2000 Census of Population and Housing

Southern Province Analytical Report

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Preface

The 2000 Census of Population and Housing was undertaken from 16th October to 15th November, 2000. This was the fourth census since Independence in 1964. The other three were carried out in 1969, 1980 and 1990. The 2000 Census operations were undertaken with the use of Grade 11 pupils as enumerators, Primary School Teachers as supervisors, Professionals from within Central Statistical Office and other government departments being as Trainers and Management Staff. Professionals and Technical Staff of the Central Statistical Office were assigned more technical and professional tasks.

This report presents detailed analysis of issues on evaluation of coverage and content errors; population, size, growth and composition; ethnicity and languages; economic and education characteristics; fertility; mortality and disability.

The success of the Census accrues to the dedicated support and involvement of a large number of institutions and individuals. My sincere thanks go to Co-operating partners namely the British Government, the Japanese Government, the United States Agency for International Development (USAID), United Nations Population Fund (UNFPA), the Norwegian Government, the Dutch Government, the Finnish Government, the Danish Government, the German Government, University of Michigan, the United Nations High Commission for Refugees (UNHCR) and the Canadian Government for providing financial, material and technical assistance which enabled the Central Statistical Office carry out the Census.

Finally, we would like to show gratitude to the people of Southern for co-operating in providing the valuable information, to the enumerators, supervisors, master trainers, provincial census officers, district census officers and to all others who contributed to the collection, processing and compilation of this valuable information in one way or another.

Dr. Buleti G. Nsemukila
Director of Census and Statistics

October, 2004

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Abbreviations/Acronyms

AIDS	Acquired Immune Deficiency Syndrome
ASFR	Age Specific Fertility Rate
CBR	Crude Birth Rate
CEB	Children Ever Born
CFS	Completed Family Size
CMR	Child Mortality Rate
CSO	Central Statistical Office
CWR	Child-Woman Ratio
EMIS	Education Management Information System
GDP	Gross Domestic Product
GFR	General Fertility Rate
GPI	Gender Parity Index
HIV	Human Immune Virus
ICF	International Classification of Functioning
IMR	Infant Mortality Rate
ISCED	International Standard Classification of Education
LCMS	living Conditions Monitoring Survey
NAC	National AIDS/STD/TB/ Council
NRR	Net Reproduction Rate
PAS	Population Analysis Spreadsheet
SAP	Structural Adjustment Programme
SADC	Southern African Development Community
TFR	Total Fertility Rate
UMR	Under-Five Mortality Rate
UN	United Nations
WHO	World Health Organisation
ZCS	Zambia Community School

Executive Summary

Southern province's population recorded as at 16th October 2000 (Census Night), is 1,212,124, comprising 601,440 males and 610,684 females. The majority of the population, 79 percent or 955,268 lives in rural areas, while the urban areas have the remaining 21 percent or 256,856.

Of the total population, 47.6 percent are below the age of 15, resulting in a median age of 17 years. Hence Southern Province has continued to have a young population with an in-built potential to grow for many years to come. Southern Province's population grew at an average annual growth rate of 2.8 percent between 1969-1980, 3.0 percent between 1980-1990, and finally 2.3 percent during the period, 1990-2000. Thus the province's population has continued to grow, though at a declining rate as of 2000.

The province's average population density stands at 14.2 persons per square kilometer, with the highest population density occurring in Livingstone district, with 148.6 persons per square kilometer.

Though Household-Headship is still dominated by males, the results from the census show that one in every six households or 17.3 percent is female headed. There is very little variation by rural or urban residence. Livingstone has the highest percentage of female-headed households at 20.2 percent.

A total of 1,051,663 persons reported their predominant language of communication in the 2000 census, with Tonga being the most spoken language, spoken by 69.8 percent of the population as their predominant language of communication, followed by Nyanja spoken by 5.5 percent, Lozi is spoken by 5.0 percent, Ila by 3.8 and Toka-leya by 3.6 percent of the population. English is used by only 0.8 percent of the population, as their predominant language of communication, despite it being the country's official language.

Census results show that 56.2 percent of the provincial population is literate i.e. is able to read and write in any language, with 60.8 of males and 50.9 percent of females able to read and write in any language.

Literacy rates have decreased marginally from the 1990 rate of 56.5 percent. Fifty-one percent of the population in rural areas can read and write in any language compared to 70 percent of the population in urban areas.

The provincial's labour force population stands at 319,198. However, economic participation rates stand at 67 percent for males, and 45 percent for females. The labour force has increased by 13.8 percent between 1990 and 2000. Seventy-eight percent of the labour force is in rural areas, while 22 percent is in urban areas. Slightly more than half of the labour force is in the young age group of 12-29 years.

The employed population increased by 7.1 percent between 1990 and 2000. The female employed population increased by 14.5 percent, while the male employed population increased by 3.1 percent.

The number of the unemployed increased by 68.5 percent between 1990 and 2000. The size of the male unemployed population increased by 79.2 percent, while that of females increased by 51.3 percent.

Economic activities are still organized around family labour as evidenced by the predominance (68 percent) of workers who are classified as either self-employed or unpaid family workers. In contrast,

only 29 percent of those classified as employees or employers. The transformation of the Zambian economy in the 1990's seems to have reduced employment opportunities in the formal sector, thereby forcing a large part of the labour force into the informal sector. There is a large concentration of workers (73percent) in the Agricultural and related occupations.

Southern province's fertility has continued to decline although at a slow pace. The drop in urban childbearing is the principle reason for the overall decline in fertility levels in the province. The Total Fertility Rate (TFR) for rural areas estimated at 6.8 is higher than the 4.8 estimated for urban areas. Southern province's TFR at 6.3 is relatively high.

Infant mortality rate has declined by about 4 percent in the period 1990-2000. However, the IMR is still high, with about one in every 11 infants dying before reaching their first birthday. Similarly, Childhood mortality rate has also declined by 6 percent in the period 1990 and 2000, from 69 to 65 deaths per 1000 children. Under-five mortality, however has recorded an increase of 17 percent in the period 1990 to 2000, with about one in seven under-five children dying before their fifth birthday. The decline in the IMR has not affected the Life Expectancy at birth, which has remained stagnant at 53 years throughout the period 1980- 2000. Adult survivorship levels have deteriorated between 1990-2000. Females have higher chances of surviving than males.

The disabled population forms 2.6 percent of total population of Southern province. The proportion of the disabled is higher in rural than urban areas. Physical disability is the most common type of disability affecting about 38.3 percent of the disabled population, while ex-mental is the least common type of disability accounting for 3 percent of the disabled population. Disease is the most common cause of disability reported by about 38.9 percent of the disabled population.

About two fifths of the disabled have never been to school. Slightly more than two fifths have completed primary education. Amongst all categories of disability, the largest proportions of the disabled are self-employed. The least proportion is among the employers. The most common occupation among the disabled is agriculture, which takes up about 80.6 percent.

Chapter 1

BACKGROUND CHARACTERISTICS

1.1 Geography

Found in the Southern part of Zambia, The province covers an area of 85,283 square kilometres, about 11.8 percent of the total area of Zambia. It forms boundaries with Western Province on the western side, Central Province in the north and Lusaka Province on the north-eastern side. It also shares borders with Zimbabwe, Botswana and Namibia in the south.

Administratively, the province is divided into eleven districts, namely: Choma, Gwembe, Itezhi-tezhi, Kalomo, Kazungula, Livingstone, Mazabuka, Monze, Namwala, Siavonga and Sinazongwe. Livingstone is the administrative capital of the province

Southern Province boasts of many tourist attractions, the major one being the Victoria Falls. There are four main rivers, the Zambezi, Kafue, Kalomo and Ngwezi and two man made lakes, Kariba and Itezhi-tezhi. Other attractions include Wildlife and Bird viewing in Musi-oTunya, Kafue and Lochnivar National Parks, Maramba Cultural Centre, Livingstone Museum, Rafting and boating, micro-flights, Bungi Jumping, Sichifulo and Mulobezi Game Management areas.

The Province lies in a low rainfall zone of the country. Temperatures range from 14°C to 35°C. The soil type of this province is mostly sandy loam, which is a plateau soil. Topographically, the province is divided into four areas, which are valley, plateau, escarpment and Kafue Flats. Kalahari sands are also found in the western parts of the province.

1.2 Population

Southern Province accounts for 12 percent of the country's population. This has been so since 1969. The total population currently stands at 1,212,124. This is a rise from 496,041 in 1969, 671,923 in 1980, and 965,591 in 1990. However, the population growth rate has declined from 2.8 percent during the 1969-1980 and 3.0 percent during the 1980-1990 periods to 2.3 percent between 1990-2000. This trend is similar to the national one. Southern Province's population growth rate (2.3 percent) in 2000 compares with that of the whole country (2.5 percent)

The provincial population density has increased from 5.8 in 1969, 7.9 in 1980, and 11.3 in 1990 to 14.4 persons per square kilometre in 2000. This is higher than the population density of the whole country by just one percentage point. Out of the 1,212,124 people enumerated in 2000, half were male and the other half were female.

At district level, Choma has the largest number of people with a population size of 204,898 followed by Mazabuka with 203,219 persons. Gwembe has the least number of people with a population size of 34,133. Livingstone, the provincial headquarters, is the most densely populated district with 148.6 persons per square kilometre. Itezhi-tezhi, a new district, on the other hand has the lowest population density with 2.7 persons per square kilometre.

Table 1.1: Population Distribution, Area, Density and Annual Growth Rate by District, Southern Province, 1969,1980, 1990 and 2000

District	Population				Area (Sq. Km)	Percentage Distribution				Density				Growth Rate (%)		
	1969	1980	1990	2000	2000	1969	1980	1990	2000	1969	1980	1990	2000	1969-80	1980-90	1990-00
Choma	91,980	130,416	170,687	204,898	7,296	19.8	19.5	17.7	16.7	13.4	17.9	23.4	28.1	2.9	2.3	1.8
Gwembe	76,451	20,666	39,785	34,133	3,879	15.4	3.1	4.1	2.8	6.1	4.1	10.3	8.8	-12.3	5.5	-1.5
Itezhi-tezhi	-	-	31,424	43,111	16,064	-	-	3.3	3.5	-	-	2.0	2.7	-	-	3.2
Kalomo	76,571	97,177	127,762	169,503	15,000	15.4	14.5	13.2	13.8	3.5	3.1	8.5	11.3	2.4	5.3	2.9
Kazungula	-	-	45,157	68,265	16,835	-	-	4.7	5.6	-	-	2.7	4.1	-	-	4.2
Livingstone	49,063	71,521	83,780	103,288	695	9.9	10.6	8.7	8.4	34.4	50.1	120.5	148.6	3.8	1.5	2.1
Mazabuka	159,376	112,258	162,321	203,219	6,242	32.1	16.7	16.8	16.6	23.3	16.4	26.0	32.6	-3.4	3.3	2.3
Monze	-	110,423	133,671	163,578	4,854	16.4	13.9	13.8	13.3	-	22.8	27.5	33.7	-	1.3	2.0
Namwala	36,600	56,058	61,848	82,810	5,687	8.3	9.2	6.4	6.8	1.7	2.6	10.9	14.6	4.4	4	3.0
Siavonga	-	29,633	37,497	58,864	3,871	-	4.4	3.9	4.8	-	11.3	9.7	15.2	-	1.6	4.6
Sinazongwe	-	43,771	71,659	80,455	4,860	-	6.5	7.4	6.6	-	8.8	14.7	16.6	-	3.8	1.2
Southern Province	496,041	671,923	965,591	1,212,124	85,283	100	100	100	100	5.8	7.9	11.3	14.4	2.8	3	2.3
Zambia	4,056,995	5,661,801	7,759,117	9,885,591	752,612	100	100	100	100	5.4	7.5	10.3	13.1	3.1	2.7	2.5

Sources: CSO, 1969,1980,1990,2000 Censuses of Population and Housing

1.3 Economy

Prior to 1991, Southern Province, especially Livingstone had many manufacturing (textile) industries. Currently, there are two textile industries, one dairy, one wood processing and one grain milling. There is substantial dairy and game ranching and a number of agro-processing operations in Choma and Mazabuka districts. In addition, medium scale ginneries are also established to support cotton industry in Kalomo and Sinazongwe. Sugar is produced in Mazabuka by Nakambala Sugar Plc, which employs about 6,036 people, while about 1,400 are employed by small-scale sugar cane out growers.

Coal Production at Maamba Collieries is the main mining activity in the province. Coal deposits are also found in other parts of Sinazongwe District. There is also exploitation of amethyst at Mapatizya Mine in Kalomo and tin in Choma at a Small-Scale Level.

1.4 Agriculture

Before 1991, Southern Province was the main producer of Zambia's staple food (maize). However, frequent droughts have led to a fall in production coupled with poor produce and input Marketing arrangements. In spite of the drought, however, the soils in Southern Province have a large potential for dry rice, wheat, maize and vegetables. Other crops include sorghum, cotton, tobacco and beans.

Since 1990, live stock population in the province has been going down. The number of cattle decreased by 46.3 percent, sheep by 49.6 percent, goats by 46.5 percent and pigs by 47 percent between 1996 to 1999. Animal diseases contributing to the decrease include corridor, east coast fever and foot and mouth.

1.5 Education

Southern Province has 880 institutions, which include 36 secondary schools, 121 basic, 516 primary, 204 community schools and three colleges. There are 5,996 primary and basic schoolteachers out of the required 6,663 in the province leaving a short fall of 667.

Enrolment in basic schools went up by 7.4 percent between 1997 and 2001. However, in high schools, enrolment decreased sharply by –50.67 percent during the same period, refer to Table 1.2 for details.

Table 1.2 Education Enrolments – Southern 1997 – 2001

School	1997	1998	1999	2000	2001
Basic Schools	220,695	217,024	226,082	226,082	237,157
High Schools	42,480	40,703	33,157	27,786	21,003

1.6 Health

The total number of health institutions in the province is 211, out of which 4 are General hospitals (two are run by mission), 10 district hospitals and 2 mission hospitals, 202 are Health Centres and five are health posts. Table 1.3 gives more information. Districts along the line of rail namely Kalomo, Choma, Livingstone, Monze and Mazabuka have more health facilities.

Table 1.3: Number of Health Institutions

DISTRICT	Government	Mission	Private	Total	Beds	Cots
Choma	24	5	4	33	716	47
Gwembe	8	2	-	10	135	16
Itezh-tezhi	13	-	-	13	89	4
Kalomo	21	5	-	26	357	63
Kazungula	14	-	-	14	102	2
Livingstone	12	-	1	13	429	145
Mazabuka	27	2	3	32	937	47
Monze	23	4	-	27	549	19
Namwala	12	1	-	13	113	5
Siavonga	14	2	-	16	256	8
Sinazongwe	13	-	1	14	347	19
Total	181	21	9	211	4,030	375

Source: Ministry of Health

1.7 HIV/AIDS

The disease burden in the province has been compounded by the HIV/AIDS pandemic, which is a major concern in the province. The 2001 Zambia Demographic and Health Survey estimated the HIV/AIDS levels to be about eighteen percent among adults aged 15- 49 years, This is above the national estimate of 16 percent, see table 1.4 for details.

Table 1.4: HIV Prevalence Among Men and Women Aged 15-49 Years by Province

Province	Percent Positive			Total Number Tested
	Men	Women	Total	
Central	13.4	16.8	15.3	306
Copperbelt	17.3	22.1	19.9	775
Eastern	11.0	16.1	13.7	471
Luapula	8.6	13.3	11.2	299
Lusaka	18.7	25.0	22.0	559
Northern	6.2	10.0	8.3	517
North-Western	9.5	8.8	9.2	166
Southern	14.6	20.2	17.6	408
Western	8.3	16.9	13.1	306
Zambia	12.9	17.8	15.6	3,807

Sources: CSO, CboH and ORC Macro: 2001/2002 ZDHS, February 2003, Page 236

Chapter 2

EVALUATION OF COVERAGE AND CONTENT ERRORS

2.1 Introduction

Data evaluation is the assessment of the quality of data. In evaluating the data, sometimes it is adjusted in order to ensure that it is of acceptable standard. The adjustment is done on the basis of the responses to the following questions that were asked during the Census:

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

2.2 Concepts and Definitions

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

- **Census of Population:** Complete enumeration of persons during a specified period in a demarcated geographical area.

- **Child-Woman Ratio:** Number of children aged 0-4 years in a population to every 1,000 women aged 15-49 years in the same population.

- **Content Error*:*** Mistake made in the recorded information in the census questionnaire either by the respondent or by the interviewer.

- **Coverage Error:** Under or over-enumeration in a population census due to either omission or duplication.

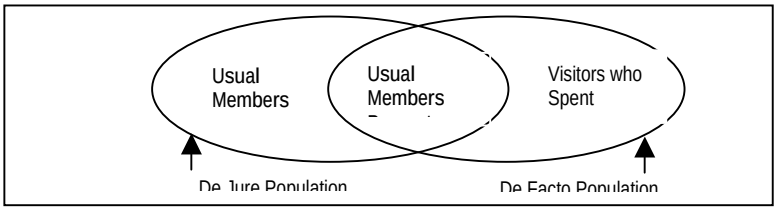
- De facto Population: **This refers to the usual household members present and visitors who spent the census night at any given household. This however excludes:**

(a) Foreign diplomatic personnel accredited to Zambia; and

(b) Zambian nationals accredited to foreign embassies and their family members who live with them abroad and, Zambian migrant workers and students in foreign countries who were not in the country at the time of the census.

- De jure Population: **This refers to usual household members present and usual household members temporarily absent at the time of the census. These include institutional populations in places such as hospitals/health centers, prisons and academic institutions (universities, colleges and boarding schools).**

Thus, the de facto and the de jure population can be diagrammatically represented as follows:



- **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 preferred digits. This results in heaping of population in ages ending with certain digits.

- **Evaluation of Census Data:** Measurement of the quality of Census data.

- **Sex Ratio:** Number of males per 100 females in a population.

2.3 Type of Population used in Evaluating the Coverage and Content Errors

In the analysis of the coverage and content errors, the de facto population has been used. This is so because we would like to analyse the information obtained from the people who gave us their details and not those we did not talk to or collect the information from.

2.4 Methods of Evaluation

During enumeration, checks and controls are instituted to minimise errors in the census. Despite instituting data control measures, there are usually several errors in the census data. For instance, some people may be completely omitted, others may be enumerated more than once, or some characteristics of an individual such as age, sex, fertility and economic activity of the canvassed individual may be incorrectly reported or tabulated. In general, two approaches are used to evaluate the quality of data, direct and indirect methods.

The direct method basically involves the carrying out of what is referred to as a Post Enumeration Survey (PES). In a PES, a sample of households is revisited after the census and data are again collected but on a smaller scale and later compared with that collected during the actual census. The matching process of the two sets of data can then be used to evaluate the quality of the census data. With regard to the 2000 Census of Population and Housing, the PES was carried out between February and March 2001. PES information is, however, only available for use at National Level, and therefore, will not be used to evaluate data quality at the Provincial Level.

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

2.4.1 Coverage Error

A coverage error is made when omission or duplication resulting in under- or over-enumeration occurs. Some factors, which contribute to this, include errors arising from inaccessibility and co-operation with respondents. Difficulties in communication and lack of proper boundary descriptions also contribute to coverage errors. Examining certain statistics such as growth rate, age composition, child-woman ratio and dependency ratio usually highlights coverage errors.

2.4.1.1 Age Composition

Table 2.1 shows the age composition of the population of Southern province for 1980,1990 and 2000 Censuses.

Table 2.1: Population Distribution by Broad Age Groups, Southern Province, 1980, 1990, and 2000

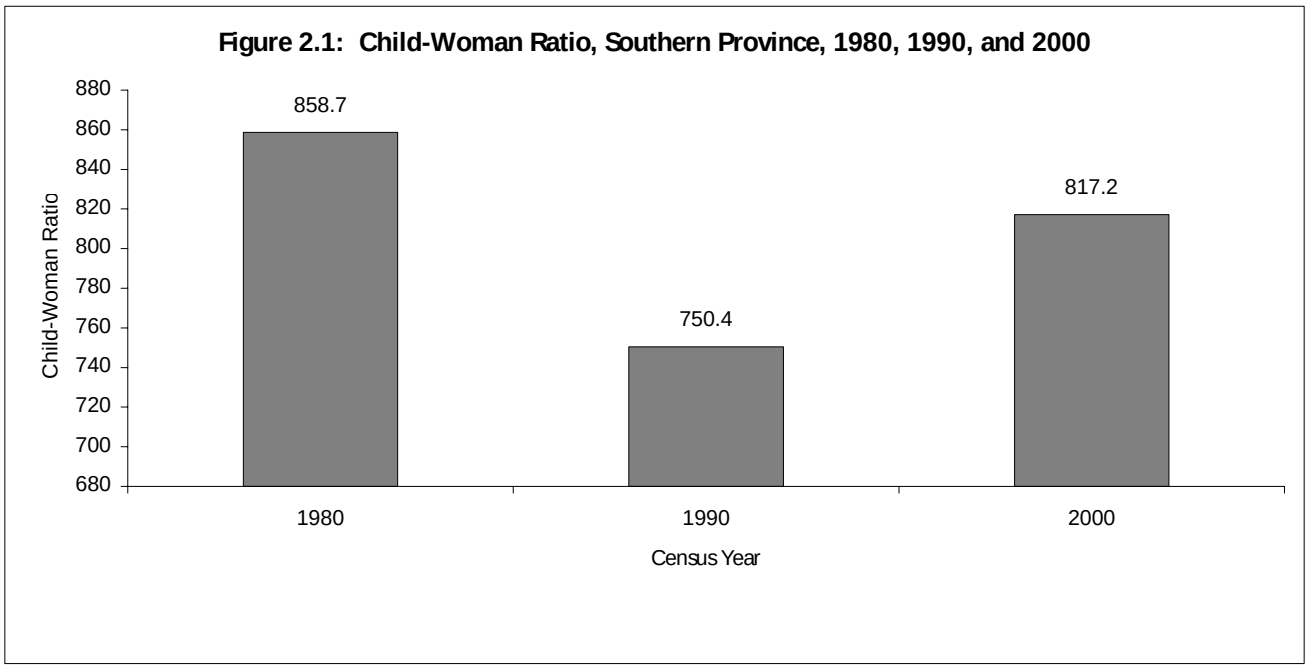
Age Group	Population					
	1980	Percent	1990	Percent	2000	Percent
0-14	342,311	50.9	431,328	47.5	552,669	48.8
15-64	311,616	46.4	454,427	50.1	551,416	48.7
65+	17,996	2.7	21,395	2.4	28,725	2.5
Total	671,923	100.0	907,150	100.0	1,132,810	100.0

Sources: CSO, 1980, 1990 and 2000 Censuses of Population and Housing

The proportion of children 0-14 years dropped from 50.9percent in 1980 to 47.5 percent in 1990 but rose to 48.8 percent in 2000. Both the 1990 and 2000 proportions for the persons aged 0-14 were lower than that of the 1980 Census. The proportion of adults (15-64) rose from 46.4 percent in 1980 to 50.1 percent in 1990 but later dropped to 48.7 percent in 2000. This could be attributed to the increase in adult mortality coupled with the effects of HIV/AIDS in this period. The proportion of those aged 65 years or older declined from 2.7 percent in 1980 to 2.4 percent in 1990 and showed a slight increase from 2.4 percent in 1990 to 2.5 percent in 2000. Generally, there is still a bigger proportion of the population in the age group 0-14 implying that the province has a young and youthful population (See Table 2.1 for details). This distribution shows that the quality of age data by broad age groups for the year 2000 is acceptable.

2.4.1.2 Child-Woman Ratio

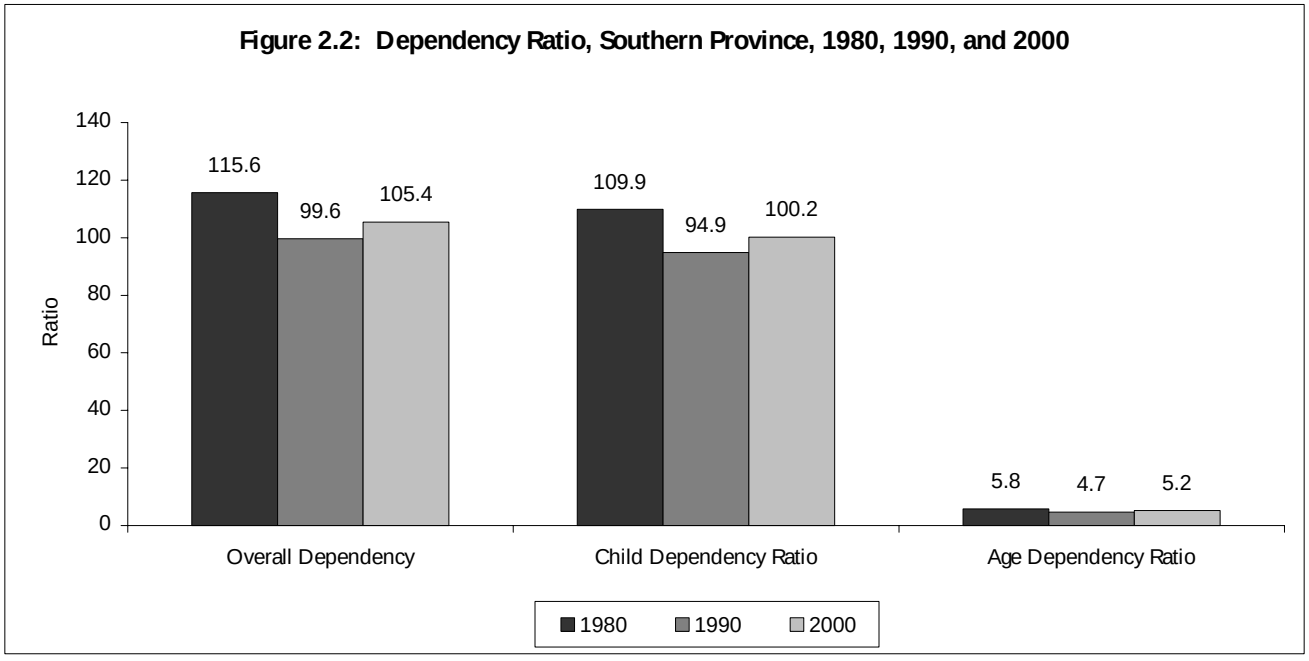
The child-woman ratio dropped from 858.7 in 1980 to 750.4 in 1990 but increased to 817.2 per 1000 women aged 15-49 years in 2000 See Figure 2.1). This is in line with the increase in the percentage of the population in the 0-14 year age group.



Sources: CSO, 1980, 1990 and 2000 Censuses of Population and Housing

2.4.1.3 Dependency Ratio

The overall dependency ratio for the population of Southern Province for 1980, 1990 and 2000 Censuses were 115.6, 99.6 and 105.4 persons per 100 persons in age group 15-64 years, respectively. This means that in the 2000 census for each person in the age range 15-64 years, there were 105.5 persons in the age groups 0-14 and 65 years or older who were dependants. The aged dependency ratio dropped from 5.8 in 1980 to 4.7 in 1990 but increased to 5.2 percent in 2000. The child dependency ratio also dropped from 109.9 in 1980 to 94.9 in 1990 but later rose to 100.2 in 2000 (See Figure 2.2). This means that there were more dependants in 2000 than in 1990. The increase in dependency ratios could be attributed to the decline in the proportion of the population aged 15-64 years.



Sources: CSO, 1980, 1990 and 2000 Censuses of Population and Housing

2.5 Content Error

Content errors refer to instances where characteristics such as age, sex, marital status, and economic activity of a person enumerated in a census or survey are incorrectly reported or tabulated. Content errors are caused by either a respondent giving a wrong response or by the enumerator recording an incorrect response. For instance, a question about age in a census can be solicited by asking either the "date of birth" or "completed number of years". These two questions may yield different ages. During the 2000 Census, age was recorded in completed years. Some content errors are being estimated by the use of the Myers' Index, Sex-ratios, Age-ratios and Survival-ratios.

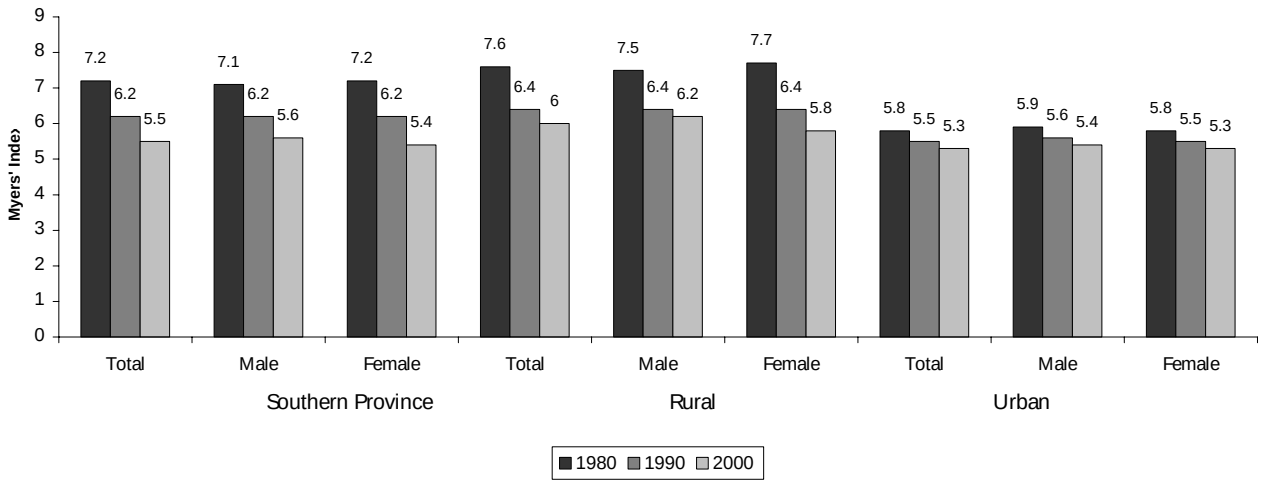
2.5.1 Digit Preference

Digit preference is the tendency of respondents to report ages ending with certain digits in preference to other digits. Digit preference is most pronounced among population subgroups having a low educational status. The causes and patterns of digit preference vary from one culture to another. Age misreporting, net under-enumeration and non-reporting or misclassification of age contribute to heaping (Shryock, et.al. 1976).

Investigation of age heaping in Southern Province is done through the calculation of the Myers' Index. This index has been calculated for 1980,1990 and 2000 Censuses data using the United Nations Population Analysis Software (PAS) for single age data (SINGAGE) and is presented in Figure 2.3. A high Myers' Index implies poor age reporting whereas a low Myers' Index indicates good age reporting. The maximum value of Myers' Index is 90 and the minimum value is 0. In Southern Province, in all the three censuses, the index is on the lower side (less than 10), which implies that the age reporting is good.

Figure 2.3 shows that the Myers' Index has been declining in the past 20 years in the province. It was 7.2 in 1980. It went down to 6.2 in 1990 and further declined to 5.5 in 2000. This suggests that the quality of data has been improving in the subsequent years. In terms of residence the Index is higher in rural areas of the province than in urban areas (6.0 and 5.3 for rural and urban areas respectively). This is also true for the 1980 and 1990 censuses. It can, therefore, be said that the quality of data is better in urban areas as opposed to rural areas. In terms of sex, in the 2000 Census the index for males was higher than that of females implying that age data.reporting was better for females than for males and that age reporting was better in urban areas than in rural areas due to the small observed indices (See Figure 2.3 for details).

Figure 2.3: Myers' Index by Residence, Southern Province, 1980, 1990, and 2000



Sources: CSO, 1980, 1990 and 2000 Censuses of Population and Housing

Table 2.2 shows that there was age heaping in Southern Province for both males and females regardless of residency. This is confirmed by the most preferred digits in decreasing order of preference for the three censuses. Preference for digits 0, 2, and 8 among males and females was observed in 1980 and 1990. However, in the 2000 Census, the digits 0 and 2 were preferred most.

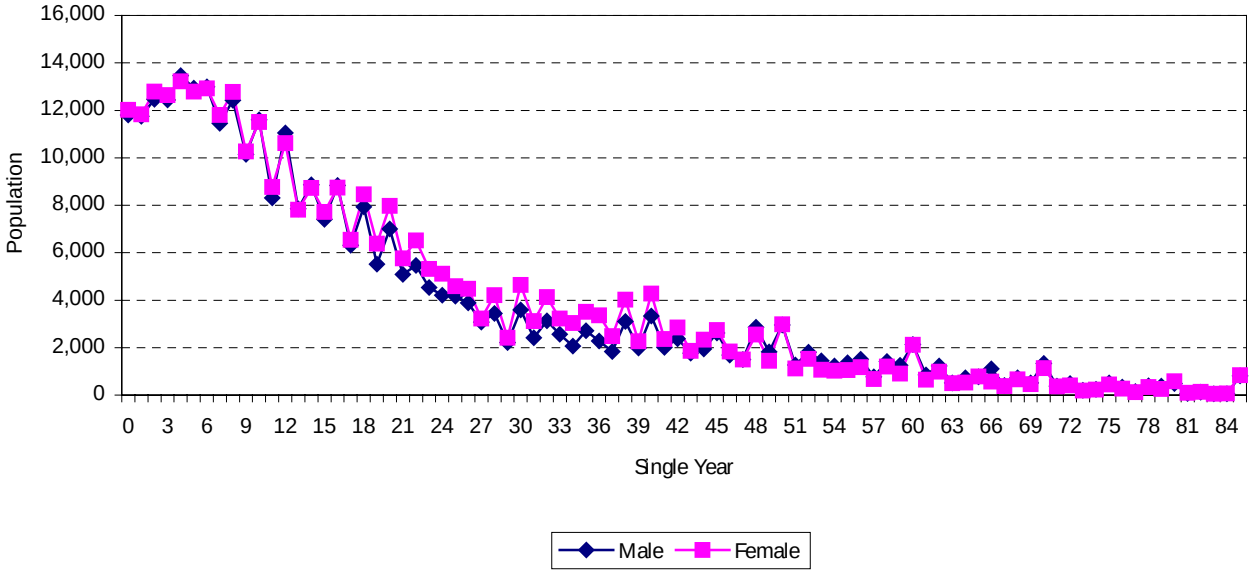
Table 2.2: Most Preferred Digits, Southern Province, 1980, 1990, and 2000

Residence	Most Preferred Digits and Census Year			
	Sex	1980	1990	2000
Southern	Both Sexes	0, 8, 2	0, 8, 2	0, 2
	Male	0, 8, 2	0, 8, 2	0, 2
	Female	0, 8, 2	0, 8, 2	0, 2
Rural	Both Sexes	0, 8, 2	0, 8, 2	0, 2
	Male	0, 8, 2	0, 8, 2	0, 2
	Female	0, 8, 2	0, 8, 2	0, 2
Urban	Both Sexes	0, 8, 2	0, 8, 2	0,2
	Male	0, 8, 2	0, 8, 2	0, 2
	Female	0, 8, 2	0, 8, 2	0, 2

Sources: CSO, 1980, 1990 and 2000 Censuses of Population and Housing

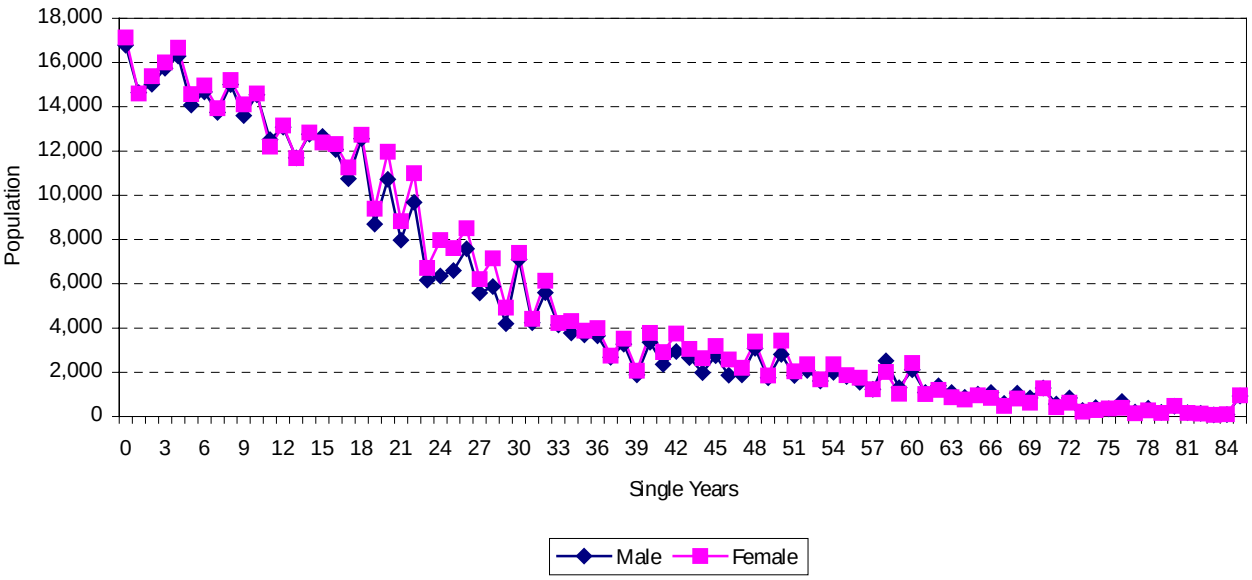
Age misreporting errors are also presented in Figures 2.4 to Figure 2.6. The peaks on the curves indicate the most preferred ages in reporting while the troughs indicate the under reported ages. A comparison of Figures 2.4, 2.5, and 2.6 shows that the peaks and troughs are higher for ages reported before 60 in all the three censuses. There is no noticeable difference in the height of the peaks and troughs for ages reported after 60 in all the three census years, i.e. 1980, 1990, and 2000 (Refer to Figures 2.4, 2.5, and 2.6).

Figure 2.4: Population Distribution in Single Years, Southern Province, 1980

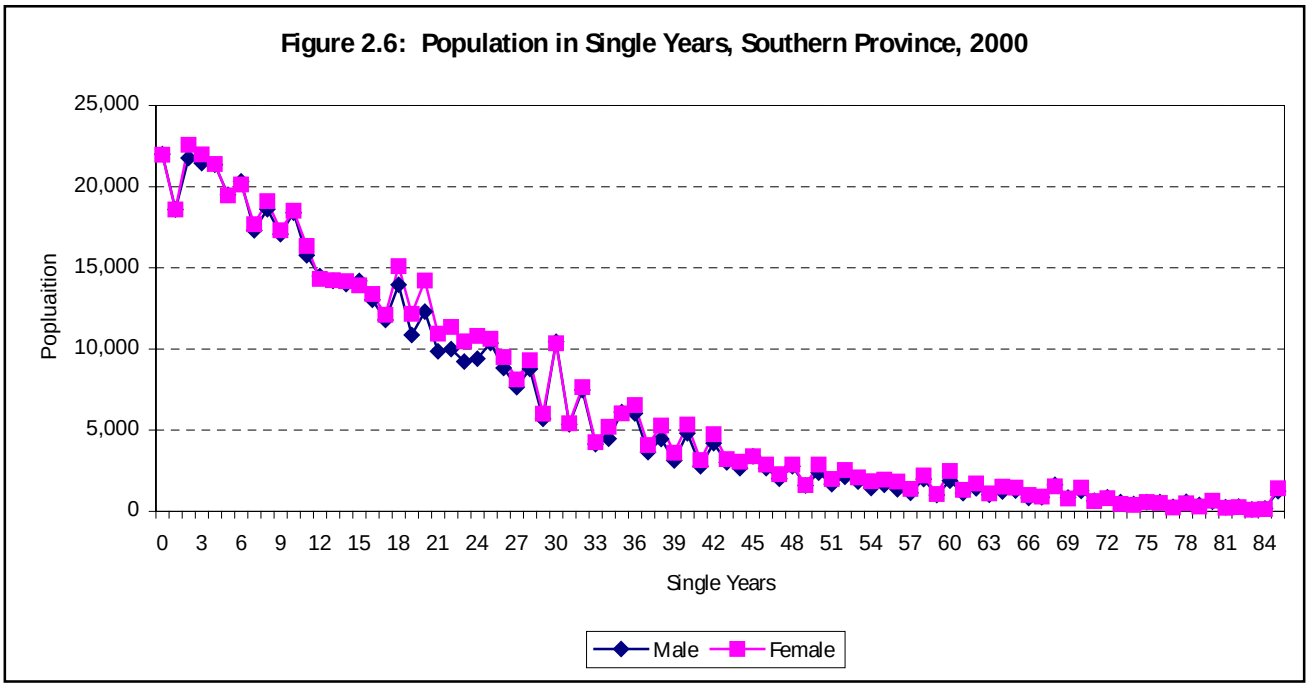


Source: CSO, 1980, Census of Population and Housing

Figure 2.5: Population Distibution in Single Years, Southern Province, 1990

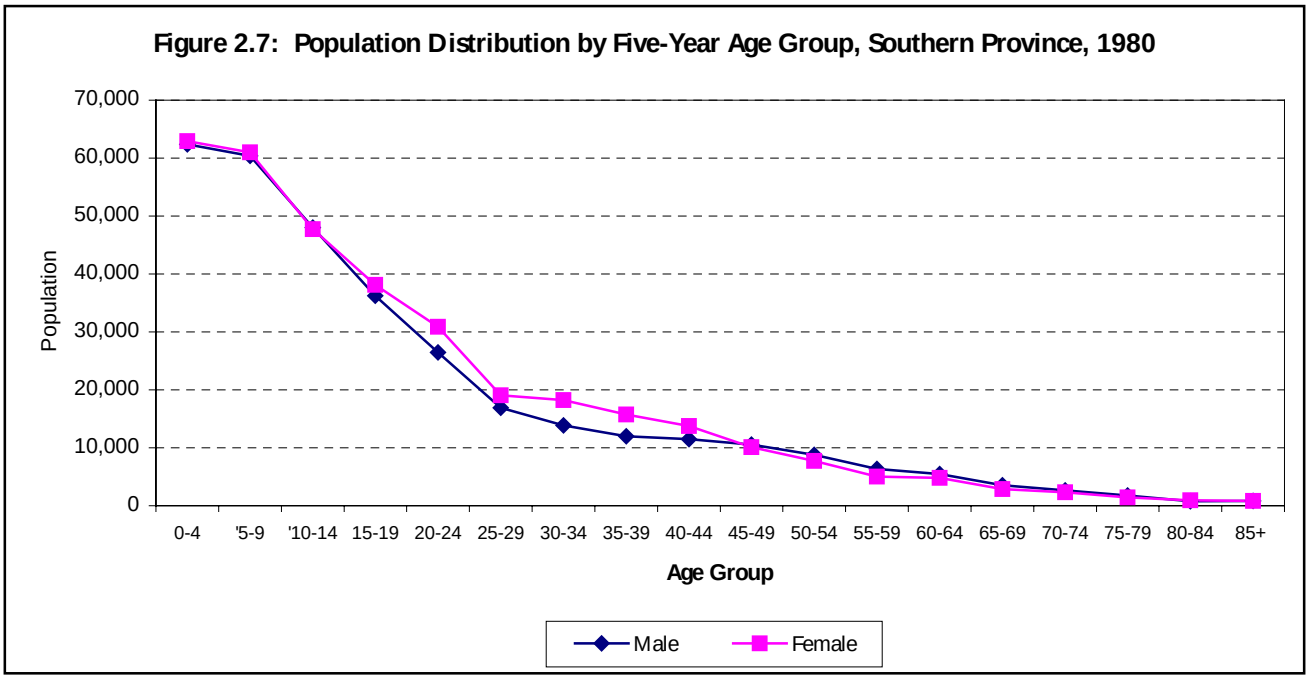


Source: CSO, 1990, Census of Population and Housing

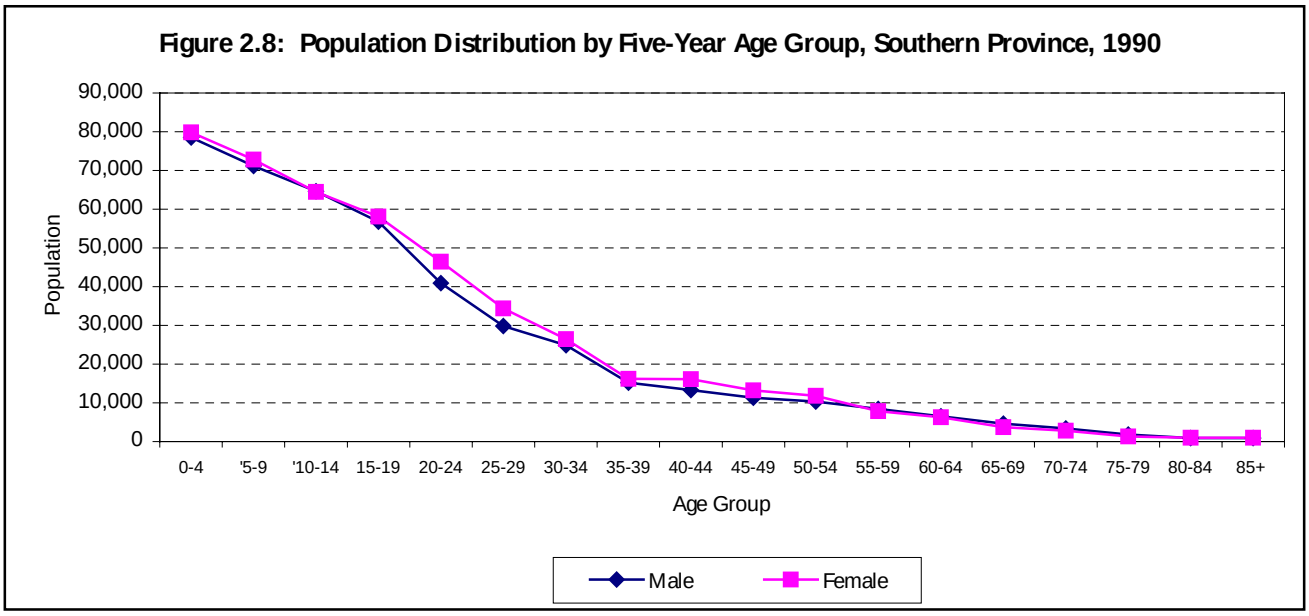


Source: CSO, 2000, Census of Population and Housing

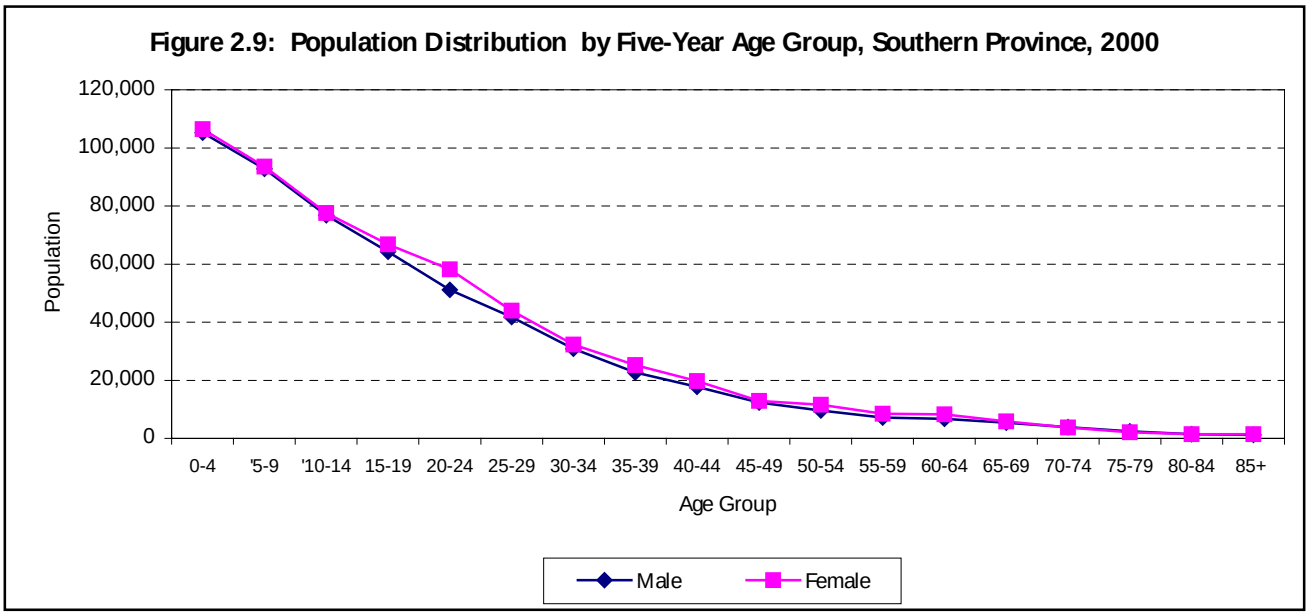
The smoothness of the curves in Figures 2.7, 2.8, and 2.9 show that grouping single year age data into five year age groups improves irregularities in age data arising from age misreporting. The 2000 Census shows smoother curves than the 1980 and 1990 censuses. This suggests that errors of age misreporting are less in the 2000 Census as compared to both the 1980 and 1990 censuses.



