households	Number of Rooms							
		Total	1	2	3	4	5	6+	Not Stated
Central Province									
Total	119,464	100	12.1	44.1	23.5	11.9	3.8	3.3	1.3
1-2	20,539	100	24.1	52.6	14.7	4.8	1.3	1.1	1.4
3-4	26,512	100	15.1	51.9	21.2	7.4	1.9	1.3	1.2
5-6	26,366	100	10.0	46.2	26.4	11.4	3.0	2.0	1.0
7+	46,047	100	6.2	34.6	27.0	18.0	6.6	6.3	1.3
Rural									
Total	81,624	100	14.0	45.6	21.4	10.0	3.9	3.7	1.4
1-2	13,512	100	26.3	52.9	12.8	4.3	1.2	1.0	1.5
3-4	17,900	100	17.2	52.9	19.1	6.2	1.8	1.3	1.4
5-6	17,643	100	12.6	48.1	23.7	9.5	2.9	1.9	1.3
7+	32,569	100	7.8	37.1	25.1	14.8	6.7	6.9	1.6
Urban									
Total	37,840	100	8.1	40.8	27.8	15.9	3.7	2.7	1.0
1-2	7,027	100	19.8	52.0	18.4	5.9	1.4	1.1	1.4
3-4	8,612	100	10.5	49.7	25.6	10.0	2.0	1.4	0.8
5-6	8,723	100	4.8	42.2	31.9	15.2	3.2	2.0	0.7
7+	13,478	100	2.5	28.5	31.5	25.6	6.2	4.7	1.0

Figure 11.2

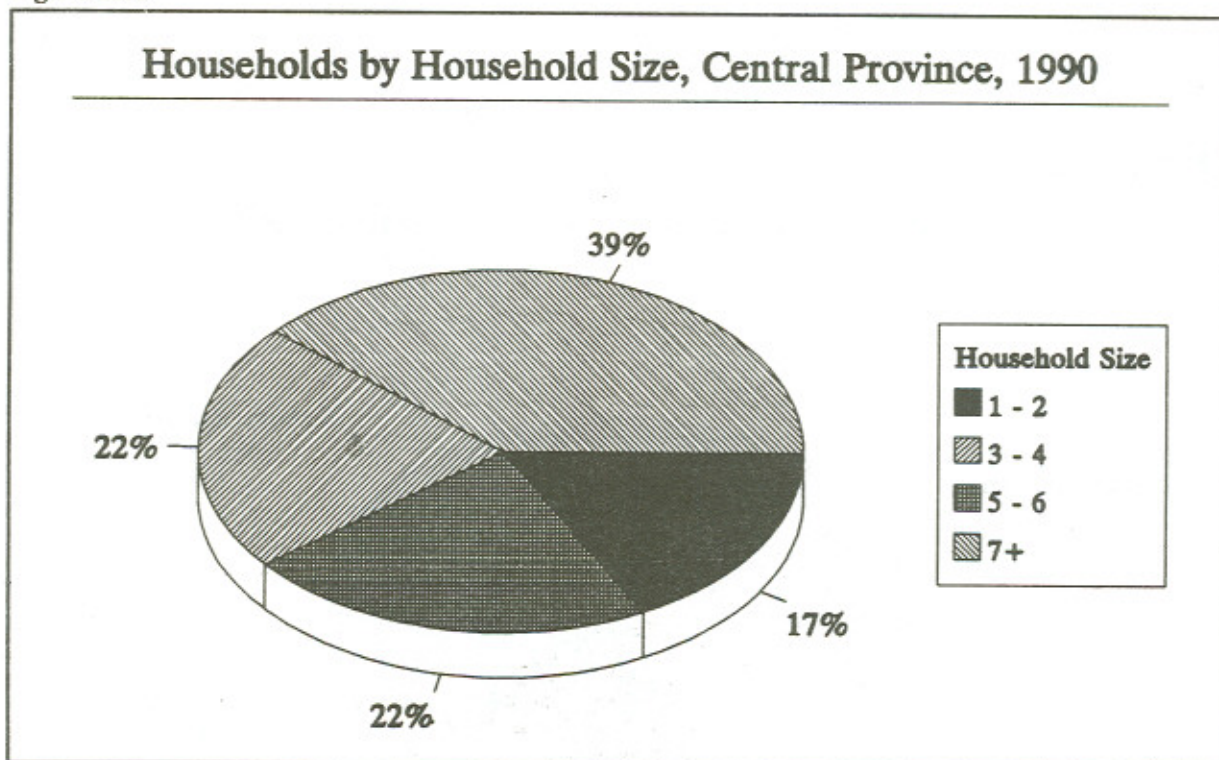


Table 11.2 shows the number of rooms, household size and residence. The element of over-crowding in a housing unit is introduced when the number of rooms becomes insufficient to accommodate a large number of household members. As earlier assessed 56.2 percent of housing units in Central Province have two rooms or less. Nevertheless, about 61 percent of households constitute at least five members. There is a higher proportion of households occupying 1 or 2 roomed structures with at least five members in rural than urban areas of the province.

Construction Materials of Walls and Roof

Quality building materials for constructing walls, roofs and floors of housing units increases the life span of such structures. Good quality materials include corrugated iron sheets, concrete and cement, asbestos and marble.

Table 11.3

Occupied Housing Units by Construction Materials of Walls and Roof, Central Province, 1990

Construction Materials of Walls	Housing Units	Total	Construction Materials of Roof						
			Concrete/Cement	Asbestos Sheets	Iron Sheet Corrugated	Grass/Thatch	Tiles	Other	Not Stated
Burnt Bricks	11,603	100	3.1	24.8	50.9	20.1	0.1	0.9	0.1
Mud Bricks	66,877	100	0.5	4.5	20.6	73.1	0.1	1.1	0.1
Concrete Blocks	20,263	100	2.8	68.6	26.9	0.9	0.1	0.4	0.2
Stone	153	100	2.6	3.9	25.5	66.7	-	-	1.3
Iron Sheets	715	100	1.5	7.3	72.7	10.8	0.8	1.0	5.9
Asbestos/Wood/Hardboard	445	100	2.5	52.8	16.0	19.3	0.4	5.2	3.8
Pole and Dagga	15,870	100	-	1.1	4.4	93.6	0.1	0.6	0.2
Grass	2,132	100	-	1.4	2.9	89.6	0.3	3.6	2.2
Other	1,156	100	0.5	2.9	9.0	41.6	0.6	6.9	38.5
Total	119,214	100	1.1	17.1	22.3	57.85	0.1	1.0	0.6