Source: CSO, 1980, Census of Population and Housing



Source: CSO, 1990, Census of Population and Housing



Source: CSO, 2000, Census of Population and Housing

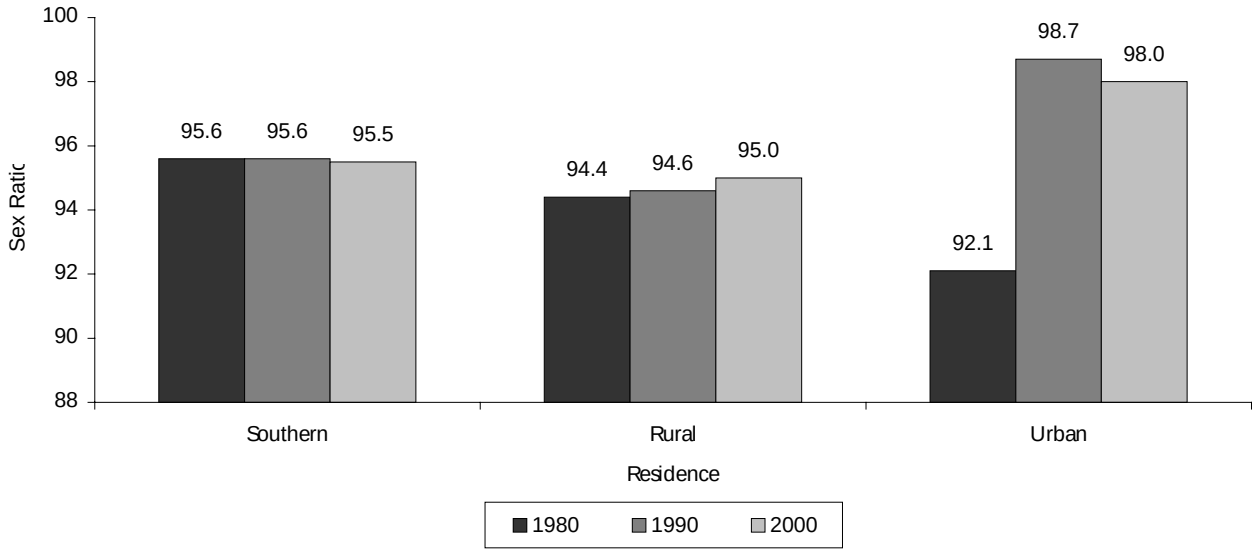
2.5.2 Sex Ratio

A sex ratio is the number of males per 100 females. A sex ratio of more than 100 shows an excess of males, a sex ratio of less than 100 shows that there are more females than males while a sex ratio of 100 indicates an equal number of males and females.

In a natural process where data on population is accurately recorded, the sex-ratios by age group are expected to start from about 102 to 106 at birth depending on the cultural set up being examined and gradually decline progressively until the lowest is recorded in the oldest age group. Although more males than females are born, there is sex difference in mortality as the population grows older such that males die off faster than females and this leads to the reversal of the sex-ratio from above 102 at birth to below 100 and sometimes even below 90 in older age groups. Departure from this expected norms suggest errors in the data.

The overall sex ratio for Southern Province using 1980, 1990 and 2000 Censuses shows that the sex ratio remained constant at 95.6 between 1980 and 1990 but declined slightly by 0.1 in 2000 (See Figure 2.10 and Table 2.3). This result shows that there was a higher number of females than males in Southern province in 1980, 1990 and 2000. The sex ratio is seen to be increasing in the rural areas though at a minimal rate (See Figure 2.10).

Figure 2.10: Sex Ratio by Residence, Southern Province, 1980, 1990, and 2000



Sources: CSO, 1980, 1990 and 2000 Censuses of Population and Housing

In the absence of big fluctuations in births, deaths and migration, the sex ratios are expected to be high at infant ages because the sex ratio at birth is favourable to males. After early childhood, the ratios are expected to decline continuously to reach very low levels at the highest ages when female mortality is much lower than the male mortality. In terms of residence, rural areas have shown a higher number of females over males than urban areas even though in both cases there are more females than males. This scenario applies to all the three censuses; 1980,1990 and 2000.

Table 2.3: Sex Ratios By Age Group And Residence, Southern Province, 1980, 1990 and 2000.

Age Group	Total			Rural			Urban		
	1980	1990	2000	1980	1990	2000	1980	1990	2000
Total	95.6	95.6	95.5	94.4	94.6	95.0	92.1	98.7	98.0
00-04	99.1	98.3	98.8	98.8	98.7	98.7	92.7	97.2	98.9
05-09	99.0	97.7	99.1	99.8	98.7	99.7	89.3	94.3	96.4
10-14	100.6	100.2	99.0	102.4	103.7	101.7	87.8	89.8	89.2
15-19	95.1	97.7	96.3	97.0	100.4	98.7	82.8	89.7	87.0
20-24	85.8	88.0	87.9	86.6	87.9	87.2	77.6	88.1	89.9
25-29	88.7	86.8	95.0	85.3	85.0	92.6	89.7	91.6	101.5
30-34	75.8	93.9	95.5	68.6	88.7	91.9	89.0	107.8	113.4
35-39	76.2	93.6	90.2	68.9	84.1	86.3	92.6	118.3	108.1
40-44	83.6	82.5	89.8	75.7	69.1	83.1	103.8	131.7	112.5
45-49	104.3	86.0	95.2	94.7	75.0	88.0	132.0	134.8	123.5
50-54	113.3	87.2	82.9	102.4	77.0	73.4	150.3	145.5	137.5
55-59	126.5	106.8	83.8	115.8	100.2	79.5	168.6	146.0	117.3
60-64	114.3	104.5	81.8	108.4	100.2	77.9	136.9	132.2	116.8
65-69	123.2	123.7	94.2	117.7	119.9	95.5	149.4	152.5	95.0
70-74	113.3	119.9	101.6	112.1	117.1	103.0	111.5	144.7	96.3
75-79	122.9	135.1	113.8	122.4	130.2	114.6	117.2	186.8	114.1
80-84	83.4	98.4	104.2	83.2	96.8	102.6	78.6	115.3	134.1
85+	96.7	97.8	86.4	94.2	99.2	85.9	114.2	84.8	104.9

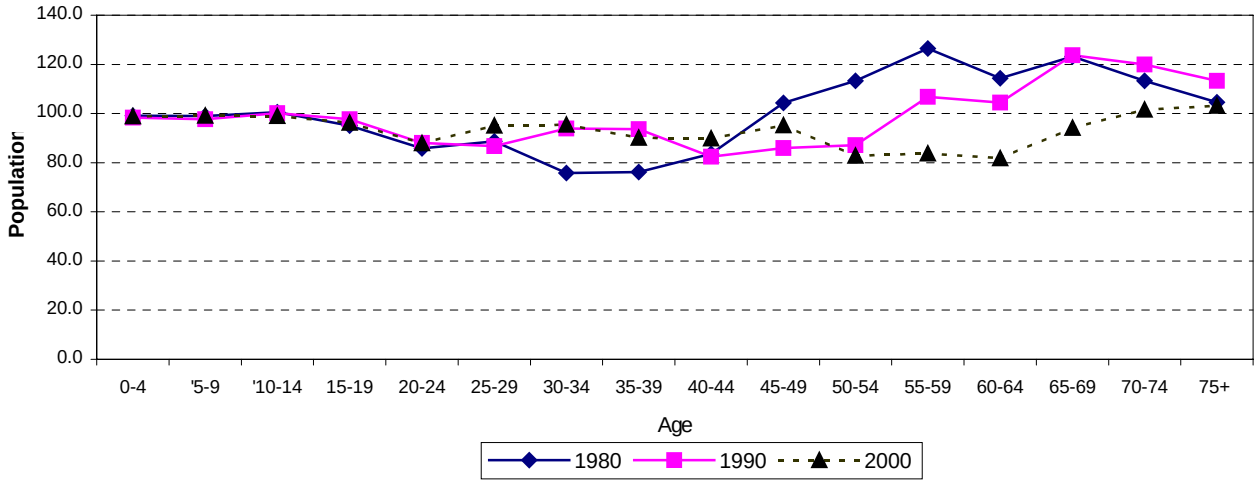
Sources: CSO, 1980, 1990 and 2000 Censuses of Population and Housing

From Table 2.3 and Figure 2.11, the sex ratios are higher in the age groups 70-84 in 2000 while in the 1980 and 1990 censuses they were higher in the age groups 45-49 to 75-79 and 55-59 to 75-79 respectively. The tendency by men to over estimate their age could have shifted men into older ages while the tendency by

women to under-state their age could have shifted them into lower ages, hence, causing errors in age and sex data.

An analysis of age-specific sex ratios for1980, 1990 and 2000 reveals unexpected deficit of males in younger age groups 0-4 and 5-9 years. There are many possible factors responsible for this, including high male mortality. A sex –ratio in the age group 0-4 and 5-9 may suggest under enumeration of children since the sex-ratio is supposed to be high at such age groups.

Figure 2.11: Population Distribution by Sex Ratio, Southern Province, 1980, 1990, and 2000



Sources: CSO, 1980, 1990 and 2000 Censuses of Population and Housing

2.5.3 Age Ratio

An age ratio may be defined as the ratio of the population in a given age group to one-third of the sum of the populations in the age group itself, the preceding and the following age groups, times 100 (Shryock et al, 1976). In normal circumstances, when there are no major changes in fertility, mortality or migration, the age ratios do not deviate much from 100, hence, any substantial deviation is explained in terms of age misreporting. Results from the 1980 Census show that age groups with age ratios less than 100 in 1980 for males are 10-39, 55-59 and 65-69 and for females, the age groups are 10-19, 25-29, 35-39, 45-49, 55-59 and 65-69. In 1990, age groups with ratios less than 100 are 05-09, 20-29, 35-39 and 45-49, 55-59 and 65-69 for males. For females, the same pattern is reflected except for the age group 20-24 which shows an age ratio of above 100. In 2000, the age groups with age ratios less than 100 are 10-14, 20-24,30-39 and 45-59 for males, and 10-19, 25-39, 45-49, 55-59 and 65-69 for females. The substantial deviations of the age ratios are suggestive distortions arising from age misreporting. Results from Tables 2.4, 2.5 and 2.6 suggest that reporting of age is less satisfactory for females than males. This is evidenced by having a higher average age ratio deviation for females than males.

The Age Accuracy Index reduced from 40.1 in 1980 to 32.1 in 1990 and then to 24.9 in 2000. The United Nations define age data as "accurate, inaccurate and highly inaccurate" if the age accuracy index lies below 20, between 20-40 and 40 and above, respectively. In as far as the United Nations Age-Sex Accuracy Index is concerned, the 1980 age data were "highly inaccurate" whereas the 1990 and 2000 data were "inaccurate". However, the 1990 and 2000 age data show that there has been improvement in the age data in the last 2 decades (Refer to Tables 2.4, 2.5, 2.6 and Figure 2.12 for details).

Table 2.4: Population by Five Year Age Group, Sex, Age Ratio and the Age-Sex Accuracy Index, Southern Province, 1980

Age Group	Population		Age Ratio		Deviation		Sex Ratio	Difference
	Male	Female	Male	Female	Male	Female		
0-4	62,379	62,928	N/A	N/A	N/A	N/A	99.1	-
5-9	60,363	60,969	109.4	110.2	9.4	10.2	99.0	-0.1
10-14	48,020	47,744	99.4	96.4	-0.6	-3.6	100.6	1.6
15-19	36,251	38,101	97.3	96.9	-2.7	-3.1	95.1	-5.4
20-24	26,486	30,866	99.7	108.0	-0.3	8.0	85.8	-9.3
25-29	16,898	19,047	83.8	77.6	-16.2	-22.4	88.7	2.9
30-34	13,842	18,254	95.8	105.0	-4.2	5.0	75.8	-12.9
35-39	11,993	15,735	94.6	98.3	-5.4	-1.7	76.2	0.4
40-44	11,510	13,771	102.0	106.5	2.0	6.5	83.6	7.4
45-49	10,566	10,133	104.1	94.1	4.1	-5.9	104.3	20.7
50-54	8,792	7,759	103.8	102.3	3.8	2.3	113.3	9.0
55-59	6,367	5,031	89.2	80.1	-10.8	-19.9	126.5	13.2
60-64	5,489	4,804	110.9	121.6	10.9	21.6	114.3	-12.3
65-69	3,535	2,869	86.8	80.3	-13.2	-19.7	123.2	8.9
70-74	2,655	2,345	N/A	N/A	0	0	113.3	-9.9
75+	3,372	3,224	N/A	N/A	N/A	N/A	104.6	-8.7
Total	328,520	343,581			83.6*	129.9*	95.6	122.8*
Mean					6.4	10.0		8.2

Source: CSO, 1980 Census of Population and Housing

Note: * Shows total irrespective of sign.

Age-Sex Accuracy Index: = 3 times mean difference in sex ratios plus mean deviations of male and female age ratios.
= 3 x 8.2 + 6.4 + 10.0
= 40.1

Table 2.5: Population by Five Year Age Group, Sex, Age and the Age-Sex Accuracy Index, Southern Province, 1990

Age Group	Population		Age Ratio		Deviation		Sex Ratio	Difference
	Male	Female	Male	Female	Male	Female		
0-4	78,490	79,817	N/A	N/A	N/A	N/A	98.3	-
5-9	71,124	72,821	99.4	100.9	-0.6	0.9	97.7	-0.7
10-14	64,599	64,477	101.0	98.5	1.0	-1.5	100.2	2.5
15-19	56,754	58,089	107.6	104.7	7.6	4.7	97.7	-2.5
20-24	40,884	46,472	94.4	100.5	-5.6	0.5	88.0	-9.7
25-29	29,857	34,397	90.8	94.3	-9.2	-5.7	86.8	-1.2
30-34	24,872	26,478	110.5	104.6	10.5	4.6	93.9	7.1
35-39	15,166	16,206	79.5	76.1	-20.5	-23.9	93.6	-0.4
40-44	13,304	16,128	100.4	109.7	0.4	9.7	82.5	-11.1
45-49	11,343	13,197	96.0	94.3	-4.0	-5.7	86.0	3.5
50-54	10,336	11,859	104.6	112.5	4.6	12.5	87.2	1.2
55-59	8,417	7,881	99.8	87.0	-0.2	-13.0	106.8	19.6
60-64	6,533	6,252	100.4	107.9	0.4	7.9	104.5	-2.3
65-69	4,592	3,712	92.7	81.9	-7.3	-18.1	123.7	19.2
70-74	3,375	2,814	N/A	N/A	0	0	119.9	-3.8
75+	3,667	3,236	N/A	N/A	N/A	N/A	113.3	N/A
Total	443,315	463,835			72.0*	108.7*	95.6*	
Mean					5.5	8.4		6.1

Source: CSO, 1990 Census of Population and Housing
Note: * Shows total irrespective of sign.

Age-Sex Accuracy Index = 3 times mean difference in sex ratios plus mean deviations of male and female age ratios.
= 3 x 6.1 + 5.5 + 8.4
= 32.1

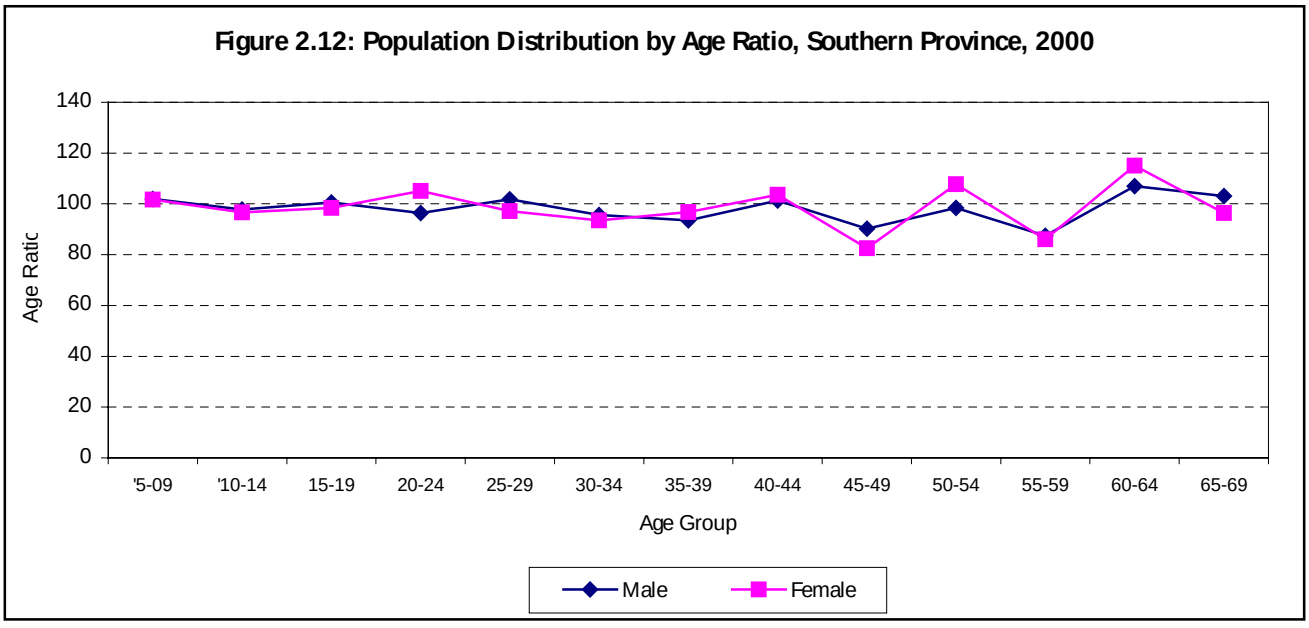
Table 2.6: Population by Five Year Age Group, Sex, Age Ratio and the Age-Sex Accuracy Index, Southern Province, 2000.

Age Group	Population		Age Ratio		Deviation from 10		Sex Ratio	Difference
	Male	Female	Male	Female	Male	Female		
0-4	105,207	106,497	N/A	N/A	N/A	N/A	98.8	
5-9	92,791	93,600	102.0	101.7	2.0	1.7	99.1	0.3
10-14	76,776	77,550	97.8	96.7	-2.2	-3.3	99.0	-0.1
15-19	64,263	66,762	100.5	98.4	0.5	-1.6	96.3	-2.7
20-24	51,116	58,167	96.4	105.1	-3.6	5.1	87.9	-8.4
25-29	41,736	43,928	101.8	97.1	1.8	-2.9	95.0	7.1
30-34	30,848	32,294	95.7	93.5	-4.3	-6.5	95.5	0.5
35-39	22,707	25,180	93.5	96.8	-6.5	-3.2	90.2	-5.3
40-44	17,732	19,739	101.3	103.6	1.3	3.6	89.8	-0.3
45-49	12,305	12,927	90.2	82.6	-9.8	-17.4	95.2	5.4
50-54	9,566	11,546	98.4	107.7	-1.6	7.7	82.9	-12.3
55-59	7,133	8,516	87.5	86.1	-12.5	-13.9	83.8	0.9
60-64	6,735	8,233	107.0	115.1	7.0	15.1	81.8	-2.0
65-69	5,450	5,786	103.1	96.4	3.1	-3.6	94.2	12.4
70-74	3,834	3,773	N/A	N/A	0	0	101.6	7.4
75+	5,133	4,975	N/A	N/A	N/A	N/A	103.2	N/A
Total	553,332	579,473			56.3	85.6	95.5	65.3
Mean					4.3	6.6		4.7

Source: CSO, 2000 Census of Population and Housing

Note: * Shows total irrespective of sign.

Age-Sex Accuracy Index = 3 times mean difference in sex ratios plus mean deviations of male and female age ratios.
= 3 x 4.7 + 4.3 + 6.6
= 24.9



Source: CSO, 2000 Census of Population and Housing

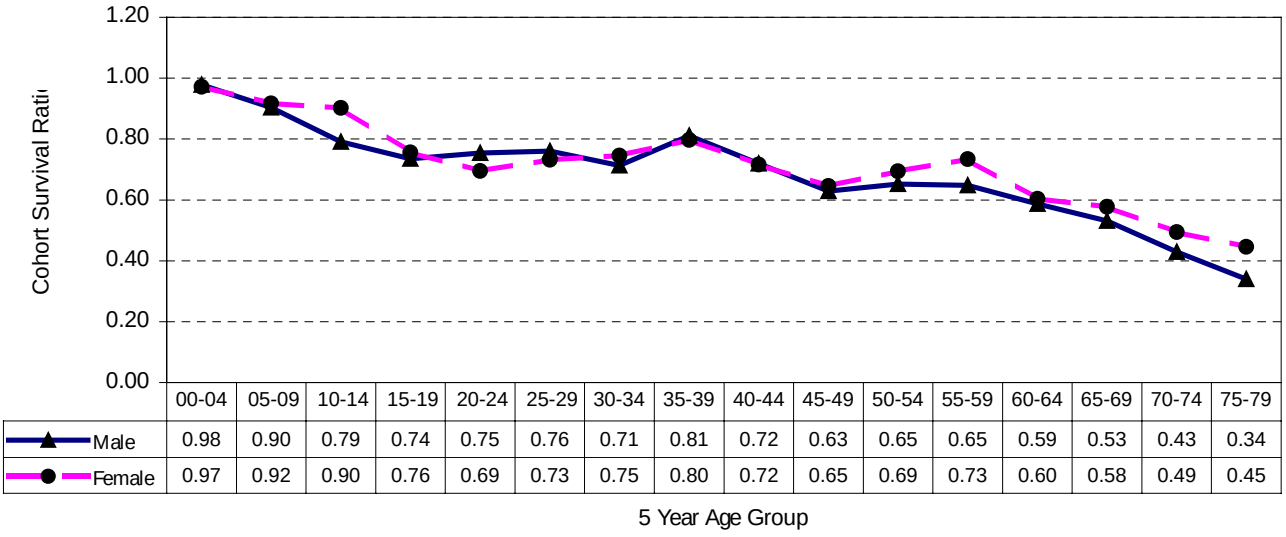
2.5.4 Survival Ratio

Survival ratios represent the probability that individuals of the same birth cohort or group of cohorts will still be alive 10 years later. Evaluation of the quality of age and sex data from two censuses using the survival ratio method can be done only under certain assumptions. The population should be closed to migration. It is also assumed that influence of abnormal mortality through wars, disasters, diseases, etc, over a 10 year period should be absent.

Cohort survival ratio refers to the survival ratio of the population in a given age group to the next age whereas overall survival ratio refers to the ratio of the population aged say 10 years and above, who will survive to 15 years and above, and so on.

Cohort survival ratios are expected to be highest at age group 10-14 where mortality is assumed to be lowest and then to decline continuously thereafter. Figure 2.13 shows fluctuations rather than the expected pattern. For example, at age group 25-29 the cohort survival ratio is lower than in age groups 30-34. The female cohort survival ratio is lower at age group 30-34 than the following age group they are also higher at age group 65-69 than the preceding age group (See Figure 2.13). Fluctuations in the cohort survival ratios show that there was over-statement or under-statement of ages among males and females.

Figure 2.13: Cohort Survival Ratio, Southern Province, 1990 - 2000



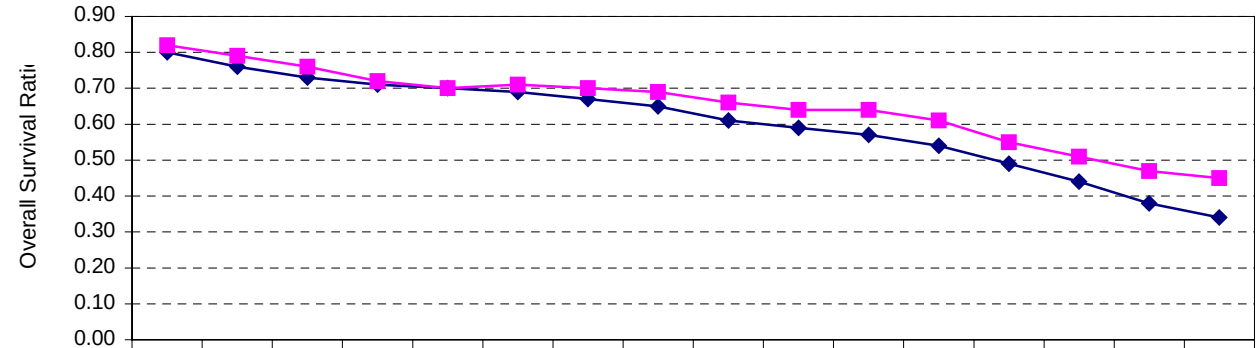
	00-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79
Male	0.98	0.90	0.79	0.74	0.75	0.76	0.71	0.81	0.72	0.63	0.65	0.65	0.59	0.53	0.43	0.34
Female	0.97	0.92	0.90	0.76	0.69	0.73	0.75	0.80	0.72	0.65	0.69	0.73	0.60	0.58	0.49	0.45

5 Year Age Group

Sources: CSO, 1990 and 2000 Censuses of Population and Housing

In the absence of abnormal mortality and migration, the overall survival ratios should decline continuously as we go down to the older ages. The female ratios should be higher than the male ratios because of lower mortality of females compared to that of males. The pattern of having higher ratios for females than males is true for all age groups apart from age 30+ where the age ratio for males and females is the same (See Figure 2.14). Overall survival ratios are showing that the ratios for females are higher than those for males in all the age groups. They also reflect the expected pattern in survival ratios, i.e. starting with the highest ratio and reducing continuously to the last age group.

Figure 2.14: Overall Survival Ratio, Southern Province, 1990 and 2000



	10+	15+	20+	25+	30+	35+	40+	45+	50+	55+	60+	65+	70+	75+	80+	85+
Male	0.80	0.76	0.73	0.71	0.70	0.69	0.67	0.65	0.61	0.59	0.57	0.54	0.49	0.44	0.38	0.34
Female	0.82	0.79	0.76	0.72	0.70	0.71	0.70	0.69	0.66	0.64	0.64	0.61	0.55	0.51	0.47	0.45

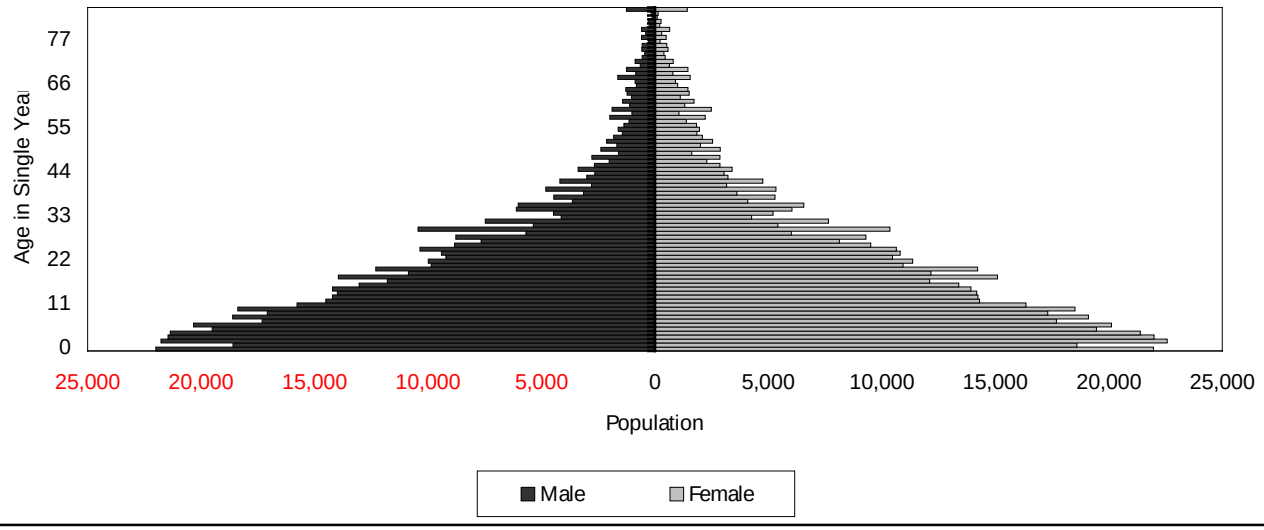
Age Group

Sources: CSO, 1990 and 2000 Censuses of Population and Housing

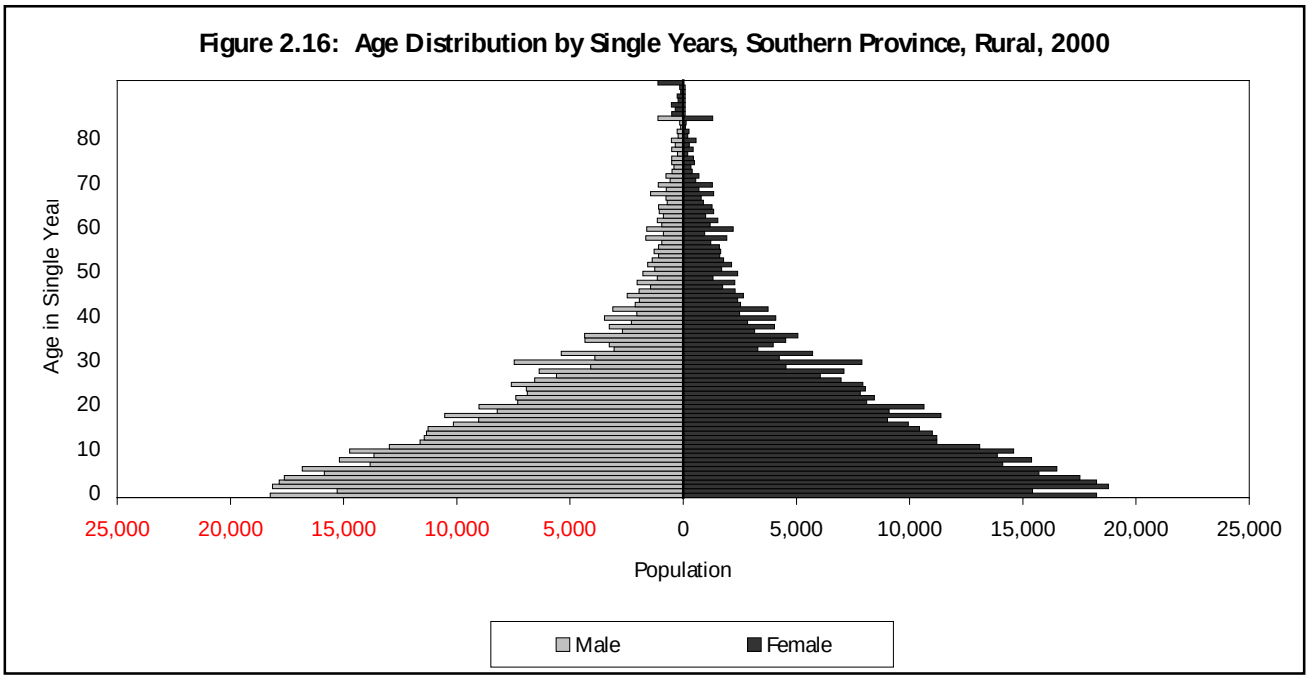
2.5.5 Population Pyramids

Another way of detecting irregularities in the reported age data of a survey or census is by looking at a Population Pyramid by single years of age. As already observed, when census age data is distributed in single years, one can easily spot out inaccuracies than when it is distributed in five-year age groups. If data is found to have a lot of inaccuracies, it is better to smooth it. Looking at the population pyramids for the 2000 Census data from Figures 2.15 to 2.17, it can be seen that age misreporting was not severe to warrant the smoothing of data.

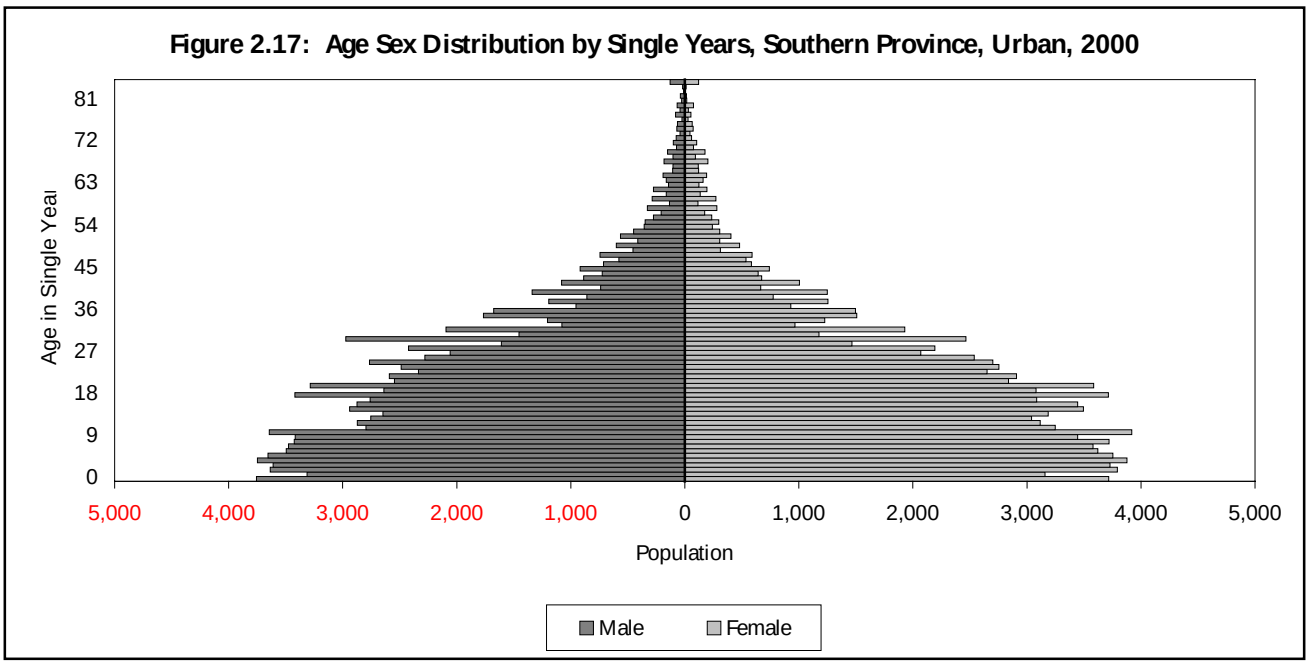
Figure 2.15: Population Distribution in Single Years by Sex, Southern Province Total, 2000



Source: CSO, 2000 Census of Population and Housing



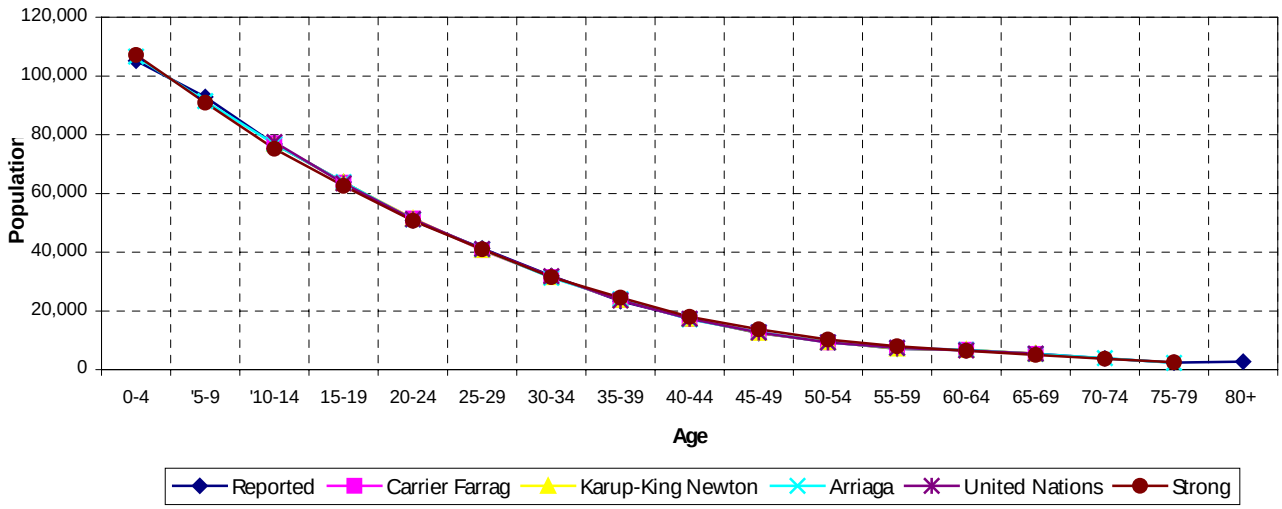
Source: CSO, 2000 Census of Population and Housing



Source: CSO, 2000 Census of Population and Housing

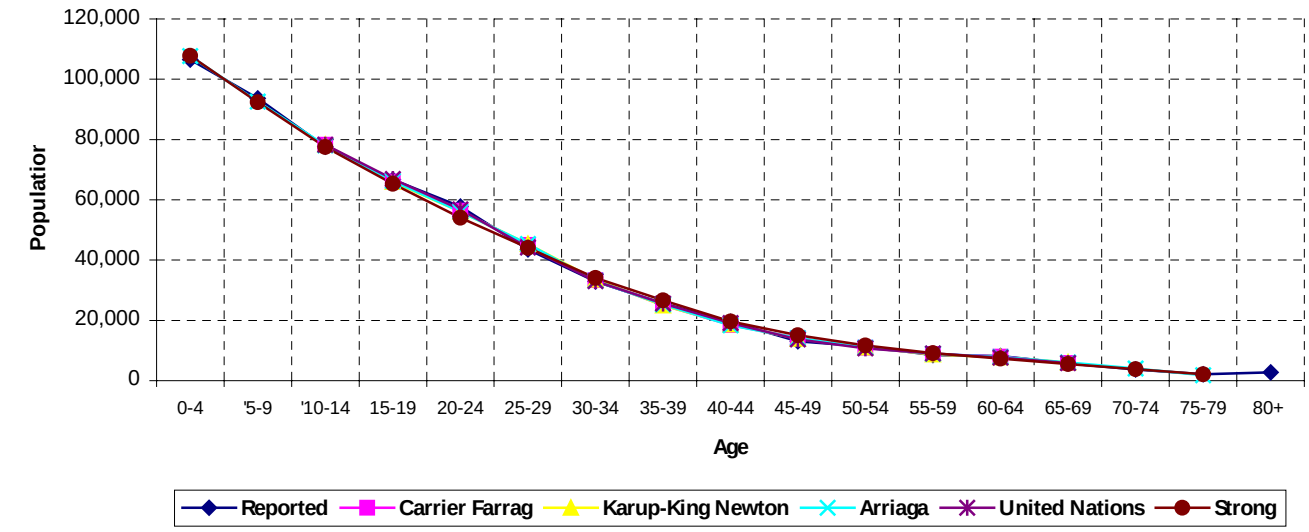
Smoothing the age data using selected techniques for light smoothing of the population (Edwardo E. Arriaga: November 1994, pages 11-42) shows that the irregularities in the structure are not severe, see Figures 2.18 and 2.19. The smoothing of data has been done using AGESMTH software program one of the Population Analysis Spreadsheet (PAS) programmes developed by the United Nations. Selected techniques for light smoothing of the population include Carrier Farrag, Karup-King Newton, Arriaga and United Nations. The strong smoothing technique has also been incorporated (See Figures 2.18 and 2.19).

Figure 2.18: Reported and Smoothed Population by 5-Year Age Groups and Smoothing Technique, Southern Province, Males, 2000



Source: CSO, 2000 Census of Population and Housing

Figure 2.19: Reported and Smoothed Population by 5-Year Age Groups and Smoothing Technique, Southern Province, Females, 2000



Source: CSO, 2000 Census of Population and Housing

Given that the irregularities in the reported proportions are small, it is not recommended to smooth the 2000 Census of Population and Housing data because genuine irregularities in the reported pattern might be smoothed out.

2.6 Summary

Southern Province has a young population. Out of the total number of 1,132,810 in 2000, 48.8 percent were below age 15 and 48.7 percent were aged 15-64 while 2.5 percent were aged 65 years or older. The overall dependency ratio of the province increased from 99.6 in 1990 to 105.4 dependants per 100 persons aged 15-64. Southern Province has more females than males and a sex ratio of 95.5 males per 100 females was recorded in 2000. There was age heaping among males and females during the 2000 Census, with 0 and 2 being the most preferred digits. The 2000 age data showed an improvement over the 1980 and 1990 in as far

as the Age-Sex Accuracy Index is concerned which dropped from 40.1 in 1980 to 32.1 in 1990 and further down to 24.9 in 2000.

Chapter 3

POPULATION SIZE, GROWTH AND COMPOSITION

3. 1 Introduction

In Zambia, the first comprehensive Census of Population and Housing was undertaken in 1969 and was followed by another in 1980. Since then, censuses have been conducted regularly every ten (10) years. The Census of Population in Zambia has included questions on births and deaths, given the poor status of the vital registration system. The Census is designed to collect both de jure and de facto population count. By definition (*see below*) the de facto count is most useful in providing a separate record of a range of characteristics for all individuals enumerated. Characteristics here refer to social, economic and political aspects of a population such as education and economic activity. This therefore provides sound basis for carrying out detailed analysis of the characteristics of persons or groups of a population based on the de facto count.

In general, censuses of population are useful for social, economic, political planning of a country. For instance, population data analysed by age are essential in preparing current population estimates and projections of households, school enrollment, labour force and further projections of requirements for schools, teachers, health services, food and housing.

This chapter presents a trend analysis of the population size, population growth rates, population distribution and composition (i.e. demographic, social and economic) from the census results of 1980, 1990 and 2000. Analysis of population composition is based on the de facto as opposed to the de jure population of Zambia. As such, analysis is only possible by use of the former population count, which provides individual social and economic characteristics.

3.2 Concept and Definitions

Concepts and definitions adopted during the census and used in this chapter and throughout the report are as follows:

- *De facto Population*

This count includes usual household members and visitors who spent the census night at that household. This however excludes:

a) Foreign diplomatic personnel accredited to Zambia; and

b) Zambian nationals accredited to foreign embassies and their families, Zambian migrant workers and students in foreign countries who live with them abroad, and were not in the country at the time of the Census.

- *De jure Population*

Included in this count are usual household members *present* and usual household members temporarily *absent* at the time of the census. These include institutional populations in places such as hospitals/health centers, prisons and academic (universities, colleges and boarding schools).

- **Population Growth Rate**

Refers to the change in the size of the population as a proportion of the total population of an area. Estimated on a yearly basis gives us the average annual growth rate for each year of the inter-censal period.

- **Population Composition**

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

- Demographic characteristics such as age and sex,
- Social characteristics such as ethnicity and citizenship, and
- Economic characteristics such as economic activity.

- *Age*

- The age of an individual in all censuses undertaken in Zambia is commonly defined in terms of the age of the person at his/her last birthday *before* the census date.

- *Household*

- A group of persons who normally live and eat together. These people may or may not be biologically related to each other and make common provision for food and other essentials for living.

- **Head of Household**

- This refers to a person who makes day-to-day decisions concerning the running of the household and is also regarded as such by all household members.

- **Population Density**

  Density of population is defined as the number of people resident within a standard unit of area, in this case, measured per square kilometer (Pressant, 1985).

- **Citizenship**

  Citizenship defined as 'the legal nationality of each person', is not necessarily linked to place of birth. Rather, citizenship is acquired through various means such as being born within state (or elsewhere with parents of the given nationality), through naturalization or marriage (Pressant,1985).

- **Age Dependency ratio**

  Age Dependency ratio refers to the 'joint account of variations in the proportions of children, aged persons, and persons of "working age"' (Shyrock et al., 1972:133). It is therefore, the ratio of children aged 0-14 years and persons aged 65 years and older per 100 persons in the working age group of 15-64 years old.

3.3 Population Size and Growth

The 2000 population for Southern Province is 1,212,124 of which 610,684 are females and 601,440 males, indicating that females have continued to outnumber males (see Table 3.1a).

Table 3.1a Population Size (De Jure) and Percentage By Sex and Residence, Southern Province, 2000.

Residence	Both Sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Zambia	9,885,591	100	4,946,298	50.0	4,939,293	50.0
Southern	1,212,124	100	601,440	49.6	610,684	50.4
Rural	955,268	100	472,115	49.4	483,153	50.6
Urban	256,856	100	129,325	50.3	127,531	49.7

Source: CSO, 2000 Census of Population and Housing

In demographic terms, this de jure figure is considered the *true population* of a nation. However, this type of count of population does not allow collection of data on various characteristics (social, economic and political) of individuals as it makes count in totality. As the definition above states, persons in institutions such as prisons are counted as a group, but also considering the sex differences. The de jure population therefore becomes important as far as the age sex distribution is concerned. For instance, it is a useful denominator in the calculation of vital education indicators such as gross and net enrolment and intake rates

The Southern Province de facto count however, presented in Table 3.1b is 1,132,810 of which 51.1 percent are females. The de facto population allows for detailed analysis of individuals because these are present at the time of count (*see definition above*). It can be noted that the de jure population is always larger than the de facto population.

Table 3.1b Population Size (De facto) and Percent Distribution by Sex and Residence, Southern Province, 2000

Residence	Both Sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Zambia	9,337,425	100	4,594,290	49.2	4,743,135	50.8
Southern	1,132,810	100	553,657	48.9	579,153	51.1
Rural	892,141	100	434,542	48.7	457,599	51.3
Urban	240,669	100	119,115	49.5	121,554	50.5

Source: CSO, 2000 Census of Population and Housing

The 2000 Census district population sizes are displayed in absolute terms in Table 3.2. Choma followed by Mazabuka have the highest population of 204, 898 and 203, 219, respectively. The least populated districts are Itezhi- tezhi and Gwembe at 43,111 and 34,133, respectively. Amongst the districts, Livingstone is the most urbanized with over 90 percent being an urban population. As a tourist center, Livingstone has experienced both a down- and up- swing in economic terms. The end of the decade coincided with the construction of a major 'three-star' hotel next to the Victoria Falls. This was followed by the mushrooming of lodges in response to the new government policy to encourage Tourism and Agriculture as the driving forces of the economy.

Table 3.2 Population Size (De jure) by Sex, Residence and Province, Southern Province, 2000

District	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Southern	1,212,124	601,440	610,684	955,268	472,115	483,153	256,856	129,325	127,531
Choma	204,898	100,791	104,107	164,493	80,565	83,928	40,405	20,226	20,179
Gwembe	34,133	16,862	17,271	32,279	15,958	16,321	1,854	904	950
Itezhi-tezhi	43,111	22,170	20,941	36,235	18,479	17,756	6,876	3,691	3,185
Kalomo	169,503	83,175	86,328	158,499	77,907	80,92	11,004	5,268	5,736
Kazungula	68,265	34,178	34,087	68,265	34,178	34,087	-	-	-
Livingstone	103,288	51,828	51,460	5,800	2,962	28,38	97,488	48,866	48,622
Mazabuka	203,219	102,585	100,634	156,071	78,208	77,863	47,48	24,377	22,771
Monze	163,578	80,697	82,881	138,975	68,667	70,308	24,603	12,030	12,573
Namwala	82,810	40,486	42,324	78,790	38,519	40,271	4,20	1,967	2,053
Siavonga	58,864	29,171	29,693	45,821	22,449	23,372	13,043	6,722	6,321
Sinazongwe	80,455	39,497	40,958	70,040	34,223	35,817	1,015	5,274	5,141

Source: CSO, 2000 Census of Population and Housing

The rate at which Southern Province has grown in between censuses of 1969, 1980, 1990 and 2000 is shown in Table 3.3. The table shows that the population has grown from 671,923 in 1980 to 907,150 in 1990 and to 1.2

million in 2000. On an annual average the population of Southern Province grew the most during the 1980-1990 inter-censal period. However, its annual population growth rate between 1990 and 2000 is slightly lower than the national average with a deviation of 0.2. Except for the period 1969-1980, when the annual population growth rate was 9.2 percent for urban areas, rural areas have continued to exhibit higher rates of growth than urban areas. However, rates for both rural and urban areas have dropped since 1969-80 period with that for urban areas dropping more sharply from 9.2 to 2.6 percent per annum during the said period.

At district level, Kazungula and Siavonga experienced high annual growth rates of 4.0 and 4.6 percent respectively, between 1990 and 2000. Notably, the population growth rate in Gwembe district declined from 5.5 between 1980 –90 to –1.5 percent, between 1990 – 2000.

Table 3.3 Population Size and Annual Average Population Growth Rate by Residence and District, Southern Province, 1969-2000

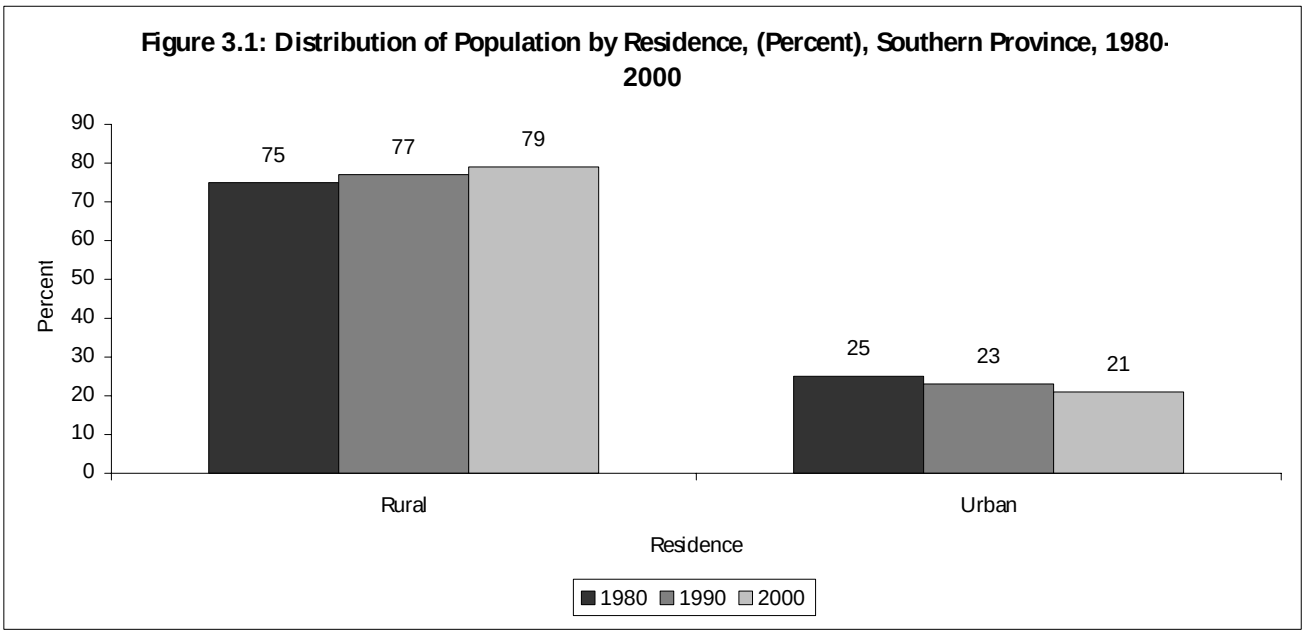
Residence/District	Population Size (1980)	Annual Growth Rate 1969 - 1980	Population Size (1990)	Annual Growth Rate 1980 - 1990	Population Size (2000)	Annual Growth Rate 1990 - 2000
Zambia	5,661,801	3.1	7,759,117	2.7	9,885,591	2.5
Southern	671,923	2.8	965,591	3.0	1,212,124	2.3
Rural	505,368	1.4	745,006	3.2	955,268	2.5
Urban	166,555	9.2	220,585	2.6	256,856	1.5
District						
Choma	130,416	2.6	170,687	2.3	204,898	1.8
Gwembe	20,666	-11.2	39,785	5.5	34,133	-1.5
Itezhi-tezhi*	-	-	31,424	-	43,111	3.2
Kalomo	76,571	2.2	127,762	5.3	169,503	2.9
Kazungula*	-	-	45,157	-	67,666	4.2
Livingstone	49,063	3.5	83,780	1.5	103,288	2.1
Mazabuka	159,376	-3.1	162,321	3.3	203,219	2.3
Monze	-	-	133,671	1.3	163,578	2.0
Namwala	36,600	4.0	61,848	4.0	82,810	3.0
Siavonga	-	-	37,497	1.6	58,864	4.6
Sinazongwe	-	-	71,659	3.8	80,455	1.2

Source: CSO, 2000 Census of Population and Housing
Note: * New districts

3.4 Population Distribution

The spatial or geographical distribution of the population in Southern Province from 1980 to 2000 is shown graphically in Figure 3.1, 3.2 and Table 3.4.

As Figure 3.1 illustrates, four in five persons of the Southern Province population reside in rural areas. The proportion of rural population has steadily increased during the last three decades, from 75 percent in 1980 to 77 and 79 percent in 1990 and 2000, respectively. This implies a constant urban-rural migration trend, which is apparent in the most urbanized provinces of the country such as Copperbelt, Central and Lusaka. These provinces have over the years been characterised by economic decline, rendering them unattractive in economic terms. Details on internal migration are provided in the 2000 Migration and Urbanisation Report.



Sources: CSO, 1980, 1990, and 2000 Censuses of Population and Housing

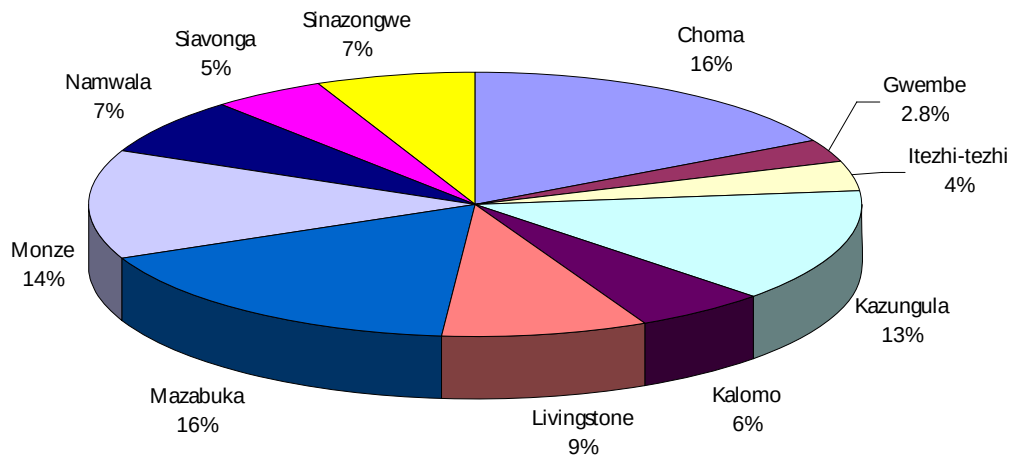
The percent distribution of Southern Province population by districts is presented in Table 3.4 and further illustrated in Figure 3.2. Table 3.4 shows that in 2000, Choma and Mazabuka recorded the largest share of the population in the Province, with about 17 percent each. Of the newly created districts, Kazungula has higher population share than Itezhi-tezhi. Gwembe has continued to have one of the lowest population in the province with 2.8 percent in 2000.

Table 3.4: Population Distribution (De jure) by District, Southern Province, 1980, 1990 and 2000

Residence	1980		1990		2000	
	Number	Percentage	Number	Percentage	Number	Percentage
Total	671,923	100	965,591	100	1,212,124	100
District						
Choma	130,416	19.4	170,687	17.7	204,898	16.9
Gwembe	20666	3.1	39,785	4.1	34,133	2.8
Itezhi-tezhi	-	-	31,424	3.3	43,111	3.6
Kalomo	97,177	14.5	127,762	13.2	67,666	5.6
Kazungula	-	-	45,157	4.7	169,503	14
Livingstone	71,521	10.6	84,278	8.7	103,288	8.5
Mazabuka	112,258	16.7	162,321	16.8	203,219	16.8
Monze	110,423	16.4	133,671	13.8	163,578	13.5
Namwala	56,058	8.3	61,848	6.4	82,810	6.8
Siavonga	29,633	4.4	37,497	3.9	58,864	4.9
Sinazongwe	43,771	6.5	71,659	7.4	80,455	6.6

Sources: CSO, 1980, 1990 and 2000 Censuses of Population and Housing

Figure 3.2: Population Distribution By District, Southern Province, 2000



Source: CSO, 2000 Census of Population and Housing

3.4.1 Population Density

Table 3.5 shows the land area and population density of Southern Province from 1969 to 2000. Generally, with an increasing population in the past decades, the population density in the province has also been increasing, from 5.8 in 1969 to 7.9 and 11.3 in 1980 and 1990, respectively. In 2000, 14.2 persons per square km were recorded; a population density that is higher than the national population density of 13.1 persons per square kilometer.

An important feature of the provincial population distribution is that Livingstone, which has the smallest land area of 695km, exhibits the highest population density of over 120 and 149 persons per sq. km in 1990 and 2000 respectively. However, during the same period the new districts (Itezhi-Tezhi and Kazungula) that take the largest share of land in the province had population densities less than 10 persons per sq. km (*see Table 3.3*).

Table 3.5: Area and Population Density (de jure) by District, Southern Province, 1969-2000

District	Area sq.km	Population Density/Census Year (Population per sq.km)			
		1969	1980	1990	2000
Zambia	752,612	5.4	7.5	10.3	13.1
Southern	85,283	5.8	7.9	11.3	14.2
Districts					
Choma	7,296	13.4	17.9	23.4	28.1
Gwembe	3,879	6.1	4.1	10.3	8.8
Itezhi-tezhi	16,064	-	-	2.0	2.7
Kalomo	15,000	3.5	3.1	8.5	11.3

Kazungula	16,835	-	-	2.7	4.1
Livingstone	695	34.4	50.1	120.5	148.6
Mazabuka	6,242	23.3	16.4	26.0	32.6
Monze	4,854	-	22.8	27.5	33.7
Namwala	5,687	1.7	2.6	10.9	14.6
Siavonga	3,871	-	11.3	9.7	15.2
Sinazongwe	4,860	-	8.8	14.7	16.6

Source: CSO, 1980, 1990 and 2000 Censuses of Population and Housing

3.5 Population Composition

This section provides some information on the composition of Southern Province population in terms of age, sex, age dependency, household headship, marital status, ethnicity, citizenship and economic characteristics.

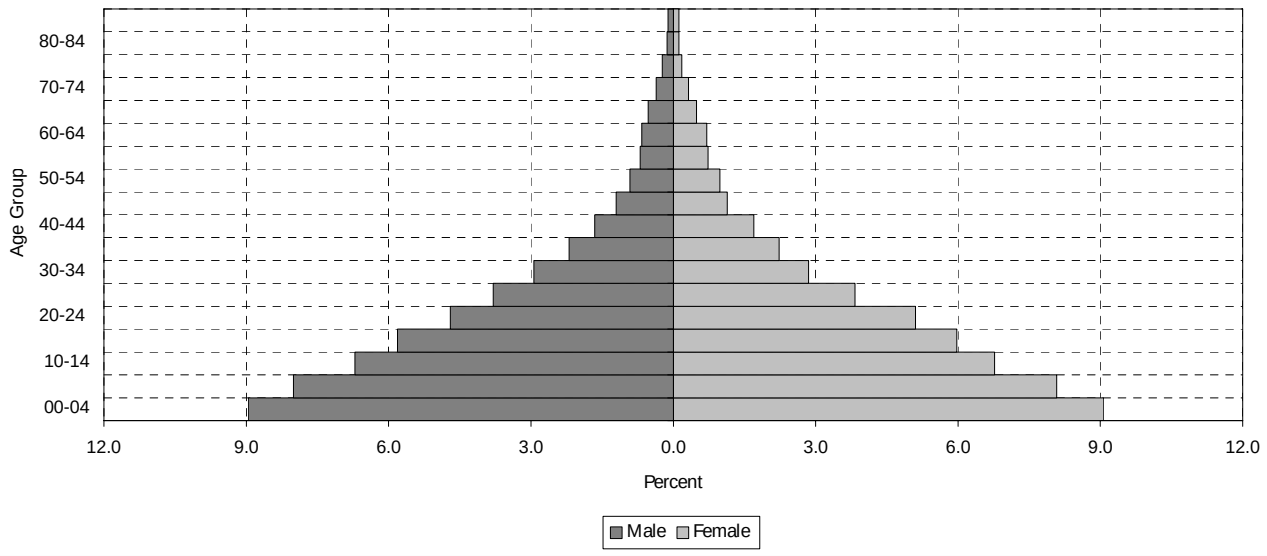
3.5.1 Age and Sex Composition

The analysis of most population phenomena is difficult to understand without taking into consideration the age and sex structure of any given population. Generally, 'tabulations on age and sex are essential in the computation of basic measures related to the factors of population change and in the study of economic dependency. Those tabulations are indispensable for the identification and examination of various functional population groups, such as infants, children, youth, the elderly, women and women in child bearing ages, as well as for other demographic and actuarial analyses' (UN: 1995:1). Further, the age structure of a population is important given that social relationships within a community are considerably affected by the relative numbers at each age.

The age and sex structure of population in Southern Province is illustrated in proportion by way of population pyramids for 1990 and 2000 in Figure 3.3a and 3.3b. Population pyramids are useful in describing the population by age and sex pictorially. Another important feature of population pyramids is their strength in illustrating whether a population is 'young' or 'old'. Similar to the national picture, Southern Province continues to exhibit a young population given that it continues to bear a high proportion of persons below the age of 15 years. The broad base of the pyramids in both 1990 and 2000 is illustrative of this feature.

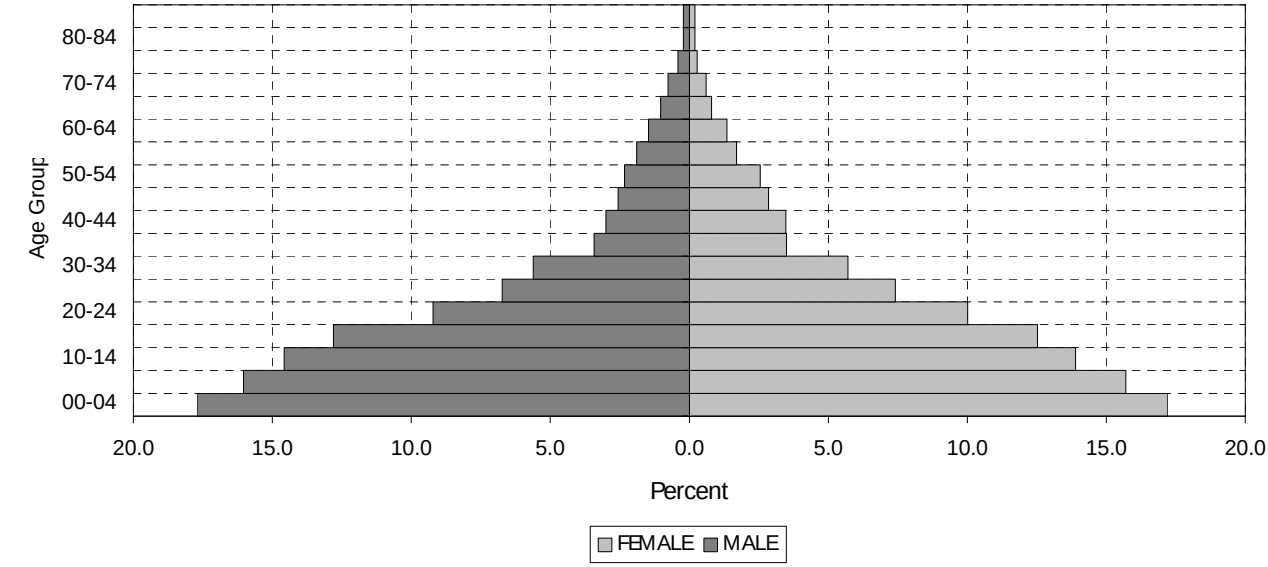
In comparative terms, the 2000 population pyramid (Figure 3.3a) has a smoothened picture along the ages of 10-14 and mid 20s, which otherwise had a bump appearance in 1990 (Figure 3.3b). By comparison, this signifies population gaps or absences from age 10 –14 to about 20 – 24 and in later ages of 45 to early 60s. These population gaps could very well be attributed to increased mortality, given the ravaging effects of HIV/AIDS pandemic coupled with the odds of the declining economic situation in the country. Supporting this likelihood of events also is the evidence that fertility has in the same period decreased (see chapter on Fertility).

Figure 3.3a: Age Sex Composition,Southern Province,2000.



Source: CSO, 2000 Census of Population and Housing

Figure 3.3b : Age-Sex Composition,Total, Southern Province,1990



Source: CSO, 2000 Census of Population and Housing

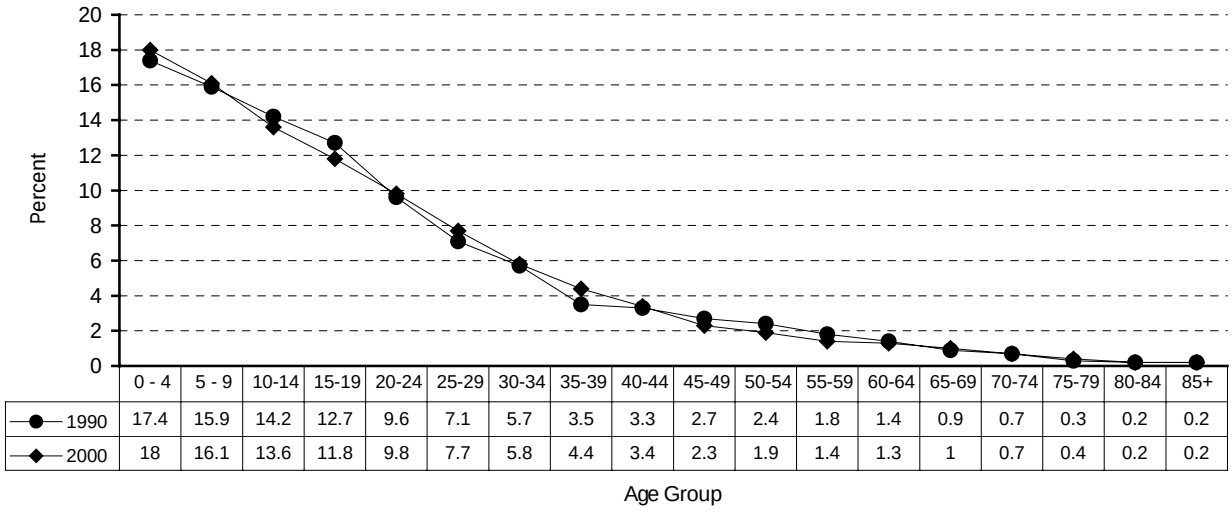
Table 3.6 presents the age-sex population distribution for Southern Province, including the rural and urban areas. As of 2000, the age group 0-14 years, responsible for terming the population as young, constitutes 47.6 percent of the total population in Southern Province, which is a percent increase/decrease from 47.5 in 1990. Similarly, rural and urban populations mostly comprise the child population (0-14 years), 49.0 and 42.0 percent, respectively. The proportion for the rest of the population declines towards a thin aged population (of about one and less percent) around the 60s and above. As was predictive in the past decades, this scenario still holds promise for future population growth given the potential that lies in the huge proportion of young persons expected to enter into reproductive ages (15-49 years).

Table 3.6 Percent Age-Sex Distribution of Population (de jure) by Residence Southern Province, 2000

Age Group	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
0-4	18.0	18.0	18.0	18.9	19.0	18.8	14.6	14.5	14.8
5-9	16.1	16.1	16.0	16.5	16.6	16.3	14.5	14.2	14.9
10-14	13.5	13.5	13.4	13.6	13.9	13.4	12.9	12.1	13.7
15-19	11.8	11.7	11.9	11.4	11.5	11.3	13.3	12.4	14.1
20-24	9.8	9.5	10.2	9.3	9.0	9.6	11.8	11.3	12.4
25-29	7.7	7.7	7.6	7.2	7.2	7.2	9.4	9.6	9.1
30-34	5.8	5.9	5.7	5.5	5.5	5.5	7.0	7.6	6.4
35-39	4.4	4.4	4.4	4.2	4.1	4.3	5.2	5.6	4.9
40-44	3.4	3.3	3.4	3.2	3.1	3.3	3.8	4.2	3.5
45-49	2.3	2.4	2.3	2.3	2.3	2.3	2.6	3.0	2.3
50-54	1.9	1.8	1.9	1.9	1.8	2.1	1.7	2.1	1.4
55-59	1.4	1.4	1.4	1.5	1.5	1.6	1.0	1.1	0.8
60-64	1.3	1.3	1.4	1.5	1.4	1.6	0.8	0.9	0.6
65-69	1.0	1.1	1.0	1.1	1.2	1.1	0.5	0.6	0.5
70-74	0.7	0.7	0.6	0.8	0.8	0.7	0.4	0.4	0.3
75-79	0.4	0.5	0.4	0.5	0.5	0.4	0.2	0.2	0.2
80-84	0.2	0.3	0.2	0.3	0.3	0.3	0.1	0.1	0.1
85+	0.3	0.4	0.2	0.3	0.3	0.2	0.2	0.1	0.0
Total Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total Pop	1,212,269	601,480	610,789	955,023	471,910	483,113	257,246	129,570	127,676

Source: CSO, 2000 Census of Population and Housing

Figure 3.4: Population Percent Distribution by Age, Southern Province, 1990 and 2000



	0 - 4	5 - 9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+
1990	17.4	15.9	14.2	12.7	9.6	7.1	5.7	3.5	3.3	2.7	2.4	1.8	1.4	0.9	0.7	0.3	0.2	0.2
2000	18	16.1	13.6	11.8	9.8	7.7	5.8	4.4	3.4	2.3	1.9	1.4	1.3	1	0.7	0.4	0.2	0.2

Source: CSO, 2000 Census of Population and Housing

3.5.2 Age Dependency Ratio

Table 3.7 reveals that the overall dependency ratio as of 2000 Census was 105 per 100 persons in the economically active group (15-64 years). The table further shows that dependency on those with economically productive capabilities increased during the 1990s. For instance, at province level, *overall* and *child* dependency ratios increased from 99.6 and 94.9 in 1990 to 105.4 and 100.2 dependants per 100 persons (respectively) in 2000.

Further, it is apparent that economically productive persons in rural areas continue to bear a heavy burden of dependants compared to their urban counterparts, whose dependency has actually decreased between 1990 and 2000. According to Table 3.7 there were 114 dependants per 100 persons in rural areas, while there were only 79 dependants for every 100 persons in urban areas. Table 3.9 however also shows that aged dependency has not changed much for both rural and urban areas. Generally, all the three dependency ratios were higher for the province than the national average.

Table 3.7 further shows that between 1990 and 2000 census periods, both overall and child dependency ratios have increased for all districts with the exception of Livingstone, where only aged dependency has slightly

increased. This is a district that s considered more urban than the rest and may confirm the increased influx of urban dwellers in rural areas as a result of declining economic conditions in urban areas.

Table 3.7 Dependency Ratios by Residence and District, Southern Province, 1990-2000

Residence	Ratios	1990	2000
Zambia	Overall Dependency Ratio	110.2	95.1
	Child Dependency Ratio	104.3	87.2
	Aged Dependency Ratio	5.9	5.0
Southern	Overall Dependency Ratio	99.6	105.4
	Child Dependency Ratio	94.9	100.2
	Aged Dependency Ratio	4.7	5.2
Rural	Overall Dependency Ratio	104.4	113.8
	Child Dependency Ratio	98.8	107.7
	Aged Dependency Ratio	5.6	6.1
Urban	Overall Dependency Ratio	85.6	79.4
	Child Dependency Ratio	83.5	76.9
	Aged Dependency Ratio	2.1	2.5
District			
Choma	Overall Dependency Ratio	105.0	110.8
	Child Dependency Ratio	100.6	105.5
	Aged Dependency Ratio	4.4	5.2
Gwembe	Overall Dependency Ratio	113.3	114.4
	Child Dependency Ratio	107.9	109.1
	Aged Dependency Ratio	5.4	5.3
Itezhi-tezhi	Overall Dependency Ratio	-	106.0
	Child Dependency Ratio	-	97.8
	Aged Dependency Ratio	-	8.2
Kalomo	Overall Dependency Ratio	102.7	115.1
	Child Dependency Ratio	97.8	110.6
	Aged Dependency Ratio	4.9	4.6
Kazungula	Overall Dependency Ratio	-	108.4
	Child Dependency Ratio	-	101.0
	Aged Dependency Ratio	-	7.4
Livingstone	Overall Dependency Ratio	82.0	73.1
	Child Dependency Ratio	79.6	70.1
	Aged Dependency Ratio	2.5	3.0
Mazabuka	Overall Dependency Ratio	93.5	98.6
	Child Dependency Ratio	89.5	94.0
	Aged Dependency Ratio	4.1	4.6
Monze	Overall Dependency Ratio	103.3	113.7
	Child Dependency Ratio	98	107.1
	Aged Dependency Ratio	5.4	6.6
Namwala	Overall Dependency Ratio	104.0	116.3
	Child Dependency Ratio	96.2	109.9
	Aged Dependency Ratio	7.8	6.4
Siavonga	Overall Dependency Ratio	101.7	104.1
	Child Dependency Ratio	96.5	99.2
	Aged Dependency Ratio	5.2	4.9
Sinazongwe	Overall Dependency Ratio	97.7	107.2
	Child Dependency Ratio	94.0	102.9
	Aged Dependency Ratio	3.7	4.3

Sources: CSO, 1990 and 2000 Censuses of Population and Housing

3.5.3 Household Headship

Household headship by various characteristics is presented in Table 3.8. The table shows that close to 1 in 6 households are female headed. In comparison to the national, Southern province has less female headed households than the national level of one in every five households. With a high rural provincial population, it is not surprising that there are more than thrice as many heads of households in rural (156,072) than urban areas (48,326). Distinction of household heads by sex is important because it is often associated with aspects of household welfare. For instance, female-headed households are typically poorer than male-headed households (CSO, 1998 & 2003). Amongst the districts, Livingstone closely followed by Monze and Kazungula exhibit the highest proportion of female household heads (20 percent), while Gwembe has the lowest at 13 percent.

Table 3.8: Household Headship by Sex, Marital Status, Residence and District, Southern Province, 2000

Residence/Marital Status/District	Number of Household Heads	Total Percentage of Household Heads	Sex of Head	
			Male	Female
Zambia	1,884,741	100	81.1	18.9
Southern	204,398	100	82.7	17.3
Rural	156,072	100	83.1	16.9
Urban	48,326	100	81.2	18.8
Marital Status				
Married	157,591	100	95.3	4.7
Separated	5,005	100	41.0	59.0
Divorced	10,318	100	34.8	65.2
Widowed	19,428	100	19.2	80.8
Never Married	11,564	100	80.3	19.7
Living Together/Cohabiting	492	100	39.4	60.6
District				
Choma	33,655	100	82.8	17.2
Gwembe	5,604	100	87.2	12.8
Itezhi-tezhi	7,998	100	81.1	18.9
Kalomo	26,921	100	83.1	16.9
Kazungula	12,601	100	80.5	19.5
Livingstone	18,856	100	79.8	20.2
Mazabuka	36,210	100	84.3	15.7
Monze	26,398	100	80.2	19.8
Namwala	12,075	100	86.0	14.0
Siavonga	10,504	100	81.8	18.2
Sinazongwe	13,576	100	85.2	14.8

Source: CSO, 2000 Census of Population and Housing

Table 3.8 further shows that headship of household for a female in the province is more likely to occur when they are widowed (81 percent), divorced (65 percent) and for those cohabiting (61 percent) as well as when separated (59 percent). Among the married and never married, the majority of the heads are males.

3.5.4 Marital Status

Categorisation of marital status in the 2000 Census included married, separated, divorced, widowed, never married and co-habiting which was not available in the 1990 Census. Table 3.9 presents the percentage distribution of marital status of population above 12 years by age and sex. The majority of both males and females in the young age group 15-19 years have never married. However, slightly over a quarter of the females (27 percent) compared to four percent of males are married.

Table 3.9 Distribution of Population 12 Years and Above by Age, Sex and Marital Status, (Percent), Southern Province, 2000

	Married		Separated		Divorced		Widowed		Never Married		Cohabiting		Total Number of Cases	
Age Group	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
12-14	1.1	1.2	0.0	0.1	0.0	0.1	0.1	0.2	98.5	98.2	0.3	0.3	42,671	42,703
15 - 19	3.6	26.5	0.2	1.3	0.1	0.8	0.2	0.3	95.6	74.3	0.4	1.2	63,801	66,657
20 - 24	34.5	75.1	1.0	3.9	0.9	3.8	0.3	1.4	62.5	28.4	0.9	1.2	50,744	57,759
25 - 29	67.2	80.6	1.7	4.1	2.1	5.4	0.7	3.1	27.6	11.5	0.7	0.8	41,272	43,522
30 - 34	81.5	81.2	1.7	3.8	2.9	6.2	1.3	5.7	12.2	5.7	0.4	0.6	31,820	32,831
35 - 39	85.1	85.2	1.9	4.0	3.4	7.3	2.1	8.9	7.4	3.6	0.2	0.5	23,320	25,523
40 - 44	86.6	84.1	1.9	3.7	3.9	8.3	2.7	12.9	4.6	2.4	0.2	0.4	17,415	19,466
45 - 49	86.5	75.2	2.0	3.2	4.0	8.8	3.2	15.6	4.1	1.7	0.2	0.3	12,394	13,004
50 - 54	84.9	78.4	2.1	3.7	5.1	10.3	4.7	26.4	3.2	1.4	0.1	0.4	9,391	11,329

55+	79.8	46.2	2.3	3.0	6.0	10.2	9.3	49.3	2.5	1.0	0.1	0.2	28,066	30,833
Size	149,877	178,792	3,733	8,882	6,452	14,735	5,349	26,708	154,083	112,202	1,400	2,308	320,894	343,627

Source: CSO, 2000 Census of Population and Housing

Generally, it is a common practice for males to marry later than females with the latter presenting higher rates of those separated, divorced and widowed than their counterpart. This could be due to another common practice of males re-marrying more frequently than females. For instance, Table 3.9 shows that from age 35, the proportion of widows is higher than that of widowers by a range of 7 to 40 percentage points. In the oldest age group, (55 and above), about one in ten men compared to one in two women are widowed.

3.5.5 Ethnicity and Citizenship

Similar to the previous census, ethnicity in the 2000 Census implied indigenous Zambian tribes while this referred to the continent of origin for non-Zambians. Table 3.10 presents the ethnic composition of the population in Southern Province by residence. Information on racial characteristics is useful in the analysis of economic and social development in societies where the population is not homogenous. Planning of future development of resources is thus made possible through such analyses (UN: 95).

3.5.5.1 Ethnicity

Table 3.10 shows that the population in Southern Province mostly constitutes persons of African origin, with 99.9 percent. The American, Asian, European and 'Other' ethnic groups make up the remaining 0.1 percent. This is similar to the national with 99.5 percent of the population being persons of African origin. The ethnic composition, dominated by Africans, is similar to that of 1990 Population census, with slight variations in proportions. In 1990, the proportion of Africans in the province was 99.0 percent. 'Other' ethnic groups made up the remaining one percent.

Comparison by residence shows a slightly higher presence of non-African ethnic groups in rural than urban areas. It is apparent that there are more males than females of non-African origin.

Table 3.10 Ethnic Composition of the Population by Sex and Residence, Southern Province, 2000

Residence and Sex		Ethnic group					
		African	American	Asian	European	Other	Total
Zambia	Male	4,572,026	691	6,272	3,462	11,839	4,594,290
	Female	4,722,128	507	5,576	2,720	12,204	4,743,135
	Both sexes	9,294,154	1,198	11,848	6,182	24,043	9,337,425
Percent of total population		**99.54**	**0.01**	**0.13**	**0.07**	**0.26**	**100**
Southern	Male	552,688	68	298	336	267	553657
	Female	578,254	47	270	262	587	579420
	Both sexes	1,130,942	115	568	598	320	1132543
Percent of total population		**99.86**	**0.01**	**0.05**	**0.05**	**0.03**	**100**
Rural	Male	434,206	28	32	186	90	434542
	Female	457,265	23	14	156	141	457599
	Both sexes	891,471	51	46	342	231	892141
Percent of total population		**99.92**	**0.01**	**0.01**	**0.04**	**0.03**	**100**
Urban	Male	118,482	40	266	150	177	119115
	Female	120,989	24	256	106	179	121554
	Both sexes	239,471	64	522	256	356	240669
Percent of total population		**99.5**	**0.03**	**0.22**	**0.11**	**0.14**	**100**

Source: CSO, 2000 Census of Population and Housing

3.5.5.2 Citizenship

Table 3.11 presents information on the citizenship of the foreign population in Southern Province. In all, the number of foreign citizens in the province is 2,066, which is three times less than those recorded in 1990

(8,430). The majority of these hail from Zimbabwe (82 percent). The sharing of borders between Zimbabwe and Southern Province may partly explain the prominent presence of Zimbabweans in the province.

Table 3.11 Foreign Population of Southern Province by Citizenship, 1990 and 2000

Country/Region	Percent 1990	Percent 2000	Population 2000
Zimbabwe	18.2	39.7	818
Malawi	6.4	6.1	126
Botswana	0.5	0.9	19
Mozambique	0.3	0.6	12
Angola	0.3	0.9	19
Namibia		0.9	18
South Africa		8.9	183
Other Southern Africa	0.2	0.4	9
Ghana		0.7	14
Mali		0.3	6
Nigeria		0.5	10
Other Western Africa	1.5	2.3	47
Kenya		0.6	12
Tanzania	2.4		-
Uganda		1.2	24
Other Eastern Africa	0.6	1.1	23
Congo		1.0	20
Congo DR		3.5	72
Other Central Africa	0.8	1.2	24
Northern Africa	0.7	0.8	17
Other African Countries		0.3	6
United Kingdom		3.8	79
France		0.3	7
Germany		0.8	16
Other Europe	6.3	6.2	127
United States Of America		2.7	55
Other Americas	1.3	0.7	14
India		8.4	174
Japan		0.3	6
Other Asia & Oceania	4.2	1.6	32
Not Stated	56.3	3.3	77
Percent Total	100	100	
Total foreign Citizens	8,430		2,066
Percent Foreign Population	0.9	0.18	

Sources: CSO, 1990 and 2000 Censuses of Population and Housing

***Note**: Nationals less than five (5) were grouped under 'Other' totals.*

3.6 Economic Characteristics

Data on economic characteristics of the Southern Province population was collected during the 2000 Census. Economic characteristics pertaining to labour force participation, employment and unemployment, employment status, occupation, industry and educational attainment are covered in detail in Chapter Six of this report. This section mainly presents a summary of economic characteristics (See Table 3.12).

Out of the total population in Southern Province, 665, 566 comprise those over 12 years, commonly referred to as the *working age population*. Majority of these are found in rural than urban areas (510,429 vs. 155,137) and are mostly females. Of the total working age population in the province, about one in two are economically active or make up the labourforce (48 percent). Despite dominance of females in the working age population, majority of these are considered economically inactive due to their classification as full-time homemakers

Table 3.12 Summary of Economic Characteristics by Sex and Residence, Southern Province, 2000

Characteristics	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total Population (12 Yrs and Above)	665,566	321,475	344,091	510,429	244,335	266,094	155,137	77,140	77,997
Current Labour Force Size	319,198	200,278	118,920	38,248	22,845	15,403	10,663	7,026	3,637
Current Participation Rate	48	62.3	34.6	48.8	62.7	36	45.2	61.1	29.5
Age Dependency Ratio	105.4	109.4	101.8	113.8	120.3	108.0	79.4	77.4	81.5
Economic Dependency Ratio	92.1	44.5	177.7	85.2	108.9	34.3	45.1	39.0	70.3

Source: CSO, 2000 Census of Population and Housing

Generally, Table 3.12 indicates that age dependency is higher for persons in rural than urban areas while the reverse is true for economic dependency ratios with the exception of females. Notably, females in the productive age, particularly those in urban areas, tend to experience more stress from persons in the non-productive age groups than the male counterparts. The economic dependency ratio for females in urban areas is twice that of those in rural areas, 70.3 vs. 34.3.

3.7 Summary

The de jure or simply 'true' or resident population for Southern Province recorded in the 2000 census is 1,212,124. However, the de facto population adopted for analytical purposes in this chapter and the rest of the report is 1,132,810 of which 50.4 percent are females. The annual population growth rate for the period 1990-2000 is 2.3, which is lower than the national average of 2.5. Over the past three decades, the population growth rate for Southern Province most during the 1980-1990 inter-censal period at 3.0 percent per annum. Except for the period 1969-1980, when the annual population growth rate was 9.2% for urban areas, rural areas have continued to exhibit higher rates of growth than urban areas. However, rates for both rural and urban areas have dropped since 1969-1980 period with that for urban areas dropping more sharply from 9.2 to 2.6 percent per annum during the said period.

It is noted that almost four in every five persons of the provincial population reside in rural areas. The proportion of rural population has steadily increased during the last three decades, from 75 percent in 1980 to 77 and 79 percent in 1990 and 2000, respectively. This implies a constant urban-rural migration trend, which is apparent in the more urbanized provinces of the country such as Copperbelt, Central and Lusaka.

Analysis of the age-sex distribution indicates that overtime; Southern Province has maintained a Young population. The proportion of those below the age of 15 years has remained the same as in 1990 to 47.5 percent (2000). Population pyramids for 1990 and 2000 indicate a change in the age-sex structure, which could be attributed to increased mortality, particularly for adults. This has been observed by huge population gaps for the young population between 10 and 22 and in later years of 45 to the 60s.

Information on headship of households indicates that males predominantly remain heads of households, with only 17 percent of female heads in the province. In absolute terms, there are thrice more heads of household in rural (156,072) than urban areas (48,326).

Economic characteristics of the population show that the overall dependency ratio as of 2000 Census was 105 per 100 persons in the economically active group (15-64 years). In addition, the chapter reveals that age dependency is higher for persons in rural than urban areas while the reverse is true for economic dependency ratios with the exception of females.

Chapter 4

LANGUAGE OF COMMUNICATION AND ETHNICITY

4.1 Introduction

Zambia is a country endowed with many languages. Many people in the country speak more than one language. Officially, there are 73 ethnic groups in Zambia with each of them speaking a dialect of the seven language cluster groups. Though language is not invariably synonymous with tribe, it is a fair assumption that the number of dialects of language clusters in the country is equal to the number of tribes.

ere are seven languages or language clusters that are used in Zambia besides English for official purposes such as broadcasting (both on radio and television), literacy campaigns and the official dissemination of information. These are (in alphabetical order), Bemba, Kaonde, Lozi, Lunda, Luvale, Nyanja and Tonga. They represent language clusters around which exist several dialects. Although these languages are taught in schools in specific provinces, the official language of instruction in schools is English. The 2000 Census of Population and Housing collected information on the predominant language of communication in the cluster spoken by an individual as well as the second language. The former referred to the language a person uses most frequently in their day-to-day communication. The second language is the next most frequently used language of communication. The matter of second language shows the phenomenon of trans-tribe character of some languages in that they are spoken by other tribes.

guages presented in the tables are in five categories. The first set of languages are those most spoken in a given geographical location. Secondly, there are broad groups of languages which are mainly formed by combining languages which were mutually intelligible. For example Tonga, Ila, Lenje and Soli form one language group because they are not mutually unintelligible languages. Thirdly, there is a set of languages which are trans-tribe such as Bemba and njanya and have become increasing so. Fourthly, there are some languages that are slowly becoming extinct. Accordingly, when for example a person says they are Chishinga, Tabwa, they will say their mother tongue is Bemba. Fifthly, languages presented in the tables also deal with the category of gender. The chapter discusses the distribution of language in relation to the use by men and women. It has been necessary to make observations in this area to help in getting a clearer picture vis-à-vis language as for example in rural and urban areas.

hould be noted from the onset that children under the age of two years and persons with speech impairment did not report any language of communication. This directly implies that the population reported to speak a predominant language cluster hereafter referred to as language of communication is less than the total population of the country. The population speaking a second language of communication is therefore even smaller.

Predominant Language of Communication

4.2.1 Provincial Distribution

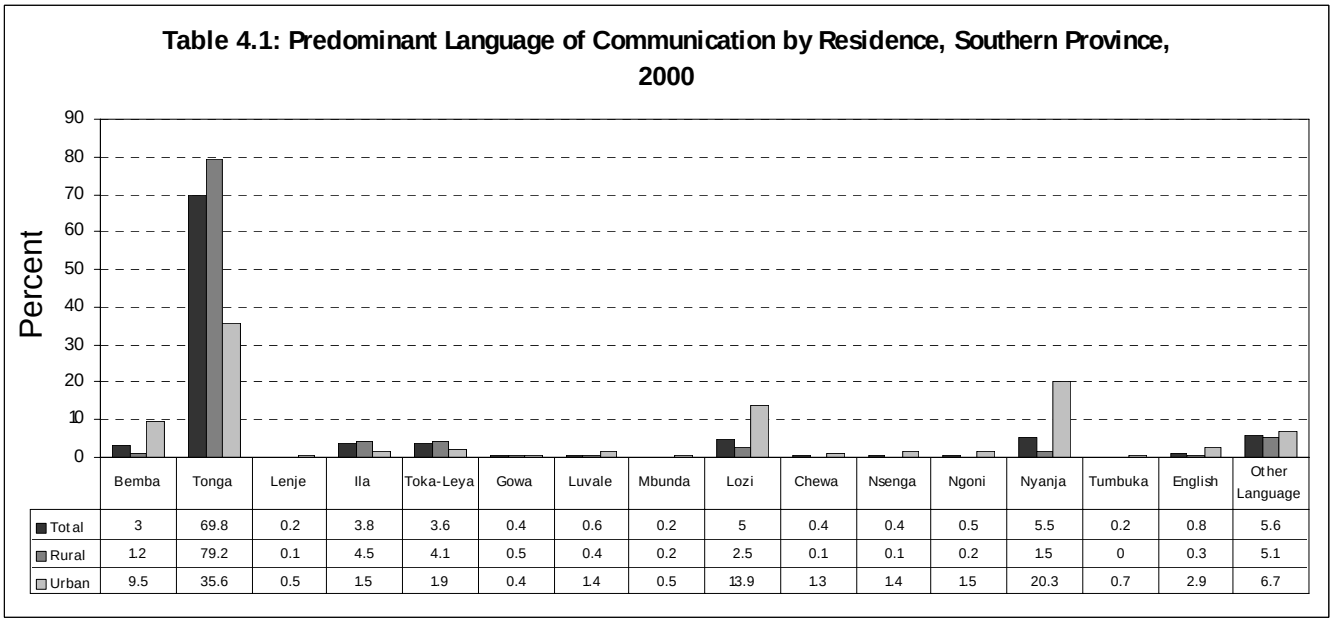
Table 4.1 and Figure 4.1show the 15 most spoken languages in Southern Province. The most predominant spoken language of communication in Southern Province in the year 2000 was Tonga with 69.8 percent of the population using it.

Table 4.1: Predominant Language of Communication by Residence, Southern Province, 2000

Language of Communication	Total	Rural	Urban
	3.0	1.2	9.5
	69.8	79.2	35.6
	0.2	0.1	0.5
	3.8	4.5	1.5
	3.6	4.1	1.9
	0.4	0.5	0.4
	0.6	0.4	1.4
	0.2	0.2	0.5
	5.0	2.5	13.9
	0.4	0.1	1.3
	0.4	0.1	1.4
	0.5	0.2	1.5
	5.5	1.5	20.3
	0.2	0.0	0.7
	0.8	0.3	2.9
	5.6	5.1	6.7
	100.0	**100**	**100**
	1,051,663	**824,938**	**226,725**

Source: CSO, 2000 Census of Population and Housing

In descending order of magnitude, the first seven predominant languages of communication in Southern Province are, Tonga (69.8 percent), Nyanja (5.5 percent), Lozi (5.0 percent), Ila (3.8 percent). Others are Toka-Leya (3.6 percent), Bemba (3.0 percent), English (0.8 percent). These 7 languages are spoken by only 91.5 percent of the population compared with 93.6 percent of the population speaking the same predominant languages in 1990.



Source: CSO, 2000 Census of Population and Housing

4.2.2 District Distribution

At District Level, at least 70 percent of the people of Choma, Gwembe, Kalomo, Mazabuka, Monze, Siavonga and Sinazongwe speak Tonga as their first language of communication. It is the most redominant language of communication in these 7 districts. In Kazungula District, slightly more than half of the population use Toka-Leya as their predominant language of communication (50.1 percent). Ila as a predominant language of communication is used mostly in Itezhi-tezhi and Namwala districts (45.3 and 29.2 percent respectively). Twenty six percent of the people of Livingstone District use Nyanja while Lozi is spoken by 23.6 percent of people in the same district. In Kazungula District Lozi is spoken by 13.2 percent of the population after Toka-Leya and Tonga. Unlike other districts, Livingstone District has a diverse range of languages spoken within its boundaries. Probably this is because not all of the people in the district are indigenous to the district. Nyanja and Lozi are the second mostly used languages in most of the districts in Southern province with more use of Nyanja concentrated in Livingstone (25.6 percent), Mazabuka (5.9 percent), Choma (4.7 percent), Itezhi-tezhi (8.5 percent) and Siavonga (7.3 percent). See Table 4.2 for details.

With the exception of Livingstone District, the most widely used languages of communication are one of the indigenous languages in the respective districts. This indicates that all languages are still widely used in their districts of origin. In all the districts with the exception of Livingstone (with 3.9 percent), less than 1 percent of the population speak English as their predominant language of communication. This is despite it being the country's official language of communication.