Figure 11.3

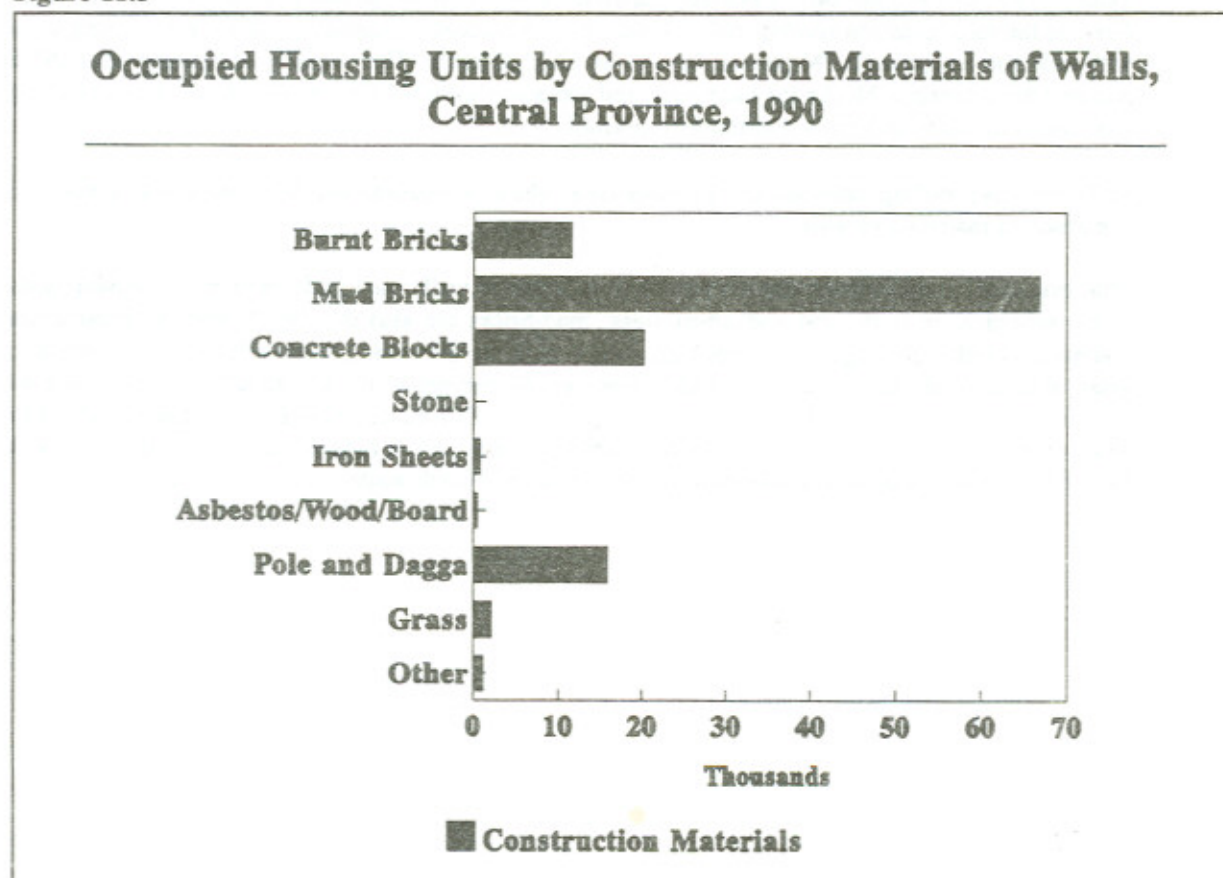


Figure 11.4

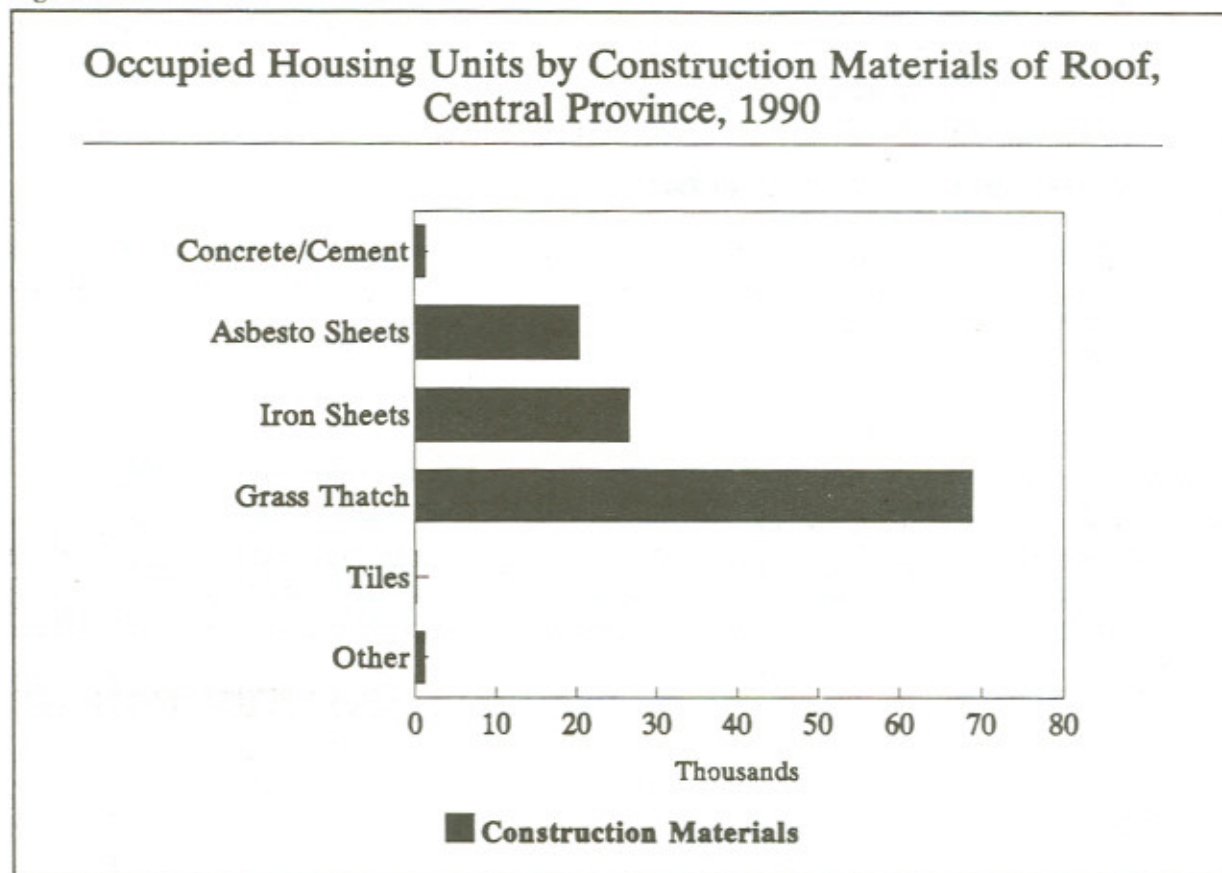


Table 11.3 shows proportions of building materials of walls cross-tabulated with those of the roofs. Grass is the most common roofing material used in 57.9 percent of housing units. Of the housing units with pole and dagga walls, 94 percent have grass thatched roofs. The majority of housing units (68.6 percent) have concrete blocks for their walls and asbestos sheets for their roofs. Housing units having iron sheets as walls and roofs constitute 73 percent.

In Table 11.4, roofing materials are the basis upon which proportions are calculated, with respect to construction materials of walls.

Mud bricks are the most common construction materials of walls used in 56 percent of housing units in the province. In both rural and urban areas, mud-bricks are also the most common construction materials of walls, although to varying degrees. The majority of housing units with roofs made of tiles, grass or iron sheets have mud-brick walls. However, 68 percent of these with asbestos roofs and 44 percent of these with concrete roofs have concrete walls. This pattern is similar to that of the urban areas of the province unlike the rural areas in which the majority of housing units with concrete roofs have burnt brick walls closely followed by those with mud-brick walls.

Table 11.4

Occupied Housing Units by Construction Materials of Walls and Roof, Central Province, 1990

Construction Materials of Walls	Total	Construction Materials of Roof						
		Concrete/Concrete	Asbestos Sheets	Iron Sheet Corrugated	Grass Thatch	Tile	Other	Not Stated
Central Province								
Burnt Bricks	9.7	27.2	14.2	22.2	3.4	11.6	8.4	1.8
Mud Bricks	56.1	26.7	14.9	51.7	70.9	43.4	59.5	12.9
Concrete Blocks	17.0	43.7	68.3	20.5	0.3	14.0	8.0	5.8
Stone	0.1	0.3	0.0	0.1	0.1	-	-	0.3
Iron Sheets	0.6	0.8	0.3	2.0	0.1	4.6	0.6	5.8
Asbestos/Wood/Hardboard	0.4	0.8	1.2	0.3	0.1	1.6	2.0	2.3
Pole and Dagga	13.3	-	0.8	2.6	21.6	14.0	7.8	3.8
Grass	1.8	-	0.1	0.2	2.8	5.4	6.7	6.6
Other	1.0	0.5	0.2	0.4	0.7	5.4	7.0	60.8
Total	100	100	100	100	100	100	100	100
Housing Units	119,214	1,316	20,344	26,631	68,929	129	1,135	730
Rural								
Burnt Bricks	9.2	34.2	18.5	30.0	3.5	8.8	2.4	1.6
Mud Bricks	61.3	33.0	20.5	47.0	68.8	46.3	22.0	13.3
Concrete Blocks	6.4	29.6	55.1	15.7	0.2	5.0	10.4	1.2
Stone	0.2	0.6	0.1	0.2	0.2	-	-	0.4
Iron Sheets	0.6	0.9	0.6	2.5	0.1	5.0	1.5	4.7
Asbestos/Wood/Hardboard	0.3	0.9	1.5	0.2	0.1	2.5	4.0	2.0
Pole and Dagga	18.5	-	3.0	3.8	23.4	21.2	23.2	5.1
Grass	2.5	-	0.3	0.3	3.0	6.2	21.4	7.1
Other	1.1	0.9	0.4	0.3	0.8	5.0	15.0	64.7
Total	100	100	100	100	100	100	100	100
Housing Units	81,517	685	4,828	14,095	60,992	80	327	510
Urban								
Burnt Bricks	10.9	19.7	12.8	13.4	2.7	16.3	10.8	2.3
Mud Bricks	44.9	19.8	13.1	57.1	87.7	38.8	74.6	11.8
Concrete Blocks	39.8	59.0	72.5	25.9	0.6	28.6	7.1	16.4
Stone	0.0	-	0.0	0.0	0.1	-	-	-
Iron Sheets	0.6	0.8	0.1	1.4	0.2	4.1	0.2	8.2
Asbestos/Wood/Hardboard	0.6	0.8	1.0	0.3	0.0	-	1.2	3.2
Pole and Dagga	2.2	-	0.2	1.3	7.5	2.0	1.5	0.9
Grass	0.3	-	0.1	0.1	1.0	4.1	0.7	5.5
Other	0.6	-	0.1	0.5	0.2	6.1	3.8	51.8
Total	100	100	100	100	100	100	100	100
Housing Units	37,697	631	15,516	12,536	7,937	49	808	220

Construction Materials of Walls and Floor.

Information derived from a combination of construction materials of walls and floor can be used as a proxy to explain for the occurrence of communicable diseases, especially among children below 15 years of age. The presence of bed bugs, ticks, flies, silverfish, fleas and other crawling insects that hide in the crevices of walls and floors provide an example of poor standards of living.

Table 11.5

Occupied Housing Units by Construction Material of Walls and Floor, Central Province, 1990

Construction Materials of Walls	Housing Units	Total	Construction Material of Floor					
			Concrete/Cement	Mud	Wood (not Wooden Tile)	Marble	Other	Not Stated
Burnt Bricks	11,603	100	72.8	26.0	0.5	0.1	0.4	0.2
Unburnt/Mud Bricks	66,877	100	16.2	83.1	0.2	0.1	0.1	0.3
Concrete Blocks/Slab	20,263	100	95.1	2.1	1.2	0.1	1.3	0.2
Stone	153	100	19.6	75.8	-	3.3	1.3	-
Iron Sheets	715	100	64.9	32.6	0.4	0.3	1.4	0.4
Asbestos/Hardboard/Wood	445	100	67.4	24.3	4.5	0.2	2.0	1.6
Pole and Dagga	15,870	100	2.9	95.8	0.3	0.1	0.6	0.4
Grass	2,132	100	2.5	89.3	0.3	0.4	5.2	2.3
Other	1,156	100	10.3	45.2	0.7	0.2	4.6	39.0
Total	119,214	100	33.5	64.7	0.4	0.1	0.6	0.7

Table 11.5 shows proportions of building materials of walls and floors calculated on the basis of construction materials of walls with respect to those of floors. Mud is the most common construction material of floors used in 65 percent of the housing units in the province, while 34 percent of housing units have concrete floors. Majority of housing units with walls made of mud bricks, stone, pole and dagga and grass have mud floors, used in at least 75 percent of housing units in each case. Nevertheless, concrete floors are most common in housing units with walls made of burnt bricks, concrete, asbestos and iron sheets.

Table 11.6

Occupied Housing Units by Construction Material of Walls and Floor, Central Province, 1990

Construction Materials of Walls	Total	Construction Materials of Floor					
		Concrete/Cement	Mud	Wood (not Wooden Tile)	Marble	Other	Not Stated
Central Province							
Burnt Bricks	9.7	21.1	3.9	10.7	10.0	6.7	3.4
Mud Bricks	56.1	27.1	72.1	28.1	53.1	11.5	19.4
Concrete Blocks	17.0	48.2	0.6	45.5	11.3	40.6	4.6
Stone	0.1	0.1	0.2	-	3.1	0.3	-
Iron Sheets	0.6	1.2	0.3	0.6	1.3	1.5	0.4
Asbestos/Wood/Hardboard	0.4	0.8	0.1	3.9	0.6	1.4	0.9
Pole and Dagga	13.3	1.1	19.7	8.3	13.8	13.5	7.4
Grass	1.8	0.3	2.5	1.4	5.6	16.5	6.3
Other	1.0	0.3	0.6	1.5	1.2	7.9	57.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Housing Units	119,214	39,965	77,123	516	160	667	783
Rural							
Burnt Bricks	9.2	14.7	3.0	13.4	5.7	14.7	3.4
Mud Bricks	61.3	24.8	88.1	16.5	42.9	13.8	18.1
Concrete Blocks	6.4	58.1	1.6	61.8	31.4	58.2	13.7
Stone	0.2	0.0	0.1	-	2.9	0.4	-
Iron Sheets	0.6	0.8	0.4	0.8	2.9	0.9	1.0
Asbestos/Wood/Hardboard	0.3	0.8	0.1	4.7	2.9	1.3	2.5
Pole and Dagga	18.5	0.4	5.7	0.8	8.6	-	1.0
Grass	2.5	0.1	0.7	0.4	-	4.4	5.9
Other	1.1	0.3	0.4	1.6	2.9	6.2	54.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Housing Units	81,517	24,924	12,055	254	35	225	204
Urban							
Burnt Bricks	10.9	14.7	3.0	13.4	5.7	14.7	3.4
Mud Bricks	44.9	24.8	88.1	16.5	42.9	13.8	18.1
Concrete Blocks	39.8	58.1	1.6	61.8	31.4	58.2	13.7
Stone	0.0	0.0	0.0	-	2.9	0.4	-
Iron Sheets	0.6	0.7	0.4	0.8	2.9	0.9	1.0
Asbestos/Wood/Hardboard	0.6	0.8	0.1	4.7	2.9	1.3	2.5
Pole and Dagga	2.1	0.4	5.7	0.8	8.5	-	1.0
Grass	0.3	0.1	0.7	0.4	-	4.4	5.9
Other	0.6	0.3	0.4	1.6	2.9	6.2	54.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Housing Units	37,697	24,924	12,055	254	35	225	204

In Table 11.6, construction materials of floors are the basis upon which proportions are calculated, with respect to building materials of walls. The majority of housing structures with floors made of mud or marble have mud brick walls. Concrete walls are most common in housing units with concrete or wooden floors. A similar pattern exists for both rural and urban areas of the province.

Ownership Status of Housing Units.

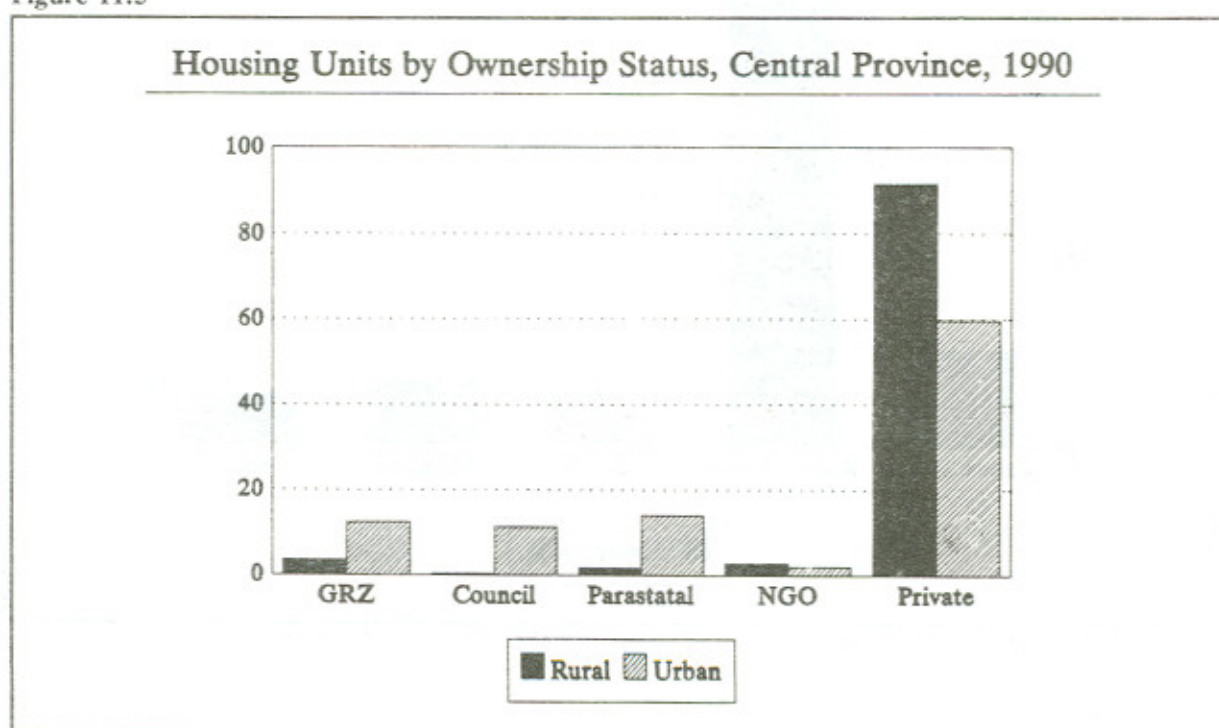
Table 11.7 shows that the majority of housing units are owned by individuals. The probable reason is that most of the housing units are in rural areas and are made of traditional cheap materials such as mud bricks and poles with grass or thatched roofs. Modern houses are owned mostly by institutions such as private and quasi-government organisations. Quasi-government organisation in Zambia are generally referred to as parastatals. The proportions of housing units owned by individuals, however, varies from 57.9 percent in Kabwe Urban District to 91.0 percent in Serenje. The high proportion of housing units in Kabwe Urban District owned by quasi-government organisations could be due to the presence of the mines and railways. The proportion of housing units owned by Kabwe Urban District Council is higher than that of housing units owned by the Central Government. In the remaining districts, the proportions of housing units owned by Central Government are higher than those owned by District Councils.

Table 11.7

Occupied Housing Units by Ownership Status, Central Province, 1990

Ownership	Total	Rural	Urban	District				
				Kabwe Rural	Kabwe Urban	Mkushi	Mumbwa	Serenje
Housing Units	119,214	81,517	37,697	35,839	28,890	18,278	19,968	16,239
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Central Government	6.23	3.42	12.30	3.37	11.68	3.87	7.30	4.16
District Council	3.71	0.20	11.28	0.45	12.90	1.06	0.71	1.18
Quasi-Government	5.47	1.53	14.00	2.36	15.44	2.91	2.01	1.74
Private Organisation	2.39	2.61	1.93	3.78	1.50	3.94	0.60	1.37
Individual	81.41	91.42	59.78	88.91	57.89	87.17	88.90	91.02
Not Stated	0.79	0.82	0.71	1.13	0.59	1.05	0.48	0.53

Figure 11.5



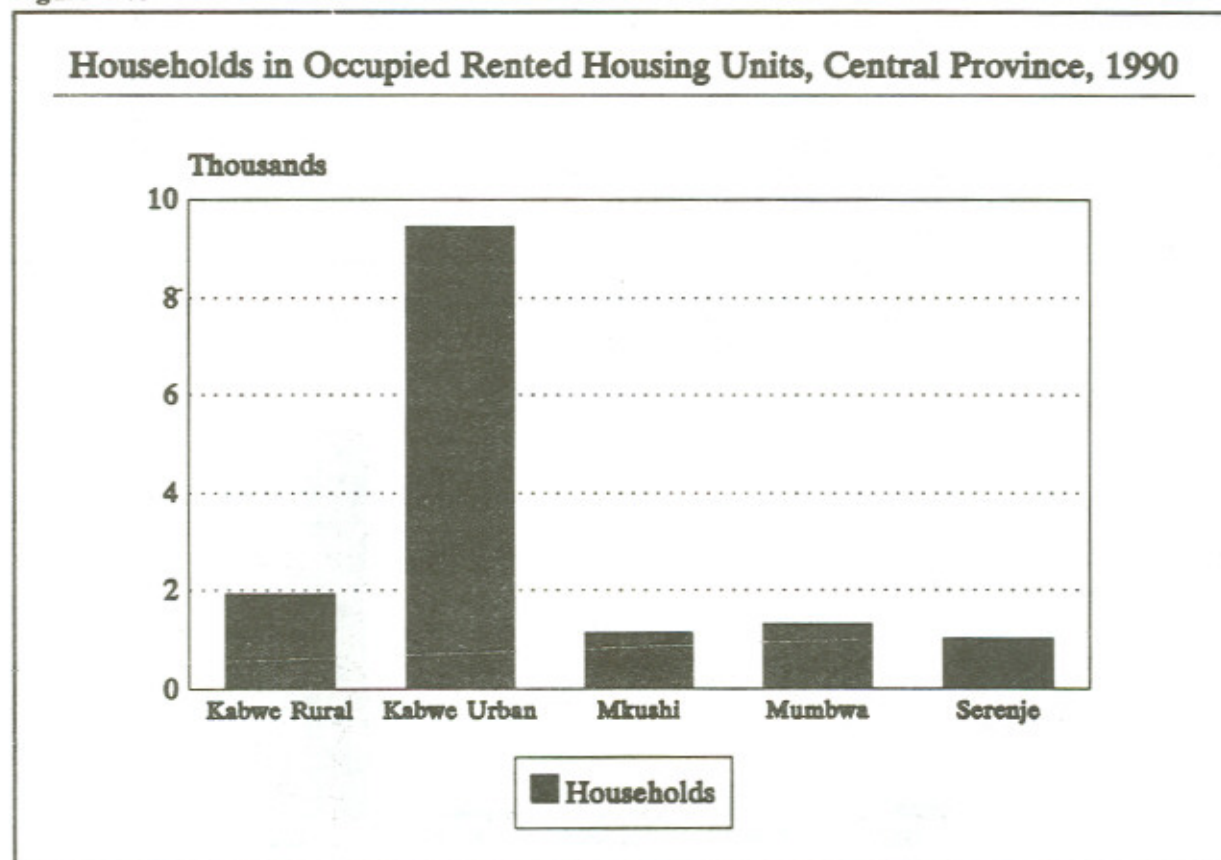
Renting of housing units is mostly an urban phenomenon. Considering that District Councils and Central Government do not own enough housing units, many employees resort to renting housing units from individuals. Out of 119,464 households, 14,807 households do not occupy own housing units. This represents 12.4 percent of households that do not have housing units of their own. Urban areas have a large share of these renting households with 79.2 percent. Overall, 36.3 percent of households rent from individuals. Proportions of households renting housing units from the Central Government and Parastatals are 19.3 percent and 19.1 percent, respectively. Refer to Table 11.8.

Table 11.8

Households in Occupied Rented Housing Units by Residence and Ownership, Central Province, 1990

Residence	Rented From							
	Number of Households	Total	Central Government	District Council	Quasi-Government	Private Organisation	Individual	Not Stated
Central Province								
- Total	14,807	100	19.3	17.6	19.1	2.9	36.3	4.8
- Rural	3,084	100	28.5	1.4	7.5	5.9	48.1	8.6
- Urban	11,723	100	16.8	21.9	22.2	2.1	33.2	3.8
Districts								
Kabwe Rural	1,916	100	18.0	3.2	11.3	5.7	51.1	10.7
Kabwe Urban	9,443	100	12.7	24.2	24.5	1.3	33.8	3.5
Mkushi	1,133	100	31.3	11.3	8.3	5.6	38.7	4.8
Mumbwa	1,298	100	37.4	7.7	6.3	2.7	41.4	4.5
Serenje	1,017	100	46.8	3.9	12.5	9.4	22.1	5.3

Figure 11.6



In rural areas, majority of households that do not own housing units, rent from individuals. These make up 48.1 percent. Central government offer rented housing units to 28.5 percent of rural households. The distribution of rented housing units vary slightly in urban areas. Even though the percentage of households that rent from individuals is still high at 33.2 percent, district councils and quasi-government have equally high proportions of renting households. Households that rent from quasi-government and district councils constitute 44.1 percent.

An assessment of households that rent housing units by district, show that Kabwe Urban has the highest number of households with 63.8 percent. Kabwe Rural and Mumbwa Districts have 12.9 and 8.8 percent, respectively.

Water Supply and Sanitation

Availability of clean water to households helps to minimise the occurrence of waterborne diseases such as dysentery, cholera, diarrhoea, bilharzia, etc. Sources of clean water supply include piped water inside or outside housing units, boreholes and protected wells. Cleanliness of water also depends on storage and treatment of fetched water.

Table 11.9 shows that most common sources of water supply are wells and boreholes used in over half of the households in the whole province. In rural areas, wells and boreholes are used by two-thirds of the households as compared to 22.0 percent in the urban areas. Urban areas are better served with piped water with 75.0 percent of households having access to this water supply source. Only 9.0 percent of households in rural areas have access to piped water.