Table 4.2: Predominant Language of Communication by District, Southern Province, 2000

nguage of Communication												
	3.0	2.5	1.9	4.5	0.8	0.5	10.0	3.8	1.6	1.6	3.1	3.6
	69.8	82.7	89.9	14.4	87.5	28.7	16.7	75.2	87.4	57.4	71.6	85.9
	0.2	0.1	0.1	0.2	0.0	0.0	0.5	0.3	0.1	0.1	0.8	0.1
	3.8	0.3	0.0	45.3	0.2	0.1	0.6	0.3	0.2	29.2	0.1	0.1
	3.6	0.1	0.1	0.1	2.0	50.1	5.3	0.2	0.1	0.1	0.0	0.2
	0.4	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	8.9	0.0
	0.6	0.3	0.1	5.0	0.2	0.4	1.7	0.4	0.2	0.6	0.1	0.2
	0.2	0.1	0.0	3.1	0.1	0.2	0.5	0.1	1.3	0.3	0.0	0.0
	5.0	1.7	1.2	9.2	1.3	13.2	23.6	5.2	0.3	2.5	1.1	1.7
	0.4	0.3	0.1	0.3	0.1	0.0	1.3	0.5	0.2	0.1	0.4	0.1
	0.4	0.3	0.1	0.1	0.1	0.1	1.8	0.6	0.5	0.1	0.3	0.1
	0.5	0.6	0.1	0.1	0.3	0.1	1.1	1.0	2.2	0.1	0.3	0.2
	5.5	4.7	1.3	8.5	1.7	1.0	25.6	5.9	2.2	1.6	7.3	2.6
	0.2	0.2	0.0	0.2	0.0	0.0	0.7	0.2	0.2	0.1	0.1	0.1
	0.8	0.9	0.1	0.2	0.4	0.2	3.9	0.9	0.3	0.2	0.8	0.3
	5.6	5.2	4.9	8.8	5.3	5.4	6.7	5.3	5.4	6.0	5.1	4.8
	100	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
	1,051,663	**179,650**	**28,946**	**38,080**	**143,389**	**58,389**	**89,374**	**182,117**	**143,743**	**70,513**	**50,010**	**67,452**

Source: CSO, 2000 Census of Population and Housing

Predominant Language Groups

re than 70 percent of all predominant languages spoken in Southern Province are in the Tonga language group. In addition, 88.3 percent rural and 40.0 percent of the urban population speak a language in this group. The next predominant languages are in the Nyanja group (6.8 percent), Lozi group (5.2 percent) and Bemba (3.3 percent). Two-fifths (40 percent) of the urban population speak a predominant language in the Tonga language group while in the rural areas of the province, this language group account for nearly nine-tenths of the predominant languages spoken. The Tonga language group is more principally prevalent in rural than urban areas. It is at least twice more dominant in rural than in urban areas (88.3 percent versus 40.0 percent). Languages belonging to the other language groups (Barotse, Bemba, Nyanja and English) are more predominantly spoken in urban areas than in rural areas of the province. Refer to Table 4.3 for more information.

ble 4.3: Predominant Language Groups by Sex and Residence, Southern Province, 2000

Language Group	Total			Rural			Urban		
	Both Sexes	**Male**	**Female**	**Both Sexes**	**Male**	**Female**	**Both Sexes**	**Male**	**Female**
Bemba	3.3	3.4	3.1	1.4	1.5	1.3	10.1	10.3	9.9
Tonga	77.9	76.8	78.9	88.3	87.6	89	40	38.4	41.5
North-Western	1.2	1.3	1.1	0.7	0.8	0.7	3	3.2	2.8
Barotse	5.2	5.5	4.9	2.7	2.9	2.5	14.3	14.5	14.1
Nyanja	6.8	7.2	6.5	1.9	2.1	1.8	24.7	25.2	24.2
Mambwe	0.2	0.2	0.2	0	0	0	0.7	0.7	0.6
Tumbuka	0.2	0.2	0.2	0.1	0.1	0.1	0.8	0.8	0.8
English	0.8	1	0.7	0.3	0.3	0.2	2.9	3.3	2.6
OtherLanguages	4.4	4.4	4.4	4.6	4.7	4.4	3.5	3.6	3.5
Total	100	100	100	100	100	100	100	100	100
Population	1,051,663	513,070	538,593	824,938	401,024	423,914	226,725	112,046	114,679

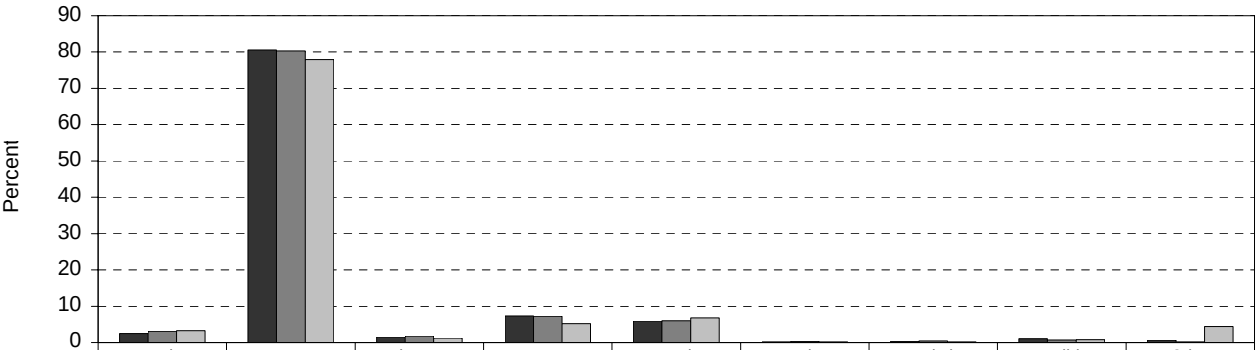
Source: CSO, 2000 Census of Population and Housing

provincial level languages in the Tonga group are spoken by more women than men as a predominant language of communication. This is irrespective of residency.

Trends in Language Groups' Distribution, 1980 – 2000

le 4.4 and Figure 4.2 show trends in the percentage share of each language group for the period 1980 –2000 in Southern Province. The Tonga language group has remained dominant throughout the last 20 years followed by Barotse and Nyanja. With the exception of Bemba, Nyanja and English, no other language group recorded an increase in usage as a predominant language between the period 1990 –2000. There were significant declines in the Tonga and Barotse groups as predominant languages of communication, (2.4 percentage points for the Tonga group and 2.0 percent for the Barotse group). The Bemba, Nyanja and English groups as predominant languages of communication recorded a small percentage increase in the same period. The decline in the other language groups as predominant languages of communication in the period 1990-2000 could be attributed to the increase in the percentage of the 'other group'. This could mean that people speaking any languages different from those displayed moved into the province. In the period between 1980 and 1990 there were no major changes in all the language groups though increases were recorded for the Bemba, North-Western, Mambwe, Tumbuka and Nyanja groups while the remaining groups recorded declines. Figure 4.2, Table 4.3 and Table 4.4 gives more information.

Figure 4.2: Predominant Language Groups by Census Year, Southern Province, 2000



	Bemba	Tonga	North-Western	Barotse	Nyanja	Mambwe	Tumbuka	English	Other
1980	2.5	80.6	1.5	7.3	5.9	0.2	0.3	1.1	0.6
1990	3.1	80.3	1.8	7.2	6	0.3	0.4	0.7	0.2
2000	3.3	77.9	1.2	5.2	6.8	0.2	0.2	0.8	4.4

Source: CSO, 2000 Census of Population and Housing

ble 4.4: Predominant Language Groups by Census year, Southern Province, 1980 – 2000

Language group	Percentage of Total Population		
	1980	1990	2000
Bemba	2.5	3.1	3.3
Tonga	80.6	80.3	77.9
North-Western	1.5	1.8	1.2
Barotse	7.3	7.2	5.2
Nyanja	5.9	6.0	6.8
Mambwe	0.2	0.3	0.2
Tumbuka	0.3	0.4	0.2
English	1.1	0.7	0.8
Other	0.6	0.2	4.4
Total	100	100	100
Population	621,105	858,902	1,051,663

Sources: CSO, 1980, 1990 and 2000 Census of Population and Housing

4.5 Second Language of Communication

As in every other province of Zambia, there are many languages in Southern Province. As a result, a large proportion of the people speak more than one language. For each respondent, the census collected information on the predominant language of communication as well as the second language spoken by all respondents. This section gives the information on the second language of communication and the results are presented in Table 4.5 and 4.6 and in Figure 4.3. Table 4.5 shows that only 36.1 percent of 1,051,663 or 379,173 people in the province spoke a second language.

The four widely spoken second languages are: Nyanja (40 percent), English (19.6 percent), Tonga (12.5 percent), Bemba (9.0 percent) and Lozi (8.3 percent). These five languages stated represent more than nine-

tenths of the population that reported speaking a second language of communication in the 2000 Census of Population and Housing in the province.

Table 4.5: Second Language by Residence, Southern Province, 2000

ominant Language	Total	Rural	Urban
Bemba	9.0	9.8	8.0
Tonga	12.5	11.1	14.5
Lenje	0.3	0.4	0.3
Soli	0.1	0.1	0.1
Ila	2.9	4.3	1.1
Toka-Leya	1.4	1.8	0.8
Gowa	0.7	0.9	0.3
Luvale	0.5	0.4	0.6
Mbunda	0.2	0.2	0.2
Kaonde	0.2	0.2	0.2
Lozi	8.3	8.9	7.5
Nkoya	0.2	0.2	0.1
Chewa	0.3	0.2	0.4
Nsenga	0.3	0.1	0.4
Ngoni	1.3	1.5	0.9
Nyanja	40.8	38.0	44.7
Kunda	0.1	0.1	0.1
Tumbuka	0.2	0.1	0.2
English	19.6	20.6	0.2
Other Language	1.0	1.0	18.2
African	0.1	0.1	0.1
Total	**100.0**	**100**	**100**
Population	**379,173**	**220,464**	**158,709**

Source: CSO, 2000 Census of Population and Housing

Table 4.6 and Figure 4.3 shows the distribution of the Second language groups by sex. Disaggregated by sex and residence, the second language groups present a picture that is different from that of the predominant language. The proportions using Tonga as a second language is less than that using it as a predominant language, while other language groups are more used as second language than predominant languages in the province.

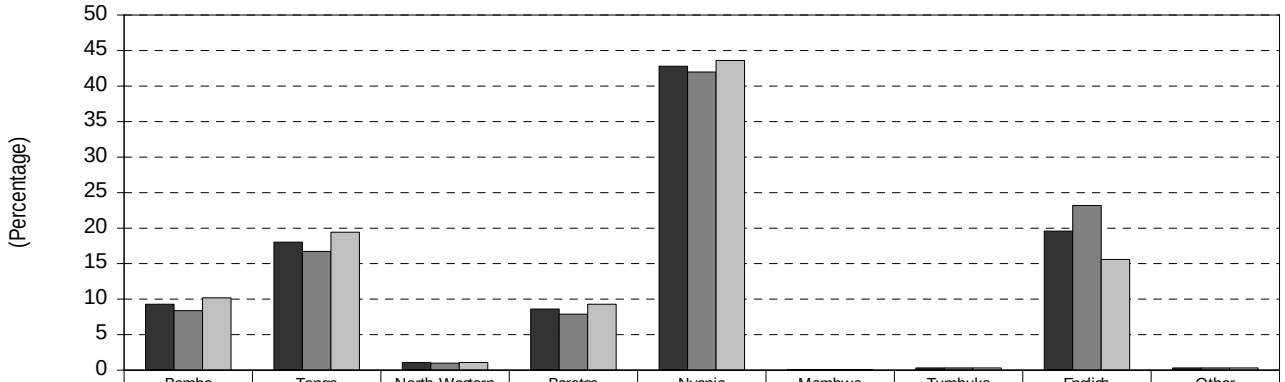
Table 4.6:Second Language Group by Sex and Residence: Southern Province**,** 2000

Second Language Group	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Bemba Speaking Group	9.3	8.4	10.2	10.0	8.9	11.3	8.3	7.8	8.7
Tonga Speaking Group	18.0	16.7	19.4	18.7	17.0	20.7	17.0	16.2	17.8
North-Western Group	1.1	1.0	1.1	0.9	0.8	1.0	1.3	1.3	1.3
Barotse Language Group	8.6	7.9	9.3	9.2	8.3	10.2	7.8	7.4	8.1
Nyanja Speaking Group	42.8	42.0	43.6	40.0	39.4	40.7	46.6	45.8	47.4
Mambwe Language Group	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
Tumbuka Language Group	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3
English	19.6	23.2	15.6	20.6	25.0	15.5	18.2	20.7	15.8
Other Languages	0.2	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Population	379,173	197,894	181,279	220,464	118,105	102,359	158,709	79,789	78,920

Source: 2000 Census of Population and Housing

Language groups showing dominance in magnitude are Nyanja (42.8 percent), English (19.6 percent), Tonga (18.0 percent), Bemba (9.3 percent) and Barotse (8.6 percent). These five language groups account for about nine-tenths of the population speaking a second language (98.3 percent). English is spoken as the second language of communication by 20.6 percent of the population in rural areas compared with 18.2 percent in urban areas. This could be explained by the fact that in urban areas more people speak English as a predominant language than in rural areas. There is also a significant difference between rural men who speak English at25.0 percent and their urban counterparts at only 20.7 percent. Furthermore, English is the only language spoken by more males than females, refer to Table 4.6 and Figure 4.3 for details. .

Figure 4.3: Percent Distribution of Second Language Group by Sex, Southern Province, 2000



	Bemba	Tonga	North-Western	Barotse	Nyanja	Mambwe	Tumbuka	English	Other
Total	9.3	18	1.1	8.6	42.8	0.1	0.3	19.6	0.3
Male	8.4	16.7	1	7.9	42	0.1	0.3	23.2	0.3
Female	10.2	19.4	1.1	9.3	43.6	0.1	0.3	15.6	0.3

Source: 2000 Census of Population and Housing

4.6 Ethnicity

In the 2000 Census of Population and Housing, seven broad groups of tribes were identified. These are: Bemba group, Tonga group, North-Western group, Barotse group, Nyanja or Eastern Group, Mambwe group and the Tumbuka group. The groups are such that all the tribes in Zambia belong to one of these broad tribal groupings. The Bemba group includes all tribes of Luapula Province, some tribes in Central and Copperbelt provinces and all but those tribes belonging to the Mambwe group in the Northern Province. The Tonga group consists of all the tribes of Southern Province in addition to Lenje from Central Province and also the Soli and Gowa tribes from Lusaka province. The North-Western and Barotse groups consist of all the tribes of the North-Western and Western Provinces respectively. The Nyanja group (getting its name from the lingua franca from the languages spoken by the people in its group) consists of some tribes of the Eastern Province including the Chikunda of Lusaka Province. Lungu, Mambwe Namwanga, Wina and Tambo make up the Mambwe group while the Tumbuka group is made up of Tumbuka, Senga and the Yombe on the northern part of Eastern Province bordering the Northern Province.

In Table 4.7 and Figure 4.4 the most predominant ethnic groups in the province as reported in the 2000 Census of Population and housing are displayed. In descending order, the 7 largest ethnic groups are Tonga (72.4 percent), Lozi (6.7 percent), Ila (3.7 percent), Toka-Leya (3.6 percent).Others are: Bemba (3.1 percent), Ngoni (1.2 percent) and Luvale (1.1 percent) of the total population

Table 4.7: Ethnic Groups by Residence, Southern Province, 2000

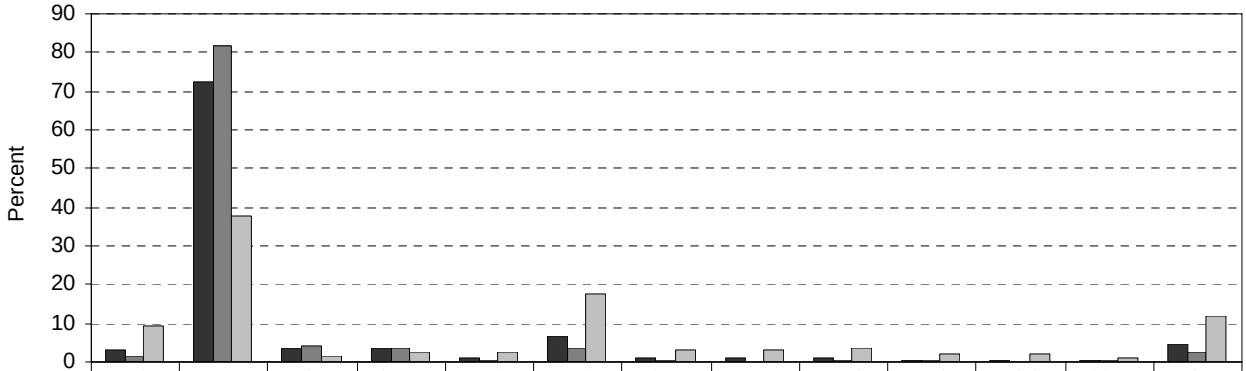
Ethnic Group	Total	Rural	Urban
	3.1	1.8	9.4
	72.4	81.7	38.0
	3.7	4.1	1.8
	3.6	3.8	2.8
	1.1	0.7	2.8
	6.7	3.7	17.8
	0.8	0.3	2.9
	0.9	0.2	3.3
	1.2	0.5	3.7
	0.7	0.3	2.1
	0.6	0.2	2.2
	0.6	0.5	1.1
	4.6	2.6	12.1
	100.0	**100**	**100**
	1,132,810	**892,141**	**240,669**

rce: CSO, 2000 Census of Population and Housing

It is worth noting here that 3 of the 12 largest ethnic groups listed above are from within Southern Province. These 3 ethnic groups are Tonga, Ila and Toka-leya accounting for nearly 80 percent of all ethnic groups in the province. In general, ethnic groups and most widely spoken languages (see previous section) follow the same descending order.

In terms of residence, the three Southern Province ethnic groups (Tonga, Ila and Toka-Leya) are more prevalent in rural than in urban areas of the province while Bemba, Lozi and the five ethnic groups originally from Eastern province (Chewa, Nsenga, Ngoni, Nyanja and Tumbuka) are more prevalent in urban areas than in rural areas. There are almost twice more Tonga people in rural than in urban areas (81.7 percent versus 38.0 percent). Conversely, tribes such as Bemba (Northern), Lozi (Western), Nyanja, Tumbuka, Chewa, Nsenga and Ngoni (Eastern) are such that there are at least double their numbers in the urban than in rural areas.

Figure 4.4: Ethnic Groups by Residence, Southern Province, 2000



	Bemba	Tonga	Ila	Toka-Leya	Luvale	Lozi	Chewa	Nsenga	Ngoni	Nyanja	Tumbuka	Africans	Other
Total	3.1	72.4	3.7	3.6	1.1	6.7	0.8	0.9	1.2	0.7	0.6	0.6	4.6
Rural	1.4	81.7	4.1	3.8	0.7	3.7	0.3	0.2	0.5	0.3	0.2	0.5	2.5
Urban	9.4	38	1.8	2.8	2.8	17.8	2.9	3.3	3.7	2.1	2.2	1.1	12.1

Source: CSO, 2000 Census of Population and Housing

Broad Ethnic Groups

e broad ethnic groups are analyzed by examining their distribution by sex and residence (Table 4.8). Tribes in the Tonga ethnic group account for more than three quarters of all tribes in Southern Province (80.6 percent). From the previous section it is evident that more than 70 percent of all languages spoken in Southern Province are in the Tonga language group (72.4). This is an indication that some people who are in fact from the Tonga tribal group do not actually speak a language in this group as their predominant language of communication. Additionally, 90.4 percent and 44.6 percent of the people belonging to the Tonga tribal group reside in rural and urban areas respectively. The distribution of the people of the Tonga group by sex shows very little variability though in all cases there are more females than males.

rder of size, the Barotse or Western Group is the next largest of the tribal groups at 7.2 percent of the whole population in the province. The others are: Nyanja (3.9 percent), Bemba group (3.8 percent) and North-Western (2.4 percent). The others (that is non-Zambian tribes/ethnic groups) account for 0.8 percent. The distribution by residence of all these tribes does not show much variation except the Tonga group for which twice the people live in rural Southern Province compared with those in the urban areas of the province, refer to Table 4.8 for details.

ble 4.8: Broad Ethnic Groups by Sex and Residence, Southern Province, 2000

Tribe Group	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Bemba	3.8	4.0	3.6	1.8	1.9	1.7	11.2	11.6	10.8
Tonga	80.6	79.7	81.5	90.4	89.8	90.9	44.6	43.2	45.9
North-Western	2.4	2.6	2.3	1.3	1.5	1.2	6.5	6.9	6.1
Barotse	7.2	7.6	6.9	4.1	4.4	3.8	18.8	19.1	18.6
Nyanja	3.9	4.0	3.8	1.5	1.5	1.4	12.7	12.8	12.6
Maambwe	0.5	0.6	0.5	0.1	0.2	0.1	2.0	2.1	2.0
Tumbuka	0.7	0.8	0.7	0.2	0.3	0.2	2.5	2.6	2.4
English	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.9	0.7	0.7	0.6	0.4	0.7	1.7	1.7	1.6
Total	100	100	100	100	100	100	100	100	100
Population	1,132,810	553,657	579,153	892,141	434,542	457,599	240,669	119,115	121,554

Source: CSO, 2000 Census of Population and Housing

Provincial Level, more than half the population belongs to the Tonga tribal group. This group makes up 80.6 percent of the Southern Province population. This distribution is however different in terms of residence, in urban areas the percentage for the Tonga group is lower while for other tribal groups the percentages are higher in urban than in rural areas.

ble 4.9: Broad Ethnic Group by District: Southern Province, 2000

Ethnic Group	Total	Choma	Gwembe	Itezhi-Tezhi	Kalomo	Kazungula	Livingstone	Mazabuka	Monze	Namwala	Siavonga	Sinazongwe
Bemba	3.1	2.5	1.9	4.7	1.0	0.8	9.6	3.9	1.8	1.7	3.6	4.1
Lala	0.1	0.1	0.0	0.2	0.0	0.0	0.6	0.2	0.1	0.0	0.1	0.1
Lamba	0.1	0.1	0.0	0.1	0.0	0.0	0.5	0.1	0.1	0.0	0.1	0.1
Tonga	72.4	85.4	92.9	15.9	89.7	32.0	21.4	76.5	89.5	59.1	76.9	88.6
Lenje	0.3	0.2	0.1	0.4	0.1	0.1	1.1	0.5	0.2	0.1	0.9	0.2
Soli	0.2	0.1	0.0	0.1	0.0	0.1	0.4	0.3	0.1	0.0	0.3	0.0
Ila	3.7	0.6	0.1	40.0	0.3	0.3	1.3	0.5	0.3	26.0	0.2	0.2
TokaLeya	3.6	0.3	0.1	0.2	2.2	45.5	6.7	0.4	0.2	0.2	0.2	0.4
Gowa	0.4	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.0	8.1	0.0
Luvale	1.1	0.7	0.3	7.0	0.5	0.9	3.5	0.9	0.4	1.1	0.3	0.5
Lunda (N/West)	0.2	0.2	0.1	0.6	0.1	0.1	0.9	0.2	0.2	0.3	0.1	0.1
Mbunda	0.4	0.1	0.1	3.9	0.1	0.6	1.3	0.3	0.1	0.5	0.1	0.1
Luchazi	0.2	0.1	0.0	0.9	0.0	0.2	0.8	0.1	0.0	0.1	0.0	0.0
Chokwe	0.1	0.2	0.0	0.5	0.1	0.1	0.7	0.0	0.1	0.1	0.0	0.0
Kaonde	0.4	0.3	0.2	2.2	0.1	0.2	1.0	0.3	0.2	0.4	0.3	0.1
Lozi	6.7	3.1	1.9	12.7	2.8	15.1	27.5	7.2	2.4	4.7	2.1	2.6
Nkoya	0.4	0.2	0.0	3.1	0.1	0.9	0.9	0.1	0.1	0.7	0.0	0.1
Chewa	0.8	0.7	0.2	0.8	0.3	0.2	3.2	1.1	0.6	0.3	1.1	0.3
Nsenga	0.9	0.7	0.2	0.5	0.3	0.2	4.3	1.2	0.5	0.3	1.0	0.3
Ngoni	1.2	1.5	0.3	0.6	0.7	0.3	3.4	1.7	1.0	0.4	0.8	0.5
Nyanja	0.7	0.6	0.4	0.4	0.3	0.6	2.4	1.1	0.3	0.3	0.5	0.4
Kunda	0.1	0.1	0.1	0.1	0.0	0.0	0.7	0.2	0.1	0.0	0.1	0.1
Mambwe	0.3	0.2	0.1	0.3	0.1	0.0	0.8	0.4	0.3	0.2	0.5	0.1
Namwanga	0.3	0.2	0.0	0.4	0.1	0.0	0.8	0.4	0.1	0.1	0.2	0.2
Tumbuka	0.6	0.6	0.2	0.8	0.2	0.1	2.1	0.8	0.4	0.5	0.7	0.3
Africans	0.6	0.5	0.1	1.1	0.3	0.7	1.3	0.3	0.3	2.6	0.2	0.2
Other	1.0	0.7	0.6	2.4	0.5	0.7	2.8	1.2	0.7	0.4	1.5	0.7
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
Total Population	132,810	193,246	31,373	41,013	155,900	62,971	94,404	195,223	155,154	76,896	53,580	73050

Source: CSO, 2000 Census of Population and Housing

le 4.9 shows that the predominant ethnic group at District Level with an exception of Livingstone, Kazungula and Itezhitezhi does not follow the provincial pattern. The predominant ethnic group in Livingstone is Barotse (27.5 percent), Kazungula is Toka-Leya (45.5 percent) and Itezhi-Tezhi is Ila (40.0 percent). For the rest of the districts Tonga is the most predominant ethnic group, see Table 4.9 for more information.

4.8 Summary

the predominant language of communication, Tonga remains the most widely spoken language in the province with over two-thirds of the whole population speaking it. Nyanja is the next most widely spoken language at 5.5 percent closely followed by Lozi at 5.0 percent.

The distribution of languages by residence shows that of the 5 most spoken predominant languages of communication, Bemba, Nyanja and Lozi are more widely used in urban areas as opposed to Tonga, which is mostly spoken in rural areas. Tonga is spoken by more than twice as many people in rural than in urban areas (79.2 percent versus 35.6 percent). Almost 8 times as many people speak Bemba in urban than in rural areas (9.5 percent versus 1.2 percent respectively) and about 14 and 6 times as many for Nyanja and Lozi respectively (20.3 percent versus 1.5 percent for Nyanja and 13.9 versus 2.5 percent for Lozi).

It should be noted that just about one-third of the Population in Southern Province reported to speak a second language at all representing 379,173 persons. This is a direct consequence of the diversity of languages within the province.

Chapter 5

EDUCATION CHARACTERISTICS

5.1 Introduction

Education plays a fundamental role in the overall development of nations. It is for this reason that education has been declared by many countries as a human rights issue as attested to by the 1990 Jomtien declaration on Education For All and 1990 Convention on the Rights of the Child. As such, the Zambian Government has recognized the important role of education in grooming morally and intellectually upright individuals with the intentions of using the acquired skills and knowledge for the overall development of the country.

However, these declarations have come under threat in the light of economic recessions being experienced by many developing countries including Zambia. In the case of Zambia, the post independence era was marked by drastic policy shifts in the education sector. The sector experienced exceptional expansion during the early years of political independence as a result of efforts aimed at redressing previous impediments and discrimination in the case of access and participation in education. After 1990, two major policies were at play in as far as education provision was concerned, namely "Focus on Learning of 1992 and "Educating Our Future" of 1996. Despite these well-articulated policies, the last decade witnessed subdued expansion in the sector mainly as a result of new policy initiatives, which included among others, liberalized market economy with its attendant privatization, liquidation/ closure of industries and retrenchments, and the reintroduction of user service fees as a cost-sharing measure.

The embracement and implementation of these largely over ambitious policies of economic liberalization and privatization as blueprints for socio-economic transformation under Structural Adjustment Programme (SAP), adversely affected all sectors of the economy including education. These new economic measures resulted in increased poverty levels, which manifested themselves in high unemployment, poor performance of the agriculture sector and growth of the informal sector at the expense of the shrinking formal sector. Education and poverty have definitely an impact on each other.

5.2 Census Undertaking and Education

There are four main sources of education statistics in Zambia:

- Annual school censuses (sometimes supplemented by school surveys)
- Household Surveys conducted by the Central Statistical Office
- Population Censuses conducted by the Central Statistical Office
- and
- Administrative registers.

The strength of a population census is that it is undertaken on the basis of a complete count of the population. This means that analysis of the education sector in this case can be done even at the smallest administrative unit in the country. For any conscious policy target setting, there is need to identify areas where primary, secondary or tertiary school attendance is particularly poor.

Therefore, censuses in general provide a good basis for monitoring the participation of the population in an education system and also reveal the adsorption power of the same system. The 2000 Census of Population and Housing captured the following education aspects for all persons as per United Nations (UN) recommendations for the 2000 census round:

- Literacy, i.e whether an individual can read and write,
- School attendance
- Educational attainment
- Educational qualifications
- Academic qualification, and
- Fields of study.

This chapter looks at school attendance as a measure of participation in an education system at all levels and literacy levels as a measure of effectiveness of the education system. In addition, various fields of study available in Zambia have been shown.

5.3 CONCEPTS AND DEFINITIONS

- **EDUCATIONAL SYSTEM**

An education system refers to a set of programmes tailored to impart knowledge and skills, formally acquired through a framework of an established schooling system, or informally through interaction with one's society, in an individual. The term "Education" is understood to comprise all deliberate, systematic and organized communication designed to bring about learning.

The education system in Zambia conforms to the 1997 International Standard Classification of Education (ISCED97), which consists of 7 levels of education.

In Zambia formal education is mainly based on a three-tier system, which starts with primary education from grade 1 to 7, followed, by secondary education from grade 8 up to 12. The next level relate to tertiary education, which basically include college and university education. Selective examination of pupils in grades 7, 9 and 12 inhibit universal progression of pupils from one level to another. The primary and secondary cycles last for 7 and 5 years respectively. Alternatively, the duration of tertiary education varies widely depending on the education program load and certification requirements. These three levels constitute what has come to be known as formal education system.
According to the 1996 education policy, the government intends to scrap off grade 7 examination by 2015 so that there is universal progression up to grade 9; hence the concept of basic education which comprises the first 9 grades of formal education in Zambia.

In addition to primary and secondary education, the last two decades saw the mushrooming of community schools and some institutions offering early childhood education mainly in urban areas. Some of these schools actually enroll children in formal grades. This development has made it increasingly difficult to monitor school enrolment and attendance since these schools fall outside the data collection and monitoring system implemented by the Ministry of education. In addition to early childhood institutions, there has been an increase in community schools which mainly cater for school drop-outs and orphans. Some of the major characteristics of community schools are that they are near to homes of learners, they are not demanding in terms of entry requirements and that they are community driven. The enrolment levels in these schools have tremendously increased from less than 10,000 in 1996 to over 50,000 learners by 2000 (ZCSS, 1999).

Another form of learning in Zambia takes place through non-formal education. This comprises continuing and adult education. There is also education for better living, which is normally imparted through both the media and theatre. (MOE, EFA 2000 Assessment)

- **SCHOOL ATTENDANCE**

School attendance is, in population censuses, defined as attendance at any accredited educational institution or programme, public or private, for organized learning at any level of education. The primary school entry age in Zambia is seven years. Taking the admission age to grade 1 as 7 years, the following age-grade match applies for a given educational level:

- Lower primary (Lower basic) grades 1,2,3 and 4 correspond to pupils aged 7 to 10 years.
- Upper primary (Middle basic) grades 5,6 and 7 correspond to pupils aged 11 to 13 years.
- Junior secondary (Upper basic) grades 8 and 9 correspond to pupils aged 14 and 15 years.
- Senior Secondary (High School) grades 10,11 and 12 correspond to pupils aged 16 to 18 years.
- Students above the age of 18 years are, by expectation, supposed to be in higher institution of learning.

However, there are in most cases age-grade mismatches arising from either early entry or late exist from a given level of education.

- **GROSS SCHOOL ATTENDANCE RATE**

Gross School Attendance Rate is defined as the ratio of the population aged five years and over attending a specified education level to the applicable official school-age population. In some instances where there is rampant under-age and over-age enrolment, the ratio can be over 100 percent. This indicator is mainly used to measure the absorption capacity of an education system at any designated level.

- **NET SCHOOL ATTENDANCE RATE**

The Net School Attendance Rate measures the proportion of the school-age population that is attending a designated level of education. This indicator is much more refined than the crude gross attendance rate and is widely used in education planning. The gross and net attendance rates are used to determine the extent of underage and overage school attendance in an education system. The difference between gross and net school attendance is an indication of the degree of under-age and over age enrolment at a designated level of education.

- **ACADEMIC EDUCATION COMPLETED**

This is the highest level of formal education that an individual has attained or completed regardless of duration in school. Education qualifications acquired such as certificate, diploma, etc, are included in the educational outputs. If an individual is attending grade seven, the highest level completed is grade six. In this chapter, adding 1 to the variable defining highest level of education completed determines current grade for those reported to be presently attending school.

- **LITERACY**

Literacy refers to the ability to read and write in any language. Members of the population who are able to read and write are said to be Literate.

5.4 Literacy Rate

General literacy rate refers to the proportion of the population aged 5 years and above who can read and write. Adult Literacy rate refers to the percentage of the population aged 15 years and over who can read and write. Youth Literacy Rate is in this case defined as the proportion of the population aged 15 to 24 years who are literate.

5.4.1 Literacy Levels for the Population Aged 5 Years and Above.

A literate nation is more likely to develop than an illiterate one since the former is much more knowledgeable about realities of life. Table 5.1 shows that in the year 2000 the literacy rate for the population aged 5 years and above declined slightly from 56.5 percent in 1990 to 56.2 percent in 2000. However, it is worth noting that literacy levels for those aged 5 years and above in the province is higher than the national average that has remained at the 1990 level of 55.3 percent. The pattern was the same in 1990. Results further show that the problem of illiteracy is still more common among the female than their male counterpart since 1990. The table reveals that about 52.3 percent of females were illiterate compared to 60.2 percent of males by the year 2000.

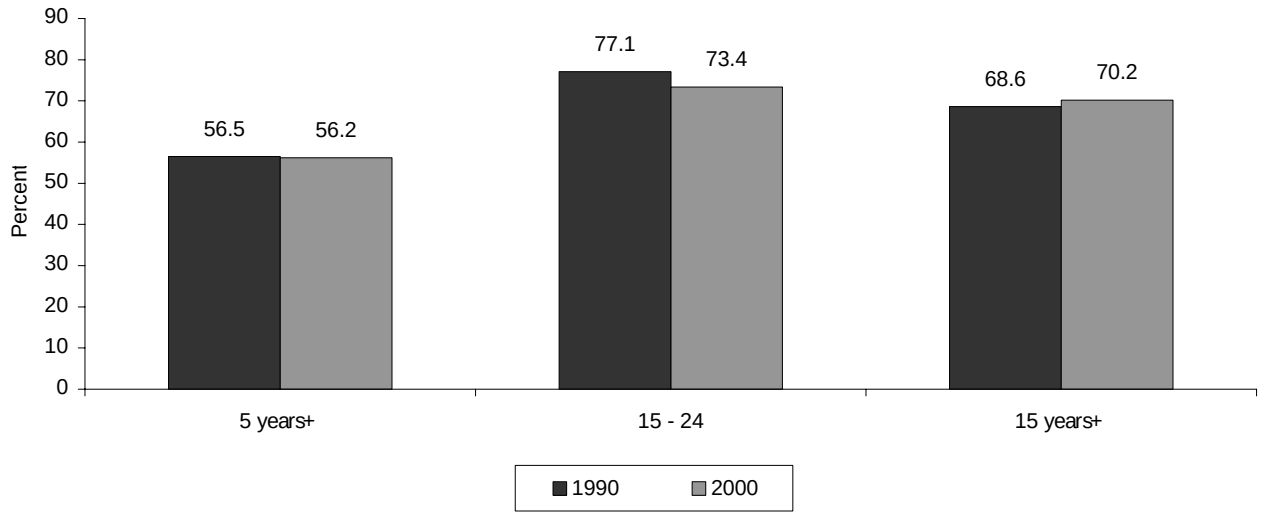
In rural areas, the proportion of the population that could read and write in any language stagnated at about 50 percent between 1990 and 2000. About half of the rural population aged 5 years and above were illiterate compared to about a quarter of the urban population in 2000. Whilst there was no improvement in literacy levels in rural areas, the urban population registered a slight increase from 73 percent in 1990 to 76 percent in 2000.

Table 5.1: Literacy Rates by Age Group, Sex and District, Southern Province, 1990 - 2000

Sex, Residence and District	5+	15 - 24	15+	Population
Zambia (1990)	55.3	74.9	66.0	6,181,285
Southern Province (1990)				748,765
Both Sexes	56.5	77.1	68.6	
Male	61.1	79.7	76.9	364,784
Female	52.1	74.7	60.8	383,981
Rural	51.4	73.0	63.6	568,271
Urban	72.5	89.6	83.4	180,494
Zambia (2000)	55.3	70.1	67.2	7,680,705
Southern Province (2000)				
Both Sexes	56.2	73.4	70.2	921,109
Male	60.2	76.3	77.8	448,476
Female	52.3	70.8	63.2	472,633
Rural	50.5	68.3	65.1	715,735
Urban	76.0	88.9	86.7	205,374
District (2000)				
Choma	57.9	76.2	72.6	157,198
Gwembe	38.2	53.2	48.9	25,182
Itezhi-tezhi	50.5	63.9	64.5	33,379
Kalomo	51.9	69.9	67.3	124,195
Kazungula	51.7	68.6	65.2	51,016
Livingstone	80.2	91.8	89.3	81,430
Mazabuka	57.0	73.7	70.5	15,631
Monzeq	59.9	80.8	77.0	125,269
Namwala	55.2	72.8	72.9	61,272
Siavonga	40.4	55.7	50.9	43,757
Sinazongwe	44.4	58.9	54.3	58,780

Source: CSO, 1990, and 2000 Censuses of Population and Housing

Figure 5.1: Literate Population by Age Group,(Percent), Southern Province, 1990 and 2000



Source: CSO, 1990, and 2000 Censuses of Population and Housing

Comparison of literacy rates for districts in Southern Province reveals that Gwembe District has the lowest literacy rate (38.2 percent) followed by Siavonga (40.4 percent), in 2000. The highest rate was recorded in Livingstone District (80.2 percent).

5.4.2 Literacy Levels for the Population Aged 15–24 Years (Youth Literacy)

Youth literacy rate had declined from 77.1 percent in 1990 to 73.4 percent in 2000. However, this rate still remains above the national average that declined from 74.9 percent in 1990 to 70.1 percent in 2000. There was a drop in the rate of both males and females. By the year 2000, only about one quarter of the male as opposed to 30 percent of the female population aged 15 to 24 years were illiterate. Therefore the problem of youth illiteracy is more likely to be high among female than male population.

The problem of youth illiteracy is still more of a rural than urban phenomena. By the year 2000, 32 percent of the youths in rural areas compared to 11 percent in urban areas were illiterate. The youth literacy rate in rural areas dropped from 73 percent to 68.3 percent between 1990 and 2000. The rate also dropped in urban areas by less than a percentage points between 1990 and 2000.

Gwembe District had the lowest youth literacy rate followed by Siavonga, Sinazongwe district. The districts with the highest proportion of literate youths are Livingstone and Monze districts. (Refer to table 5.1).

5.4.3 Literacy Levels for the Population Aged 15 Years and Above (Adult Literacy Rates)

Adult literacy rate had slightly increased from 68.6 percent to 70.2 percent between 1990 and 2000. The adult literacy rate has been higher for the province as opposed to the national in both 1990 and 2000. The proportion of female adults who were literate increased from 60.8 percent to 63.2 percent while the male rate marginally increased by 1 percentage point. In rural areas, the rate increased by under 2 percentage points over the 1990 level.

Livingstone and Monze districts had the highest rates of adult literacy while Gwembe followed by Siavonga District had the lowest rates of 48.9 and 50.9 percent by 2000, respectively.

5.5 School Attendance

One of the measures used to assess the participation of the population in an education system and the absorption capacity of the system is school attendance. Analysis of school attendance becomes more meaningful if the information available relates to the population of official school age.

Table 5.2 and Figure 5.2 shows the population aged 5 years and above presently attending school. Overall, The proportion of the population presently attending school slightly increased from 27.3 percent in 1990 to 28.8 percent in 2000. Compared to the national average, the proportion of the population currently attending school still remains higher for the province than the national (28.8 percent for the province against 26.7 percent for the nation). Since 1990, there have been proportionately more males attending school than females. The percentage of both males and females attending school marginally increased between 1990 and 2000 from 29.4 and 25.2 percent to 30.7 and 27.0 percent, respectively.

During the same period under review, there was an increase in the proportion of children aged 5 to 14 years presently attending school between 1990 and 2000. This population cohort almost befits the official primary school age population. Marginal declines were recorded for the secondary and tertiary school age population (15 – 29 years). This decline for this age group could be attributed to lack of both financial and physical access to higher education.

Table 5.2: Population Age 5 Years and Above Presently Attending School by Sex and Age Group (Percent) Southern Province, 1990 – 2000

Age	1990				2000			
	Total	**Male**	**Female**	**Population**	**Total**	**Male**	**Female**	**Population**
Total	27.3	29.4	25.2	748,765	28.8	30.7	27.0	921,109
5 – 9	27.9	26.8	28.9	143,910	37.1	35.7	38.5	186,534
10 – 14	68.5	68.3	68.8	129,043	76.6	76.6	76.6	154,434
15 – 19	49.2	57.3	41.3	114,807	46.3	54.4	38.5	130,535

20 – 24	14.0	19.8	9.0	87,313	8.5	12.0	5.5	108,575
25 – 29	4.4	5.2	3.7	64,214	3.1	3.5	2.6	84,896
30 – 44	2.7	2.9	2.5	112,086	2.6	3.1	2.1	150,687
45+	0.9	1.0	0.8	97,392	1.7	2.2	1.2	105,448

Sources: CSO, 1990, and 2000 Censuses of Population and Housing

Table 5.3 shows school attendance rates by residence and age group in Southern Province. Results in the table reveal that almost 1 in every 4 persons in rural areas of Southern Province was attending school, as opposed to more than 1 in every 3 in urban parts of the province. However, there was some increase in the proportion of the rural population attending school from 25 percent in 1990 to 27 percent in 2000. In urban areas, school attendance increased by 1 percentage point (from 34.5 percent in 1990 to 35.5 percent in 2000).

Table 5.3: Population Age 5 Years and Above Presently Attending School by Residence and Age Group,(Percent) Southern Province, 1990 – 2000

Age	1990				2000			
	Total	Rural	Urban	Population	Total	Rural	Urban	Population
Total	27.3	25.0	34.5	748,779	28.8	26.9	35.5	921,109
5 – 9	27.9	23.3	44.2	143,910	37.1	32.8	55.1	186,534
10 – 14	68.5	63.6	84.5	129,043	76.6	74.1	86.3	154,434
15 – 19	49.2	45.3	61.4	114,807	46.3	41.8	60.1	130,535
20 – 24	14	13.3	16.1	87,313	8.5	6.3	14.8	108,575
25 – 29	4.4	4.4	4.4	64,214	3.1	2.5	4.6	84,896
30 – 44	2.7	2.8	2.4	112,096	2.6	2.3	3.5	150,687
45+	0.9	0.9	0.8	97,396	1.7	1.6	2.1	105,448

Sources: CSO, 1990, and 2000 Censuses of Population and Housing

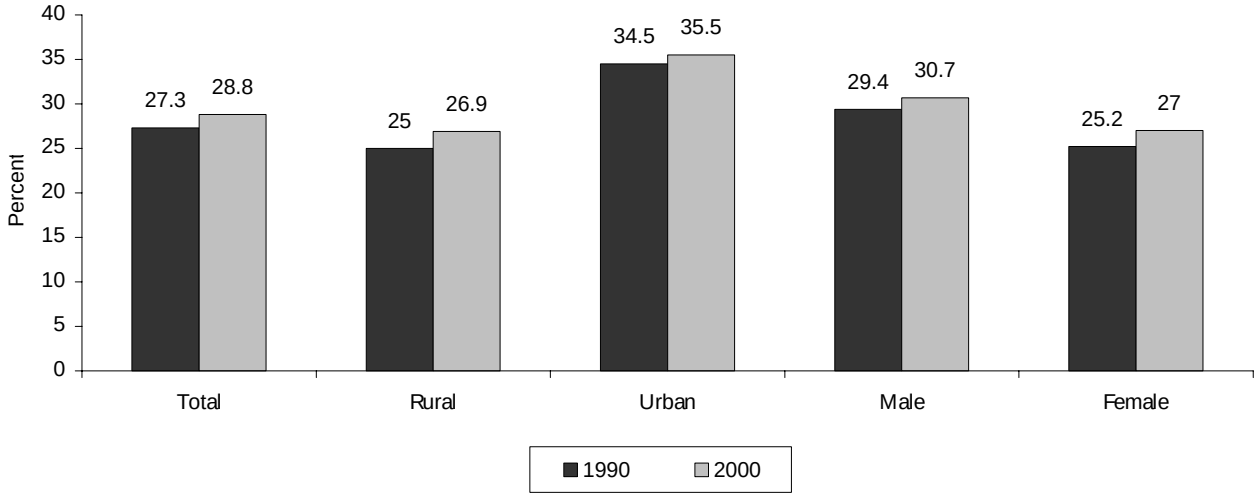
Furthermore, variations in the proportion of the population presently attending school in all the 11 districts have been observed. About 36 percent of all aged 5 years and above attended school in Livingstone District compared to 22 percent in Siavonga District. (Refer to table 5.4).

Table 5.4: Population Age 5 Years and Above Presently Attending School by Residence, (Percent), Southern Province, 1990 – 2000

Province and Residence	Sex			Population
	Total	Male	Female	
Zambia (1990)	**25.8**	**28.1**	23.6	6181285
Southern Province (1990)				
Total	27.3	29.4	25.2	748,779
Rural	25.0	27.7	22.4	568,278
Urban	34.5	34.9	34.0	180,501
Zambia (2000)	26.7	28.7	24.9	7,680,705
Southern Province (2000)				
Total	28.8	30.7	27.0	921,109
Rural	26.9	29.2	24.8	715,735
Urban	35.5	35.9	35.1	205,374
District (2000)				
Choma	30.9	33.3	28.7	157,198
Gwembe	25.5	28.4	22.7	25,182
Itezhi-tezhi	23.1	24.1	22.1	33,379
Kalomo	28.0	30.0	26.1	124,195
Kazungula	25.8	28.0	23.6	51,016
Livingstone	35.9	36.0	35.8	81,430
Mazabuka	28.1	29.2	27.0	159,631
Monze	32.8	35.4	30.4	125,269
Namwala	27.1	29	25.3	61,272
Siavonga	21.7	24.5	18.9	43,757
Sinazongwe	23.4	25.9	21.1	58,780

Sources: CSO, 1990, and 2000 Censuses of Population and Housing

Figure 5.2: Population Aged 5 Years and Above Attending School, (Percent),Southern Province, 1990 and 2000



Source: CSO, 1990, and 2000 Census of Population and Housing

5.6 School Attendance by the Primary School Age Population (7 – 13 Years)

Analysis of school attendance makes sense when the data relates to some official school age population. In Zambia the official primary school age range is 7 to 13 years. This population cohort constitutes the target population for offering primary education. However, some of the members of this cohort may not be attending exact primary grades (Grades 1 to 7). Table 5.5 shows that school attendance by the population aged 7 to 13 years had increased from 56.5 percent in 1990 to 67.3 percent in 2000. This increase is much higher than the national average increase of 6 percent. The rates for the province are higher than those of the national average for both censuses (56.5 percent versus 55.8 percent in 1990 and 67.3 percent versus 62.2 percent in 2000 for Southern and national average respectively). Both the male and female attendance rates increased by about 11 percentage points over the 1990 levels, which were at 55.7 and 57.3 percent, respectively. For this age cohort, females were more likely to be attending school than their male counterpart.