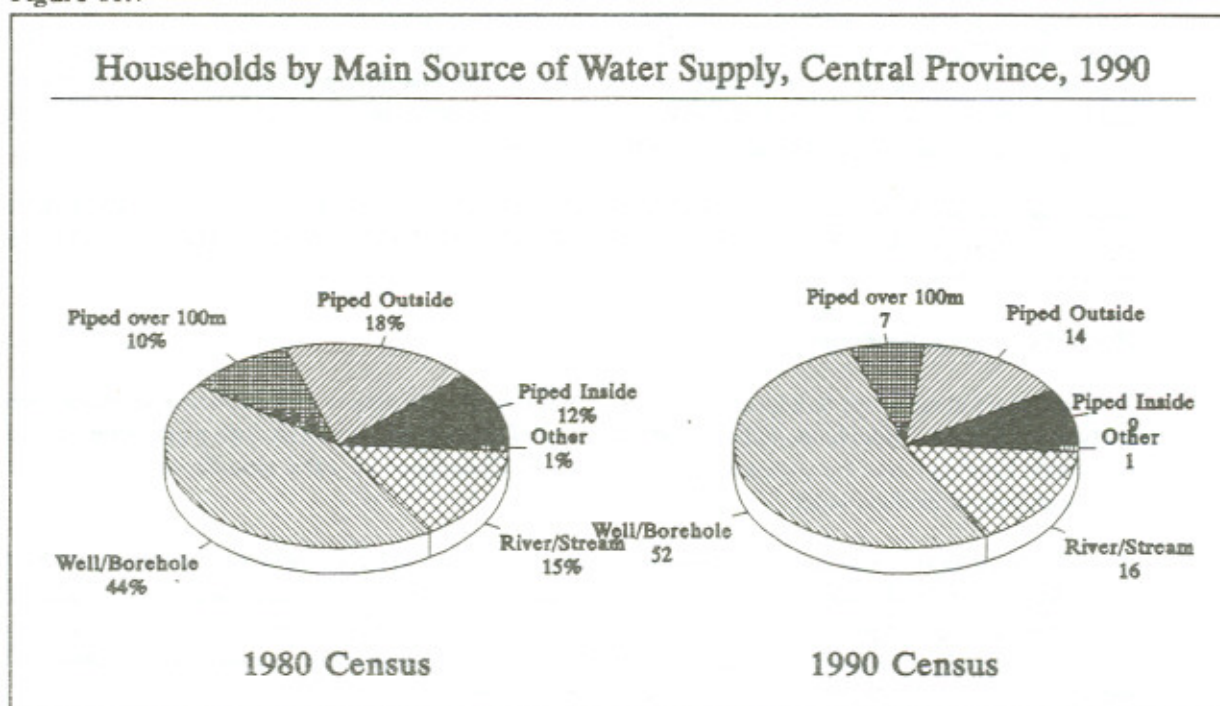
Table 11.9

Households by Main Source of Water Supply, Central Province, 1980 and 1990

Main Source of Water Supply	1980 Total	1990 Total	1990		Districts - 1990				
			Urban	Rural	Kabwe Urban	Kabwe Rural	Mikumi	Mumbwa	Serenje
Piped Water inside H/Unit	12	9	24	2	25	3	3	4	3
Piped Water outside H/Unit	18	14	34	5	35	6	9	9	5
Piped water Beyond 100m	10	7	17	2	19	3	3	3	2
Well/Borehole	44	52	22	66	19	75	36	75	52
River or Stream	15	16	1	23	-	9	45	8	36
Other	1	1	1	1	1	2	2	-	1
Not Stated	-	1	1	1	1	2	2	1	1
Total	100	100	100	100	100	100	100	100	100
Households	98,800	119,464	37,840	81,624	29,022	35,884	18,292	19,996	16,270

The proportion of housing units which depend on wells and boreholes as sources of water supply increased from 44.0 percent in 1980 to 52.0 percent in 1990. Similarly, the proportion of households with piped water dropped from 40.0 percent in 1980 to 30.0 percent in 1990. There is no substantial increase in the number of households that depend on rivers and streams as sources of water supply in the 1980-1990 intercensal period. The proportion entirely dependent on rivers or streams and other sources, rose from 16.0 percent in 1980 to 17.0 percent in 1990.

Figure 11.7



Mumbwa and Kabwe Rural Districts have three quarters of their households drawing water from boreholes and wells. A substantial number of households in Mkushi and Serenje Districts have unsafe sources of water supply. Proportions of households drawing water from rivers or streams are 45.0 and 36.0 percent for Mkushi and Serenje Districts, respectively. Availability of piped water in Kabwe Urban District is much more favourable as compared to other districts in Central Province. Households that are accessible to piped water constitute 79.0 percent in Kabwe Urban District.

Given the inadequate water supply situation, domestic and human waste disposal becomes very important especially in circumstances where the most common toilet facilities are pit-latrines. Refer to Table 11.9 for details.

Table 11.10

Households by Type of Toilet and Residence, Central Province, 1990

Type of Toilet	Total	Rural	Urban	Districts				
				Kabwe Rural	Kabwe Urban	Mkushi	Mumbwa	Serenje
Flush	13.6	2.4	37.7	4.6	41.2	4.0	5.6	5.0
Bucket	0.2	0.1	0.4	0.1	0.5	0.1	0.1	0.1
Aqua-Privy	0.2	0.2	0.1	0.2	0.1	0.3	0.1	0.2
Pit Latrine	62.1	65.4	54.9	61.6	52.1	67.3	53.4	85.6
Other	23.9	31.9	6.9	33.5	0.1	28.3	40.7	9.1
Total	100	100	100	100	100	100	100	100
Households	119,464	81,624	37,840	35,884	29,022	18,292	19,996	16,270

Table 11.10 shows the percentage distribution of households by type of toilet facility and residence. It is evident that 97.0 percent of the people in rural households depend on pit latrines and other means for human waste disposal. Human waste contains bacteria, parasites and nitrates which may contaminate drinking water. This can occur wherever pit latrines are located near ground water sources.

Domestic Energy

The utilization of six main sources of domestic cooking energy in Central Province are assessed using 1990 Census data. These are electricity, gas, kerosene, wood, charcoal and coal. In Central Province, the preference for these types of domestic energy, vary according to rural and urban areas and the type of occupied housing units.

Table 11.11

Households by Main Source of Energy used for Cooking and Type of Occupied Housing Unit, Central Province, 1990

Main Source of Energy for Cooking	Total	Conventional		Unconventional		Kabwe Rural	Kabwe Urban	Mkushi	Mumbwa	Serenje
		Urban	Rural	Urban	Rural					
Electricity	8	23	1	14	1	2	28	2	4	2
Gas	1	1	-	2	-	1	1	1	-	-
Paraffin	3	2	3	-	2	3	2	2	2	2
Wood	69	20	91	42	92	83	14	88	86	90
Charcoal	19	54	4	39	3	11	55	7	7	5
Coal	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	1	-	-	-	-	-
Not Stated	-	-	-	4	2	1	-	-	-	-
Total	100 *117,874	100 *36,989	100 *80,176	100 *108	100 *601	100 35,884	100 29,025	100 18,292	100 19,996	100 16,270

Note: * These totals exclude institutional households.

Wood fuel (charcoal and firewood), is the most important indigenous energy source for cooking in households. The proportion of households using firewood is 69.0 percent, while 19.0 percent use charcoal. This gives a proportion of 88.0 percent of households in Central Province which are entirely dependent on wood fuel for heating and cooking purposes.

In terms of energy preference, of the 36,989 urban households living in conventional housing units, 54.0 percent, 20.0 percent, and 23.0 percent use charcoal, firewood and electricity, respectively. The percentage share of other energy sources is only 3.0 percent.

The situation differs significantly for the 80,176 rural households living in conventional housing units. Slightly more than 90.0 percent of them depend on firewood and only 4.0 percent on charcoal. Less than 5 percent use kerosene and electricity. Therefore, charcoal and electricity are predominantly urban based energy fuels while firewood use is more pronounced in rural parts of Central Province.

Table 11.12

Households by Main Source of Energy used for Cooking, Central Province, 1980 and 1990

Energy Source	1980	1990
Electricity	7	8
Gas and Kerosene	2	4
Wood, Charcoal and Coal	91	88
Total	100 98,800	100 119,464

Table 11.12 shows the relative change in the number of households with regard to main source of energy used for cooking between 1980 and 1990. In the previous censuses, gas and kerosene were combined as one energy category and wood, charcoal and coal were also combined as another energy source category. In the 1990 Census, there was an improvement in the value of energy data. The relative importance of each energy source could be assessed, although, other energy sources such as cow dung and the emerging ones like, solar and biogas, etc. were not covered separately.

Table 11.13

Housing Units by Main Source of Energy Used for Lighting, Central Province, 1990

Main Source of Energy Used for Lighting	Total	Urban	Rural	Districts				
				Kabwe Urban	Kabwe Rural	Mikushi	Musshwa	Serenje
Electricity	13	37	2	40	5	4	7	4
Gas	1	1	1	1	1	1	1	1
Paraffin	81	59	92	56	89	89	89	89
Candle	1	2	1	1	1	1	1	1
Other	3	1	4	1	3	4	2	4
Not Stated	1	-	1	1	1	1	-	-
Total	100 119,214	100 81,517	100 37,697	100 35,839	100 28,890	100 18,278	100 19,968	100 16,239

Note: - Negligible

The most common energy source for lighting purposes is paraffin used in 80.0 percent of the housing units. The proportions of housing units that depend on paraffin as a major source of energy for lighting in rural and urban areas are 59.0 and 92.0 percent, respectively. However, a larger proportion of housing units in urban than rural areas use electricity for this purpose. Very few housing units use candles or gas for lighting purposes.

11.4. HOUSEHOLD SIZE AND COMPOSITION

Household Size

Table 11.14 shows the distribution of households according to sex of household head and household size. Male headed households are about six times more than the female headed households. The proportions of female headed households, are higher for households with sizes ranging from 1 to 5, while the proportions of male headed households are higher than female headed households with sizes ranging from 6 to 10 and over. This suggests that there is a tendency for male headed households to be larger than female headed households. It can be calculated from Table 11.14 that Kabwe Rural District has the largest number of households with 30.0 percent followed by Kabwe Urban District with 24.0 percent. The district with the least number of households is Serenje, with only 14.0 percent.