Table 5.5 shows that of the total 145,596 rural children aged 7 to 13 years, only 50.6 percent were attending school, compared to 76.3 percent of the 43,473 urban children in 1990. The school attendance rates increased to 63.6 percent and 81.8 percent for the rural and urban areas by 2000, respectively. School attendance among rural girls rose by 11 percentage points from about 57.3 percent in 1990 to 68.3 percent by 2000. In urban areas, female school attendance rate increased by 6 percent from 76.3 percent to 82.3 percent between 1990 and 2000. The same pattern was observed for the rural and urban boys of primary school age. Despite the high rate of increase in rural areas, these results clearly indicate the continued disparities in education participation between the rural and urban children of primary school age. Urban children are more likely to be attending school than their rural counterpart.

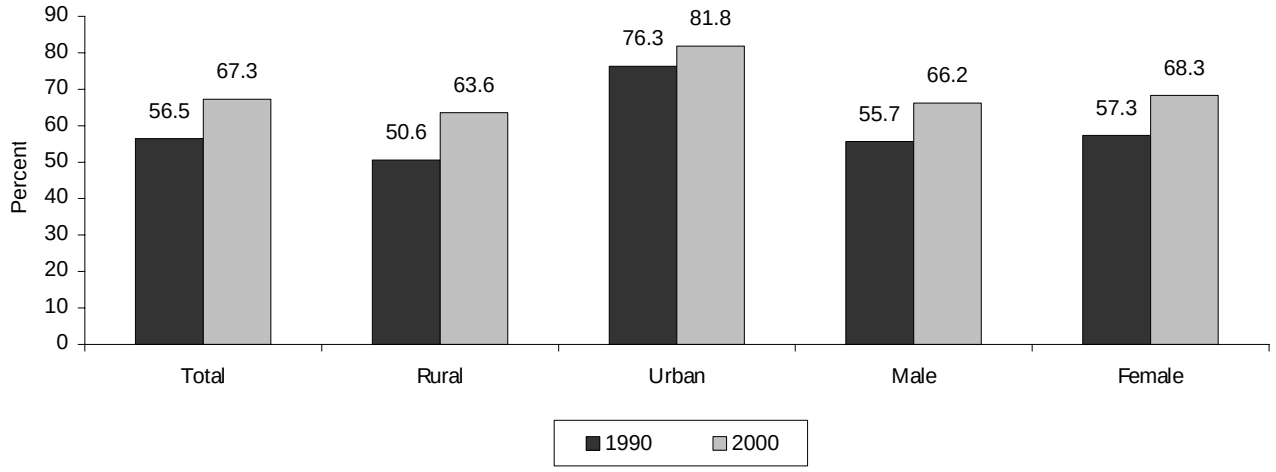
Table 5.5 also reveals that in 2000, Gwembe (46.5 percent) followed by Siavonga (46.6 percent) and Sinazongwe districts (51.3 percent) recorded the lowest rates of school attendance while Livingstone and Monze had the highest rates of 84.2 percent and 76.4 percent respectively. No major sex differences were observed during 2000, in all the districts. (Refer to table 5.5 and figure 3).

Table 5.5: Population Aged 7 to 13 Years Presently Attending School by Sex, Residence and District, (Percent) Southern Province, 1990 – 2000

Province and Residence	Primary School Attendance Rates			
	Total	Male	Female	Population
Zambia (1990)	55.8	55.4	56.2	1,486,062
Southern Province (1990)				
Total	56.5	55.7	57.3	189,069
Rural	50.6	49.8	51.4	145,596
Urban	76.3	76.2	76.3	43,473
-				
Zambia (2000)	62.2	61.8	62.6	1,826,590
Southern Province (2000)				
Total	67.3	66.2	68.3	233,378
Rural	63.6	62.6	64.6	186,551
Urban	81.8	81.3	82.3	46,827
District (2000)				
Choma	70.7	69.7	71.7	41,423
Gwembe	46.5	45.8	47.3	6,677
Itezhi-tezhi	61.1	60.0	62.3	8,036
Kalomo	63.5	62.4	64.6	32,901
Kazungula	68.0	67.2	68.8	12,670
Livingstone	84.2	83.6	84.7	17,644
Mazabuka	68.4	67.5	69.4	39,081
Monze	76.4	75.4	77.4	32,643
Namwala	66.9	64.1	69.7	15,932
Siavonga	46.6	46.7	46.5	11,330
Sinazongwe	51.3	51.0	51.5	15,041

Sources: CSO, 1990, and 2000 Censuses of Population and Housing

Figure 5.3: Population Aged 7 to 13 Years Attending School, (Percent), Southern Province, 1990 and 2000



Sources: CSO, 1990, and 2000 Censuses of Population and Housing

5.7 Gross Primary School Attendance Ratios for Children of All Ages

Gross school attendance rate at primary level shows the ratio of children of all ages attending exact primary grades to the school age population. Due to the school attendance of under-age and over-age children in primary schools, the ratio is sometimes more than 100 percent. Table 5.6 shows an increase in gross primary school attendance ratio from 74 percent in 1990 to 86.4 percent by the year 2000. In comparison to the national average, the gross rates for the province are higher in 2000 while in 1990 the provincial one was lower than the national. The gross rate for males increased from 76.9 percent to 88.6 percent while that of females increased from 71 percent in 1990 to 84.2 percent in 2000. In both years the ratio of males was much higher than that of females.

By the year 2000, the Gross Primary Attendance ratios for urban population remained above those obtaining in rural areas. However, gross school attendance in rural areas increased from 69.7 percent to 84.4 percent, while in urban areas it increased from 88.4 percent to 94.3 percent between 1990 and 2000.

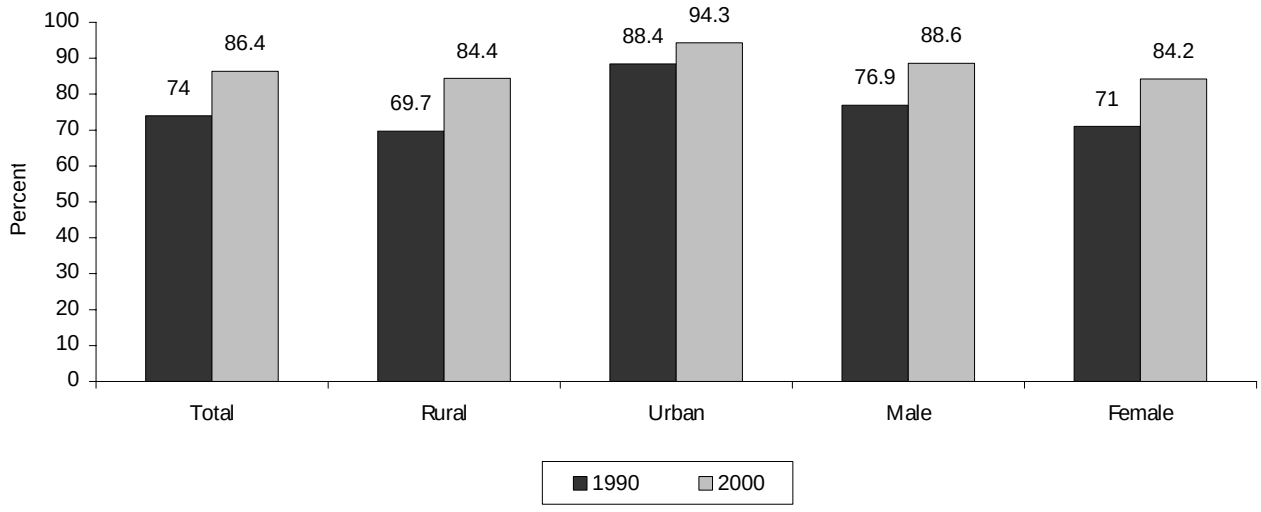
District level analysis of the 2000 Gross Primary School Attendance rates shows that Monze had the highest ratio of 99.7 percent while Siavonga with a ratio of 63.5 percent was the lowest. Gross school attendance is higher among boys than girls in all the districts.

Table 5.6: Gross Primary School Attendance Ratio by Sex, Residence and Districts (Percent), Southern Province, 1990 – 2000

Residence and District	Gross attendance rate			
	Total	Male	Female	Population
Zambia (1990)	82.3	85.7	78.9	1,486,062
Southern Province (1990)				
Total	74.0	76.9	71.0	189,069
Rural	69.7	73.0	66.3	145,596
Urban	88.4	90.8	86.3	43,473
Zambia (2000)	79.1	81.4	76.8	1,826,590
Southern Province (2000)				
Total	86.4	88.6	84.2	233,378
Rural	84.4	87.0	81.8	186,551
Urban	94.3	95.2	93.4	46,827
District (2000)				
Choma	89.0	91.0	87.0	41,423
Gwembe	66.5	68.9	64.1	6,677
Itezhi-tezhi	82.4	84.9	79.8	8,036
Kalomo	84.2	87.0	81.5	32,901
Kazungula	87.3	90.5	84.1	12,670
Livingstone	94.2	94.7	93.7	17,644
Mazabuka	86.3	88.0	84.6	39,081
Monze	99.7	101.9	97.4	32,643
Namwala	88.6	89.4	87.7	15,932
Siavonga	63.5	67.4	59.6	11,330
Sinazongwe	71.4	75.0	68.0	15,041

Sources: CSO, 1990, and 2000 Censuses of Population and Housing

Figure 5.4: Gross Primary School Attendance Ratios by Sex and Residence, Southern Province, 1990 and 2000



Sources: CSO, 1990, and 2000 Censuses of Population and Housing

5.8 Net Primary School Attendance by Children Aged 7 to 13 Years

Net School Attendance Rate at Primary Level shows the percentage of the primary school age population currently attending exactly primary grades (Grades 1 to 7). Table 5.7 shows an increase in the proportion of the primary school age population attending primary education, from 49.2 percent in 1990 to 65.5 percent by the year 2000. In 2000, the net primary school attendance rates are higher for the province than the national, while in 1990 it was the other way round (49.2percent versus 55.0 percent in 1990 and 65.5 percent versus 60.0 percent in 2000). In 1990, the attendance of girls of primary school age was slightly higher than that of boys. It remained so in 2000. The 2000 census results indicate that more than one third of children of the official primary school age were out of the school system.

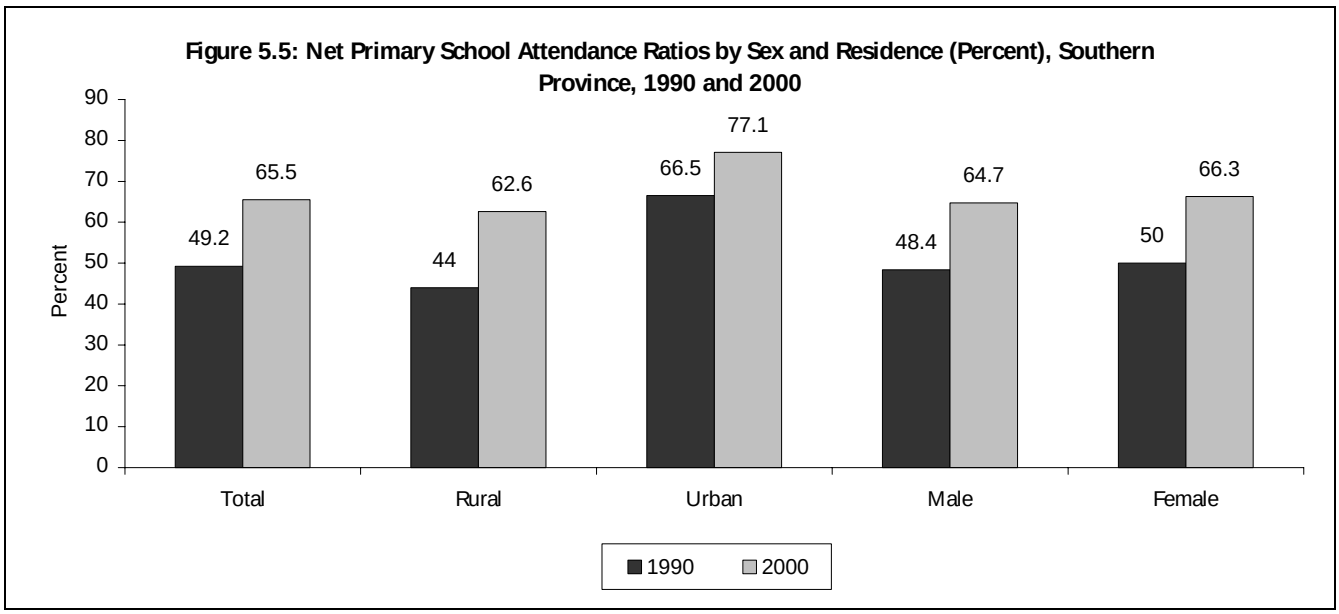
Since 1990, Net Primary School attendance rates have been higher in urban than in rural areas, clearly indicating a higher likelihood of urban children to be in school. In 1990, more than half of the rural children aged 7 to 13 years were out of primary education compared to about one third of their urban counterpart. By 2000, the proportion of children attending school in rural areas drastically increased by nearly 19 percentage points, from 44 percent to about 62.5 percent. In urban areas, net school attendance increased by more than 10 percentage points, from about 66.5 percent in 1990 to about 77.1 percent in 2000. Results of the 2000 census show that less than a quarter of urban children were out of primary school compared to more than one third of the rural children. No major sex differences were noticed since 1990, an indication of near gender parity in net attendance at primary level.

Analysis of net primary school attendance rates at district level reveals differences in school participation by the eligible children aged 7 to 13 years. In the year 2000, there were disparities in the proportions of the eligible children attending school. Besides having the lowest attendance rates, education participation by the primary school age children in Siavonga, followed by Gwembe, Sinazongwe, Itezhi-tezhi, and Kalomo districts remained below the provincial rate of 65.5 percent. For instance, in Siavonga district more than 50 percent of the eligible children were not attending school. Alternatively, Livingstone, and Monze districts had the highest rates of 78.1 and 74.9 percent respectively. With the exception of Livingstone and Siavonga districts, girls were more likely to be attending school than boys, though the sex differences were insignificant.

Table 5.7: Net Primary School Attendance Rates by Sex, Residence and District (Percent), Southern Province, 1990 – 2000

Year Residence district	Net attendance rate			
	Total	Male	Female	Population
Zambia (1990)	55.0	54.6	55.3	1,486,062
Southern Province (1990)				
Total	49.2	48.4	50.0	189,069
Rural	44.0	43.2	44.9	145,596
Urban	66.5	66.6	66.3	43,473
Zambia (2000)	60.0	59.8	60.2	1,826,590
Southern Province (2000)				
Total	65.5	64.7	66.3	233,378
Rural	62.6	61.7	63.5	186,551
Urban	77.1	77.2	77.0	46,827
District (2000)				
Choma	68.6	67.8	69.5	41,423
Gwembe	45.7	44.9	46.5	6,677
Itezhi-tezhi	60.4	59.5	61.4	8,036
Kalomo	62.3	61.4	63.2	32,901
Kazungula	66.5	65.9	67.2	12,670
Livingstone	78.1	78.5	77.9	17,644
Mazabuka	66.8	66.1	67.5	39,081
Monze	74.9	74.2	75.6	32,643
Namwala	66.2	63.4	69.0	15,932
Siavonga	45.5	45.7	45.2	11,330
Sinazongwe	50.4	50.2	50.6	15,041

Sources: CSO, 1990, and 2000 Censuses of Population and Housing



Sources: CSO, 1990, and 2000 Censuses of Population and Housing

5.9 School Attendance by the Secondary School Age Population (14-18 years)

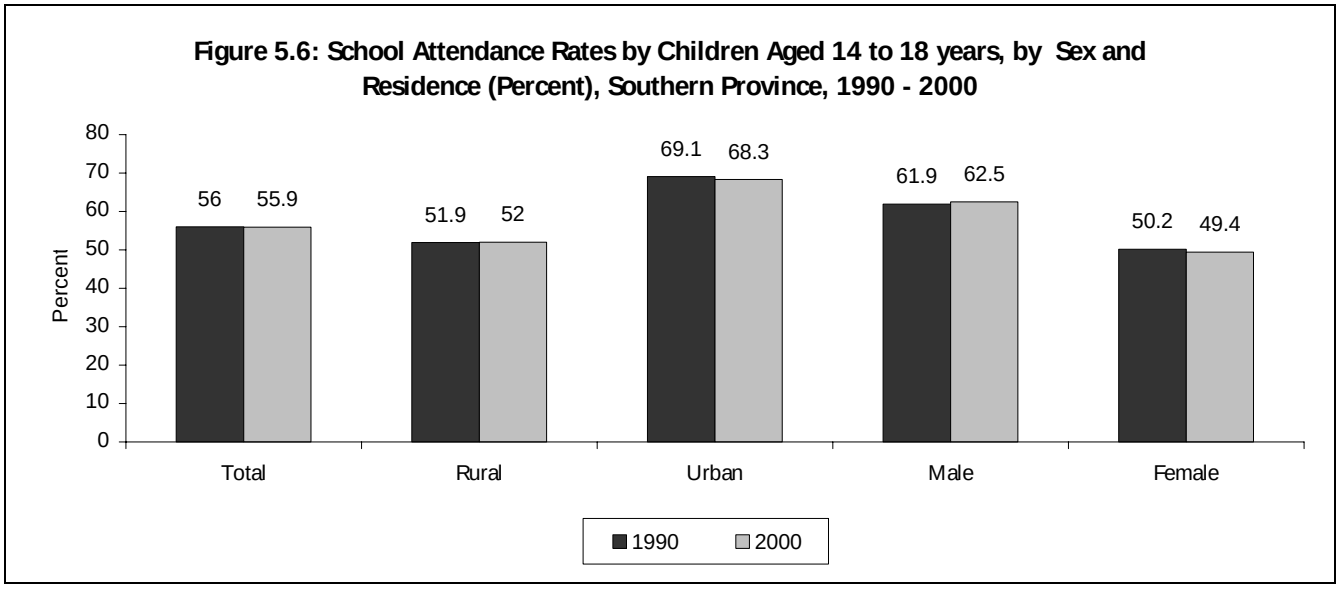
Table 5.8 shows the proportion of children aged 14 to 18 attending school in Southern Province. Overall, the percentage of children attending school remained static at about 56 percent between 1990 and 2000. However this rate is higher than the national average one which also remained constant at 53.9 percent in the same period. Since 1990, there were proportionately more boys (61.9 percent) than girls (50.2 percent) attending school. The rate of attendance in rural areas remained the same at about 52 percent, whereas in urban areas the rate declined from 69.1 to 68.3 percent by 2000. Once again, the proportion of boys attending school was much higher in both rural and urban areas than for girls. These results clearly indicate that the problem of the girl child is more associated to older (14 to 18 years) than younger children (7 to 13 years). At primary level there is normally near equality in terms of school attendance by boys and girls.

In 2000, School attendance by children of Secondary School age was lowest in Siavonga District (45.1 percent), followed by Gwembe and Itezhi-tezhi districts (45.8 and 46.1 percent respectively). Livingstone (70 percent) and Monze (64.4 percent) exhibited, relatively, high rates of school attendance.

Table 5.8: Population Aged 14 to 18 Years Presently Attending School by Sex and Residence (Percent), Southern Province, 1990 – 2000

Province and Residence	School Attendance Rates			
	Total	Male	Female	Population
Zambia (1990)	53.9	61.1	47.1	996,450
Southern Province (1990)				
Total	56.0	61.9	50.2	122,313
Rural	51.9	58.1	45.5	92,867
Urban	69.1	75.2	63.8	29,446
Zambia (2000)	53.9	61.3	47.0	1,105,484
Southern Province (2000)				
Total	55.9	62.5	49.4	135,684
Rural	52.0	59.3	44.6	103,893
Urban	68.3	73.6	63.8	31,791
District (2000)				
Choma	58.4	64.6	52.2	23,437
Gwembe	45.8	53.0	39.2	3,810
Itezhi-tezhi	46.1	52.8	39.3	4,556
Kalomo	52.3	58.8	46.0	18,764
Kazungula	49.9	58.1	41.4	7,119
Livingstone	70.0	73.9	66.5	12,732
Mazabuka	54.9	61.3	48.6	22,209
Monze	64.4	71.1	57.9	18,631
Namwala	49.8	58.1	41.6	9,409
Siavonga	45.1	54.8	35.8	6,292
Sinazongwe	48.6	56.3	41.2	8,725

Source: CSO, 1990, and 2000 Census of Population and Housing



Sources: CSO, 1990, and 2000 Censuses of Population and Housing

5.10 Gross Secondary School Attendance Rates

Results in Table 5.9 reveal that a sizeable proportion of secondary school age population in Southern Province have no access to secondary education. At provincial level, the proportion of children attending secondary education expressed as a percentage of the eligible secondary school age population increased from 35.6 percent in 1990 to 38.8 percent by 2000. This increase of about 3 percent is much lower than the national average, which increased by 10 percent (from 34.6 percent in 1990 to 44.5 percent in 2000). The gross ratios have remained higher in urban than in rural areas. While the ratio declined in rural areas from 28.4 percent in 1990 to 27.8 percent in 2000, the ratios in urban areas increased between 1990 and 2000, from 58.4 percent to 74.8 percent. In both years, there were major differences in the gross attendance rates between the sexes with the males having a significantly higher ratio than females.

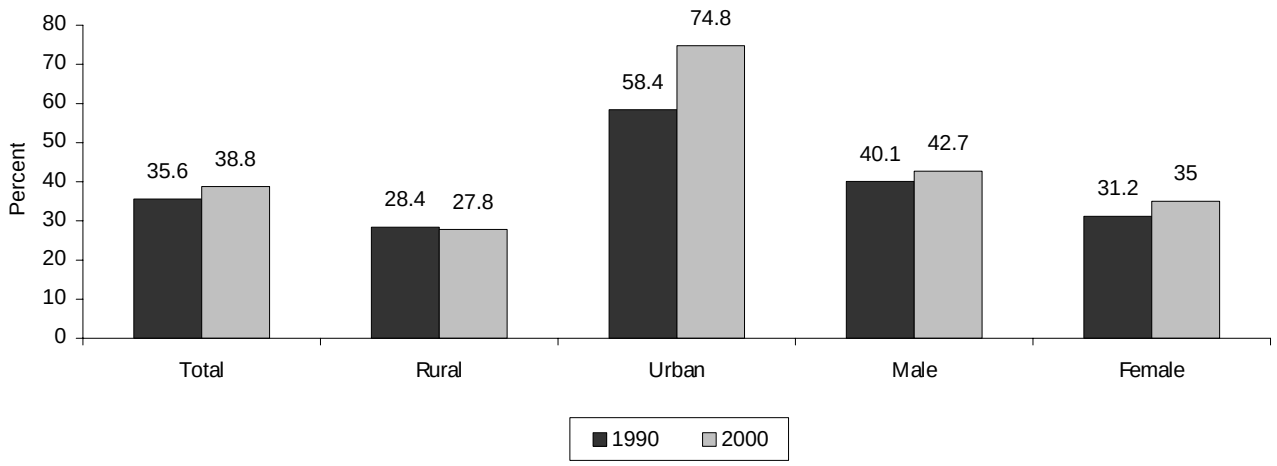
The 2000 ratio of pupils at secondary level to eligible children for that level was lowest in Itezhi-tezhi District, at 21.2 percent. On the other hand Livingstone District recorded a 78.1 percent ratio, followed by Mazabuka, which recorded a ratio of only 42.8 percent.

Table 5.9: Gross Secondary School Attendance Ratio by Sex and Residence (Percent), Southern Province, 1990 – 2000

Residence and District	Gross secondary attendance rate			
	Total	Male	Female	Population
Zambia (1990)	34.6	40.4	29.0	996,450
Southern Province (1990)				
Total	35.6	40.1	31.2	122,313
Rural	28.4	32.6	24.1	92,867
Urban	58.4	65.9	51.8	29,446
-				
Zambia (2000)	44.5	50.2	39.1	1,105,484
Southern Province (2000)				
Total	38.8	42.7	35.0	135,684
Rural	27.8	31.6	24.0	103,893
Urban	74.8	82.2	68.4	31,791
District (2000)				
Choma	42.4	46.8	38.0	23,437
Gwembe	28.5	30.8	26.4	3,810
Itezhi-tezhi	21.2	24.6	17.6	4,556
Kalomo	29.5	31.6	27.5	18,764
Kazungula	24.1	26.5	21.6	7,119
Livingstone	78.1	82.3	74.2	12,732
Mazabuka	42.8	48.0	37.6	22,209
Monze	40.7	45.2	36.3	18,631
Namwala	23.2	27.2	19.3	9,409
Siavonga	27.8	33.6	22.2	6,292
Sinazongwe	28.6	32.9	24.6	8,725

Sources: CSO, 1990, and 2000 Censuses of Population and Housing

Figure 5.7: Gross Secondary Attendance Ratios by Sex and Residence (Percent), Southern Province, 1990 and 2000



Sources: CSO, 1990, and 2000 Censuses of Population and Housing

5.11 Net Secondary School Attendance Rates by Children Aged 14 to 18 Years

Results in table 5.10 indicate that a significant proportion of the secondary school age population has no access to education. In 1990, only about one fifth of the children aged 14 to 18 years were attending secondary education. This proportion increased to approximately 28 percent in 2000, but it is slightly lower than the national average which increased to 30.9 in 2000. Since 1990 there were proportionately more boys than girls attending secondary school.

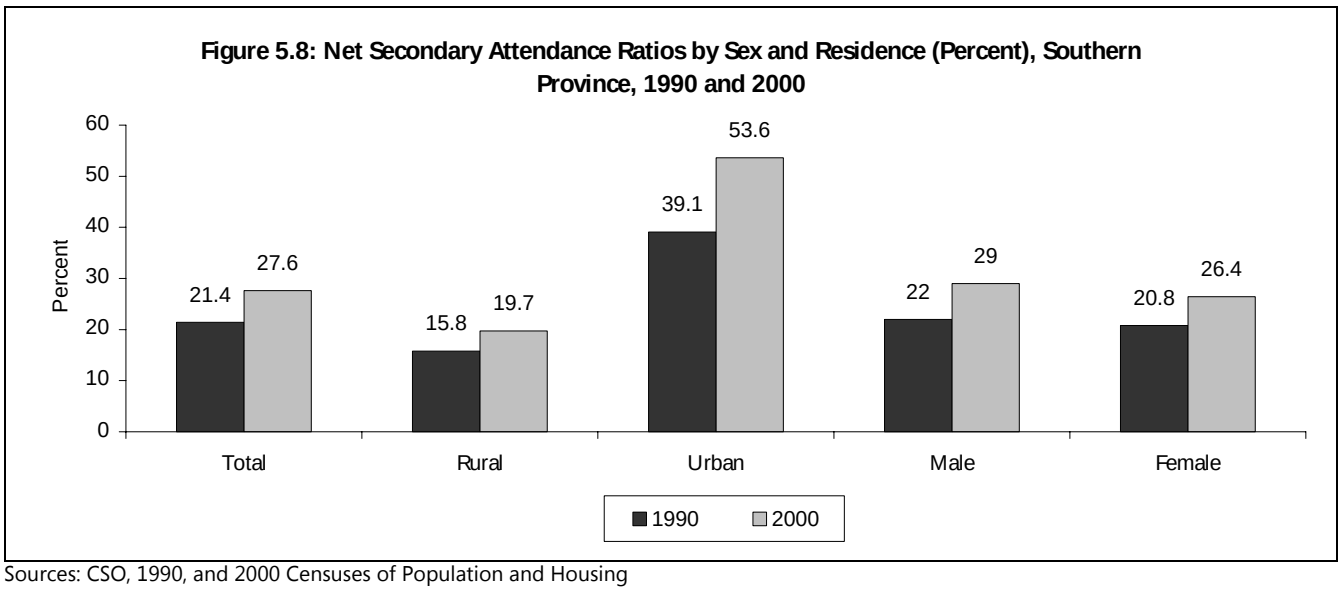
Differences in net secondary school attendance rates have existed since 1990. In the proportion of urban eligible children attending secondary education (39.1 percent) was more than twice that of their rural counterpart (15.8 percent). Net secondary school attendance rate for rural areas, only increased by 4 percentage points from about 16 percent in 1990 to about 20.0 percent in 2000. In urban areas, the proportion of eligible children attending secondary education increased from about 39 to 54 percent.

Analysis of 2000 census results by districts show that Itezhi-tezhi District had the least net secondary rate of 14.8 percent, followed by Namwala (16.7 percent), and Gwembe (17.6 percent). In the same year Livingstone and Mazabuka districts recorded the highest rates of 56.6 and 30.4 percent respectively.

Table 5.10: Net Secondary School Attendance Ratio by Sex and Residence (Percent), Southern Province, 1990 – 2000

Residence and District	Net secondary attendance rate			
	Total	Male	Female	Population
Zambia (1990)	21.4	22.8	20.0	996,450
Southern Province (1990)				
Total	21.4	22.0	20.8	122,313
Rural	15.8	16.4	15.1	92,867
Urban	39.1	41.1	37.3	29,446
Zambia (2000)	30.9	33.3	28.7	1,105,484
Southern Province (2000)				
Total	27.6	29.0	26.4	135,684
Rural	19.7	21.1	18.3	103,893
Urban	53.6	56.7	50.9	31,791
District (2000)				
Choma	30.0	31.2	28.8	23,437
Gwembe	17.6	17.7	17.5	3,810
Itezhi-tezhi	14.8	15.8	13.8	4,556
Kalomo	20.7	21.0	20.4	18,764
Kazungula	18.5	19.9	17.0	7,119
Livingstone	56.6	58.9	54.6	12,732
Mazabuka	30.4	32.5	28.4	22,209
Monze	29.6	31.0	28.2	18,631
Namwala	16.7	18.6	14.9	9,409
Siavonga	18.8	21.1	16.6	6,292
Sinazongwe	19.4	20.5	18.3	8,725

Sources: CSO, 1990, and 2000 Censuses of Population and Housing



Sources: CSO, 1990, and 2000 Censuses of Population and Housing

5.12 Distribution of the Population by Selected Fields of Study

Table 5.11 shows the population aged 5 years and over by some selected field of study and sex. The table reveals that the most popular fields of study since 1990 have been Teacher training, Nursing, Agriculture/Forestry/Fisheries and Mechanics/mechanical engineering.

The results also clearly indicate that males have a wider variety of fields of specialization than their female counterpart. Further examination of the results in table 5.11 highlights the fact that very few females have been attempting more technically oriented fields of study such as engineering and other technical programmes since 1990. Except for Nursing, secretarial training, service trade and textile trade, where there were more females than males, males dominant participation in all training courses.

The results also clearly indicate that males have a wider variety of fields of specialization than their female counterpart. Further examination of the results in table 5.11 highlights the fact that very few females have been attempting more technically oriented fields of study such as engineering and other technical programmes since 1990.

Table 5.11: Population (5 years and above) by Sex and Field of Study (Percent), Southern Province,1990 – 2000

Field of Study	1990			2000		
	Total	Male	Female	Total	Male	Female
Natural Science	278	70.5	29.5	167	89.2	10.8
Civil Engineering	115	97.4	2.6	161	96.9	3.1
Electronic Engineering	409	96.8	3.2	775	97.3	2.7
Mechanic Engineering	855	97.9	2.1	1,173	98.6	1.4
Mining Engineering	82	85.4	14.6	62	100.0	
Industrial Engineering	403	63.5	36.5	74	75.7	24.3
Architecture	170	66.5	33.5	81	85.2	14.8
Medicine/Surgery	250	87.6	12.4	217	81.1	18.9
Pharmacy	233	75.1	24.9	90	81.1	18.9
Nursing	1,311	8.6	91.4	4,885	53.4	46.6
Medical Technology	210	84.8	15.2	303	85.5	14.5
Computer Science	27	81.5	18.5	322	52.8	47.2
Economics	144	51.4	48.6	155	60.0	40.0
Accountancy	886	82.3	17.7	1,571	76.8	23.2
Teacher Training	4,845	61.1	38.9	6,137	58.0	42.0
Law/jurisprudence	231	95.2	4.8	319	90.6	9.4
Fine arts	64	92.2	7.8	94	86.2	13.8
Social Welfare	222	67.6	32.4	222	72.5	27.5
Criminology	245	95.9	4.1	358	95.5	4.5
Business Administration	464	85.8	14.2	837	82.7	17.3
Secretarial Training	392	15.6	84.4	783	9.8	90.2
Office Machine	108	88.0	12.0	101	83.2	16.8
Service Trade	240	52.5	47.5	529	43.7	56.3
Agriculture/Forestry/Fisheries	1,056	91.4	8.6	1,305	89.8	10.2
Wood Working	404	95.0	5.0	563	98.6	1.4
Textile Trade	384	47.4	52.6	618	21.5	78.5

Sources: CSO, 1990, and 2000 Censuses of Population and Housing

Note: The ISIC codes for field of study have been reduced to 3 digits to enhance analysis. However, this could lead to the lumping up of specific fields of study into a broad class based on a 3 digit description.

Table 5.12 shows the distribution of the population aged 5 years and above by field of study and education level completed in Southern Province. The table reveals the type of restrictions education attainment imposes on field of study. Results clearly indicate that the minimum education level required for the majority of the fields of study is grades 10 – 12. This is more of the case for those in the field of engineering, medicine, natural and social sciences. Other programmes such as Accountancy, Business Administration, Teacher Training, Journalism and Secretarial training have overtime become more demanding in terms of educational entry requirements.

Table 5.12: Education Level Completed by Field of Study (Percent), Southern Province, 2000

Field of Study	Size	Total	Level of Education Completed				
			1-7	8-9	10-12	'A' Level	Degree
Zambia							
Natural Science	167	100	3.6	3.6	73.1	1.8	18.0
Civil Engineering	161	100	11.8	8.1	60.9	1.9	17.4
Electronics/Engineering	775	100	5.2	4.8	72.8	1.9	15.4
Mechanics/Engineering	1173	100	6.8	8.3	68	0.8	16.1
Chemical Engineering	44	100	6.8	6.8	81.8	.	4.5
Mining Engineering	62	100	17.7	6.5	62.9	.	12.9
Industrial Engineering	74	100	18.9	14.9	50.0	.	16.2
Metallurgical Engineering	35	100	8.6	11.4	68.6	.	11.4
Architecture	81	100	19.8	23.5	34.6	.	22.2
Other Engineering	229	100	7.4	6.6	67.7	0.9	17.5
Medicine/Surgery	217	100	6.0	5.1	67.3	2.3	19.4
Pharmacy	90	100	4.4	5.6	73.3	.	16.7
Dentistry	158	100	5.1	6.3	75.9	1.3	11.4
Nursing	4884	100	11.7	10.5	65.6	1.2	11.0
Medical Technology	303	100	3.0	4.0	77.6	0.7	14.9
Veterinary	243	100	4.5	7.4	75.3	2.1	10.7
Computer Science	322	100	2.5	1.6	70.2	1.2	24.5
Economics	155	100	7.7	9.7	53.5	.	29.0
Accountancy	1571	100	2.2	2.8	70.0	1.5	23.5
Teacher Training	6137	100	3.5	5.3	69.4	1.5	20.3
Law/jurisprudence	319	100	9.1	9.7	59.6	1.3	20.4
Journalism	71	100	1.4	2.8	71.8	.	23.9
Fine arts	94	100	17.0	22.3	43.6	1.1	16.0
Social Welfare	222	100	14.0	11.7	59.9	.	14.4
Criminology	358	100	13.1	10.3	43.3	3.1	30.2
Business Administration	837	100	2.7	3.5	74.0	2.3	17.6
Secretarial Training	783	100	5.2	3.8	67.4	1.5	22.0
Shorthand Typing	309	100	4.9	15.2	62.1	1	16.8
Clerical typing	402	100	6.7	17.2	55.7	1.5	18.9
Office Machine	101	100	7.9	11.9	66.3	1.0	12.9
Service Trade	528	100	17.0	17.4	47.7	1.5	16.3
Agriculture/Forestry/Fisheries	1304	100	10.7	11.0	62.3	1.3	14.6
Food/Drink Production	174	100	10.3	17.2	54.6	1.1	16.7
Wood Working	563	100	20.4	24.7	43.2	0.7	11.0
Textile Trade	618	100	20.1	27.0	37.7	0.8	14.4

Sources: CSO, 1990, and 2000 Censuses of Population and Housing

Note: The ISIC codes for field of study have been reduced to 3 digits to enhance analysis. However, this could lead to the lumping up of specific fields of study into a broad class based on a 3 digit description.

5.13 Certificate and Diploma Holders by Level of Education Completed

Table 5.13 shows the education level completed by certificate and diploma holders in Southern Province. Overall, the number of certificate holders rose between 1990 (16,738) and 2000 (18,346). The percent increase among the females was not much higher than their male counterpart. The proportion of persons with certificates who had attained grades 1 to 7 declined from 22.7 percent in 1990 to 11.9 percent in 2000, whilst the proportions attaining higher grades increased significantly. On the other hand, the number of diploma holders after grades increased 3,196 in 1990 to 3,273 in 2000. The growth in the number of diploma holders was much more marked among females (53.1 percent) than males (18.5 percent). Both sexes experienced a drop in the rates between the censuses.

Table 5.13 Certificates and Diplomas by Level of Education and Sex, Southern Province (Percent), 1990-2000

Certificates	Size	Education Level Completed				
		1-7	8-9	10-12	'A' Level	Total
Certificates						
Southern 1990						
Total	16,738	22.7	13.7	63.1	0.5	100
Male	10,972	25.2	13.5	60.8	0.5	100
Female	5,766	18.1	13.9	67.6	0.5	100
Southern 2000						
Total	18,346	11.9	13.6	73	1.5	100
Male	11,736	12.9	13.5	72.2	1.4	100
Female	6,610	10.1	13.8	74.5	1.6	100
Diploma						
Southern 1990						
Total	3,196	5.6	4.1	82.0	8.3	100
Male	2,565	6.0	4.2	81.8	8	100
Female	631	4.0	3.6	82.7	9.7	100
Southern 2000						
Total	3,273	3.1	2.8	92.1	2	100
Male	2,554	3.4	3.1	91.8	1.6	100
Female	719	1.9	1.5	93.3	3.2	100

Source: CSO, 2000 Census of Population and Housing

5.14 Summary

In Southern Province literacy rates did not improve between 1990 and 2000, they remained low at about 56 percent. Thus 44 percent of all persons 5 years and above were illiterate. Literacy rates for males in urban areas are much higher than those for females and rural areas, 60 percent and 52 percent respectively. The youth (15-24) and adults (15 years +) recorded better overall rates of 73 percent and 70 percent respectively, in 2000.

In 2000, 29 percent of the 5 years and above were in school an increase of only 2 percent from the 1990 level. The male children had a higher attendance rate of about 31 percent compared to 29 percent for their female counterparts.

At primary level, there are more female children enrolled than there are males. Sixty-eight percent of the females are enrolled compared to 66 percent for the males. This situation is reversed at secondary school level where more males (63 percent) than females (49 percent) are attending school.

Children coming from the following groups are disadvantaged: rural, female. Rural and female children are less likely to enroll and progress beyond primary level.

The most popular fields of study are teacher training, nursing, accountancy and agriculture. This is a typical rural province with a limited number of institutions of higher learning.

Chapter 6

ECONOMIC CHARATERISTICS

6.1 Introduction

Individuals engage in economic activities in order to attain and sustain a certain acceptable level of consumption of goods and services. Engagement in these activities not only ensures a person's livelihood but also equips an individual with the means of acquiring and sustaining the basic needs of life such as food, clothing and shelter.

Most studies have revealed that the employment levels to a large extent determine the production and consumption levels of any given economy. In a developing country like Zambia, it becomes imperative to constantly measure and monitor changes in the levels of economic activities overtime as fluctuations in labourforce participation rates, employment levels and economic dependency levels an impact on poverty and vice versa.

In the population censuses of 1990 and 2000, data pertaining to economic characteristics of the population was collected. The main topics covered were:

- Labourforce participation
- Employment and unemployment
- Employment status
- Occupation
- Industry and
- Educational attainment

6.2 Concepts and Definitions

- **Working Age Population:** The working age population is defined as all persons aged 12 years and over.

- **Employed Population:** The employed population includes all persons who: work for remuneration in the form of wages, salaries, commissions or pay in kind; operate their own businesses without employing others, and; work in a family business or farm without pay or profit.

- **Unemployed Population:** The unemployed population is composed of those who are unemployed and seeking work and those who are not seeking work but are available for work.

- **Economically Inactive Population:** This category includes all persons who are full time housewives/home-makers, full time students and those who are not available for work aged 12 years and over.

- **Economically Active Population (Labourforce):** The economically active population or the Labour force is defined as all persons aged 12 years and above whose main economic activity status is to supply their labour force to the production of economic goods and services. It is composed of the employed and unemployed. It includes all those who are working, those who are unemployed but seeking work

and those not seeking work but available for work. Included also are those unpaid on family business.

- **Economic Dependency Ratio:** Economic dependency measures the extent to which the economically inactive population is dependent on the economically active population. Therefore, the economic dependency ratio is the ratio of the economically inactive population divided by the economically active population.

- **Labourforce Paticipation Rates:** The Labour force participation rate is defined as the proportion of persons of a particular age- group who were in the labour force. It measures the extent to which a particular age group and/or sex involved in economic activities.

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

- **Occupation:** Occupation is a concept, which identifies a set of characteristics of a job and a group of specific tasks that are performed by a person.

- **Industry:** Industry or economic sector defines the type of product or service produced at a workplace.

- **Unemployment rate:** Expressed as a percentage, this is a ratio of the unemployed population and the economically active population.

6.3 Working-Age Population

Figure 6.1 is a diagrammatic presentation of the various category of the population. In the 2000 Census of Population and Housing, the working-age population is defined as all persons aged 12 years and over

Figure 6.1: Working Age Population 12 Years and Over

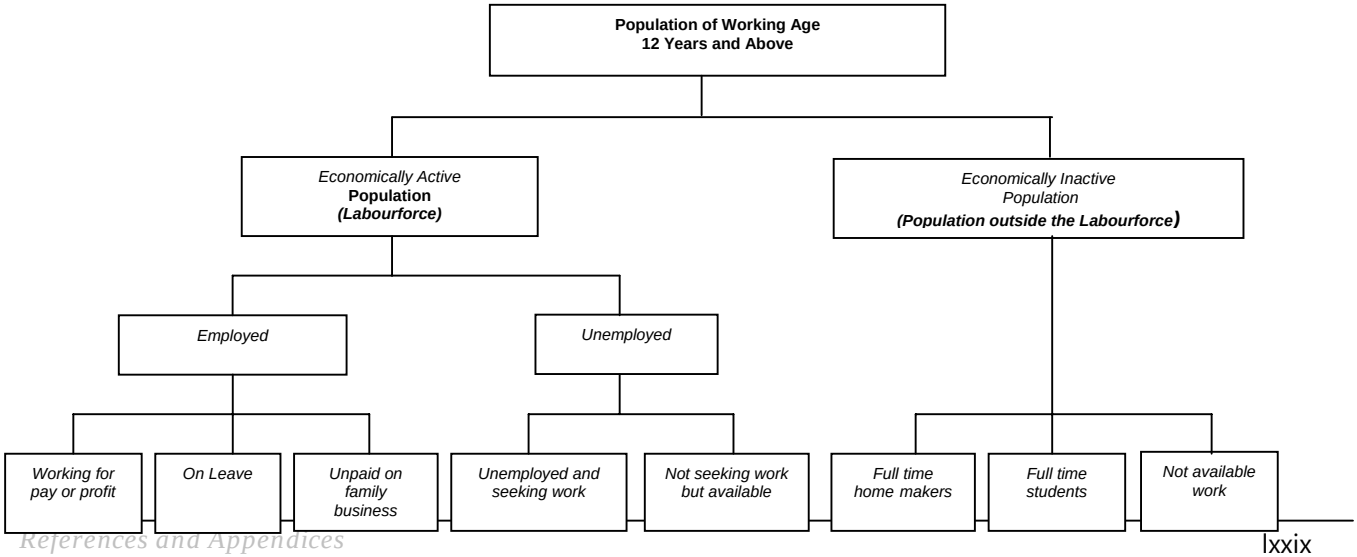


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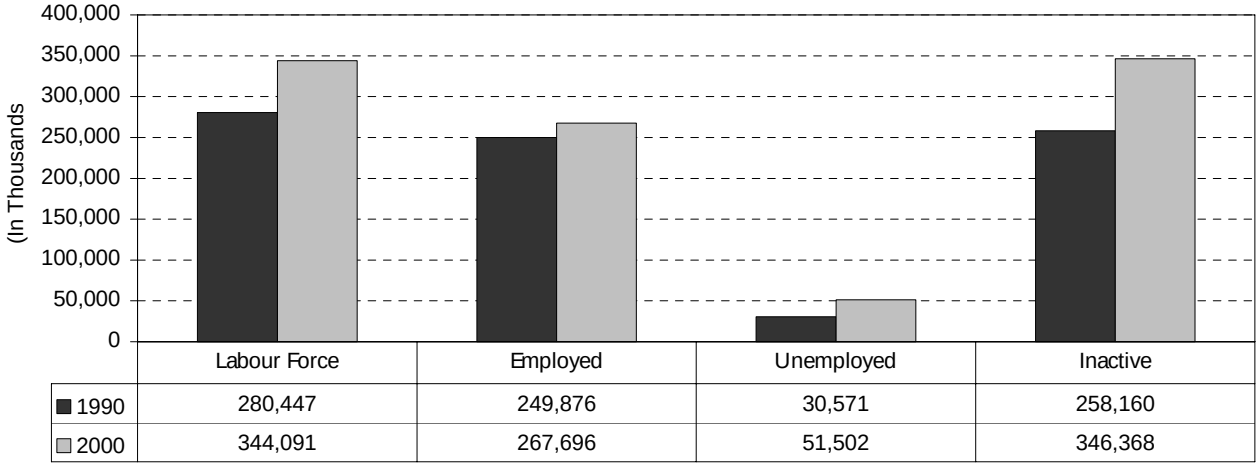
Table 6.1 presents the population 12 years and over by age group, residence and sex for 1990 and 2000. The working-age population in Southern province has increased by 20.8 percent. The increase of the female working-age population of 21 percent is just marginally higher than the male working-age population of 20.5 percent. In rural areas, the working-age population has increased by 23.1 percent, while in urban areas it has increased by only 13.8 percent. The increase of 23.3 percent for the male working-age population in rural areas is slightly more than the increase of 22.9 percent for the female working-age population; In urban areas, on the other hand, the increase of 12.7 percent in the male working-age population is less than the increase in the female working-age population of 14.8 percent.