Table 11.14

Households by Size and Sex of Head, Central Province, 1990

Sex of Head	Household Size										
	No of H/Holds	1	2	3	4	5	6	7	8	9	10+
<u>Central Total</u>											
Male	101,240	6.86	9.18	10.41	11.31	11.42	10.72	9.64	8.07	6.48	15.91
Female	18,224	12.19	11.35	12.17	12.62	11.78	9.92	8.29	6.51	4.43	10.74
Both Sexes	119,464	7.68	9.51	10.68	11.51	11.47	10.60	9.44	7.83	6.16	15.12
<u>Kabwe Rural</u>											
Male	30,810	7.09	9.04	10.65	11.47	10.97	10.40	9.25	7.62	6.32	17.21
Female	5,074	13.54	12.08	12.20	12.63	11.36	8.79	7.96	5.97	4.49	10.98
Both Sexes	35,884	7.98	9.47	10.87	11.64	11.03	10.17	9.07	7.38	6.06	16.33
<u>Kabwe Urban</u>											
Male	24,626	7.80	10.31	10.69	11.38	11.80	11.22	10.08	8.51	6.47	11.63
Female	7,396	12.42	12.02	13.17	13.01	12.74	10.88	8.48	6.63	3.85	6.80
Both Sexes	29,022	8.50	10.57	11.07	11.64	11.94	11.26	9.84	8.22	6.07	10.89
<u>Mkushi</u>											
Male	15,818	6.86	9.61	11.17	11.39	11.69	10.63	9.68	7.98	6.04	14.95
Female	2,414	11.86	10.29	11.66	13.06	11.78	10.54	8.53	6.24	5.08	10.96
Both Sexes	18,292	7.52	9.70	11.24	11.62	11.75	10.61	9.52	7.25	5.91	14.42
<u>Mumbwa</u>											
Male	16,877	7.95	8.81	9.33	10.58	10.64	9.75	8.67	7.52	6.46	20.29
Female	3,119	14.20	12.79	12.60	12.11	11.05	9.36	7.44	5.74	3.65	11.06
Both Sexes	19,996	8.92	9.43	9.84	10.82	10.20	9.69	8.48	7.25	6.02	18.85
<u>Serenje</u>											
Male	13,049	3.22	7.32	9.76	11.61	12.43	11.70	10.95	9.16	7.44	16.41
Female	3,221	8.04	8.69	10.74	12.20	11.82	10.46	9.22	8.16	5.40	15.27
Both Sexes	16,270	4.16	7.59	9.96	11.73	12.31	10.46	10.61	8.96	7.04	16.18

The 1990 overall average household size for Central Province is 6.0 persons. Average household sizes for rural and urban areas are 6.2 and 5.6 persons, respectively. The 1980 average household sizes are lower than those for 1990 with an exception of urban areas where it has remained constant in the 1980-1990 intercensal period. Mumbwa and Serenje Districts have the highest household sizes of 6.4 persons as compared to other districts. Kabwe Urban District has the least household size of 5.6 persons. Mkushi District has 5.9 persons.

Male headed households have a high average household size of 6.2 as compared to female headed household size of 5.2 persons.

Table 11.15

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

	1990	1980
Central Province		
- Total	6.0	5.7
- Rural	6.2	5.7
- Urban	5.6	5.6
Sex of head		
- Male	6.2	-
- Female	5.2	-
Districts		
- Kabwe Rural	6.1	-
- Kabwe Urban	5.6	-
- Mkushi	5.9	-
- Mumbwa	6.4	-
- Serenje	6.4	-

The Table 11.16 below shows the household size for the years 1980 and 1990. Between 1980 and 1990, the proportion of households with a single member decreased from 10.0 percent in 1980 to 7.7 percent in 1990.

Table 11.16

Household Size, Central Province, 1980 and 1990

Number of Household Members	Year	
	1980	1990
Total	100.0	100.0
1	10.0	7.7
2-3	21.8	20.2
4-6	32.8	33.6
7+	35.4	38.5

The proportions of households with 2-3 members has also declined from 22.0 percent in 1980 to 20.0 percent in 1990. The situation may have been triggered by inadequate housing, forcing people to stay longer with their parents or relatives. Households with 4 - 6 members show an increase from 33.0 in 1980 to 34.0 percent in 1990. Similarly, households with 7 and more members show an increase from 35.0 percent in 1980 to 39.0 percent in 1990.

Household Composition

In this section, age, sex, and marital status of household head are discussed with the use of Tables 11.17 and 11.18. Other variables of importance are relationship of members to household head, economic status of household heads and presence of children below 12 years.

Marital Status of Household Heads

Marital status by sex shows a high percentage of male household heads who are married compared to married female household heads. The proportions of married male household heads is 84.0 percent while that of married female heads is 15.0 percent.

There is no significant difference in the proportions of married male household heads in both rural and urban areas of Central Province. However, there is a low proportion of married female household heads in the urban as compared to those in the rural areas. Proportions of other marital status categories for male heads are lower than 10.0 percent.

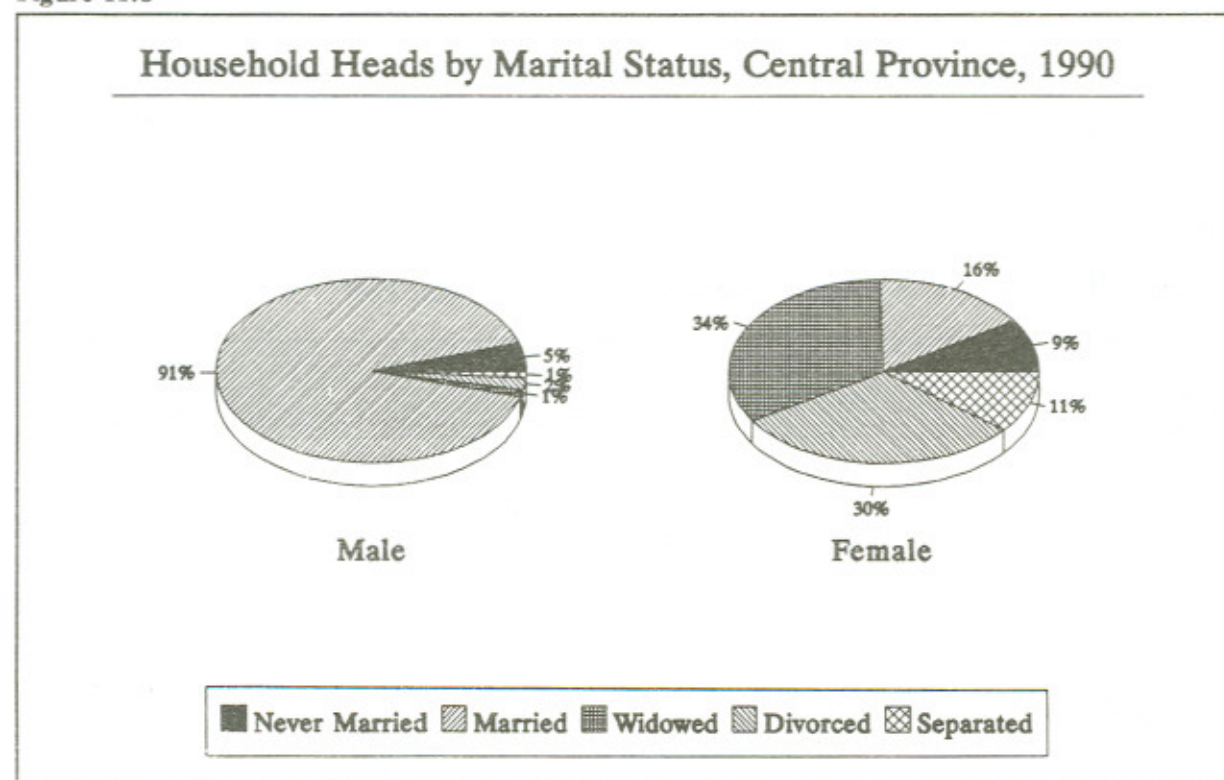
Proportions of widowed and divorced female household heads are high as compared to other marital status categories. Proportions range from 28.9 percent for divorced to 32.1 percent for widowed female household heads. The same pattern exists both in rural and urban areas. Another feature is that the proportion of divorced female household heads is higher in urban than rural areas as shown in Table 11.17 below. There are more female household heads who are widowed in the rural areas (34.8 percent) as compared to those in the urban areas (26.6 percent).

Table 11.17

Household Heads by Marital Status, Sex and Residence, Central Province, 1990

Marital Status	Provincial Total		Rural		Urban	
	Male	Female	Male	Female	Male	Female
Total	100.0	100.0	100.0	100.0	100.0	100.0
Never Married	4.7	8.8	3.8	6.2	6.9	14.4
Married	84.2	15.4	84.5	16.5	83.7	13.1
Widowed	1.1	32.1	1.2	34.8	1.0	26.6
Divorced	2.0	28.9	2.0	27.4	1.9	32.1
Separated	1.0	10.4	1.0	10.9	0.8	9.2
Not Stated	7.0	4.4	7.6	4.2	5.7	4.7

Figure 11.8



The percentages of heads of households by age, sex and marital status, show that marriage in Central Province is universal. This implies that most people marry at least once in their lifetime. This is shown in the "never married" category which has its peak at age group 20-24 years for the male heads, and 25-29 years for the female heads. Thereafter, percentages decline steadily up to age group 60-64 years. The married category has its peak at age group 30-34 years for the male heads and age group 40-44 years for the female heads of households.

Table 11.18

Household Heads by Marital Status, Age and Sex, Central Province, 1990

Age of household head	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
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	100.0
12 - 14	0.0	0.1	0.2	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
15 - 19	0.5	1.0	6.9	5.9	0.2	1.5	0.0	0.1	0.2	0.3	0.5	1.1	0.2	0.4
20 - 24	6.0	4.8	33.0	23.1	4.9	6.3	0.4	0.6	2.5	3.2	3.4	5.1	3.8	2.5
25 - 29	13.1	8.4	29.2	26.0	12.8	10.9	1.9	1.5	7.6	8.8	8.7	10.2	9.9	6.8
30 - 34	15.4	10.1	12.0	15.2	16.0	12.0	5.1	3.8	11.5	13.6	11.1	13.1	13.8	9.7
35 - 39	12.2	9.8	5.2	7.2	12.9	12.0	6.2	5.2	10.2	13.3	10.8	13.0	11.9	10.9
40 - 44	11.2	11.4	3.2	4.7	11.7	13.3	7.5	8.9	10.4	14.7	11.0	13.5	12.1	10.4
45 - 49	9.5	10.9	2.4	3.4	10.0	11.5	6.5	11.3	10.1	12.0	10.8	11.6	9.6	12.8
50 - 54	8.4	12.1	2.1	3.4	8.6	11.5	9.8	15.4	11.4	11.4	10.1	11.4	9.5	13.3
55 - 59	7.6	10.0	1.7	2.7	7.7	8.3	9.4	15.0	9.8	8.1	8.4	8.2	8.8	9.8
60 - 64	5.6	8.4	1.1	3.1	5.6	5.5	11.5	14.0	8.2	6.4	7.1	5.5	6.3	7.1
65 +	9.6	12.2	2.5	4.5	9.3	6.7	41.0	23.2	17.8	7.5	12.6	7.1	9.8	9.4
Not Stated	0.7	1.0	0.4	0.4	0.4	0.4	0.7	1.1	0.5	0.9	0.6	0.2	4.5	6.9

Education Level of Household Head

Table 11.19 shows percentage distribution of household heads by level of education completed in Central Province. Majority of household heads have either completed primary or never been to formal school. Overall, 38.6 percent of household heads have completed primary level of education while 34.0 percent have never been to formal school. Rural areas have high proportions of household heads having either primary level of education or no formal schooling as compared to urban areas. Rural areas have 41.9 percent of household heads with primary level of education as compared to 31.5 percent for urban areas. Similarly, 40.5 percent of household heads in rural areas have no formal schooling as compared to 20.1 percent for urban areas. Household heads who have completed secondary or higher levels of education comprise 46.7 percent of urban household heads compared to only 15.6 percent in rural areas.