Table 6.1: Population 12 years and Over by Broad Age Groups-Residence and Sex, Southern Province, 1990 and 2000

Residence and Sex	Year	Size	Total	12-19	20-24	25-29	30-59	60+	Not Stated
Total	1990	551,115	100	34.5	15.8	11.7	31.8	6.2	0.0
	2000	665,566	100	32.4	16.3	12.8	31.9	6.5	0.0
Percent increase		20.8							
Male	1990	266,677	100	35.4	15.3	11.2	31.3	6.8	0.0
	2000	321,475	100	33.1	15.8	12.9	31.7	6.6	0.0
Percent increase		20.5							
Female	1990	284,438	100	33.7	16.3	12.1	32.2	5.6	0.0
	2000	344,091	100	31.8	16.8	12.7	32.2	6.5	0.0
Percent increase		21.0							
Residence									
Rural									
Total	1990	414,746	100	34.7	15.7	11.2	31.2	7.2	0.0
	2000	510,429	100	32.7	15.8	12.3	31.7	7.5	0.0
Percent increase		23.1							
Male	1990	198,232	100	36.6	15.3	10.7	29.4	7.9	0.0
	2000	244,335	100	34.2	15.4	12.4	30.6	7.5	0.0
Percent increase		23.3							
Female	1990	216,514	100	33.0	16.0	11.6	32.9	6.5	0.0
	2000	266,094	100	31.3	16.2	12.3	32.8	7.5	0.0
Percent increase		22.9							
Urban									
Total	1990	136,369	100	33.7	16.4	13.1	33.5	3.3	0.0
	2000	155,137	100	31.6	18.0	14.2	32.7	3.4	0.0
Percent increase		13.8							
Male	1990	68,445	100	31.6	15.3	12.5	36.8	3.8	0.0
	2000	77,140	100	29.7	17.2	14.4	35.1	3.6	0.0
Percent increase		12.7							
Female	1990	67,924	100	35.7	17.5	13.8	30.3	2.7	0.0
	2000	77,997	100	33.5	18.9	14.1	30.2	3.3	0.0
Percent increase		14.8							

Sources: CSO, 1990 and 2000 Censuses of Population and Housing

Figure 6.2: Current Economically Active Population (12 Years and Over) Southern Province, 1990 and 2000



Sources: CSO, 1990 and 2000 Censuses of Population And Housing

6.4 The Economically Inactive Population

This is the population which is 12 years and over and include all those who are full time housewives/home-makers, full time students and those who are not available for work. Table 6.4 shows the current economically inactive population by reason of inactivity, residence and sex in 2000. Almost two thirds (65 percent) of the inactive population is female, while about a third (35 percent) are male. About 76 percent are in rural areas while 24 percent are in urban areas. Homemaking (40.5 percent) is the most important reason for inactivity, followed by studying (39.2 percent) and lastly other reasons (20.4 percent). Groups of people included in the category of those who are economically inactive for "other reasons" include pensioners, those that are too old to work, prisoners, invalids, beggars and the disabled. In both rural and urban areas, the reasons for inactivity are in an order similar to the one for the whole province. The only thing to note is that there are more students in the urban areas (45.4 percent) than in the rural areas (37.1 percent); slightly more homemakers in the rural areas (41.7 percent) than in the urban areas (36.6 percent); there are more economically inactive people for other reasons in rural areas (21.1 percent) compared to urban areas (18.0 percent).

In 2000, males are economically inactive mainly because of studying (61.3 percent) while females are inactive primarily because of home making (57.3 percent).

Table 6.2: Current Economically Inactive Population By Reason For Inactivity, Residence And Sex, Southern Province, 2000

Residence And Sex	Reason For Inactivity				
	Total Number	Total	Home Maker	Student	Other
Southern Province					
Total	346,368	100.0	40.5	39.2	20.4
Rural	261,356	100.0	41.7	37.1	21.1
Urban	85,012	100.0	36.6	45.4	18.0
Sex					
Male	121,197	100.0	9.2	61.3	29.5
Female	225,171	100.0	57.3	27.2	15.5

Source: CSO, 2000 Census of Population and Housing

6.5 The Economically Active Population (Labour-force)

The economically active population or the Labour force is defined as all persons aged 12 years and above of either sex whose main economic activity is to supply their labour force to the production of goods and services. It is composed of the employed and unemployed persons. It includes all those who are working including those who are unemployed but seeking work and those not seeking work but available for work. Included also are those unpaid on family business. The economically active population by residence and sex are given in Table 6.2. According to this table, the labour force increased by 13.8 percent, from 280,447 in 1990 to 319,198 in 2000. However, the growth rate of the labourfroce for the province (1.3 percent) is less than that of the national average of 3.9 percent. The increase of 18.8 percent in the female labour force is more than the increase of 11.0 percent in the male labour force. A big proportion of the labour force (78.1 percent in 1990 and 78.0 percent in 2000) is in rural areas, as compared to the labour force in urban areas (21.9 percent in 1990 and 22.0 percent in 2000). This pattern is similar to that of the nation as a whole for both males and females.

TABLE 6.3: TRENDS IN THE LABOURFORCE AND AVERAGE ANNUAL GROWTH RATE OF THE LABOURFORCE, SOUTHERN PROVINCE, 1990 AND 2000

District	1990	2000	Average Annual Growth Rate
Zambia	2,162,487	3,165,151	3.9
Southern	280,447	319,198	1.3
Choma	53,244	48,911	-0.9
Gwembe	8,901	6,743	-2.7
Itezhi-tezhi	-	13,063	-
Kalomo	56,227	47,301	-1.7
Kazungula	-	15,360	-
Livingstone	22,343	27,430	2.1
Mazabuka	47,903	59,162	2.1
Monze	35,746	48,989	3.2
Namwala	23,352	21,990	-0.6
Siavonga	11,689	13,630	1.6
Sinazongwe	21,042	16,619	-2.3

Sources: CSO, 1990 and 2000 Censuses of Population and Housing

*'-' denotes not application applicable as they refer either to a new or non-existed districts.

Monze, Mazabuka, Livingstone and Siavonga recorded the highest average annual growth rates in the Labourforce between 1990 and 2000 of 3.2 percent, 2.1 percent) and 1.6 percent, respectively. The rest of the districts recorded negative growth rates.

In terms of percentage distribution of the labourforce in 2000, Mazabuka District has the highest (18.5 percent), followed by Monze and Choma and then Kalomo districts with 15.3 percent and 14.8 percent respectively. Gwembe, Itezhi-tezhi and Siavonga districts have the least with 2.1 percent, 4.1 percent and 4.3 percent respectively.

Table 6.4: Percentage Distribution of the Labourforce by District, Southern Province, 2000

District	Total	Male	Female
Southern	100.0	100.0	100.0
Choma	15.3	14.9	16.0
Gwembe	2.1	2.3	1.7
Itezhi-tezhi	4.1	4.3	3.7
Kalomo	14.8	13.5	17.0
Kazungula	4.8	5.3	4.0
Livingstone	8.6	9.2	7.6
Mazabuka	18.5	20.0	16.1
Monze	15.3	13.0	19.3
Namwala	6.9	6.6	7.4
Siavonga	4.3	4.7	3.5
Sinazongwe	5.2	6.1	3.7

Source: CSO, 2000 Census of Population and Housing

The employed population includes all persons who: work for remuneration in the form of wages, salaries, and commissions or pay in kind. Others in this category are those who operate their own businesses without employing others and those who work in a family business or farm without pay or profit. Of the 319,198 total labour force in Southern province, 267,696 or 83.9 percent are employed. The employed population increased by 7.1 percent from 249,876 in 1990 to 267,696 in 2000. The increase of 14.5 in the female employed labour force is much more than the increase of 3.1 percent in the male employed labour force. The proportion of the employed population residing in rural areas has increased form 78.7 percent in 1990 to 80.6 percent in 2000 while the proportion of the employed labour force residing in urban areas has decreased from 21.3 percent in 1990 to 19.4 percent in 2000.

The unemployed population is composed of those who are unemployed and seeking work and those who are not seeking work but available.

The unemployed population has increased by 68.5 percent from 30,571 in 1990 to 51,502 in 2000. The increase of 79.2 percent in the male unemployed population is more than the increase in the female unemployed population of 51.3 percent.

In 1990 there were more unemployed people in the rural areas (73.3 percent for total; 75.6 percent for males and 69.7 percent for females than in the urban areas (26.7 percent for total; 24.4 percent for males and 30.3 percent for females). In 2000 the pattern is much the same as that of 1990,there are more unemployed people residing in the rural areas (64.5

percent for total; 66.5 percent for males and 60.6 percent for females) than in urban areas (35.5 percent for total; 33.5 percent for males and 39.4 percent for females).

Table 6.5: Current Economically Active Population 12 Years and Over by Residence and Sex, Southern Province, 1990 and 2000

Activity and Sex	Residence							
	1990				2000			
	Total Number	Total	Rural	Urban	Total Number	Total	Rural	Urban
Population								
Total	551,115	100.0	75.3	24.7	665,566	100.0	76.7	23.3
Male	266,677	100.0	74.3	25.7	321,475	100.0	76.0	24.0
Female	284,438	100.0	76.1	23.9	344,091	100.0	77.3	22.7
Labour Force								
Total	280,447	100.0	78.1	21.9	319,198	100.0	78.0	22.0
Male	180,381	100.0	76.1	23.9	200,278	100.0	76.5	23.5
Female	100,066	100.0	81.8	18.2	118,920	100.0	80.7	19.3
Employed								
Total	249,876	100.0	78.7	21.3	267,696	100.0	80.6	19.4
Male	161,557	100.0	76.1	23.9	166,554	100.0	78.5	21.5
Female	88,319	100.0	83.5	16.5	101,142	100.0	84.2	15.8
Unemployed								
Total	30,571	100.0	73.3	26.7	51,502	100.0	64.5	35.5
Male	18,824	100.0	75.6	24.4	33,724	100.0	66.5	33.5
Female	11,747	100.0	69.7	30.3	17,778	100.0	60.6	39.4
Inactive								
Total	258,160	100.0	72.3	27.7	346,368	100.0	75.5	24.5
Male	80,358	100.0	70.6	29.4	121,197	100.0	75.2	24.8
Female	177,802	100.0	73.1	26.9	225,171	100.0	75.6	24.4
Not Stated								
Total	12,508	100.0	72.3	27.7	-	-	-	0
Male	5,938	100.0	72.6	27.4	-	-	-	0
Female	6,570	100.0	71.9	28.1	-	-	-	0

Sources: CSO, 1990 and 2000 Censuses of Population and Housing

The economically inactive population comprises all persons 12 years and over who are classified neither as employed nor unemployed during the reference period; that is that part of the population that is considered to be outside the labour force. The economically inactive population has increased by 34.2 percent from 258,160 in 1990 to 346,368 in 2000. Economic inactivity in males has increased by 50.8 percent from 80,358 in 1990 to 121,197 in 2000, while the female economic inactivity has increased by 26.6 percent from 177,802 in 1990 to 225,171 in 2000. In both 1990 and 2000 there were more economically inactive persons in the rural areas than in the urban areas.

Table 6.6 shows the economically active and economically inactive population by age, sex and nature of current economic activity. For the labourforce and the employed, the peak age group is 35-54 years (26.0 percent for total; 26.5 percent for males and 25.2 percent for females and 28.3 percent for total; 28.5 percent for males and 27.8 percent for females respectively).

For the unemployed population, the peak is in the age groups 12-19 (29.8 percent for total, 24.5 percent for males and 39.8 percent for females) and 20-24 (27.3 percent for total, 27.3 percent for males and 27.5 percent for females).

In so far as the economically inactive population is concerned, the peak is in the 12-19 age group largely due to the fact that this is the age-range where you have a lot of school going persons on a full time basis.

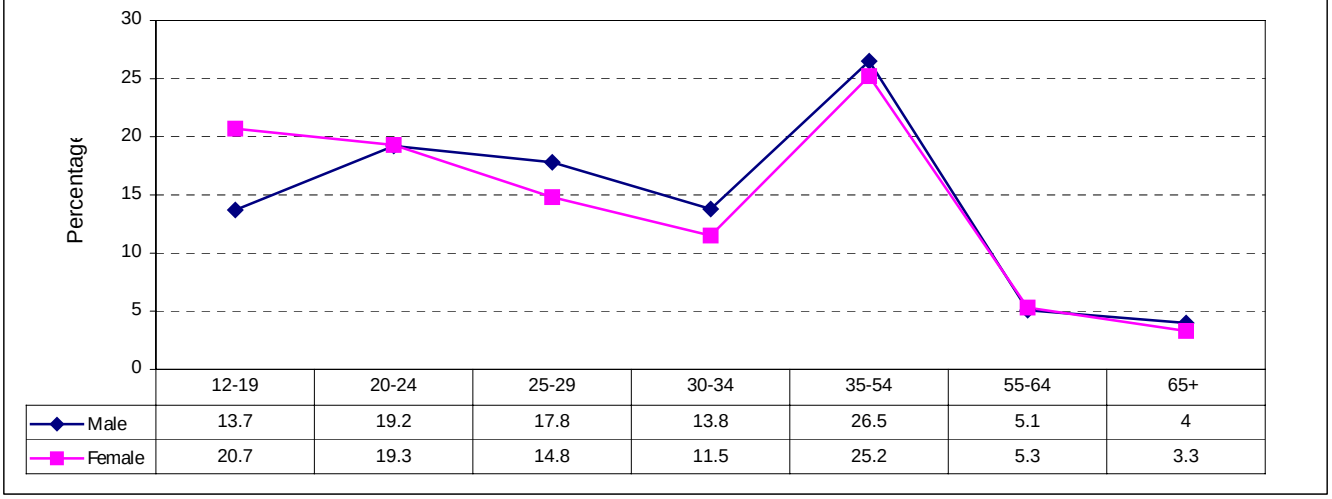
Figure 6.3 shows a diagrammatic presentation by age and sex of the economically active population in 2000. The peak is in the age-range 35-54.

Table 6.6: Economically Active Population (12 Years and Over) by Age, Sex, and Nature of Current Economic Activity, Southern Province, 2000

Activity And Sex	Total Number	Total	Age Group							
			12-19	20-24	25-29	30-34	35-54	55-64	65+	Not Stated
Labour Force										
Total	319,198	100.0	16.3	19.2	16.7	12.9	26.0	5.2	3.8	0.0
Male	200,278	100.0	13.7	19.2	17.8	13.8	26.5	5.1	4.0	0.0
Female	118,920	100.0	20.7	19.3	14.8	11.5	25.2	5.3	3.3	0.0
Employed										
Total	267,696	100.0	13.7	17.7	16.8	13.6	28.3	5.8	4.3	0.0
Male	166,554	100.0	11.5	17.6	17.8	14.4	28.5	5.6	4.6	0.0
Female	101,142	100.0	17.3	17.8	15.1	12.3	27.8	6.0	3.7	0.0
Unemployed										
Total	51,502	100.0	29.8	27.3	16.0	9.3	14.4	2.0	1.1	0.0
Male	33,724	100.0	24.5	27.3	17.7	10.5	16.4	2.4	1.4	0.0
Female	17,778	100.0	39.8	27.5	13.0	6.9	10.7	1.4	0.8	0.0
Inactive										
Total	346,368	100.0	47.4	13.6	9.2	6.8	14.2	4.0	4.8	0.0
Male	121,197	100.0	65.3	10.2	4.7	3.6	8.0	3.0	5.2	0.0
Female	225,171	100.0	37.7	15.5	11.5	8.5	17.5	4.6	4.7	0.0

Source: CSO, 2000 Census of Population and Housing

Figure 6.3 Economically Active Population (12 Years and Over) by Age and Sex, Southern Province



Source: CSO, 2000 Census of Population and Housing

6.6 Economic Dependency Ratios

Economic dependency is a concept, which measure the extent to which the economically inactive population is dependent on the economically active population. Therefore the economic dependency ratio is the economically inactive population divided by the economically active population.

Table 6.7 shows the current economically active population and economic dependency ratios by sex and residence. The table shows that the ratios have increased for all the categories. Notable increases are for males from 44.5 percent in 1990 to 60.5 percent in 2000 and urban areas (45.1 percent in 1990 to 120.8 percent in 2000). The dependency ratio for rural areas increased by only about 20.2 percentage points.

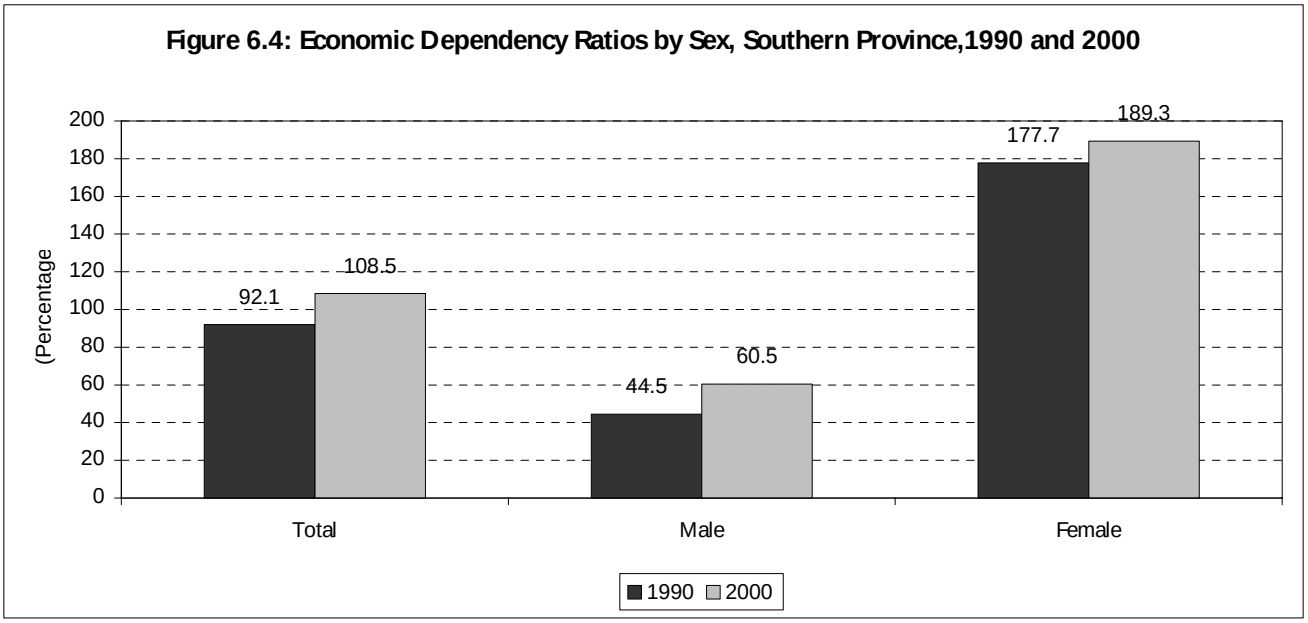
Unlike the national average in which the economic dependency ratio reduced from 114.0 to 79 .0 between 1990 and 2000, the economic dependency ratio for the province increased from 92.1 in 1990 to 108.5 in 2000.

Table 6.7: Current Economically active Population and Economic Dependency Ratios by Sex and

Residence, Southern Province, 1990 and 2000.

Sex and Residence	1990	2000
Labourforce		
Total Zambia	2,162,487	3,165,151
Total Southern Province	280,447	319,198
Male	180,381	200,278
Female	100,066	118,920
Rural	219,029	248,974
Urban	61,418	70,224
Economic dependency ratios (Percentage)		
Total Zambia	114.0	79.0
Total Southern Province	92.1	108.5
Male	44.5	60.5
Female	177.7	189.3
Rural	85.2	105
Urban	45.1	120.8

Sources: CSO, 1990 and 2000 Censuses of Population and Housing



Sources: CSO, 1990 and 2000 Censuses of Population and Housing

6.7 Current Labour Force Participation Rates

The Labour force participation rate is defined as the proportion of persons of a particular age- group who are in the labour force. It measures the extent to which a particular age and/or sex group is involved in economic activities. Labour force participation rates by age, sex, and residence are shown in table 6.8.

There has been a decline in the extent to which the working-age population are involved in economic activities between the two censuses, as seen from the decline in the labour force participation from 50.9 percent in 1990 to 48 percent in 2000. This is in contrast with the national average, where the participation rates increased from 46.6 percent in 1990 to 56.0 in 2000. The decline in the male labour force participation rates from 67.6 percent to 62.3 percent is more than the decline for females from 37.5 percent to 37.0 percent.

Table 6.8: Trends in Labour force Participation Rates by District and Sex, Southern Province, 1990 and 2000 (Percentage)

District	1990			2000		
	Total	Males	Females	Total	Males	Females
Zambia	46.6	62.2	31.9	56.0	67.0	45.0
Southern Province	50.9	67.6	37.5	48.0	62.3	37.0
Choma	54.8	70.3	44.7	43.8	56.1	35.7
Gwembe	44.2	66.8	28.8	37.7	55.5	24.6
Itezhi-tezhi	-	-	-	53.4	69.6	34.7
Kalomo	57.4	74.4	45.1	54.0	65.3	48.6
Kazungula	-	-	-	41.6	59.2	26.5
Livingstone	41.6	59.3	22.6	43.5	58.5	28.7
Mazabuka	50.0	69.4	29.5	50.6	68.2	32.7
Monze	46.9	60.9	38.2	54.7	61.9	54.5
Namwala	46.1	62.3	34.3	50.3	63.9	42.6
Siavonga	55.4	71.0	47.6	43.4	62.7	27.7
Sinazongwe	54.7	70.4	45.2	39.4	61.2	22.2

Sources: CSO, 1990 and 2000 Censuses of Population and Housing

- Adash (-) indicates that the district was not there at that time.

There was a slight increase in the urban labour force participation rate (from 45.0 percent to 45.2 percent) as opposed to the decline in rural labour force participation rate (from 52.8 percent in 1990 to 48.8 percent in 2000).

The decline in labour force participation rates is greater for males than for females in rural areas. In the urban areas, the female participation rate has increased from 26.7 percent in 1990 to 29.5 percent in 2000, while the male participation rate has declined from 63.1 percent in 1990 to 61.1 percent in 2000.

The Labourforce participation rates have increased most in Monze district (46.9 percent in 1990 to 54.7 percent in 2000) and declined most in Gwembe district (44.2 percent in 1990 to 37.7 percent in 2000).

An examination of the labour force participation rates by age reveals that they were lowest (11.6 percent) in the age-group 12-14 years, rose with the increase in ages to reach a peak of 63.8 percent for the age-group 35-39 years, and then started to decline until it reached 32.3 percent for the oldest age-group 75 years and over. The pattern of the distribution of the labour force participation rates by age in rural and urban areas are similar to the pattern described above for the total population although there is a difference on the peak age-group in urban areas (age-group 40-44). The patterns are not the same in terms of sexes; there are different peak age groups for all the cases.

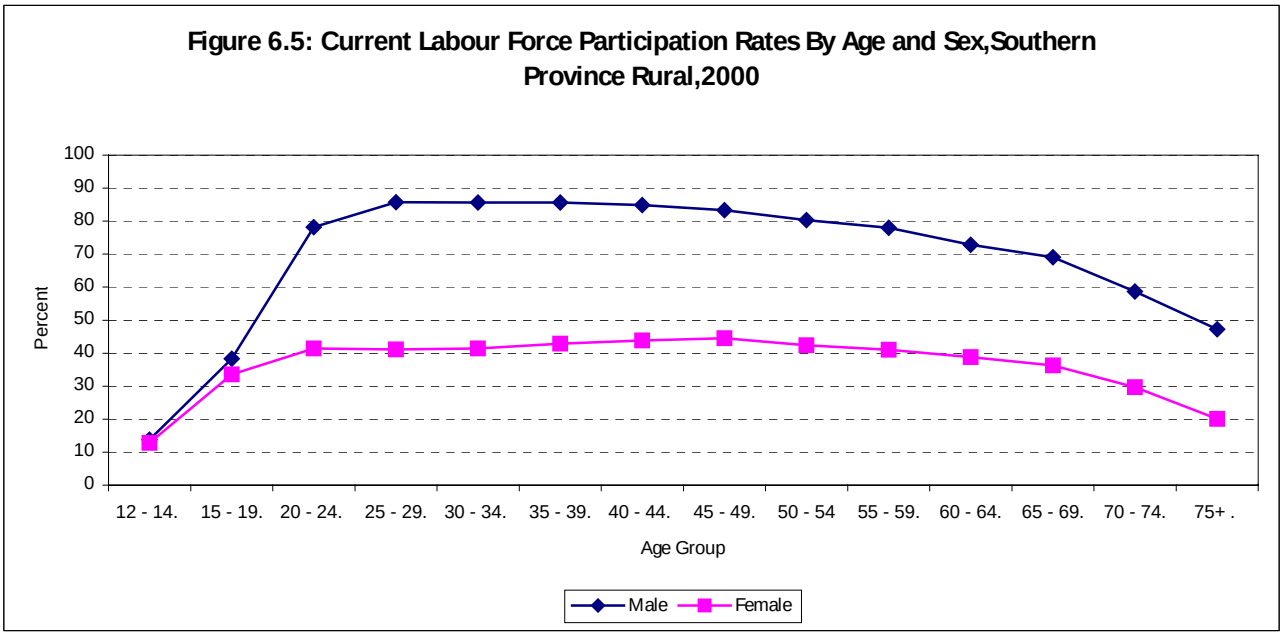
The male labour force participation rates are higher than those for females at every age group; this pattern is the same between the two sexes and in both rural and urban areas.

Table 6.9: Current Labour Force Participation Rates by Age, Sex and Residence, Southern Province,
1990 and 2000

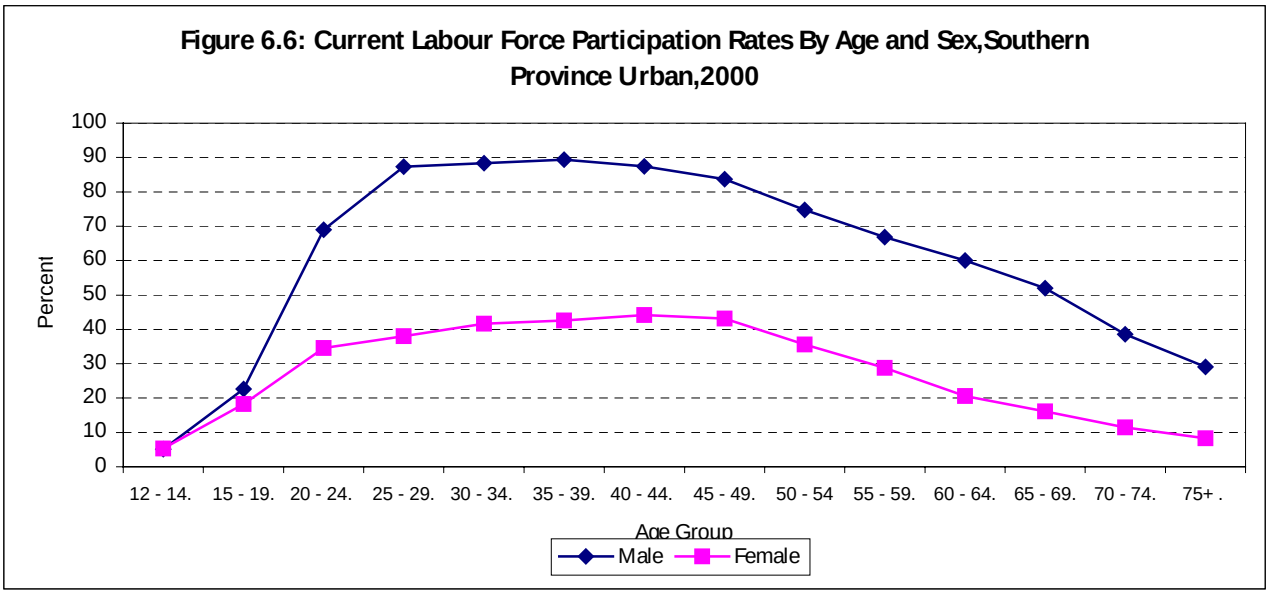
Year	Current Participation Rates								
	Total			Rural			Urban		
	Both	Male	Female	Both	Male	Female	Both	Male	Female
1990	50.9	67.6	35.2	52.8	69.2	37.8	45.0	63.1	26.7
2000	48.0	62.3	34.6	48.8	62.7	36.0	45.2	61.1	29.5
2000 Census Age Group									
Total									
12 – 14	11.63	12.08	11.17	13.28	13.75	12.80	5.26	5.15	5.35
15 – 19	32.17	34.75	29.70	35.94	38.35	33.56	20.29	22.63	18.25
20 – 24	56.55	75.74	39.68	58.53	78.13	41.45	50.82	68.94	34.54
25 – 29	62.65	86.18	40.33	62.57	85.74	41.11	62.89	87.37	38.03
30 – 34	63.59	86.38	41.48	62.61	85.63	41.44	66.45	88.34	41.63
35 – 39	63.77	86.68	42.83	62.70	85.66	42.89	66.90	89.36	42.62
40 – 44	63.58	85.56	43.92	62.46	84.85	43.84	67.07	87.44	44.17
45 – 49	63.38	83.44	44.22	62.69	83.33	44.51	65.56	83.72	43.14
50 – 54	58.40	78.88	41.36	58.43	80.28	42.39	58.27	74.72	35.64
55 – 59	56.17	75.97	39.45	57.41	78.00	41.05	49.35	66.85	28.83
60 – 64	52.16	70.89	36.78	53.69	72.87	38.76	41.84	60.06	20.56
65 – 69	49.96	66.93	33.75	52.32	69.08	36.30	33.64	52.03	16.16

70 – 74	42.03	56.32	27.42	44.39	58.67	29.68	24.75	38.57	11.45
75+	32.30	45.20	18.86	33.82	47.25	20.04	19.51	29.12	8.30
Not stated	-	-	-	-	-		-	-	-

Sources: CSO, 1990 and 2000 Censuses of Population and Housing



Source: CSO, 2000 Census of Population and Housing



Source: CSO, 2000 Census of Population and Housing

6.8 Employment Status, Occupation And Industrial Classification

The occupational and industrial structure and employment status of a province's workforce reflect the level of its economic development and the efficiency with which it uses and allocates its resources. If economic progress is experienced in a province, this will easily be seen from the increased division and specialization of its labour force. In an economy in which economic progress is negligible, it is typical to find the majority of the workforce employed in it's primary industries, for various forms of self-employment to be the most dominant status in employment, for unskilled workers to be in the majority, and for workers to be generally involved in agricultural and other occupations characterized by low skill requirements.

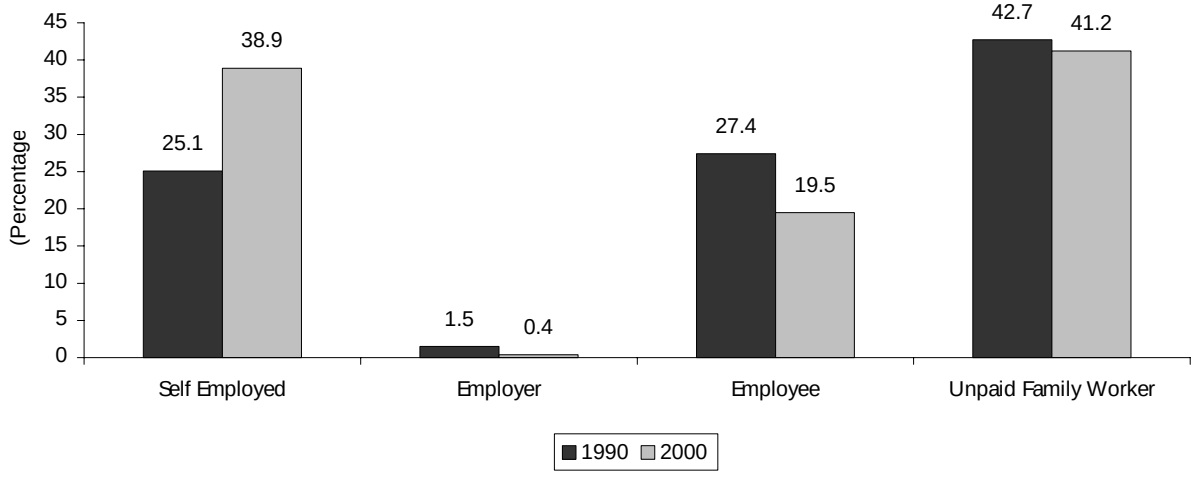
6.8.1 Employment Status

Employment status refers to whether a worker is an employer, employee, self-employed or an unpaid family worker. An employer is a person who operates his or her own economic enterprise or engages independently in a profession or trade, and hires one or more employees. An employee is a person who works for a public or private employer and receives remuneration in wages, salary, commission, tips, piece rates, or pay in kind. A self-employed worker is a person who operates his or her own economic enterprise or engages independently in a profession or trade, and hires no employees. Finally, an unpaid family worker is a person who works without pay in an economic enterprise operated by a related member of the same household (including peasant farmers). The usually working population increased by 37.7 percent between 1990 and 2000.

In terms of employment status, the total self-employed persons as a proportion of the total usually working population increased from 25.1 percent in 1990 to 38.9 in 2000. The ratio of the self-employed persons by sex has also increased between the two periods. However, the increase in the male self- employed persons (from 27.2 percent in 1990 to 46.9 percent in 2000) is more than the increase in the female self-employed persons (from 20.9 percent in 1990 to 28.0 percent in 2000). With regard to residence, a similar pattern is observed where the proportion of the male self-employed population has increased by a bigger percentage (from 332.1 percent in 1990 to 51.7 percent for the rural areas and from 13.4 percent to 27.9 percent for the urban areas) than the female self-employed population which has increased from 18.9 percent in 1990 to 26.7 percent in 2000 for the rural areas and from 30.3 percent in 1990 to 37.5 percent in 2000.

There has been a decrease in the proportion of the workforce classified as employers from a proportion of 1.5 percent in 1990 to 0.4 percent in 2000. A similar trend by sex and residence is observed. As in the case of employers, there has also been a decrease in the proportion of the population classified as employees irrespective of sex and residency. From 1990 to 2000 the proportion of the population classified as employees declined by 7.9 percentage points (from 27.4 percent in 1990 to 19.5 percent in 2000). In terms of sex the decrease was more among the male population (from 34.2 percent in 1990 to 26.2 percent in 2000) than in females (from 13.9 percent in 1990 to 10.3 percent in 2000). There are no significant differences in the decline in terms of residency. The proportion of the unpaid family workers has declined in general from 42.7 percent in 1990 to 41.2 percent in 2000. There have been larger increases in the urban unpaid family workers especially for females who have increased from 7.0 percent in 1990 to 9.1 percent in 2000, while the male proportion has declined from 33.8 percent in 1990 to 26.4 percent in 2000. In terms of residency there has been a decrease in the proportion of the unpaid family workers in the rural areas, while in urban areas there has been an increase.

Figure 6.7: Usually working Population (12 Years and Over) by Employment Status, Southern Province, 1990 and 2000



Sources: CSO, 1990 and 2000 Census of Population and Housing

Table 6.10: Percent Distribution of the Usually Working Population (12 Years and Over) by Employment Status, Sex and Residence, Southern Province1990 and 2000

Employment status and sex	Residence and Year					
	Total		Rural		Urban	
	1990	2000	1990	2000	1990	2000
Total number						
Total	209,966	289,119	161,472	239,637	48,494	49,482
Male	139,930	167,277	103,827	133,461	36,103	33,816
Female	70,036	121,842	57,645	106,176	12,391	15,666
Total percentage						
Total	100	100	100	100	100	100
Male	100	100	100	100	100	100
Female	100	100	100	100	100	100
Self-employed						
Total	25.1	38.9	27.3	40.6	17.8	30.9
Male	27.2	46.9	32.1	51.7	13.4	27.9
Female	20.9	28.0	18.9	26.7	30.3	37.5
Employee						
Total	27.4	19.5	15.0	11.4	68.7	58.9
Male	34.2	26.2	19.4	16.1	76.5	65.9
Female	13.9	10.3	7.0	5.4	46.2	43.7
Employer						
Total	1.5	0.4	1.0	0.2	2.9	1.1
Male	1.8	0.5	1.3	0.3	3.2	1.3
Female	0.7	0.2	0.5	0.1	2.0	0.7
Unpaid family worker						
Total	42.7	41.2	53.4	47.8	7.0	9.1
Male	33.8	26.4	44.2	31.9	3.9	4.9
Female	60.5	61.5	70.0	67.9	16.0	18.2
Not stated						
Total	3.3	0.0	3.3	0.0	3.6	0.0
Male	3.0	0.0	3.0	0.0	3.0	0.0
Female	4.0	0.0	3.6	0.0	5.5	0.0

Sources: CSO**,** 1990 and 2000 Censuses of Population and Housing

6.8.2 Working Population by Occupation

Occupation is a concept, which identifies a set of characteristics of a job and a group of specific tasks that are performed by a person.

The distribution of male and female workers among occupations shows some similarities. The three most important occupations for males are Agriculture (51.9 percent in 1990 and 69.5 percent in 2000), Production and related workers (7.9 percent in 1990 and 9.1 percent in 2000) and sales workers (3.1 percent in 1990 and 6.3 percent in 2000).

For females the three most important occupations are Agriculture (50.5 percent in 1990 and 78.5 percent in 2000), Sales workers (5.7 percent in 1990 and 7.1 percent in 2000) and Professional, Technical and related occupations (5.7 in 1990 and 3.6 percent in 2000.

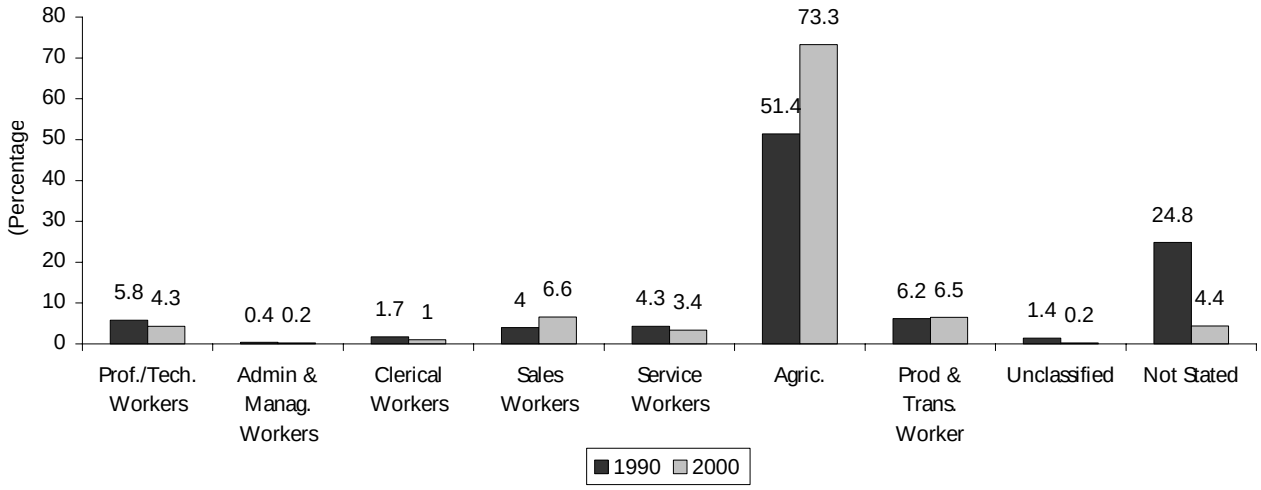
In rural areas, the distribution of workers among the various occupations is similar to the one for total province, except that the proportion of workers who are in Agriculture and related occupations is much higher in rural areas as opposed to urban areas. The differences between the distributions of male and female workers over the various occupations in rural areas are not so significant. The distribution of workers over occupations in urban areas is different from both that of the total and that of the rural areas. In urban areas, workers are more widely distributed over many occupations, and not concentrated in few occupations. The four most important occupations in urban areas are Sales workers (25.1 percent in 2000), Production and related workers (19.3 percent in 2000), Agriculture, Animal Husbandly and Professional, technical and related workers (14.6 percent).

Table 6.11: Percent Distribution of the Usually Working Population By Occupation, Sex and Residence, Southern Province, 1990 and 2000

Occupation	Year	Percentage of Working Population								
		Total			Rural			Urban		
		Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total Number	1990	209,966	139,930	70,036	161,472	103,827	57,645	48,494	36,103	12,391
	2000	289,119	167,277	121,842	239,637	133,461	106,176	49,482	33,816	15,666
Total Percent	1990	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	2000	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Professional, Technical	1990	5.8	5.9	5.7	3.2	3.5	2.8	14.4	12.7	19.1
	2000	4.3	4.9	3.6	2.2	2.7	1.5	14.6	13.3	17.6
Administrative & Managing	1990	0.4	0.5	0.1	0.1	0.1	0.0	1.3	1.6	0.5
	2000	0.2	0.3	0.1	0.1	0.1	0.0	0.9	1.1	0.5
Clerical & Related	1990	1.7	1.7	1.8	0.4	0.5	0.3	6.2	5.3	8.8
	2000	1.0	1.2	0.8	0.3	0.4	0.1	4.7	4.4	5.5
Sales Workers	1990	4.0	3.1	5.7	1.6	1.4	2.0	11.9	8.0	23.1
	2000	6.6	6.3	7.1	2.8	2.7	2.9	25.1	20.4	35.4
Service Workers	1990	4.3	5.0	2.9	2.0	2.0	2.0	11.9	13.8	6.7
	2000	3.4	4.1	2.5	1.3	1.5	1.0	13.8	14.4	12.5
Agriculture, Animal Husbandry	1990	51.4	51.9	50.5	63.9	66.2	59.8	9.9	10.8	7.1
	2000	73.3	69.5	78.5	85.4	83.4	88.0	14.6	14.7	14.4
Production & Related	1990	6.2	7.9	2.7	2.7	3.2	1.7	17.8	21.4	7.4
	2000	6.5	9.1	3.0	3.9	5.0	2.4	19.3	25.0	7.0
Unclassified	1990	1.4	1.6	1.0	1.0	1.0	0.9	2.9	3.3	1.7
	2000	0.2	0.3	0.2	0.1	0.2	0.1	0.7	0.7	0.6
Not Stated	1990	24.8	22.4	29.6	25.1	22.1	30.5	23.7	23.1	25.6
	2000	4.4	4.5	4.3	4.0	4.0	4.0	6.3	6.1	6.5

Sources: CSO, 1990 and 2000 Censuses of Population and Housing

Figure 6.8: Usually Working Population (12 Years and Over) by Occupation, Southern Province, 1990 and 2000



Sources: CSO, 1990 and 2000 Censuses of Population and Housing

6.8.3 Working Population by Industry

Industry or economic sector defines the type of product or service produced at one's workplace. The distribution of the usually working population 12 years and over by industry and employment status for 1990 and 2000 is shown in Table 6.12.

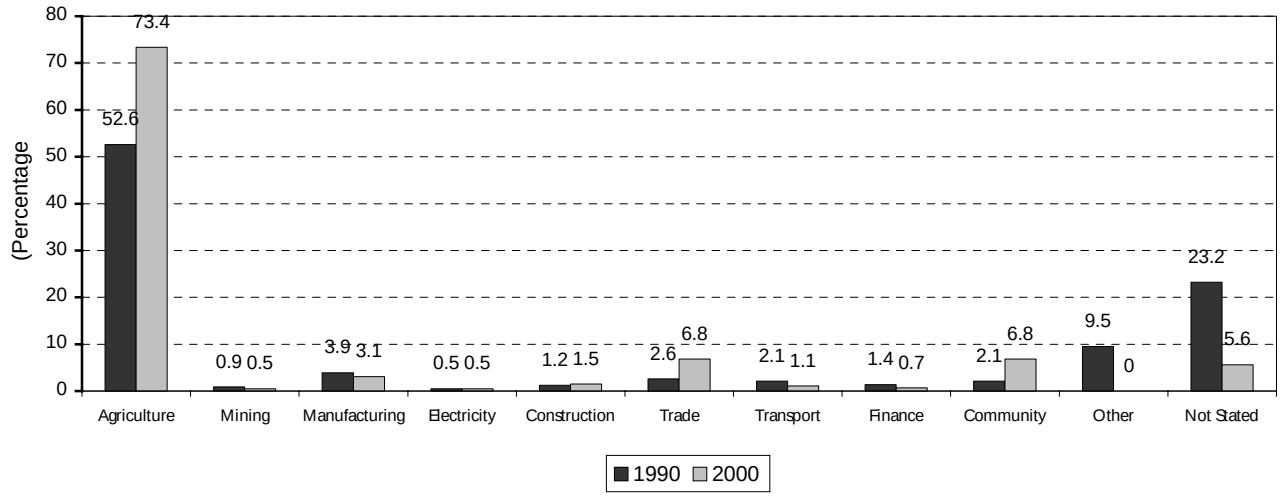
The industrial structure in Southern province continues to be dominated by the Agriculture industry. In 2000 the Agriculture sector employed 73.4 percent of the workers, the Mining industry employed 0.5 percent, secondary activities together employed 5.1 percent, while tertiary industries together employed 15.4 percent. In comparison to 1990, agriculture, Construction, Trade and Community sectors recorded an increase, while the rest of the sectors have shown decreases. However, it must be noted that there was major increase in the Agriculture sector as compared to the other three sectors. This suggests that the majority of the retrenches, retirees and those who are fired, have taken up agricultural activities. The industrial distribution of workers by employment status revealed that the unpaid family workers (62.8 percent in 1990 and 90.8 percent in 2000) and the self-employed (70.1 percent in 1990 and 76.5 percent in 2000) were mostly in the Agricultural sector. Employees are more widely distributed over the industries than other statuses. Employers were more predominant in Agriculture (38.8 percent in 1990 and 31.8 percent in 2000) and Community and Personal Services (19.0 percent in 1990 and 17.2 percent in 2000).

Table 6.12: Percent Distribution of the Usually Working Population (12 Years and Over) by Employment Status and Industry, Southern Province, 1990 and 2000

Industry and Year		Total Number Working	Self - Employed	Employee	Employer	Unpaid Family Worker	Not Stated
Total Number							
1990		209,966	52,751	57,533	3,027	89,654	7,001
	2000	289,119	112,545	56,397	1,033	119,144	0.0
Total Percentage							
1990		100.0	100.0	100.0	100.0	68.4	100.0
	2000	100.0	100.0	100.0	100.0	100.0	0.0
Agriculture							
1990		52.6	70.1	28.7	38.8	62.3	25.9
	2000	73.4	76.5	31.5	31.8	90.8	0.0
Mining	1990	0.9	0.2	2.8	1.2	0.0	0.4
	2000	0.5	0.1	2.3	0.8	0.1	0.0
Manufacturing	1990	3.9	3.8	9.4	6.1	0.4	3.0
	2000	3.1	2.9	8.6	12.1	0.5	0.0
Electricity	1990	0.5	0.1	1.9	1.0	0.0	0.3
	2000	0.5	0.1	2.3	0.4	0.0	0.0
Construction	1990	1.2	0.8	3.0	3.1	0.2	1.0
	2000	1.5	1.2	4.6	3.7	0.3	0.0
Trade	1990	2.6	4.7	4.4	5.1	0.2	1.6
	2000	6.8	10.8	8.2	15.0	2.3	0.0
Transport							
1990		2.1	0.2	7.0	7.7	0.0	1.3
	2000	1.1	0.3	4.8	5.2	0.1	0.0
Finance	1990	1.4	1.7	2.9	2.8	0.2	1.1
	2000	0.7	0.7	1.7	3.9	0.1	0.0
Community	1990	2.1	5.5	24.8	19.0	2.0	6.6
	2000	6.8	2.2	28.0	17.2	0.9	0.0
Other	1990	9.5	0.9	1.8	1.8	0.8	2.6
	2000	0.0	0.0	0.0	0.0	0.0	0.0
Not Stated							
1990		23.2	12	13.3	13.4	2.3	56.2
	2000	5.6	5.1	8.0	10.0	4.9	0.0

Sources**:** 1990 and 2000 Censuses of Population and Housing

Figure 6.9: Usually Working Population (12 Years and Over) by Industry, Southern Province, 1990 and 2000



Sources: CSO, 1990 and 2000 Censuses of Population and Housing

The distribution of the usually working population by employment status in each industry is shown in Table 6.13. Unpaid Family Workers (42.7 percent in 1990 and 41.2 percent in 2000) are the most predominant status for all industries except for the Agriculture and Trade industries. The Self Employed status is predominant in the Trade industry in both 1990 and 2000. The status of employer is not very predominant in any industry in both Censuses.

Table 6.13: Percent Distribution of the Usually Working Population (12 Years and Over) by Employment Status and Industry, Southern Province, 1990 and 2000

Industry and Year		Total Number Working	Total	Self Employed	Employee	Employer	Unpaid Family Worker	Not Stated
Total Number	1990	209,966	100.0	25.1	27.4	1.5	42.7	3.3
	2000	289,119	100.0	38.9	19.5	0.4	41.2	0.0
Agriculture	1990	112,288	100.0	32.9	14.7	1.1	49.7	1.6
	2000	212,329	100.0	40.5	8.4	0.2	50.9	0.0
Mining	1990	1,827	100.0	4.8	90.2	1.9	1.7	1.4
	2000	1,571	100.0	10.2	84.3	0.5	5.0	0.0
Manufacturing	1990	8,130	100.0	24.7	66.2	2.3	4.2	2.6
	2000	8,835	100.0	36.6	54.8	1.4	7.2	0.0
Electricity	1990	1,185	100.0	2.8	92.6	2.5	0.3	1.8
	2000	1,371	100.0	6.0	93.0	0.3	0.7	0.0
Construction	1990	2,473	100.0	17.1	70.2	3.8	6.2	2.7
	2000	4,345	100.0	32.3	59.5	0.9	7.3	0.0
Trade	1990	5,496	100.0	44.8	46.4	2.8	4.0	2.0
	2000	19,773	100.0	61.6	23.5	0.8	14.1	0.0
Transport	1990	4,511	100.0	3.0	88.9	5.2	0.9	2.0
	2000	3,241	100.0	11.9	83.3	1.7	3.2	0.0
Finance	1990	2,912	100.0	31.1	56.9	2.9	6.3	2.8
	2000	2,000	100.0	42.0	49.3	2.0	6.8	0.0
Community	1990	20,024	100.0	14.6	71.3	2.9	8.9	2.3
	2000	19,550	100.0	12.7	80.8	0.9	5.6	0.0
Other	1990	2,455	100.0	19.1	41.8	2.2	29.4	7.5
	2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Not Stated	1990	48,665	100.0	13.0	15.7	0.8	62.4	8.1
	2000	16,104	100.0	35.4	27.9	0.6	36.1	0.0

Sources: CSO, 1990 and 2000 Censuses of Population and Housing

Table 6.14 and Table 6.15 show the distribution of usually working population by industry, sex and residence for the year 2000. The majority of the labourforce are employed in the Agricultural sector (73 percent) followed by Community and Personal Services sector (7 percent). By residence, the rural areas employ 86

percent in the Agricultural industry. Where as in urban areas, Community and Personal Services and Trade Restaurants and Hotels each account for 23 percent and 27 percent, respectively.

Table 6.14: Percent Distribution of Usually Working Population by Industry, Residence and Sex, Southern Province, 2000.

Industry	Total Number	Rural	Urban	Males	Females
Total	289,119	239,637	49,482	167,277	121,842
Total Percent	100	100	100	100	100
Agriculture, Hunting Forestry and Fishing	73	86	15	70	78
Mining and Quarrying	1	0	1	1	0
Manufacturing	3	1	11	4	2
Elect., Gas and Water	0	0	2	1	0
Construction	2	1	4	3	0
Trade, Restaurants and Hotels	7	3	27	6	7
Transport and Communication	1	0	5	2	0
Finance and Real Estates	1	0	3	1	1
Community and Personal Services	7	3	23	7	6

Source: CSO, 2000 Censuses of Population and Housing

Disaggregated by sex, 78 percent of the total usually working population of females are in the Agricultural sector while 6 percent are in the Community and Personal Services sector. For the males 70 percent are in the Agricultural sector while 6 percent are in the Community and Personal Services sector.

Table 6.15: Usually Working Population by Industry, Residence and Sex, Southern Province, 2000.

Industry	Total Number	Total Percent	Male	Female	Rural Number	Total Percent	Male	Female	Urban Number	Total Percent	Male	Female
Total	289,119	100	58	42	239,637	100	56	44	49,482	100	68	32
Agriculture, Hunting Forestry and Fishing	212,329	100	55	45	205,000	100	55	45	7,329	100	68	32
Mining and Quarrying	1,571	100	97	3	930	100	97	3	641	100	96	4
Manufacturing	8,835	100	74	26	3,432	100	56	44	5,403	100	84	16
Elect., Gas and Water	1,371	100	93	7	205	100	96	4	1,166	100	92	8
Construction	4,345	100	98	2	2,134	100	98	2	2,211	100	98	2
Trade, Restaurants and Hotels	19,773	100	55	45	6,596	100	53	47	13,177	100	56	44
Transport and Communication	3,241	100	95	5	819	100	97	3	2,422	100	94	6
Finance and Real Estates	2,000	100	67	33	546	100	66	34	1,454	100	67	33
Community and Personal Services	19,550	100	62	38	8,196	100	64	36	11,354	100	60	40

Source: 2000 Census of Population and Housing

From the total working population by industry sex and residence, 58 percent were males and 42 percent were females. All the sectors account for the majority of male working population as opposed to the females. The distribution by rural and urban does not differ much from the total distribution.

6.9 Educational Attainment

The main objective of human resource development is to secure the optimal number of people with the right qualifications for the right jobs at the right time.

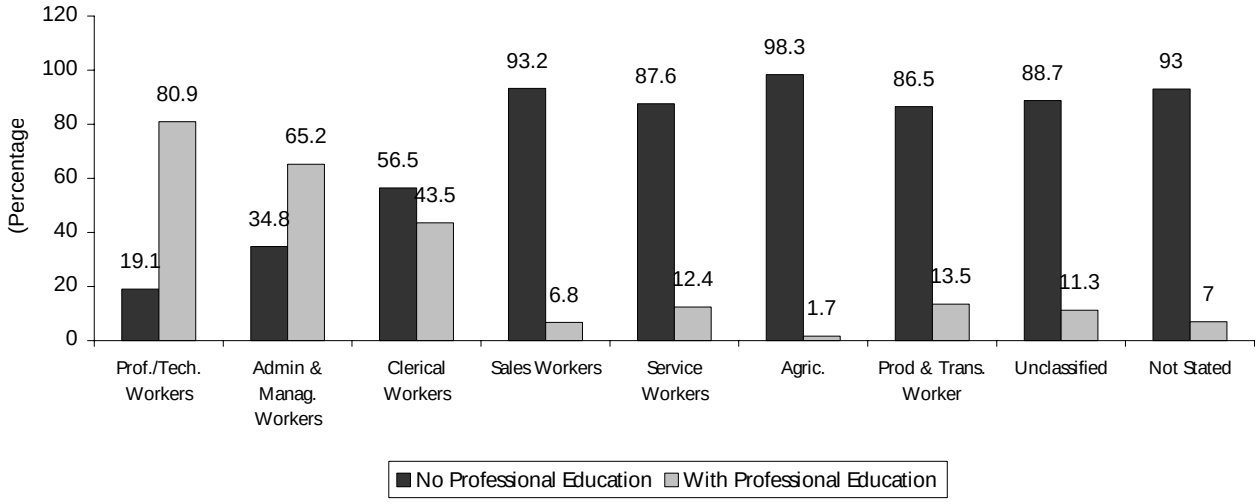
It is necessary for a country to invest time and money in the development of its human resources because of the benefits, which result from increased efficiency, and productivity of those who receive training. Then specific type and number of skills required will be determined by the needs of economic growth and development. The total human resources needed in a country will by definition be equal to the number required to maintain the existing level of output, plus the number required to produce the planned additional

volume of output, not forgetting to add some percentage for those who will die, retire, be upgraded, become disabled or emigrate. The information required on the development of human resources should give indications of the number of workers who possess skills that are critical for sustained economic development. Professional education is training which will enable a person to practice in an occupation in which only those who have acquired a pre-determined amount of knowledge, usually at degree level can practice. Vocational education is training which prepares one for a specific occupation or family of occupations, but at a level that is lower than professional education.

Table 6.16 shows the distribution of the usually working population 12 years and over by professional/vocational training and occupation in 2000. According to this table, 92.6 percent of the province's workforce have absolutely no professional /vocational education while only 7.4 percent have such education. The distribution among the various occupations, shows that about four fifths of those in the Professional, Technical and related occupations have professional education, while close to a fifth do not have. About two-thirds of the Administrative and Managerial occupations have professional education while slightly more than one-third do not have. For the Clerical and related workers, the distribution is (56.5 with no professional education while 43.5 percent have). Over four fifths of the sales, service, Agriculture and production workers do not have professional education. A comparison of the distribution of male and female workers by professional/vocational workers does not show significant differences.

An examination of the levels of training of those who are reported to have professional education shows that slightly over three quarters (78.2 percent) are trained at Certificate level, over a sixth (16.5 percent) are trained up to Diploma level and only 5.3 percent are trained up to Degree level. Except for the Administrative and Managerial workers (19.8 percent), the proportion that has been trained up to Degree level is still very low by 2000. A substantial number of workers trained up to Diploma level in the two occupations; Administrative and managerial (32.0 percent) and Professional and technical (21.7 percent). The majority (ranging from 48.1 percent to 91.8 percent) of the workers are trained up to Certificate level in all the remaining occupations. The proportion of Diploma and degree holders is higher for males than for females, while the opposite is true of certificate holders. This pattern is the same in the majority of the occupations.

Figure 6.10: Usually Working Population (12 Years and Over) by Professional Training; Occupation, Southern Province, 2000



Source: CSO, 2000 Census of Population and Housing

Table 6.16: Usually Working Population 12 Years and Over by Professional/Vocational Training; Occupation and Sex (Percent), Southern Province, 2000

Sex And Occupational Category	Total Usually Working Population	Working Population			Working Population With Professional Education				
		Total	No Professional Education	With Professional Education	Number Having Professional Education	Total	Certificate	Diploma	Degree
Both Sexes									
Total	289,119	100	92.6	7.4	21,341	100	78.2	16.5	5.3
Prof/Tech	12,479	100	19.1	80.9	10,101	100	71.1	21.7	7.2
Admin. Managerial	580	100	34.8	65.2	378	100	48.1	32.0	19.8
Clerical & Related	2,950	100	56.5	43.5	1,283	100	85.9	12.5	1.6
Sales workers	19,115	100	93.2	6.8	1,301	100	80.2	15.4	4.3
Service workers	9,869	100	87.6	12.4	1,223	100	88.9	9.0	2.1
Agric	211,930	100	98.3	1.7	3,538	100	86.0	10.3	3.7
Production	18,851	100	86.5	13.5	2,549	100	91.8	7.2	1.1
Unclasfied	663	100	88.7	11.3	75	100	69.3	25.3	5.3
Not Stated	12,682	100	93.0	7.0	893	100	72.9	19.1	8.0
Males									
Total	167,277	100	91.0	9.0	15,058	100	74.9	18.5	6.5
Prof/Tech	8,133	100	21.6	78.4	6,378	100	64.4	25.9	9.7
Admin. Managerial	486	100	35.6	64.4	313	100	46.3	32.3	21.4
Clerical & Related	1,952	100	66.3	33.7	657	100	79.5	17.5	3.0
Sales workers	10,463	100	91.3	8.7	910	100	75.5	18.9	5.6
Service workers	6,878	100	85.8	14.2	979	100	87.9	9.5	2.6
Agric	116,256	100	97.5	2.5	2,886	100	84.3	11.6	4.1
Production	15,178	100	85.2	14.8	2,239	100	91.2	7.7	1.1
Unclasfied	470	100	88.5	11.5	54	100	72.2	24.1	3.7
Not Stated	7,461	100	91.4	8.6	642	100	69.8	21.3	8.9
Females									
Total	121,842	100	94.8	5.2	6,283	100	85.9	11.6	2.5
Prof/Tech	4,346	100	14.3	85.7	3,723	100	82.6	14.5	2.9
Admin. Managerial	94	100	30.9	69.1	65	100	56.9	30.8	12.3
Clerical & Related	998	100	37.3	62.7	626	100	92.7	7.2	0.2
Sales workers	8,652	100	95.5	4.5	391	100	91.3	7.4	1.3
Service workers	2,991	100	91.8	8.2	244	100	92.6	7.0	0.4
Agric	95,674	100	99.3	0.7	652	100	93.9	4.1	2.0
Production	3,673	100	91.6	8.4	310	100	95.8	3.2	1.0
Unclasfied	193	100	89.1	10.9	21	100	61.9	28.6	9.5
Not Stated	5,221	100	95.2	4.8	251	100	80.9	13.5	5.6

Source: CSO, 2000 Census of Population and Housing

Table 6.17shows the usually working population 12 years and over by professional/vocational training, occupation and sex in 1990. Intercensal comparisons of training in human resources shows that the proportion of those having professional education declined from 8.4 percent in 1990 to 7.4 percent in 2000 while those having no professional qualification have increased from 91.6 percent in 1990 to 92.6 percent in 2000. This pattern varies across the occupations. The declines (especially in the technical and administrative sectors) could be as a result of the brain drain, as doctors, nurses, teachers and college lectures go to work abroad (within the Southern African sub-region, as well as overseas) where they get better remuneration and conditions of service.

The comparison of those educational levels reached by those having professional/vocational training shows that the proportion both those who are trained at Certificate and Diploma level declined (from 82.0 percent in 1990 to 78.2 percent in 2000 for Certificate and from 17.0 percent in 1990 to 16.5 percent in 2000), respectively. The proportion of those trained at degree level has increased from 1.0 percent in 1990 to 5.3 percent in 2000. The above pattern of change between the two censuses is maintained between the two censuses in all occupations except for those that attained diploma level where the pattern varies in some occupations. It must be noted that there is a remarkable increase in the proportion of those trained at Degree level in the two occupations of Administrative and Managerial (from 1.8 percent in 1990 to 19.8 percent in 2000, and Professional and Technical (from 1.3 percent in 1990 to 7.2 percent in 2000).

Although there has been a big stride in increasing the number of workers who have received professional/vocational training at Certificate, Diploma and Degree levels, the data above still shows that the bulk of the province's workforce is unskilled (and may have hence

have low productivity), while critical skills in the professional, Technical, administrative, managerial and related occupations may still be too inadequate to enable the province to sustain appreciable development efforts.

Table 6.17: Usually Working Population 12 Years and Over by Professional/Vocational Training; Occupation and Sex (Percent), Southern Province 1990.

Sex And Occupational Category	Working Population				Working Population With Professional Education				
	Total Usually Working Population	Total	No Professional Education	With Professional Education	Number Having Professional Education	Total	Certificate	Diploma	Degree
Both Sexes									
Total	209,966	100	91.6	8.4	17,491	100	82.0	17.0	1.0
Prof/Tech	12,185	100	32.3	67.7	8,122	100	76.7	22.0	1.3
Admin. Managerial	800	100	44.8	55.2	434	100	51.2	47.0	1.8
Clerical & Related	3,647	100	66.3	33.7	1,219	100	91.0	8.9	0.2
Sales workers	8,404	100	92.3	7.7	640	100	80.8	18.6	0.6
Service workers	9,037	100	88.7	11.3	1,013	100	90.7	9.3	0.0
Agric	107975	100	97.4	2.6	2,734	100	86.1	12.9	1.0
Production	12922	100	90.3	9.7	1,243	100	92.4	7.5	0.2
Unclasfied	2952	100	93.5	6.5	189	100	74.6	24.3	1.1
Not Stated	52044	100	96.3	3.7	1,897	100	89.7	9.4	0.9
Males									
Total	13,9930	100	90.8	9.2	12,730	100	79.7	19.2	1.1
Prof/Tech	8,196	100	36.4	63.6	5,130	100	70.9	27.3	1.8
Admin. Managerial	723	100	44.3	55.7	396	100	50.5	47.7	1.8
Clerical & Related	2,393	100	76.4	23.6	560	100	86.8	12.9	0.4
Sales workers	4,397	100	89.6	10.4	455	100	77.1	22.0	0.9
Service workers	7,037	100	87.2	12.8	894	100	91.4	8.6	0.0
Agric	72,646	100	96.6	3.4	2,472	100	85.8	13.1	1.0
Production	11,000	100	90.0	10.0	1,094	100	91.8	8.0	0.2
Unclasfied	2,255	100	92.8	7.2	160	100	73.1	25.6	1.3
Not Stated	31,283	100	94.9	5.1	1,569	100	89.9	9.4	0.8
Females									
Total	70,036	100	93.1	6.9	4,761	100	88.2	11.3	0.5
Prof/Tech	3,989	100	24.0	76.0	2,992	100	86.7	12.8	0.5
Admin. Managerial	77	100	49.3	50.7	38	100	57.9	39.5	2.6
Clerical & Related	1,254	100	47.1	52.9	659	100	94.5	5.5	0.0
Sales workers	4,007	100	95.4	4.6	185	100	89.7	10.3	0.0
Service workers	2,000	100	5.3	0.3	119	100	85.7	14.3	0.0
Agric	35,329	100	99.3	0.7	262	100	88.5	10.7	0.8
Production	1,922	100	92.2	7.8	149	100	96.6	3.4	0.0
Unclasfied	697	100	95.8	4.2	29	100	82.8	17.2	0.0
Not Stated	20,761	100	98.4	1.6	328	100	89.0	9.5	1.5

Source: CSO, 1990 Census of Population and Housing

Table 6.18 shows the usually working population 12 years and over by field of training and professional/vocational training level completed by 2000. The biggest proportion of the province's workforce of 71.6 percent had not received training at any level by 2000. There is more concentration of training in the Social sciences and arts than in the natural sciences. The following are the five most important fields of training for those who received professional/vocational training in 2000: Teacher training (24.7 percent); Nursing (17.3 percent); Accountancy (5.7 percent); Agriculture (5.0 percent) and Mechanical Engineering (4.4 percent).

A comparison of fields of training by level of training completed shows patterns, which are similar to the one, described for the total workers who had received professional training by 2000.

Table 6.18: Usually Working Population (12 Years and Over) by Field of Training and Professional/vocational Training Completed (percent), Southern Province, 2000

Field of Training	Total Usually Working Population	No Professional Education	Professional/Vocational Training			
			Total	Certificate	Diploma	Degree
Total Working Number	289,119	267,778	21,341	16,682	3,519	1,140
Total .	100.0	100.0	100.0	100.0	100.0	100.0
Natural science	0.0	0.0	0.6	0.2	1.2	5.4
Civil engineering	0.0	0.0	0.6	0.4	1.1	1.3
Elec. & Electronic Engineering	0.2	0.0	3.1	2.9	3.6	3.6
Mechanical Engineering	0.3	0.0	4.4	4.4	3.9	4.8
Chemical Engineering	0.0	0.0	0.2	0.1	0.3	0.7
Mining Engineering	0.0	0.0	0.2	0.1	0.3	0.9
Industrial Engineering	0.0	0.0	0.0	0.0	0.0	0.0
Metallurgical Engineering	0.0	0.0	0.1	0.1	0.2	0.1
Architectural& T/Planning	0.0	0.0	0.3	0.3	0.3	0.4
Other Engineering	0.1	0.0	0.9	0.8	1.0	1.9
Medicine and Surgery	0.1	0.0	0.9	0.3	2.0	5.1
Pharmacy	0.0	0.0	0.3	0.2	0.7	0.4
Dentistry	0.0	0.0	0.5	0.5	0.5	0.4
Nursing	1.3	0.0	17.3	19.5	11.5	2.5
Medical Technology	0.1	0.0	1.2	0.4	3.0	6.6
X-RAY Technology	0.0	0.0	0.2	0.0	0.3	1.5
Veterinary	0.1	0.0	1.0	0.9	0.9	1.9
Statistics	0.0	0.0	0.1	0.1	0.2	0.3
Mathematics.	0.0	0.0	0.2	0.1	0.4	0.8
Computer Science	0.1	0.0	0.8	0.7	1.4	0.9
Economics	0.0	0.0	0.5	0.4	0.4	2.8
Accountancy	0.4	0.0	5.7	4.6	10.7	5.4
Teacher Training	1.8	0.0	24.7	24.2	27.8	22.8
Law and Jurisprudence	0.1	0.0	1.3	1.3	0.8	2.5
Journalism	0.0	0.0	0.2	0.1	0.7	0.4
Fine Arts	0.0	0.0	0.3	0.3	0.4	0.2
Physical Education	0.0	0.0	0.2	0.2	0.1	0.4
Library Science	0.0	0.0	0.1	0.1	0.1	0.1
Social Welfare	0.1	0.0	0.8	0.8	0.6	1.3
Criminology	0.1	0.0	1.4	1.7	0.4	0.4
Business Administration	0.2	0.0	3.1	2.5	5.5	5.4
Secretarial Training	0.2	0.0	2.2	2.6	1.3	0.2
Shorthand Typing	0.1	0.0	0.9	1.1	0.2	0.0
Clerical Typing	0.1	0.0	1.2	1.5	0.2	0.0
Operating of Off. Machine	0.0	0.0	0.4	0.4	0.4	0.2
Service Trade	0.1	0.0	1.6	1.9	0.9	0.6
Radio & TV Broadcasting	0.0	0.0	0.1	0.1	0.1	0.2
Fire Protection & Fire Fighting	0.0	0.0	0.3	0.4	0.2	0.1
Agriculture, Forestry & Fishery	0.4	0.0	5.0	4.6	5.9	8.4
Food and drink Processing	0.0	0.0	0.6	0.6	0.4	0.0
Wood working	0.2	0.0	2.1	2.6	0.4	0.3
Textile Trades	0.1	0.0	1.6	2.0	0.3	0.2
Leather Trades	0.0	0.0	0.1	0.1	0.0	0.1
Other Programmes	0.9	0.0	12.4	13.3	9.1	8.3
No Training	71.6	77.3	0.0	0.0	0.0	0.0

Not stated.	21.0	22.7	0.3	0.2	0.4	0.5

Source: CSO, 2000 Census of Population and Housing

6.10 Unemployment

The unemployed population consists of all persons 12 years and over who are actively seeking work or are available for work during the reference period, i.e. the last seven days before the enumeration day. Poor economic conditions are primarily responsible for unemployment, although demographic trends do affect the growth and composition of the labour-force. A high unemployment ratio generally means that many people are without jobs because of a shortfall in employment opportunities. The unemployment rate is found by measuring the number of unemployed persons against the labour-force.

Table 6.19 shows unemployment ratios by sex and residence for 1990 and 2000. There is an increase in the overall unemployment rate from 10.9 percent in 1990 to 16.1 percent in 2000. Males have experienced a bigger rise from 10.4 percent in 1990 to 16.8 percent in 2000 while the female unemployment rate has increased from 11.7 percent in 1990 to 14.9 percent in 2000.

The total unemployment rate for the province is above the national unemployment rate in 2000 (16.1 percent compared with the national rates of 12.9 percent). In 1990, however, the national unemployment rate was higher than that of the province (10.9 percent against 15.0 percent for the province and national average respectively).

Unemployment rates have increased most in Siavonga district (8.6 percent in 1990 to 32 percent in 2000) and Sinazongwe district (12.4 percent in 1990 to 29.4 percent in 2000). Monze and Namwala districts recorded the biggest declines from 14.2 percent in 1990 to 6.5 percent for Monze and from 10 percent to 6.9 percent for Namwala districts respectively. Disaggregated by sex, the unemployment rates have increased most in Siavonga district (from 9.7 percent in 1990 to 33 percent in 2000 and from 7 percent in 1990 to 33.5 percent in 2000 for males and females respectively). Monze district registered the biggest decrease in the male unemployment rate from 14.2 percent in 1990 to 7.0 percent in 2000. A similar pattern is observed for the female unemployment rates.

Table 6.19: Trends in Unemployment Rates by District and Sex, Southern Province, 1990 and 2000

District	1990			2000		
	Total	Male	Female	Total	Male	Female
Zambia	15.0	14.1	16.7	12.9	14.1	11.3
Southern Province	10.9	10.4	11.7	16.1	16.8	14.9
Districts						
Choma	9.6	9.2	10.1	15.6	16.4	14.4
Gwembe	14.3	13.8	15.3	26.4	27.1	24.8
Itezhi-tezhi	-	-	-	9.5	8.2	11.9
Kalomo	8.0	8.2	7.7	9.5	10.8	7.6
Kazungula	-	-	-	23.6	24.1	22.7
Livingstone	16.5	12.7	26.6	30.7	28.5	35.2
Mazabuka	10.4	9.4	12.9	17.5	17.7	17.3
Monze	14.2	14.2	14.3	6.5	7.0	5.9
Namwala	10.0	9.7	10.5	6.9	7.3	6.5
Siavonga	8.6	9.7	7.0	32	31.3	33.5
Sinazongwe	12.4	12.8	11.9	29.4	27.1	35.6

Sources: CSO, 1990 and 2000 Censuses of Population and Housing

In both rural and urban areas the unemployment rate has increased for both male and females. The most notable increase however is in the urban areas, where unemployment rate has increased from 13.3 percent in

1990 to 26.1 percent in 2000. In urban areas, male unemployment rate has increased from 10.6 percent in 1990 to 23.9 percent in 2000 while the Female unemployment rate has increased from 19.6 percent in 1990 to 30.4 percent in 2000. In rural areas the total unemployment rate has increased from 10.2 percent in 1990 to 13.3 percent in 2000. The increase in the male rural unemployment rate (from 10.4 percent in 1990 to 14.7 percent in 2000) is more than the increase in the rural female unemployment rate (from 10.0 percent in 1990 to 11.2 percent in 2000). The increase in the unemployment rates in the urban areas could be accounted for by the fact that there were a lot of job losses because a good number of companies were either liquidated or privatized.

Table 6.20: Unemployment Rates by Sex and residence, Southern Province, 1990 and 2000

Residence	Sex	1990	2000
Southern Province	Total	10.9	16.1
	Male	10.4	16.8
	Female	11.7	14.9
Rural	Total	10.2	13.3
	Male	10.4	14.7
	Female	10.0	11.2
Urban	Total	13.3	26.1
	Male	10.6	23.9
	Female	19.6	30.4

Sources: CSO, 1990 and 2000 Censuses of Population and Housing

Current unemployment rates by age, sex and residence in 2000 are shown in table 6.21. This table shows that unemployment is a more serious problem in the young age-groups 12-14 (33.2 percent); 15-19 (28.7 percent); 20-24 (22.9 percent) and 25-29 (15.5 percent). The peak is in the age-group 12-14 years. This pattern is the same for both sexes, and in both rural and urban areas.

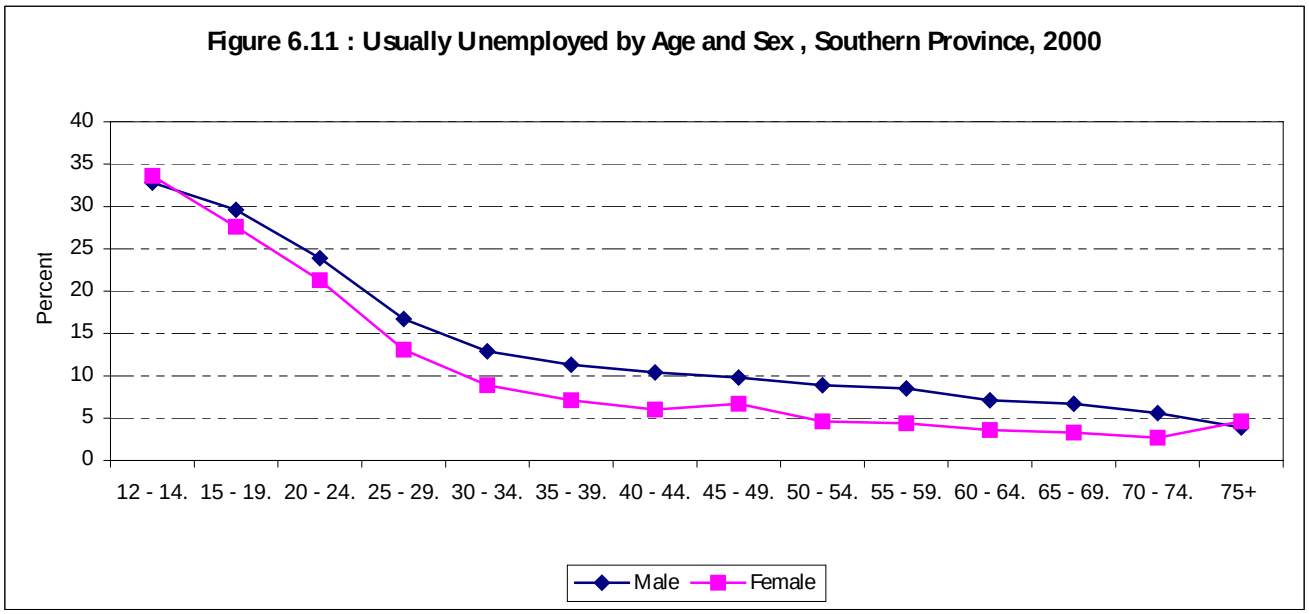
The overall unemployment rate of 16.8 percent for males is more than that of females of 14.9 percent. A comparison of the rates by age between the two sexes shows that apart from the age-group 12-14 years, the male unemployment rates are higher than the female unemployment rates at all ages.

In rural areas, the male unemployment rates are higher than the female unemployment rates at all ages apart from age group 12-14 and the open ended age group (75+) while in urban areas the rates fluctuate in different age groups between males and females.

Table 6.21: Current Unemployment Rates by Age, Sex and Residence, Southern Province, 2000

Age Group	Total			Rural			Urban		
	Both	Male	Female	Both	Male	Female	Both	Male	Female
Total.	16.1	16.8	14.9	13.3	14.7	88.8	26.1	23.9	30.4
12 - 14.	33.2	32.8	33.6	29.9	29.6	30.3	65.2	69.0	62.0
15 - 19.	28.7	29.6	27.6	23.3	25.2	21.1	58.8	54.7	63.3
20 - 24.	22.9	23.9	21.3	17.2	19.3	13.7	42.1	38.7	48.2
25 - 29.	15.5	16.7	13.1	12.4	14.2	8.9	24.4	23.4	26.6
30 - 34.	11.6	12.9	8.9	10.1	11.6	7.2	15.7	16.1	14.6
35 - 39.	9.8	11.3	7.1	8.9	10.6	6.0	12.4	13.0	10.8
40 - 44.	8.8	10.4	6.0	7.8	9.6	4.8	11.7	12.2	10.4
45 - 49.	8.7	9.8	6.7	7.8	8.8	6.2	11.3	12.4	8.5
50 - 54.	7.2	8.9	4.6	6.2	7.8	3.8	11.7	12.3	9.7
55 - 59.	6.9	8.5	4.4	5.8	7.3	3.5	13.9	14.6	12.3
60 - 64.	5.8	7.1	3.6	5.1	6.6	3.0	11.1	10.3	13.7
65 - 69.	5.5	6.7	3.3	4.8	5.7	3.0	13.5	15.6	6.8
70 - 74.	4.7	5.6	2.7	4.0	4.9	2.2	14.2	14.5	13.2
75+	4.1	3.9	4.6	3.9	3.7	4.3	7.7	6.5	12.2

Source: CSO, 2000 Census of Population and Housing



Source: CSO, 2000 Census of Population and Housing

Table 6.22 shows the usually unemployed population by level of education completed and age in 2000. About three quarters (74.8 percent) of the unemployed population in the province either have completed no education or they have a rudimentary education of grade 1 to 7. Slightly below a quarter of the unemployed population (23.3 percent) had secondary school education of grade 8 to 12. Those who have 'A' level education and Degree are almost negligible (1.9 percent). The distribution of the unemployed population by age shows that the proportion of those who have no education increase with the increase in age, while the proportion of those with grade 1-7 and 8-12 decrease with the increase in age.

The data in table 6.22 strongly suggests that unemployment in the country is a bigger problem for those with little or no education. However, this also appears to be a growing problem for those with a secondary education of grade 8-12, especially in the age group 15-54 years.

Table 6.22: Usually Unemployed, by Level of Academic Educational Completed and Age, Southern Province, 2000

Age Group	Total Unemployed	Total	None	Grade 1-7	Grade 8-12	A Level	Degree
Total	376,447	100.0	21.6	53.2	23.3	0.4	1.5
12 – 14	79,617	100.0	9.9	86.3	3.8	0.0	0.0
15 – 19	100,182	100.0	12.2	55.3	32.2	0.3	0.0
20 – 24	57,418	100.0	19.7	38.0	41.0	0.6	0.7
25 – 29	365,35	100.0	24.5	39.5	32.9	0.6	2.4
30 – 34	25,191	100.0	26.6	43.0	24.8	0.6	5.0
35 – 39	18,221	100.0	28.3	43.7	21.4	0.5	6.1
40 – 44	13,507	100.0	32.2	43.0	19.6	0.6	4.7
45 – 49	9,484	100.0	35.6	41.1	17.5	0.9	4.9
50 – 54	8,231	100.0	45.0	38.5	11.8	0.8	3.9
55 – 59	6,241	100.0	51.3	35.2	9.5	0.6	3.4
60 – 64	6,447	100.0	61.3	30.4	5.6	0.3	2.4
65 – 69	5,075	100.0	61.7	31.3	4.3	0.4	2.3
70 – 74	3,959	100.0	68.0	26.0	4.0	0.2	1.8
75+	6,339	100.0	72.9	22.4	2.8	0.2	1.7

Source: CSO, 2000 Census of Population and Housing

6.9.1 Marital Status of the Unemployed

Table 6.23 shows the distribution of the currently unemployed population by marital status, sex and residence. According to the table, the majority (57.7 percent) of the unemployed population are married, close to a third (31.8 percent) are separated 3.0 percent are divorced, 3.9 percent are widowed, while 2.9 percent have never been married. The proportion of the married female unemployed population is higher (59.5 percent in rural and 66.6 percent in urban areas) than the male married unemployed population (51.4 percent in rural and 63.1 in urban areas) in both rural and urban areas.

Table 6.23: Currently Unemployed by Marital Status, Sex and Residence, (Percent),Southern Province, 2000

Residence And Sex	Total Number Unemployed	Marital Status						
		Total	Married	Separated	Divorced	Widowed	Never Married	Living Together
Total								
Both Sexes	51,502	100.0	57.7	31.8	3.0	3.9	2.9	0.7
Male	33,724	100.0	55.3	39.1	1.2	2.2	1.5	0.6
Female	17,778	100.0	62.3	18.1	6.4	7.1	5.4	0.9
Rural								
Both Sexes	33,215	100.0	54.0	35.3	2.8	3.8	3.3	0.8
Male	22,438	100.0	51.4	42.9	1.1	2.1	1.7	0.7
Female	10,777	100.0	59.5	19.6	6.2	7.3	6.4	1.0
Urban								
Both Sexes	18,287	100.0	64.4	25.5	3.4	4.0	2.2	0.4
Male	11,286	100.0	63.1	31.5	1.4	2.4	1.2	0.3
Female	7,001	100.0	66.6	15.8	6.6	6.6	3.8	0.6

Source: CSO, 2000 Census of Population and Housing

6.9.2 Youth Unemployment

The data presented in Table 6.24 shows that youth unemployment is high in Southern province, 28.7 for the age group 15-19 and 22.9 percent in the age group 20-24. Comparing these rates with the rest of the age groups (refer to Table 6.21 above) it can be seen that youth unemployment is still a big problem in the province. In Terms of residence youth unemployment is higher in urban areas as opposed to rural areas. The reason here could be that youths in rural areas may be involved in agricultural activities thereby reducing the number of those unemployed whereas in urban areas where there are less agricultural activities youths end up having no employment. It is interesting to note that in all cases male unemployment rates are higher than female unemployment rates. The rates are also higher among youths in the age group 15-19 as opposed to those in the age group 20-24. This however could be attributed to the fact that youths in the age group 15-19 could still be attending school.

Table 6.24: Youth Unemployment Rates by Age, Sex and Residence, Southern Province, 2000

Age Group	Total			Rural			Urban		
	Both	Male	Female	Both	Male	Female	Both	Male	Female
Total.	16.1	16.8	14.9	13.3	14.7	88.8	26.1	23.9	30.4
15 – 19	28.7	29.6	27.6	23.3	25.2	21.1	58.8	54.7	63.3
20 – 24	22.9	23.9	21.3	17.2	19.3	13.7	42.1	38.7	48.2

Source: CSO, 2000 Census of Population and Housing

6.11 Summary

The size of the working-age population in the province has increased by 20.8 percent between 1990 and 2000. The distribution of this population by age shows that it declines with the increase in age, just as the total population.

The Labour force has increased by 13.8 percent between 1990 and 2000. A bigger proportion of the labour force 78.0 percent labour force is in rural areas, while 22.0 percent is in urban areas. Slightly less than two thirds of the Labour force is in the young age group of 12-29 years.

The employed population has increased by 7.1 percent. The female employed population has increased by 14.5 percent, while the male employed Labour force increased by 3.1 percent. The increase in the female employed population must have been due to both the increased female participation in informal sector activities, as well as due to the improved coverage of informal sector activities in the 2000 Census compared to the 1990 Census.

The number of the unemployed has increased by 68.5 percent between 1990 and 2000. The size of the male unemployed population has increased by 79.2 percent, while that of females has increased by 51.3 percent. There are more unemployed persons in the rural than in the urban areas for both males and females. In 2000, unemployment is a more serious problem for the young age-group of 12-29 years than for the adult age-group of 30 years and over.

Lack of adequate education seems to have contributed to the problem of unemployment for the affected persons. The majority of the unemployed are young people who have not yet started married lives, or are finding it difficult to do so because they have no jobs.

The economically inactive population has increased by 34.2 percent against an increase of 13.8 percent in the Labour force between 1990 and 2000. This implies that most of the 20.8 percent increase in the working-age population between 1990 and 2000 has increased the labour force as well as the inactive population. Similarly the overall unemployment rate has increased from 10.9 percent in 1990 to 16.1 percent in 2000.
Economic activities are still organized around family Labour as evidenced by the predominance (67.8 percent) of workers who are classified as either self-employed or unpaid family workers. In contrast, only 28.9 percent are classified as employees or employers. The transformation of the Zambian economy in the 1990's seems to reduced employment opportunities in the formal sector, thereby forcing a large part of the Labour force into self-employment of the informal sector.

There is a large concentration of workers (73.4 percent) in the Agricultural and related occupations because of the ease with which it is to enter the sector even with very low educational attainment.

Lack of industrialization in the country is reflected by the continued predominance of the primary economic activities of Agriculture which employed over two thirds (73.4 percent) of the workforce in 2000. This situation has been exacerbated by the economic recession of the 1990's, which has caused manpower losses in all the non-agricultural industries and manpower gains in the Agriculture industry.

Chapter 7

FERTILITY LEVELS, PATTERNS AND TRENDS

7.1 Introduction

Fertility is one of the three dynamics of population change; the other two being mortality and migration. Fertility analysis is important in understanding past, current and future trends of population size, composition and growth. Information on fertility levels, patterns and trends experienced by a country is important for socio-economic planning, monitoring and evaluating programs.

7.2 Concepts and Definitions:

- **Fertility:** refers to the frequency of occurrence of live births among women in a population.
- **Crude Birth Rate (CBR):** is the number of live births per thousand mid-year population during a specified period.
- **Completed Family Size (Mean Parity):** is the number of children ever born to women who have completed their reproduction i.e. those aged 45-49.
- **Age Specific Fertility Rate (ASFR):** is the number of live births per thousand women of a specific age group during a specific period.
- **Total Fertility Rate (TFR):** is the number of children that a woman would have by the end of her childbearing period if she were to experience the currently observed age-specific fertility rates.
- **Child Woman Ratio (CWR):** is the ratio of all children aged 0-4 to women aged 15-49 in the population.
- **General Fertility Rate (GFR):** is the number of live births occurring during a specified period per thousand women of childbearing age.
- **Gross Reproduction Rate (GRR):** refers to the average number of female births that a woman would give birth to by the time she reaches the end of her reproduction if she experienced age specific fertility rates prevailing in that year.
- **Net Reproduction Rate (NRR):** refers to the average number of female births born to women aged 15-49, that would survive to the end of their reproductive period after experiencing the prevailing fertility and mortality levels.

7.3 Nature and Quality of Fertility Data

7.3.1. Data Availability and Limitations

The 2000 Census of Population and Housing collected data on fertility using a question on Children Ever Born (CEB) and a question on births in the last twelve months prior to the census. Information was collected from all women present in the household at the time of enumeration. Information on CEB was collected from women aged 12 years and older, while information on births in the last 12 months prior to the census was collected from women aged 12-49 years.

The question on CEB provides required information for estimating lifetime fertility of women. Estimates of Completed Family Size (Mean Parity) were computed using data from this question.

Information collected using the question on births in the 12 months prior to the census is useful in estimating current fertility. Data collected using this question was used in the computation of Age Specific Fertility Rates (ASFR), Total Fertility Rates (TFR), Gross Reproduction Rates (GRR) and the Net Reproduction Rates (NRR).

It is important to note that data on CEB sometimes do not yield good results due to omission of births, particularly by women aged 35 years and above. Children who died soon after birth, those born before marriage and not living with the mother for example, are usually omitted in the census, especially that birth histories are not used to collect this information in the census. Mean parities calculated from children ever born data are also affected by age misreporting by women (See Chapter 2).

In order to reduce on the chances of children being omitted, especially children who have died or live in different households from those of their mothers, the 2000 Census of Population and Housing included questions on whether the child lives in the same household as the mother or whether the child lives elsewhere, and whether the child died. The sex of the child was asked for each of these questions.

7.3.2. Data Evaluation and Adjustment

The 2000 Census fertility analysis used the Trussel variant of the Brass PF ratio technique to adjust the fertility data and to come up with adjusted Age Specific Fertility Rates (ASFR) and adjusted Total Fertility Rates (TFR). The PF ratio technique originally developed by William Brass provides a method for adjusting reported age specific fertility rates (based on births in the 12 month period prior to the census), to the 'actual ' level of fertility (based on CEB). The PF ratio technique was used to adjust fertility on the basis of the age of the mother at the time of the census, and not the age of the child.

While the Gompertz Relational Technique yielded reasonable estimates of adjusted TFR, the PF Ratio technique was used because it yielded both adjusted ASFR and TFR (See Table 7.1). The analysis of the PF Ratios showed that areas that had experienced fertility declines e.g. urban areas had PF ratios that were rising by age of women suggesting patterns of recent fertility decline, while rural areas with almost constant fertility showed PF ratios with very little deviations from the standard. The analysis and adjustment of fertility used different sets of spreadsheets in the Population Analysis Spreadsheets (PASEX), developed by the US Census Bureau.

The Brass PF Ratio technique is used to estimate fertility by comparing the lifetime fertility (Completed fertility =P) to the current fertility (Age specific fertility pattern prevailing at a particular time=F). If the age pattern and the level of fertility are correctly reported, the ratio of the current fertility and completed fertility, or PF ratio is equal to one.

Deviations from one may indicate the extent and nature of biases in the data, but if consistency checks show that both the P and F are accurate, the deviations with a pattern of increasing ratios with an increase in the age of the woman may be an indication of recent declines in fertility levels.

The Trussel variant of the Brass PF ratio uses adjustment factors developed by Trussel using a set of fertility models (Coale and Trussel, 1974). Since the age specific fertility pattern are with respect to 5-year age groups of women aged 15-19, 20-24, 25-29,… whose mid-point ages are 17.5, 22.5, 27.5, etc, and the completed fertility refer to fertility at exact age 20, 25, 30,..etc, there is need to adjust the data so that the reference ages are harmonized.

The Gompertz fertility model assumes that a relationship exists between the cumulative fertility and the Gompertz function, and hence attempts to fit the completed fertility to the double exponential function.

Table 7.1: Comparison of TFR obtained from the Gompertz Technique and the Trussel/Brass PF Ratio Technique by Province, Zambia, 2000

Province	Gompertz Relational 2+2 Points based on ASFR and CEB Avg. (20-34)	Trussel-Brass PF Ratio Avg. (P2/F2:P3/F3: P4/F4)
Zambia	**6.0**	**6.0**
Central	6.2	6.1
Copperbelt	5.2	5.2
Eastern	6.6	6.7
Luapula	7.0	7.1
Lusaka	4.6	4.6
Northern	6.9	7.0
North Western	6.3	6.6
Southern	6.3	6.3
Western	5.8	5.9

Source: CSO, 2000 Census of Population and Housing

7.4 Fertility Levels, Patterns and Trends

Fertility levels refer to the currently observed fertility rates prevailing in a particular territory at a particular time, while fertility Patterns refer to the prevailing fertility rates by the various background characteristics of women. Fertility trends look at what has been happening to fertility over time.

The ASFR provides a measure of fertility variation by age of women and helps in the calculation of Total Fertility Rate (TFR). In this chapter ASFR refers to the prevailing fertility patterns for women aged 15-49 when plotted on a graph, the ASFR shows a characteristic pattern with an initial rise from low levels in the younger ages rising to a peak usually in the 20s and then falling in the older ages (See figure 7.1).

Table 7.2 shows observed and adjusted Age Specific Fertility Rates (ASFR) and Total Fertility Rates (TFR) for Southern province, rural and urban estimated for the 2000 Census. Women in rural areas with a TFR of 6.8, have on average two children more their counterparts in urban areas with a TFR of 4.8. The TFR for Southern province is 6.3; it is more than that of the national average of 6.0. This means that on average, a woman in Southern province will give birth to about 6.3 children by the end of her reproductive period if current fertility levels remain constant.

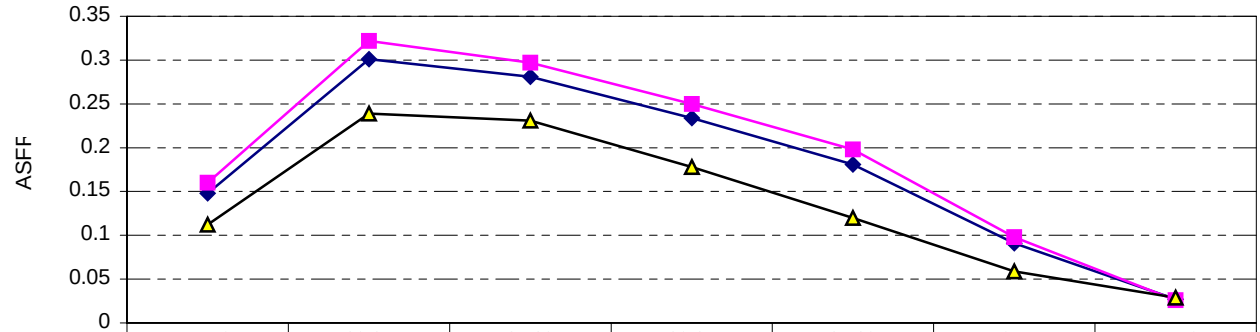
Table 7.2: Age Specific Fertility Rate (ASFR) and Total Fertility rate (TFR), Southern Province and Rural/Urban, 2000.