Table 11.19

Household Heads by Level of Education Completed, Central Province, 1990

	Total	Level of Education				
		No Schooling	Primary	Secondary	Higher	Not Stated
Central Province						
- Total	100	34.0	38.6	25.1	0.4	1.9
- Rural	100	40.5	41.9	15.5	0.1	1.9
- Urban	100	20.1	31.5	45.9	0.8	1.6
Sex of Head						
Males	100	29.5	41.1	27.2	0.4	1.8
Females	100	59.3	25.0	13.8	0.1	1.8
Districts						
Kabwe Rural	100	38.7	40.6	18.1	0.1	2.5
Kabwe Urban	100	19.3	31.4	46.7	1.0	1.6
Mkushi	100	38.7	40.8	18.4	0.3	1.8
Mumbwa	100	37.8	40.1	20.8	0.2	1.1
Serenje	100	39.9	43.1	15.3	0.1	1.6

More of the female heads have never been to formal schools as compared to their male counterparts. The proportion of female heads with no formal schooling is 59.3 percent as compared to 29.5 percent for male heads. Household heads who have completed primary level of education are 41.1 percent for males and 25.0 percent for females. Male heads who have completed secondary and higher levels constitute 27.6 percent as compared to 13.9 percent of female heads.

Information on educational level of household heads by district shows that most of the heads in Kabwe Urban (47.7 percent) have completed secondary and higher levels as compared to other districts. Other districts have percentages ranging from 15.4 percent in Serenje to 21.0 percent in Mumbwa District. It should be noted that all rural districts of Kabwe Rural, Mkushi, Mumbwa and Serenje have higher proportions of household heads with no formal schooling and primary level of education.

Usually Economically Active Household Members

As explained in Chapter 6, the 1990 Census collected information on the economically active population aged 12 years and over. Data on economically active household members was not collected for those usual members who were absent at the time of the 1990 Census. Thus, Table 11.20 includes such type of households that had their usual economically active members absent at the time of enumeration.

Majority of households have one or two members who are usually economically active. A substantial number of households has no members who are usually economically active, especially at family sizes of 1-2 persons. At provincial level, 19.6 percent of households have no members who are usually economically active. In rural and urban areas, proportions of households without usually economically active members are 15.7 and 34.2 percent, respectively. Table 11.20 below provides more details.

Table 11.20

Households by Size and Number of Members Economically Active, Central Province, 1990

Household Size	Total	Members Usually Economically Active						
		0	1	2	3	4	5	6+
Central Province								
- Total	100	10.6	47.5	20.9	9.2	4.9	2.9	4.0
- 1-2	100	19.6	65.8	14.6	-	-	-	-
- 3-4	100	12.3	56.2	22.4	7.6	1.5	-	-
- 5-6	100	9.3	49.7	24.1	9.8	4.6	2.0	0.5
- 7+	100	6.4	33.2	21.1	13.9	9.3	6.3	9.8
Rural								
- Total	100	8.8	49.3	21.3	9.0	4.9	2.8	3.9
- 1-2	100	15.7	69.1	15.2	-	-	-	-
- 3-4	100	10.2	58.8	22.6	7.0	1.4	-	-
- 5-6	100	8.0	52.2	24.1	9.1	4.3	1.8	0.5
- 7+	100	5.6	34.7	21.5	13.7	9.0	6.0	9.5
Urban								
- Total	100	21.1	37.5	18.8	10.0	5.4	3.2	4.0
- 1-2	100	34.2	53.7	12.1	-	-	-	-
- 3-4	100	22.6	43.8	21.2	10.1	2.3	-	-
- 5-6	100	16.9	35.3	23.8	13.7	6.4	3.2	0.7
- 7+	100	12.6	21.3	18.3	15.0	11.7	8.3	12.8

Relationship to Household Head

Distribution of households by relationship of household members to household heads shows that 94.7 percent of household heads are not in polygamous unions. Household heads that are married to more than one spouse constitute 5.3 percent.

The proportion of household heads in polygamous unions is higher in rural (6.8 percent) than urban areas (1.9 percent).

Family formation is incomplete without the presence of one's own sons or daughters in households. Households that have 4 sons or daughters constitute 60.8 percent. Those having 5 sons or daughters or more constitute 39.2 percent. The percentage of households with one or two step sons and daughters is 69.2 percent. A similar pattern emerges in both rural and urban areas. The above can be discerned from table 11.21.

Table 11.21

Households by Relationship to Household Head and Number of Persons, Central Province, 1990

Relationship to Household Head	Total Number	Total	Number of Persons					
			1	2	3	4	5	6+
Central Province								
- Spouse	90,089	100	94.7	4.1	0.8	0.2	0.1	0.1
- Own Son/Daughter	94,581	100	16.4	16.5	14.7	13.2	11.2	28.0
- Step Son/Daughter	5,051	100	46.4	22.8	12.7	7.2	4.4	6.5
- Other Relations	55,665	100	38.2	22.2	13.2	8.8	5.4	12.2
- Unrelated	4,321	100	63.0	17.2	7.0	3.5	2.3	6.9
- Not Stated	298	100	65.4	12.1	7.4	4.4	3.4	7.3
Rural								
- Spouse	62,403	100	93.2	5.2	1.1	0.3	0.1	0.1
- Own Son/Daughter	65,499	100	15.9	16.2	14.5	12.8	11.0	29.6
- Step Son/Daughter	3,898	100	45.4	22.3	12.8	7.5	4.5	7.5
- Other Relations	37,017	100	36.1	20.8	12.8	9.2	6.0	15.1
- Unrelated	2,863	100	62.1	17.5	7.8	3.9	2.9	5.8
- Not Stated	215	100	65.1	12.1	7.0	4.7	3.7	7.4
Urban								
- Spouse	27,686	100	98.1	1.7	0.2	0.0	0.0	0.0
- Own Son/Daughter	29,082	100	17.5	17.0	15.3	14.0	11.6	24.6
- Step Son/Daughter	1,153	100	49.8	24.5	12.5	6.2	3.9	3.2
- Other Relations	18,648	100	42.4	25.1	13.9	8.0	4.2	6.4
- Unrelated	1,458	100	64.8	16.8	5.4	2.8	1.3	8.9
- Not Stated	83	100	66.3	12.0	8.4	3.6	2.4	7.3

Living with relatives and other unrelated persons apart from sons and daughters is usually part of an African culture. Results from the 1990 Census show that 46.6 percent of households keep other relatives. The percentages for rural and urban areas are 45.3 and 49.3 percent of households that keep other relatives.

Children Below 12 Years Old

Presence of children below 12 years old in the households is a reflection of the existing fertility situation in a community. Results from the 1990 Census confirm the high fertility level in Central Province. This is especially true for male headed households. Male headed households with 4 children and more constitute 35.4 percent as compared to 25.5 percent for female headed households. The female headed households have a high percentage in the category of 1 child with 27.8 percent.

There are no major variations in rural areas between male and female headed households. However, in male headed households a high percentage of 37.1 is found for the category of 4 children and more as compared to 28.4 percent for female headed households. In urban areas, the proportion of never married females is higher than that of rural areas. Female headed households with 1 child constitute 32.3 percent as compared to 22.4 percent for male headed households.

Table 11.22

Households by Sex of Head and Number of Members Below 12 Years of Age, Central Province, 1990

Sex of Household Head and Residence		Total	Members Below 12 Years of Age			
			1	2	3	4+
Central Province						
	Male	100	21.2	22.6	20.8	35.4
	Female	100	27.8	26.6	20.1	25.5
Rural						
	Male	100	20.6	22.0	20.3	37.1
	Female	100	25.8	25.6	20.2	28.4
Urban						
	Male	100	22.4	24.0	22.0	31.6
	Female	100	32.3	28.6	19.9	19.2
Kabwe Rural						
	Male	100	21.6	22.5	19.8	36.1
	Female	100	28.3	26.7	19.1	25.9
Kabwe Urban						
	Male	100	22.7	24.2	22.3	30.8
	Female	100	32.5	28.8	20.3	18.4
Mkushi						
	Male	100	21.5	23.3	20.9	34.3
	Female	100	26.2	25.7	20.7	27.5
Mumbwa						
	Male	100	19.7	20.3	19.7	40.3
	Female	100	27.7	25.9	19.2	27.2
Serenje						
	Male	100	19.1	22.2	21.8	37.0
	Female	100	22.8	24.7	21.5	31.0

Table 11.22 shows that the highest percentage of females living with one child is found in Kabwe Urban District with 32.5 percent. Other districts with equally high percentages of females living with one child are Kabwe Rural and Mumbwa Districts with 28.3 and 27.7 percent, respectively. In the case of male headed households, Mumbwa District has 40.3 percent of households with 4 and more children.

Table 11.23

Age-Sex Specific Headship Rates, Central Province, 1980 and 1990

Age Group of Household Heads	1990 Population		Males		Females	
	Male	Female	1980	1990	1980	1990
15 - 19	46,069	47,422	3.1	1.2	3.5	0.4
20 - 24	33,637	36,981	24.3	18.2	9.3	2.3
25 - 29	25,030	27,406	61.6	53.2	15.1	5.6
30 - 34	20,746	20,925	78.6	70.1	14.9	8.8
35 - 39	14,418	13,855	84.6	85.8	16.9	12.9
40 - 44	12,376	12,865	81.9	91.8	22.8	16.2
45 - 49	10,199	10,547	79.9	94.6	24.3	18.8
50 - 54	8,886	9,098	85.5	96.1	27.5	24.2
55 - 59	7,892	6,549	86.5	96.9	29.6	27.7
60 - 64	5,890	4,879	85.1	95.5	34.9	31.2
65 +	10,650	7,040	80.7	91.4	29.4	31.6

Age-Specific Headship Rates, Central Province, 1980 and 1990

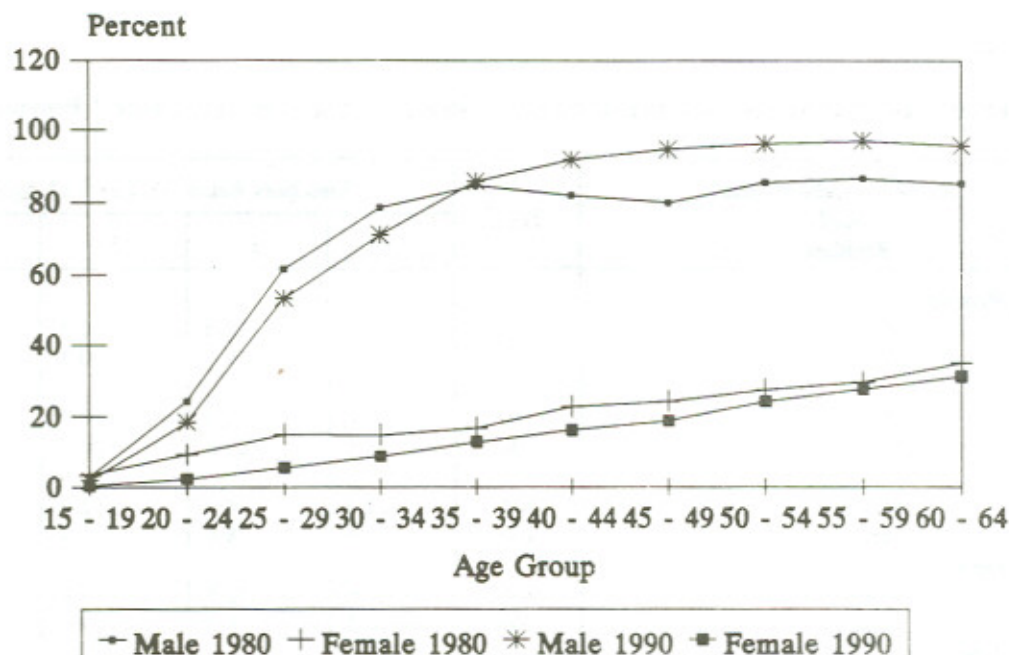


Table 11.23 shows a general decline in headship rates for females in the 1980-1990 intercensal period. This declining trend suggests the increasing of males as heads of households over their female counterparts in Central Province. In the case of males, declines are observed in age group 15-34 years. Majority of males are household heads by age 35 years with a proportion of 85.8 percent. In the older age groups above 39 years, proportions range from 91.8 percent in age group 40-44 years to 96.9 percent in age group 55-59 years.

11.5. CONCLUSION

This Chapter has used data from the 1990 Population Census to analyse household and housing characteristics pertaining to Central Province. It has been shown that the majority of households in rural areas, urban areas and the districts occupy two-roomed housing units. An insight into the element of overcrowding was introduced when average household size was analysed. It has been observed that about 61 percent of households constituted at least 5 members.

Mud bricks and grass thatch have been found to be the most common construction materials of walls and roofs in the province. In 65 percent of the housing units, mud has been found to be the construction material of floors. However, this has been associated with rural areas. In urban areas more durable construction materials of housing units such as concrete blocks, burnt mud bricks, corrugated iron sheets, asbestos, etc. have been found to be prevalent. It has been shown that ownership of those housing units are by individuals to a larger extent. This is because they are mostly found in the rural areas and are made of cheap construction materials.

Analysis of data on sources of water supply has shown that most of the households in the province fetch water from wells and boreholes. As regards human waste disposal, pit latrines have been found to be the most common in rural areas, urban areas and the districts. A proportion of 88 percent of households in the province are entirely dependent on wood fuel in terms of heating and cooking purposes. Almost the same magnitude of households use paraffin as a source of energy for lighting.

There is a tendency for male headed households to be larger than female headed households. Sizes mostly range from 1 - 5 and 6 - 10 for female and male headed households, respectively. Most household heads were observed to have completed only up to primary level of education. Many households have been found to have one or two household members who are usually economically active.

REFERENCES

- Agriculture, Ministry of (1994): 1989/90 Agriculture Statistics Bulletin, Statistics Section, Planning Division, Printed by Central Statistics Office, P.O. Box 31908, Lusaka, Zambia.
- Bureau of the Census (1979): Popstan: "A Case Study for the 1980 Censuses of Population and Housing, Part E" Washington D.C. USA.
- Bureau of the Census (1989): "Surveys on Economically Active Population, Employment, Unemployment and Underemployment: A Manual on Concepts and Methods", Paper presented at ILO Conference, Geneva, Switzerland.
- Central Statistical Office (1973): Census of Population and Housing 1969, Final Report, Vol II(a): Central Province, P.O. Box 31908, Lusaka, Printed by the Government Printers, Lusaka, Zambia.
- Central Statistical Office (1973): Census of Population and Housing 1969, Final Report, Vol I: Total Zambia, P.O. Box 31908, Lusaka, Printed by the Government Printers, Lusaka, Zambia.
- Central Statistical Office (1984): Selected Socio-Economic Indicators, P.O. Box 31908, Lusaka, Printed by the Government Printers, Lusaka, Zambia.
- Central Statistical Office (1985): 1980 Population and Housing Census of Zambia, Vol I. "Administrative Report", P.O. Box 31908, Lusaka, Printed by the CSO, Lusaka, Zambia.
- Central Statistical Office (1985): 1980 Population and Housing Census of Zambia, Analytical Report, Vol II. "Demographic and Socio-Economic Characteristics of Zambia Population", P.O. Box 31908, Lusaka, Printed by the Government Printers, Lusaka, Zambia.
- Central Statistical Office (1985): 1980 Population and Housing Census of Zambia, Analytical Report, Vol III. "Major Findings and Conclusions", P.O. Box 31908, Lusaka, Printed by the Government Printers, Lusaka, Zambia.
- Central Statistical Office (1985): 1980 Population and Housing Census of Zambia, Analytical Report, Vol IV. "Fertility and Mortality Levels and Trends" P.O. Box 31908 Lusaka, Printed by the Government Printers, Lusaka, Zambia.
- Central Statistical Office (1985): 1980 Population and Housing Census of Zambia, Analytical Report, Vol V. "Demographic Projections" P.O. Box 31908 Lusaka, Printed by the Government Printers, Lusaka, Zambia.
- Central Statistical Office (1985): 1980 Population and Housing Census of Zambia, Vol I. "General Population and Migration Tables" P.O. Box 31908 Lusaka, Printed by the Government Printers, Lusaka, Zambia.

- Central Statistical Office (1985): 1980 Population and Housing Census of Zambia, Vol 2. "Socio-Economic Tables", Parts 1 and 2, P.O. Box 31908 Lusaka, Printed by the Government Printers, Lusaka, Zambia.
- Central Statistical Office (1985): 1980 Population and Housing Census of Zambia, Vol 3. "Fertility Tables", P.O. Box 31908 Lusaka, Printed by the Government Printers, Lusaka, Zambia.
- Central Statistical Office (1986): Labourforce Survey, 1986, P.O. Box 31908 Lusaka, Printed by the Government Printers, Lusaka, Zambia.
- Central Statistical Office (1990): 1990 Population and Housing Census of Zambia, "Preliminary Report", P.O. Box 31908 Lusaka, Printed by Central Statistics Office, Lusaka, Zambia.
- Central Statistical Office (1990): 1990 Population and Housing Census of Zambia, "Enumerators Instructions Manual", P.O. Box 31908 Lusaka, Printed by Central Statistics Office, Lusaka, Zambia.
- Central Statistical Office (1991): 1990 Population and Housing Census of Zambia, "Draft Administrative Report", P.O. Box 31908 Lusaka, Printed by Central Statistics Office, Lusaka, Zambia.
- Central Statistical Office (1994): National Census of Agriculture (1990/92) "Census Report (Part I)", P.O. Box 31908 Lusaka, Printed by Central Statistics Office, Lusaka, Zambia.
- Central Statistical Office (1994): "Provincial Profile of Matebeleland North", Harare, Zimbabwe.
- Central Statistical Office (1992): Country Profile - 1992, P.O. Box 31908 Lusaka, Printed by Central Statistics Office, Lusaka, Zambia.
- Central Statistical Office (1993): "Mineral and Electricity Production Statistics Quarterly Bulletin" Unpublished report, P.O. Box 31908, Lusaka, Zambia.
- Central Statistical Office (1993): Priority Survey I - 1991 Report, Social Dimensions of Adjustment (SDA), P.O. Box 31908, Lusaka, Printed by Co-operative College, Lusaka, Zambia.
- Central Statistical Office (1986): 1983 Housing and Population Census of Mauritius, Analysis Report Vol.I, "Evaluation of Data", Rose Hill, Mauritius.
- Central Statistical Office (1986): 1983 Housing and Population Census of Mauritius, Analysis Report Vol.II, "Education : Characteristics, Prospects and some Implications", Rose Hill, Mauritius.
- Central Statistical Office (1986): 1983 Housing and Population Census of Mauritius, Analysis Report Vol.III, "Households and Housing Needs: Estimates and Implications", Rose Hill, Mauritius.
- Central Statistical Office (1987): 1983 Housing and Population Census of Mauritius, Analysis Report Vol.IV, "Economic Activity: Characteristics and Prospects", Rose Hill, Mauritius.

- Central Statistical Office (1987): 1983 Housing and Population Census of Mauritius, Analysis Report Vol.V, "Population Distribution and Migration", Rose Hill, Mauritius.
- Central Statistical Office (1989): 1983 Housing and Population Census of Mauritius, Analysis Report Vol.VII, "Fertility", Rose Hill, Mauritius.
- Central Statistical Office (1988): 1983 Housing and Population Census of Mauritius, Analysis Report Vol.VIII, "Rodrigues: A Population Profile", Rose Hill, Mauritius.
- Coale, A. & Demeny, D. (1966): Regional Model Life Tables and Stable Populations, Princeton University Press, New Jersey, USA.
- Education, Ministry of (1988): Annual Report for the year 1987, Printed by Printing Services, Lusaka, Zambia.
- Education, Ministry of (1988): Educational Statistics - 1982, Printed by Printing Services, Lusaka, Zambia.
- Education, Ministry of (1991): Educational Statistics, 1986, Development Planning and Research Unit, P.O. Box 50464, Lusaka, Zambia.
- Education, Ministry of (1987): Educational Statistics, 1984, Development and Planning Unit, P.O. Box 50464, Printed by Printing Services, Educational Services Centre, Lusaka, Zambia.
- Education, Ministry of (1987): Annual Report - 1986, Department of Technical Education and Vocational Training, Printed by Printing Services, Educational Services Centre, Lusaka, Zambia.
- Education, Ministry of (1987): Educational Statistics, 1983, Development and Planning Unit, P.O. Box 50093, Printed by Printing Services, Educational Services Centre, Lusaka, Zambia.
- Education, Ministry of (1982): Educational Statistics, 1980, Development and Planning Unit, P.O. Box 50093, Printed by Printing Services, Educational Services Centre, Lusaka, Zambia.
- ECA/RIPS (1989): Workbook on Demographic Data Evaluation and Analysis, Based on ECA sub-Regional Training Workshop for Anglophone Countries held at RIPS, Accra, 1-19 August, 1988, Addis Ababa, Ethiopia.
- Etiene van de Walle (1982): Multilingual Demographic Dictionary, English Section, IUSSP, rue des Augustins, 34-4000 Liege, Belgium.
- Health, Ministry of (1990): Bulletin of Health Statistics, 1987-1988, Major Health Trends 1978-1988, Health Information Unit, P.O. Box 30205, Lusaka, Printed by Co-operative College, Lusaka Zambia.
- Health, Ministry of (1989): Bulletin of Health Statistics, 1985-1986, Major Health Trends 1976-1986, Health Information Unit, P.O. Box 30205, Lusaka, Printed by Co-operative College, Lusaka, Zambia.

- Health, Ministry of (1982): Country Health Profile 1978, Planning Unit, P.O. Box 30205, Lusaka, Printed by Government Printers, Lusaka, Zambia.
- Health, Ministry of (1990): Health Facilities in Zambia, 1990, Health Information Unit, P.O. Box 30205, Printed by Co-operative College, Lusaka, Zambia.
- Kelly, M.J. (1991): "Education in a Declining Economy, The Case of Zambia - 1975-1985", EDI Development Policy Case Series, Analytical Case Studies, Number 8, The World Bank, 1818 H Street, N.W. Washington, D.C. 20433, USA.
- NCDP, Ministry of (1988): New Economic Recovery Programme, Interim National Development Plan, Progress Report No.2, P.O. 50268, Lusaka, Printed by Government Printers, Lusaka, Zambia.
- NCDP, Ministry of (1989): New Economic Recovery Programme, Fourth National Development Plan, 1989-1993, Vol. II. P.O. Box 50268, Lusaka, Zambia. Printed by the Government Printers.
- NCDP, Ministry of (1993): Economic Review - January - June, 1993, P.O. Box 50268, Lusaka, Zambia. Printed by the Government Printers.
- NCDP, Ministry of (1989): Zambia's National Population Policy, P.O. Box 50268, Lusaka, Zambia. Printed by the Government Printers.
- NCDP, Ministry of (1989): Economic Report 1989, P.O. Box 50268, Lusaka, Zambia. Printed by the Government Printers.
- Newell, Colin (1988): Methods and Models in Demography, Belhaven Press, A division of Printer Publishers, London, UK.
- McGirr, N. & Pinal, J. (1985): Micro-Computer Programs for Demographic Analysis (MCPDA), (MS-DOS Version), Demographic Data for Development, Institute for Resource Development at Westinghouse, P.O. Box 866, Columbia, MD.21044, USA.
- Roland Pressat (1985): The Dictionary of Demography, Christopher Wilson (eds.) Basil Blackwell Ltd. 432 Park Avenue South, Suite 1503, New York 10016, USA.
- Shryock, S. & Siegel, S. (1976): Studies in Population, "The Methods and Materials of Demography", Condensed Edition, Academic Press, INC., 1250 Sixth Avenue, San Diego, California 92101, USA.
- United Nations (1968): "A System of Nations Accounts", Studies in Methods, Series F. No. 2, Rev.3 New York, USA.
- United Nations (1983): "Indirect Techniques for Demographic Estimation", Population Studies, No.81, Department of International Economic and Social Affairs.
- United Nations (1984): "Handbook of Household Surveys", Revised Edition, Studies in Methods, Series F No. 31, New York, USA.
- United Nations (1988): Population Studies, No.104, "MortPak-Lite, The United Nations Software Package for Mortality Measurement", Department of International Economic and Social Affairs, ST/ESA/SER.A/104.

APPENDIX I

PERSONS INVOLVED IN THE ANALYSIS

1990 CENSUS ANALYSIS SECRETARIATE

MR. E.M. SILANDA
MR. M.F.C. BANDA
MR. R. ZULU
MR. K. DZEKEDZEKE
MR. C. MULENGA
MR. P.M. CHEWE
MISS. M. TEMBO
MISS. S. SHIMWAMBWA

LIST OF ANALYSTS

MR. E.M. SILANDA
MR. M.F.C. BANDA
MR. G. MOYO
MR. R. ZULU
MR. P.M. CHEWE
MR. R. MALUNGO
MR. K. MWANSA
MISS. W. CHILALA
MISS. M. TEMBO
MISS. S.M. SHIMWAMBWA
MISS. N. NCHIMUNYA

LIST OF EDITORS

MR. D. S. DIANGAMO
MR. P. HAMAKONA
MR. E. M. SILANDA
MR. A. T. JERE
MR. M. F. C. BANDA

LIST OF PROGRAMMERS

MR. K. CHIPAKO
MR. M. KAKAR (UNFPA - DPA)
MR. R. KAONGA
MR. C. SAPELE
MR. L. MITI
MR. G. NAMASIKU
MR. E. KASHONA
MISS. S. MULENDEMA

LIST OF SUPPORT STAFF

MR. P. MUSENGE
MR. M.K. PHIRI
MR. A. NKOLE
MR. W. CHILESHE
MR. W. MWANAMONGA
MISS. B. KAKUMBI

APPENDIX II

STRICTLY CONFIDENTIAL

CENTRAL STATISTICAL OFFICE
P.O. BOX 31908,
LUSAKA



QUESTIONNAIRE SERIAL NO:

REPUBLIC OF ZAMBIA

FORM C P H A 9 0 0 1

QUESTIONNAIRE NO OF

1990 CENSUS OF POPULATION, HOUSING AND AGRICULTURE

QUESTIONNAIRE IDENTIFICATION			
1. PROVINCE NAME	<input type="text"/>		
2. DISTRICT NAME	<input type="text"/> <input type="text"/> 2 - 3		
3. CSA NUMBER	<input type="text"/> <input type="text"/> <input type="text"/> 4 - 6		
4. RURAL/URBAN	<input type="text"/> 7		
5. SEA NUMBER	<input type="text"/> 8	CD	<input type="text"/> 9
6. CENSUS BUILDING NUMBER (CBN)	<input type="text"/> <input type="text"/> <input type="text"/> 13 - 14		
7. HOUSING UNIT NUMBER (HUN)	<input type="text"/> <input type="text"/>		
8. HOUSEHOLD NUMBER (HHN)	<input type="text"/> 15		
AREA IDENTIFICATION			
9. VILLAGE/LOCALITY NAME			
10. RESIDENTIAL ADDRESS/VILLAGE NAME			
11. CHIEF'S AREA	<input type="text"/> <input type="text"/> <input type="text"/> 16 - 18		
12. WARD	<input type="text"/> <input type="text"/> 19 - 20		
13. INSTITUTION/COLLECTIVE QUARTER	<input type="text"/> 21		
ASSIGNMENT RECORD		INTERVIEW STATUS	
Name	Date	1 - Interview completed (Occupied)	
Enumerator	Completed	2 - Non - contact (Occupied)	
Supervisor	Checked	3 - Not interviewed (Vacant) -	
Coder	Coded	Go to H-1 on page 9	
Editor	Edited	4 - Non-residential - Go to H - 1 on page 9	
		<input type="text"/> 22	
SUMMARY COUNT (DE FACTO POPULATION CODE 1 AND 2 OF P-3)			
CODE	MALE	FEMALE	TOTAL
1			
2			
TOTAL			

FOR ALL PERSONS										
RECORD TYPE	SERIAL NUMBER	GENERAL CHARACTERISTICS								
		NAME	MEMBERSHIP STATUS	RELATIONSHIP	SEX	AGE	DISABILITY			
		(a) What is the name of the head of household?	Is.....a	What is.....'s relationship to the head of h/hold?	What is.....'s sex?	What is.....'s age?	Is.....			
		(b) What are the names of persons who spent last night here (other than the head of household)?	1- Usual member present last night? 2- Visitor? 3- Usual member absent? (Enter Code)	1- Head 2- Spouse 3- Own Son/daughter 4- Step Son/daughter 5- Other relative 6- Unrelated (Enter Code)	1 - Male 2 - Female	(Enter age in completed year or '00' if less than 1 year)	(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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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	4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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	7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

FOR ALL PERSONS

GENERAL CHARACTERISTICS

MIGRATION

S E R I A L N U M B E R	Where was.....born ?		What is.....'s country of citizenship ? (For non Zambians write name of country and enter its code; For Zambians just enter code 148)	How long has.....been continuously living in this district ? (Enter completed years and months)					
	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)		Years	Months				
						P - 8		P - 9	P - 10
						35 - 37	38	39 - 41	42 - 43 44 - 45
1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
5	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
6	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
7	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
8	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
9	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
0	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
5	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
6	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
7	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
8	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
9	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
0	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				

FOR ALL PERSONS					
GENERAL CHARACTERISTICS					
S E R I A L N U M B E R	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	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
5	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
6	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
7	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
8	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
9	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
0	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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6	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
7	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
8	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
9	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
0	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

FOR PERSONS 5 YEARS AND OVER

EDUCATION

S E R I A L N U M B E R	Can read and write in any language ?	Does.....go to any institution of learning ?	Did.....previously go to any institution of learning ?	What highest level of academic education has..... completed ?	What highest professional or vocational education has..... completed ?
	1 - Yes 2 - No	1 - Yes-Full time 2 - Yes-Part time 3 - Yes-Correspondence Go to P-17 4 - No	1 - Yes-Full time 2 - Yes-Part time 3 - Yes-Correspondence 4 - No - Go to P-18		(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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

FOR PERSONS 12 YEARS AND OVER

S E R I A L N U M B E R	ECONOMIC ACTIVITY	EMPLOYMENT STATUS	OCCUPATION	INDUSTRY	
	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.....'s main occupation since.....1989? (Write name of occupation and enter code) What kind of main product of service is (was) produced ? Where..... works/worked? (Write name of industry and enter code)	
	P - 19	P - 20	P - 21	P.....22	P.....23
	64	65	66	67 - 69	70 - 72
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

FOR PERSONS 12 YRS AND OVER		FOR FEMALES 12 YEARS AND OVER										
		FERTILITY (Own children ever born alive)										
S E R I A L N U M B E R	MARITAL STATUS 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)	AGE AT FIRST MARRIAGE 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)	LIVE BIRTH 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)	AGE AT FIRST LIVE BIRTH How old were you when you first had a live birth?	Of the children born to you alive -							
					How many children born to you are still alive? If 'None' enter '00' GO TO F-4c		a. How many are still living with you?		b. How many are living elsewhere in some other household?		c. How many died?	
					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
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

FOR FEMALES 12 YEARS AND OVER								GENERAL COMMENTS
FERTILITY (Own children ever born alive)								
SERIAL NUMBER	Have you had any live birth since.....1989 ? 1 Yes GO TO next person otherwise go to M-1 (Enter Code)	CHILDREN BORN IN LAST 12 months						
		Of the children born to you alive since.....1989 ?						
		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 - 5						
	93	94	95	96	97	98	99	
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

MORTALITY		HOUSING CHARACTERISTICS	
RECORD TYPE	M-1 Has there been any death in this household since...1989 ?	1 - Yes 2 - No - Go to HH-1	24
	M-2 How many died ? How many of these are -	Male ? Female ?	25 26
H	HOUSEHOLD CHARACTERISTICS		H-2 Type of roofing material
23	HH-1 What is the main source of energy used for energy used for lighting by this household ?	1 - Electricity 2 - Gas 3 - Paraffin/Kerosene 4 - 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 - Yes 2 - No - Go to HH-8	32
	HH-7 Was this housing unit -	1 - Built by any member of this household ? 2 - Bought ? 3 - Inherited/given	Go to HH-13 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 3 - No	34
	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 - An individual ? 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 have ?		39----41
	b. How many television sets does this household/institution have?		42----44
	H-1 Type of housing	1 - Single Structure 2 - Several Structures 3 - Part of Structure 4 - Improvised/makeshift 5 - Unintended 6 - Collective 7 - Institutional 8 - Other	45
	H-3 What are the walls of this housing unit made of?	1 - Burnt bricks 2 - Unburnt or mud bricks 3 - Concrete blocks/slab 4 - Stone 5 - Iron sheets 6 - Asbestos/hardboard/Wood 7 - Pole and dagga/mud 8 - Grass 9 - Other	46 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 bedrooms	51 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 - COMPLETE AGRICULTURE SUPPLEMENT	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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