	Total				Rural				Urban			
Age Group	Total Women	Births	Observed ASFR	Adjusted ASFR	Total Women	Births	Observed ASFR	Adjusted ASFR	Total Women	Births	Observed ASFR	Adjusted ASFR
15-19	66,688	6,833	0.102	0.148	49,872	5,738	0.115	0.160	16,816	1,095	0.065	0.112
20-24	57,791	14,066	0.243	0.301	43,054	11,658	0.271	0.322	14,737	2,408	0.163	0.239
25-29	43,570	10,181	0.234	0.281	32,601	8,383	0.257	0.297	10,969	1,798	0.164	0.231
30-34	32,880	6,464	0.197	0.234	25,116	5,463	0.218	0.250	7,764	1,001	0.129	0.178
35-39	25,576	3,960	0.155	0.181	19,611	3,435	0.175	0.198	5,965	525	0.088	0.120
40-44	19,508	1,603	0.082	0.091	15,268	1,413	0.093	0.098	4,240	190	0.045	0.059
45-49	13,043	363	0.028	0.027	10,282	296	0.029	0.026	2,761	67	0.024	0.029
Observed TFR			**5.2**				**5.8**				**3.4**	
Adjusted TFR				**6.3**				**6.8**				**4.8**

Source: CSO, 2000 Census of Population and Housing

Figure 7.2 show that urban women have lower ASFR at all ages. The peak of childbearing for women occurs in the age groups 20-24 for both rural and urban women. Urban women have lower ASFRs at all ages than rural women.

Figure 7.1 Age Specific Fertility Rate (ASFR), Southern Province, Rural and Urban, 2000



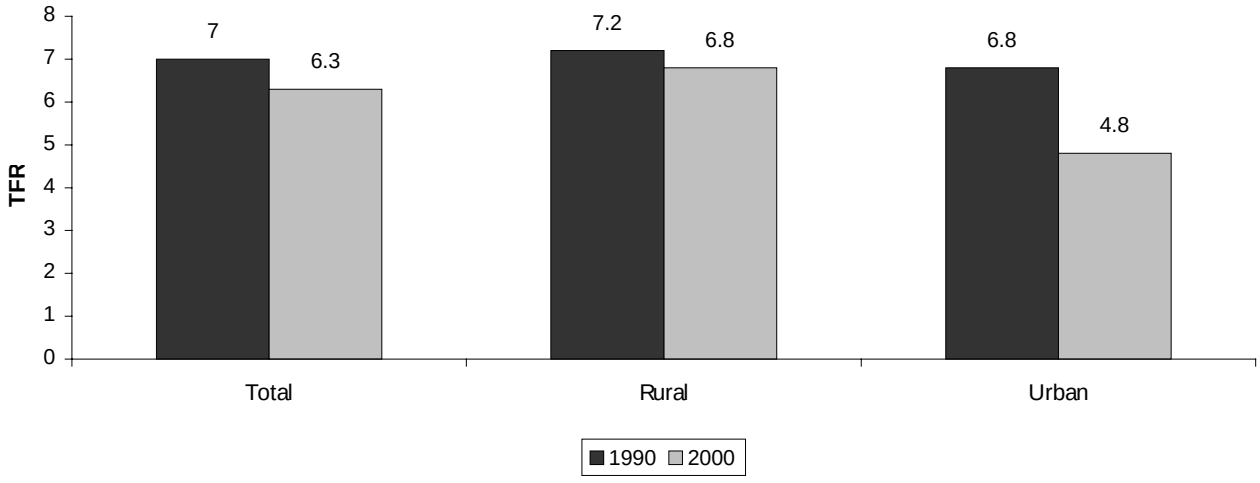
	15-19	20-24	25-29	30-34	35-39	40-44	45-49
Total	0.148	0.301	0.281	0.234	0.181	0.091	0.027
Rural	0.16	0.322	0.297	0.25	0.198	0.098	0.026
Urban	0.112	0.239	0.231	0.178	0.12	0.059	0.029

Age Group

Source: CSO, 2000 Census of Population and Housing

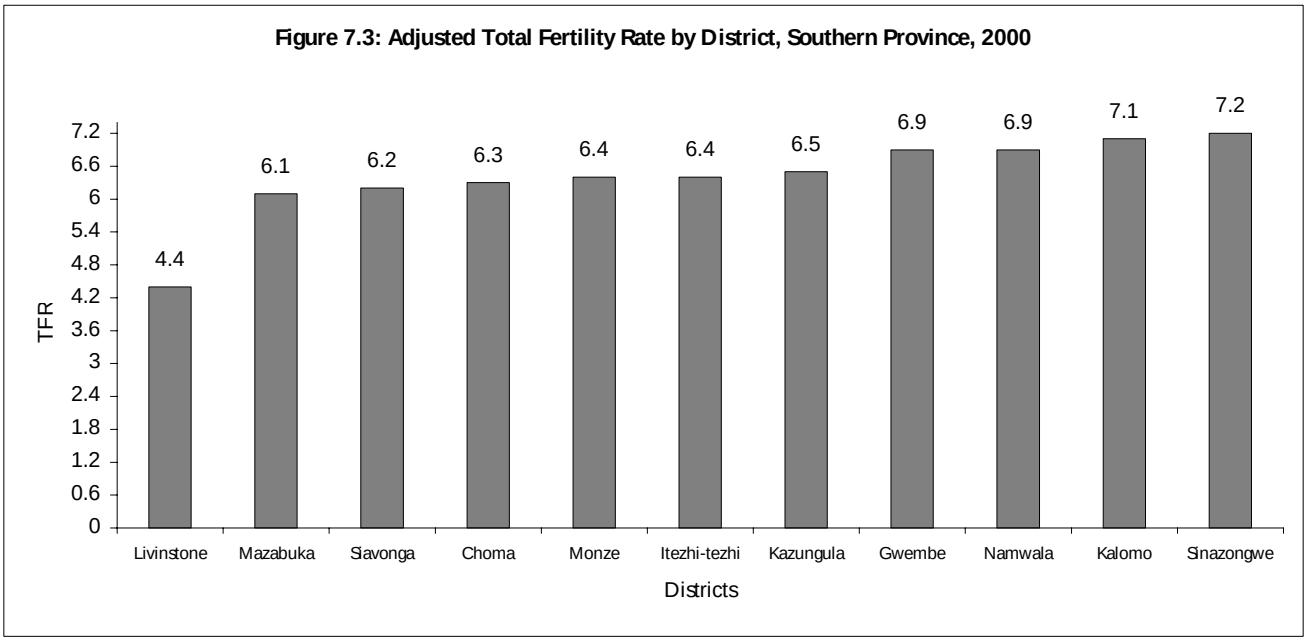
The TFR shows a decline of 0.7 from 7.0 in 1990 to 6.3 in 2000. Urban women have experienced fertility decline of two children, between 1990 and 2000 compared to their rural counterparts whose fertility has declined slightly (by 0.4) over the same period. The decline in fertility in the urban areas could be attributed to the fact that urban areas may have the socio-economic conditions necessary for fertility decline such as access to reproductive health services, better and enhanced access to education by both girls and boys among other reasons as opposed to the conditions prevailing in rural areas.

Figure 7.2: Total Fertility Rate (TFR), Southern Province, Rural and Urban, 1990 and 2000



Source: CSO, 2000 Census of Population and Housing

Figure 7.3 shows the TFRs for the districts of Southern Province. Livingstone has a very low fertility rate of 4.4 compared to Kalomo and Sinazongwe with TFRs of 7.1 and 7.2 respectively.



Source: CSO, 2000 Census of Population and Housing

7.5 Fertility Differentials by Background Characteristics of Women aged 15-49

This section shows differences in levels of fertility according to various background characteristics of women. These include marital status and economic status.

7.5.1 Fertility Differentials by Marital Status of Women aged 15-49

Marital status has a bearing on the fertility levels of women because of the amount of exposure to the risk of pregnancy that married women have compared to the unmarried. Table 7.3 shows that TFR is highest among the married (6.5) and least among the never married (2.8).

Table 7.3: Fertility Differentials by Marital Status of Women aged 15-49, Southern Province, 2000

District	Marital Status						
	Total	Married	Separated	Divorced	Widowed	Never Married	Living Together
Choma	6.3	6.5	4.8	4.7	4.1	2.4	5.2
Gwembe	6.9	6.3	6.8	3.5	3.0	1.2	0.0
Itezhi-tezhi	6.4	7.2	3.9	4.9	3.0	3.5	7.4
Kalomo	7.1	7.7	6.0	4.4	3.4	1.6	6.2
Kazungula	6.5	6.1	3.5	4.5	5.9	5.9	13.1
Livingstone	4.4	4.2	3.7	2.9	3.2	2.1	2.5
Mazabuka	6.1	5.8	4.7	4.6	4.5	2.4	4.1
Monze	6.4	6.3	4.5	4.4	5.0	2.5	5.4
Namwala	6.9	8.1	5.7	4.6	4.2	3.1	6.5
Siavonga	6.2	5.5	4.9	4.5	7.8	1.2	1.6
Sinazongwe	7.2	6.5	5.2	4.8	4.7	1.8	4.2
Southern	6.3	6.5	5.2	4.9	5.6	2.8	5.6

Source: CSO, 2000 Census of Population and Housing

7.5.2 Fertility Differentials by Economic Status of Women aged 15-49

Table 7.4 shows the fertility levels of working and non working women. Detailed definitions of working are shown in Chapter 6 of this report. Women classified as working have a slightly lower fertility rate of 6.0 than those classified otherwise (6.3). This pattern holds true for all the districts in the province.

Table 7.4: Fertility Differentials by Economic Status of Women aged 15-49, Southern Province, 2000

District	Economic Status		
	Total	Working	Not Working
Choma	6.1	6.1	6.3
Gwembe	6.9	6.9	7.0
Itezhi-tezhi	6.4	6.3	6.5
Kalomo	7.1	7.0	7.2
Kazungula	6.5	6.6	6.4
Livingstone	4.4	3.5	4.7
Mazabuka	6.1	5.9	6.1
Monze	6.4	6.0	6.5
Namwala	6.9	6.5	7.2
Siavonga	6.2	5.8	5.9
Sinazongwe	7.2	6.5	7.4
Southern	6.3	6.0	6.3

Source: CSO, 2000 Census of Population and Housing

7.5.3 Fertility Differentials by Level of Education of Women aged 15-49

Table 7.5 shows the fertility levels according to women's levels of education in Southern Province. Women with tertiary education have lower fertility than women in other education categories. For instance, women with tertiary education had a TFR of 4.4 compared with TFR of 6.3 for women without any schooling. The difference is highest in Kalomo district where women without schooling have on average about three children more than those with tertiary education.

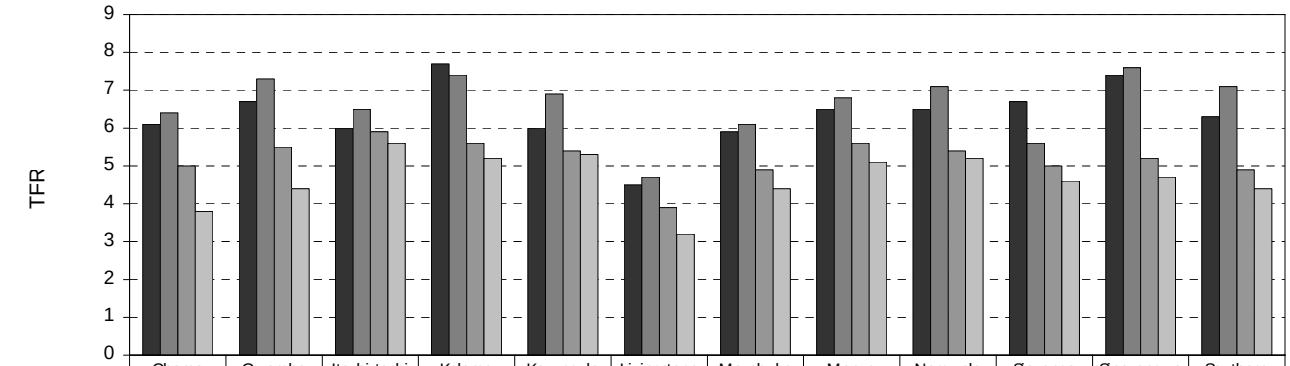
While it has been observed that women without any schooling have a lower fertility than those who have completed primary education, this pattern may not necessarily be true as most women without any schooling or who did not complete their primary education may have reported to have done so. Ideally the fertility differentials between women without any schooling and those with primary education should be small, however with those with primary education exhibiting lower fertility than those without any schooling.

Table 7.5: Fertility Differentials by Level of Education of Women aged 15-49, Southern Province, 2000

District					**Level of Education**
	Total	**No Education**	**Primary**	**Secondary**	**Tertiary**
Choma	6.3	6.1	6.4	5.0	3.8
Gweembe	6.9	6.7	7.3	5.5	4.4
Itezhi tezhi	6.4	6.0	6.5	5.9	5.6
Kalomo	7.1	7.7	7.4	5.6	5.2
Kazungula	6.5	6.0	6.9	5.4	5.3
Livingstone	4.4	4.5	4.7	3.9	3.2
Mazabuka	6.1	5.9	6.1	4.9	4.4
Monze	6.4	6.5	6.8	5.6	5.1
Namwala	6.9	6.5	7.1	5.4	5.2
Siavonga	6.2	6.7	5.6	5.0	4.6
Sinazongwe	7.2	7.4	7.6	5.2	4.7
Southern Province	6.3	6.3	7.1	4.9	4.4

Source: CSO, 2000 Census of Population and Housing

Figure 7.4: Fertility Differentials by Educational Attainment of Women Aged 15-49, Southern Province, 2000



	Choma	Gwembe	Itezhi-tezhi	Kalomo	Kazungula	Livingstone	Mazabuka	Monze	Namwala	Siavonga	Sinazongwe	Southern
No Education	6.1	6.7	6	7.7	6	4.5	5.9	6.5	6.5	6.7	7.4	6.3
Primary	6.4	7.3	6.5	7.4	6.9	4.7	6.1	6.8	7.1	5.6	7.6	7.1
Secondary	5	5.5	5.9	5.6	5.4	3.9	4.9	5.6	5.4	5	5.2	4.9
Tertiary	3.8	4.4	5.6	5.2	5.3	3.2	4.4	5.1	5.2	4.6	4.7	4.4

Source: CSO, 2000 Census of Population and Housing

7.6 Gross Reproductive Rate (GRR)

The Gross Reproduction Rate (GRR) for Southern province is 2.6, implying that about three daughters will replace a woman experiencing the fertility pertain prevailing at the time of the census by the time she reaches the end of her reproductive life. This Gross Reproductive Rate for the province is higher than the national average one which is estimated at 2.3 daughters. Women in rural areas are likely to be replaced by three daughters while women in urban areas are likely to be replaced by two daughters, one less than their rural counterparts.

Table 7.6: Gross Reproduction Rate (GRR), Southern Province, Rural/ Urban, 2000

Total				Rural			Urban		
Age Group	**Total Women**	**Female Births**	**ASFR (f)**	**Total Women**	**Female Births**	**ASFR (f)**	**Total Women**	**Female Births**	**ASFR (f)**
15-19	66,688	3,349	0.050	49,872	2,791	0.056	16,816	558	0.033
20-24	57,791	6,721	0.116	43,054	5,586	0.130	14,737	1,135	0.077
25-29	43,570	4,835	0.111	32,601	4,001	0.123	10,969	834	0.076
30-34	32,880	3,151	0.096	25,116	2,660	0.106	7,764	491	0.063
35-39	25,576	1922	0.075	19,611	1669	0.085	5,965	253	0.042
40-44	19,508	765	0.039	15,268	669	0.044	4,240	96	0.023
45-49	13,043	170	0.013	10,282	143	0.014	2,761	27	0.010
GRR			**2.5**			**2.8**			**1.6**

Source: CSO, 2000 Census of Population and Housing

7.7 Net Reproduction Rate (NRR)

The Net Reproduction Rate is more useful in theoretical demography because it helps in determining the replacement levels of women by taking into consideration the effect of both fertility and mortality on the daughters born to women. Southern province has an NRR of 1.9, with the rural women having an NRR of 2.1 compared to 1.2 for urban women (Table 7.7) This rate is higher than the national average estimated at 1.7 daughters.

An NRR equal to 1.0 is referred to as the "replacement level fertility" because it indicates that on average exactly one daughter will replace each woman after a generation. A higher value indicates a growing population and a lower value shows a declining population.

Table 7.7: Net Reproduction Rate (NRR), Southern, Rural and Urban, 2000

	Southern Total			Southern Rural			Southern Urban		
Age Group	**ASFR (f)**	**Survival Ratio**	***ASFR (f)**	**ASFR (f)**	**Survival Ratio**	***ASFR (f)**	**ASFR (f)**	**Survival Ratio**	***ASFR (f)**
15-19	0.050	0.8029	0.0401	0.056	0.8079	0.0452	0.033	0.8104	0.0267
20-24	0.116	0.7863	0.0912	0.130	0.7916	0.1029	0.077	0.7942	0.0612
25-29	0.111	0.7672	0.0852	0.123	0.7728	0.0950	0.076	0.7755	0.0589
30-34	0.096	0.7457	0.0716	0.106	0.7516	0.0797	0.063	0.7546	0.0475
35-35	0.075	0.7218	0.0541	0.085	0.7280	0.0619	0.042	0.7312	0.0307
40-44	0.039	0.6951	0.0271	0.044	0.7017	0.0309	0.023	0.7050	0.0162
45-49	0.013	0.6661	0.0087	0.014	0.6730	0.0094	0.01	0.6764	0.0068
NRR			**1.9**			**2.1**			**1.2**

Source: CSO, 2000 Census of Population and Housing
Note*:* ASFR at prevailing rates of mortality*

Net Reproduction Rate has declined has continued to decline over the last twenty years in both rural and urban (Table 7.8). This implies that population will continue to grow but a declining rate.

Table 7.8: Trends in Net Reproduction Rate (NRR), Southern Province, 1980-2000

Residence	1980	1990	2000
Total	3.3	3.0	1.9
Rural	3.4	3.1	2.1
Urban	2.8	2.8	1.2

Source: CSO, 1980, 1990 and 2000 Census of Population and Housing

7.8 Mean Parity

Mean Parity is the number of children ever born to women who have completed their reproduction i.e. those aged 45-49. The mean parity for the women aged 15-49 is usually referred to as the Completed Family Size (CFS) and should be equal to TFR under constant fertility, mortality and migration.

Table 7.9 shows that the Completed Family Size (CFS) or mean parity for women in Southern Province is 7.0 children per woman. This is slightly higher than the national average of 6.8 children per woman. Rural women having a higher CFS of 7.1 compared with their urban counterparts with 6.4 children per woman. A comparison of the TFR with the mean parity also shows trends in fertility. While TFR is a measure of current fertility, mean parity measures completed fertility. Women age 45–49 have given birth to an average of 7 children. The TFR (6.3) is lower than the CFS and this can be attributed to the observed fertility decline overtime.

Another measure of trends in fertility is comparing the TFR with the mean number of CEB to women at the end of their childbearing period, aged 45-49 (mean parity). While TFR is a measure of current fertility, mean parity measures past or completed fertility. Overall, Women age 45–49 reported having given birth to an average of 7 children. This compares with a TFR of 5.2 for women in the age group 15-49; the difference may be attributed to the observed fertility decline overtime.

Table 7.9: Observed Mean Parity, Southern Province, Rural and Urban, 2000

Age Group	**Total**	**Rural**	**Urban**
15-19	0.3	0.3	0.2
20-24	1.5	1.6	1.1
25-29	2.9	3.1	2.3
30-34	4.3	4.5	3.5
35-39	5.6	5.8	4.8
40-44	6.7	6.9	5.9
45-49	7.0	7.1	6.4

Source: CSO, 2000 Census of Population and Housing

Mean Parity for the age group 45-49 for Southern Province, has declined slightly from 7.4 children per woman in 1990 to 7.0 children per woman in 2000. At the lower age group (15 – 24), mean parity has

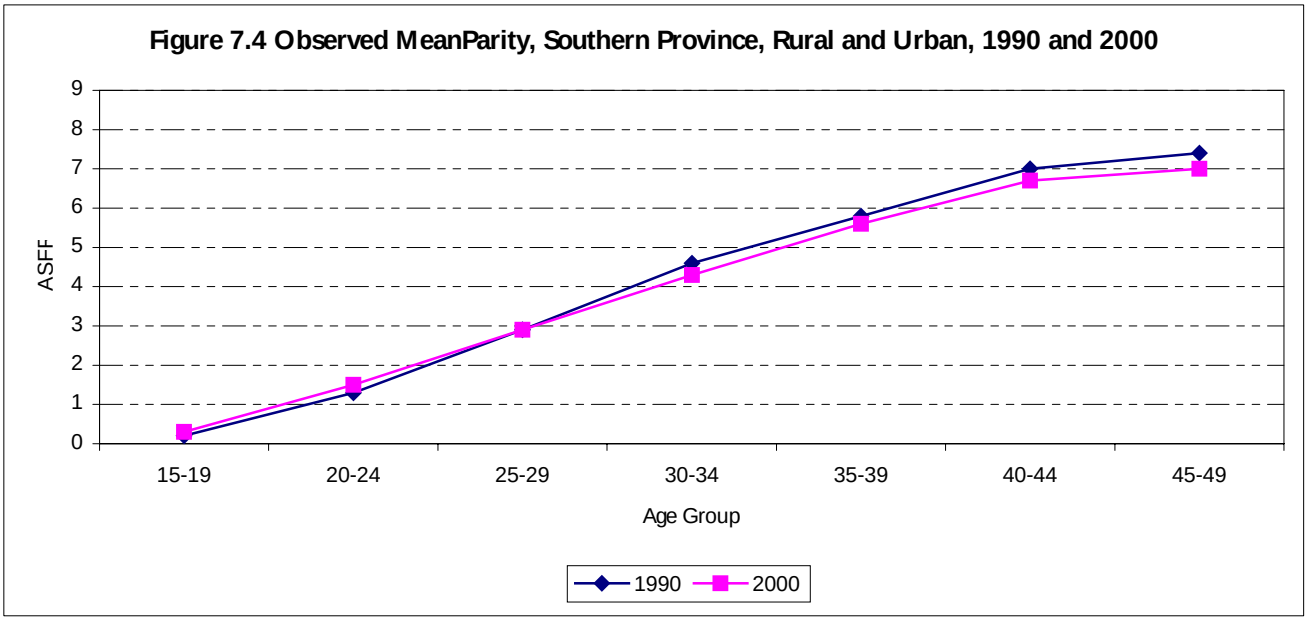
increased between 1990 and 2000 while at the higher ages groups (30 – 49), mean parity has decreased. In age group 25 -29, it has remained constant (Table 7.9 and Figure 7.4).

Table 7.9: Observed Mean Parity Southern Province, 1990-2000

Age Group	Mean Parity (1990)*	Mean Parity (2000)
15-19	0.2	0.3
20-24	1.3	1.5
25-29	2.9	2.9
30-34	4.6	4.3
35-39	5.8	5.6
40-44	7.0	6.7
45-49	**7.4**	**7.0**

Sources: CSO, 1990 and 2000 Censuses of Population and Housing

Note: 1990 estimates extracted from Analytical Report Vol..8, of the 1990 Census of Population, Housing and Agriculture, CSO 1995.



Sources: CSO, 1990 and 2000 Censuses of Population and Housing

7.9 Other Fertility Indicators

Table 7.10 shows a summary of fertility indicators for districts of Southern Province. The table shows that the Crude Birth Rate (CBR) range from 26.1 in Livingstone to 47.9 in Namwala. The General Fertility Rate and Gross Reproduction Rate are lowest in Livingstone and highest in Namwala.

Table 7.10: Summary of Fertility Indicators by District, Southern Province, 2000

District	Adjusted Total Fertility Rate	Crude Birth Rate	General Fertility Rate	Child Woman Ratio	Mean Parity	Gross Reproduction Rate
Choma	**6.3**	**36.6**	**162.4**	**789**	**7.1**	**2.4**
Gwembe	**6.9**	**41.7**	**184.5**	**843**	**7.4**	**2.8**
Itezhi tezhi	**6.4**	**37.6**	**177.2**	**851**	**6.5**	**2.7**
Kalomo	**7.1**	**44.1**	**197.5**	**869**	**7.4**	**2.9**
Kazungula	**6.5**	**41.5**	**189.9**	**828**	**6.9**	**2.9**
Livingstone	**4.4**	**26.1**	**97.5**	**502**	**6.4**	**1.5**
Mazabuka	**6.1**	**36.7**	**160.4**	**780**	**6.7**	**2.3**
Monze	**6.4**	**39.9**	**179.4**	**846**	**7.1**	**2.6**
Namwala	**6.9**	**47.9**	**214.7**	**868**	**7.7**	**3.2**
Siavonga	**3.8**	**30.6**	**133.6**	**756**	**5.8**	**2.0**
Sinazongwe	**7.2**	**41.8**	**182.1**	**815**	**7.1**	**2.8**

Source: CSO, 2000 Census of Population and Housing

7.10 Summary

Fertility levels for Southern Province have declined over the period 1990-2000, from 7.0 to 6.3.This decline has been attributed to the decline in urban areas in which the TFR dropped from 6.8 in 1990 to 4.8 in 2000 while that of the rural areas has declined slightly from 7.2 to 6.8 over the period.

Child bearing is at its peak in the age group 20-24 years after which it declines steadily. Sinazongwe has the largest TFR (7.2) among the districts while Livingstone has the least (4.4)

Generally, fertility rates are highest in Namwala and lowest in Livingstone. These include Crude Birth Rate, General Fertility Rate, Mean Parity and Gross Reproduction Rate.

Chapter 8

CHILD AND ADULT MORTALITY

8.1 Introduction

Basic demographic information on the number of deaths by age and sex in a population is a critical input for the determination and evaluation of health policies and programmes, according to the World Health Organisation (WHO, 2002:1). Specifically, child mortality data are important for evaluating and monitoring progress on governments' child survival targets and intervention measures. Equally important for planning and programme implementation purposes is information on adult mortality. This is of particular importance in the era of HIV/AIDS as the pandemic affects the most productive and reproductive ages (15-49 years).

Indirect demographic methods are used to derive both child and adult mortality indicators. Information on child mortality estimation was based on the reports of the mothers, aged 15-49 years, of the survival of their children by sex. This gives information on children surviving and not surviving out of the total children ever born per woman (mother) in the reproductive age group (15-49 years). The United Nations Mortality measurement package, Mortpak-Lite, as well as Q5 were used to compute child mortality indicators, namely, infant mortality rate (IMR), child mortality rate (CMR), under-five mortality rate (UMR) and life expectancy at birth (e_0) based on the Coale-Demeny North Model. It is worth noting that these child mortality indicators are based on life tables that were developed on mortality data in the pre-AIDS era. WHO (2002:13) notes that if deaths from HIV/AIDS were to be excluded, life expectancy at birth in some countries in Southern Africa including Zambia would be 15 to 20 years higher.

Information on the number of adult deaths by age and sex in the household was not collected in the 2000 round of Census of Population and Housing. Therefore, measurement of adult mortality was based on estimates of life expectancies by age for ages 10 - 70 years. The measurements were computed using the Population Analysis Spreadsheet (PAS) and two consecutive census populations by 5-year age groups as an input into the measurement (Preston-Bennett Mortality Technique) (US Bureau of the Census, 1994:161). This method indirectly takes into account the effects of the HIV/AIDS pandemic on the population that would not be captured from the model life tables and is also based on large numbers of the populations.

8.2 Concepts and Definitions

- *Mortality* refers to the occurrence of deaths in a population.
- *Infant mortality rate* (IMR) ($_{\mathbf{1}}q_{\mathbf{0}}$) refers to the number of deaths among infants aged below one year per thousand (1,000) live births per year
- *Child mortality rate* (CMR) ($_{\mathbf{5}}q_{\mathbf{1}}$) refers to the number of deaths among children aged between exact age one and five years per thousand (1,000) live births per year
- *Under-five mortality rate* (UMR) ($_{\mathbf{5}}q_{\mathbf{0}}$) refers to the number of deaths among children aged below five years per thousand (1,000) live births per year. UMR, therefore, constitutes both the infant and child mortality.
- *Life expectancy at birth* ($e_{\mathbf{0}}$) refers to the average number of years a newly born child is expected to live, if the current existing mortality conditions were to prevail for a long time.
- *Life expectancy at exact age* ($e_{\mathbf{x}}$) refers to the average number of years a person aged X years is expected to live, if the current existing mortality conditions were to prevail for a long time and;
- *Adult mortality* ($_{\mathbf{60}}q_{\mathbf{15}}$) refers to the number of deaths that occur to persons in the age range 15 to 60 years.

8.3 Infant Mortality Levels, Trends and Differentials

Infant mortality rate (IMR) in Southern province increased from 94 in 1980 to 99 in 1990 then declined to 95 in 2000.

Compared to the national average, the 2000 infant mortality rate for the province is significantly much lower than the national rate of 110 deaths per 1000 live infant births.

Table 8.1: Infant Mortality Rate by Sex and Residence, Southern Province, 1980-2000.

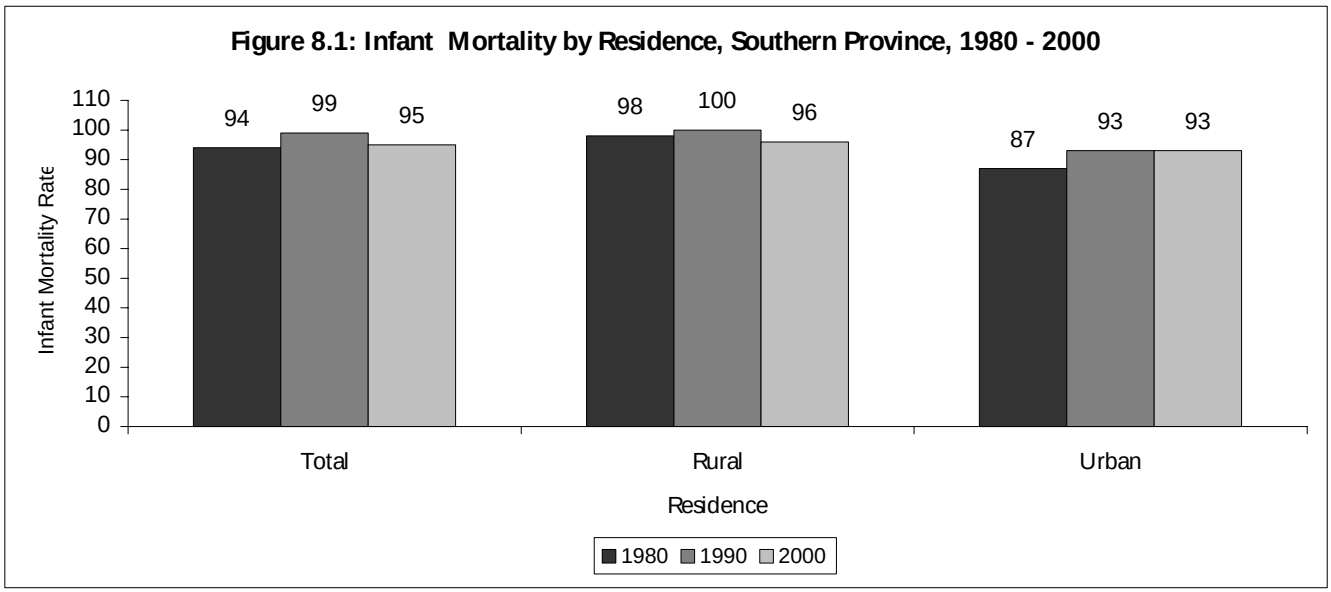
Residence and Sex	Infant Mortality Rate (per '000)		
	1980	1990	2000
Zambia	**99**	**124**	**110**
Southern	94	99	95
Residence			
Rural	98	100	96
Urban	87	93	93
Sex Of Child			
Male	91	103	95
Female	98	95	89
Districts (2000)	**Total (2000)**	**Rural (2000)**	**Urban (2000)**
Choma	85	82	99
Gwembe	90	90	-
Itezhi tezhi	97	94	77
Kalomo	112	113	94
Kazungula	102	102	-
Livingstone	97	75	98
Mazabuka	80	77	95
Monze	89	92	71
Namwala	118	117	112
Siavonga	94	89	109
Sionazongwe	109	115	49

Sources: CSO, 1980, 1990 and 2000 Censuses of Population and Housing

Note:A dash (-) denotes that the district has no urban area

8.3.1 Infant Mortality Rate by Residence

Figure 8.1 shows that infants in rural areas of the Southern Province experience a higher risk of dying before age one than urban infants. About 1 in 10 infants in rural areas than 1 in 11 infants in urban areas die before celebrating their first birthday. IMR has declined in rural areas from 100 to 96 deaths per 1000 live births while in urban areas it has remained constant at 93 deaths per 1000 live births between 1990 and 2000, respectively.

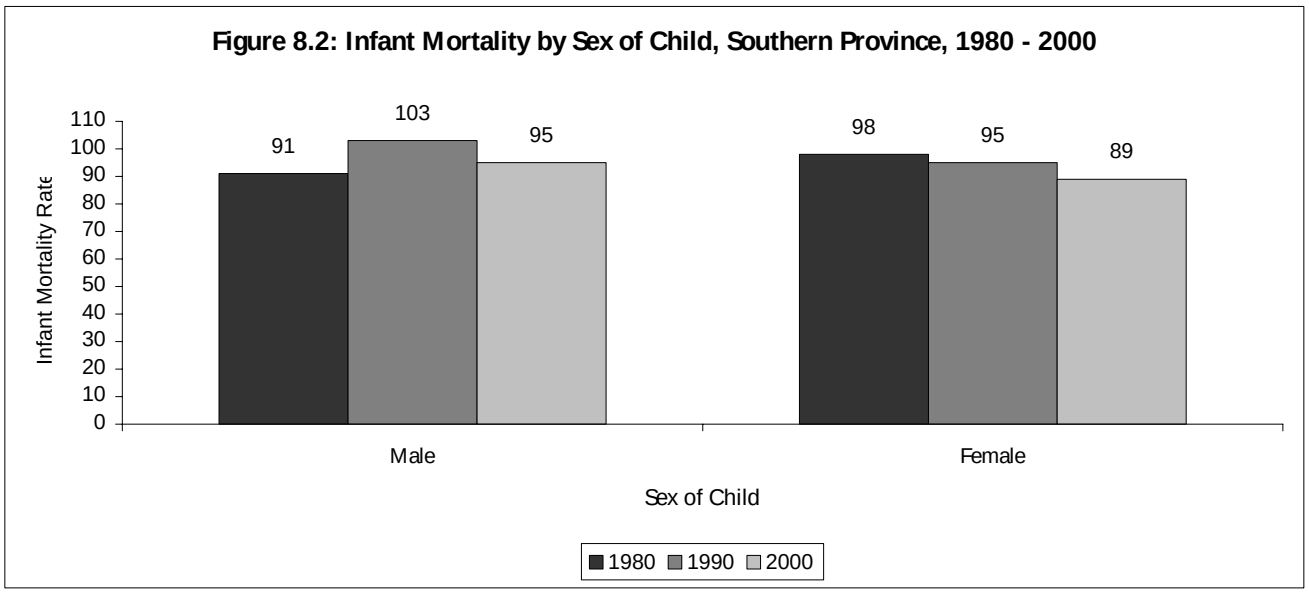


Sources: CSO, 1980, 1990 and 2000 Censuses of Population and Housing

8.2.2 Infant Mortality Rate and Sex

Figure 8.2 shows the disaggregation of IMR by sex. Male infants have a higher IMR than females (95 and 89 respectively) A similar pattern was also observed in 1990. It is important to note that the 2000 IMR for both sexes is still higher than the 1980 ones.

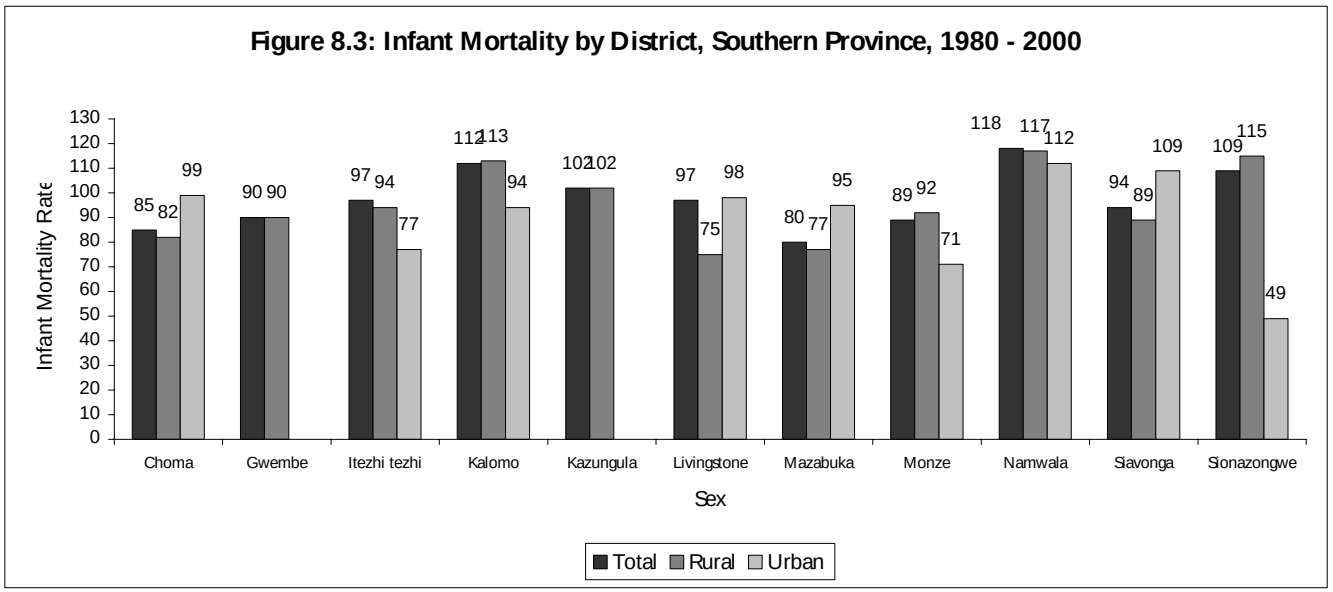
In 2000 the pattern of infant mortality by sex is similar to that of the national average; IMR is higher among males than females . However, for both male and female infants, the chances of surviving were much higher in Southern Province as compared to the national average.



Sources: CSO, 1980, 1990 and 2000 Censuses of Population and Housing

8.3.3 Infant Mortality Rate by District

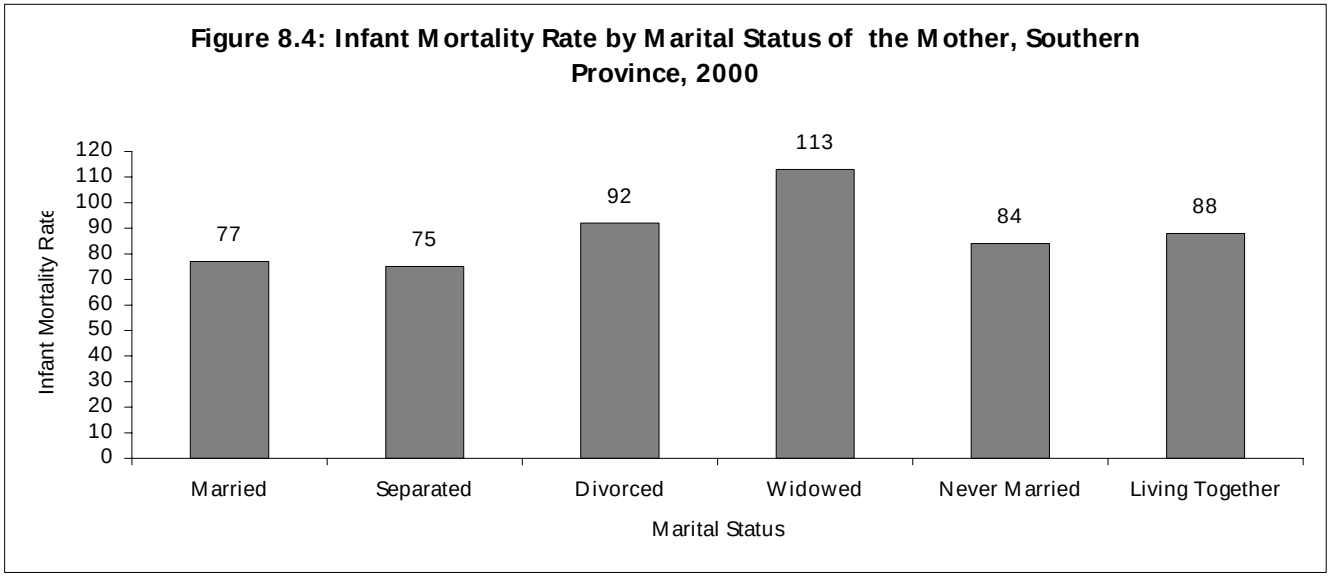
Figure 8.3 shows that the IMR for the districts is highest in Namwala (118) and lowest in Mazabuka (80). In Choma, Livingstone, Mazabuka and Siavonga, IMR for rural areas is lower than that of urban areas while for the rest of the districts, the IMR is higher in rural than urban areas. It is important to note that Gwembe and Kazungula have no urban areas.



Sources: CSO, 1980, 1990 and 2000 Census of Population and Housing

8.3.4 Infant Mortality by Marital Status Of the Mother

Table 8.2 and Figure 8.4 show the IMR by marital status of mothers. IMR is highest among widowed mothers (113) and lowest among separated mothers (75). This pattern is similar in both rural and urban areas.



Source: CSO, 2000 Census of Population and Housing

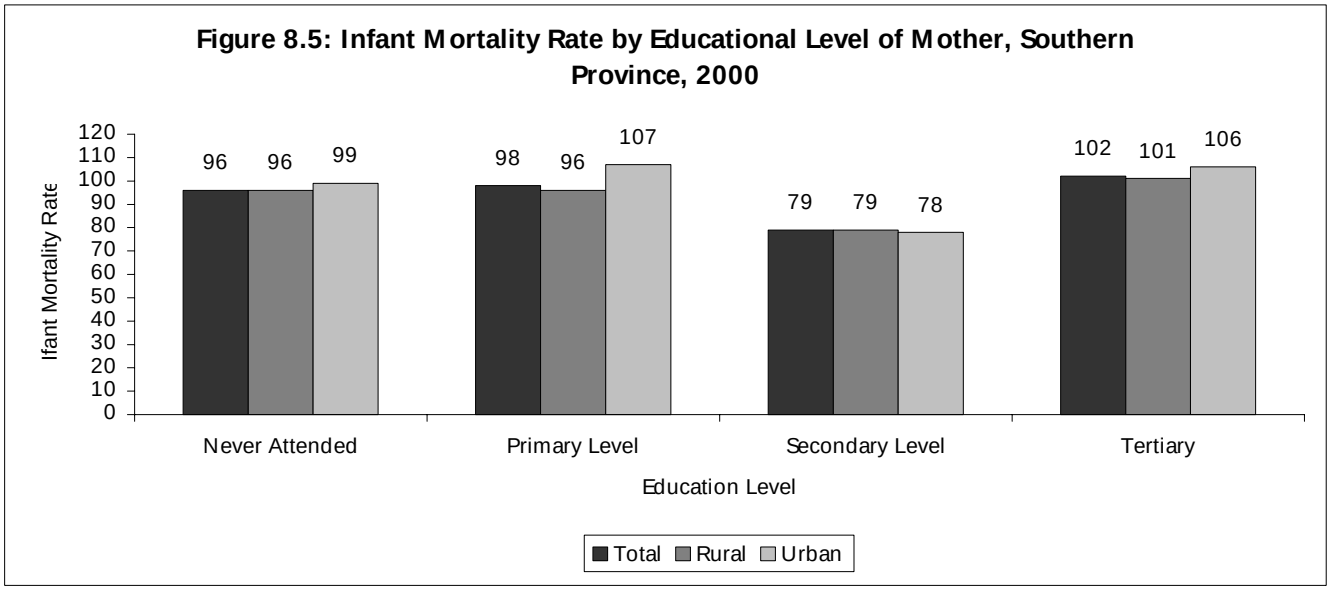
Table 8.2: Infant Mortality Rate Indicators by Selected Background Characteristics According to Rural-Urban Residence, Southern Province, 2000

Marital Status	Infant Mortality Rate (per 000)		
	Total	Rural	Urban
Married	77	78	70
Separated	75	78	61
Divorced	92	90	100
Widowed	113	109	121
Never Married	84	88	77
Living Together	88	87	93

Source: 2000 Census of Population and Housing

8.3.5 Infant Mortality Rate by Educational Level of the Mother

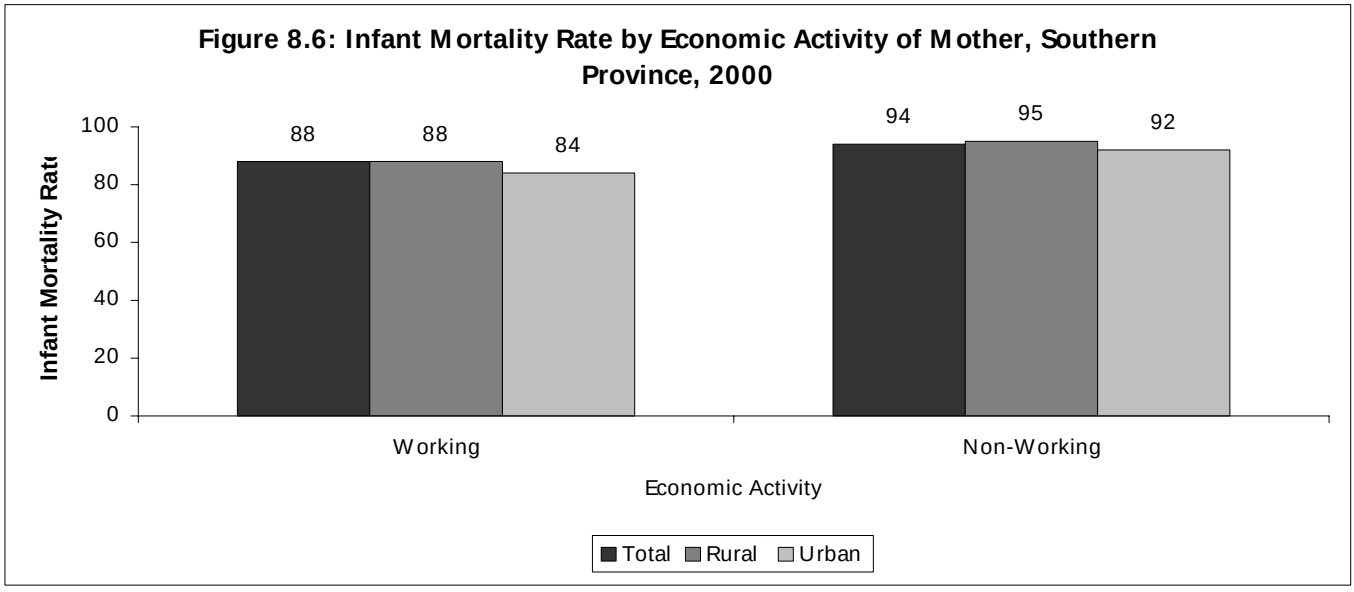
IMR by the level of education of mother is shown in Figure 8.5. It is expected the IMR would be lowest among mothers with the highest levels of education. However, in Southern Province, IMR is highest among these women (102) and lowest among women with secondary education (79). There is little variation between the IMR among women who have never had any schooling (96) and those who have only completed primary education (98).



Source: CSO, 2000 Census of Population and Housing

8.3.6 Infant Mortality Rate by Economic Activity of the Mother

Children born to working mothers have a lower IMR than those born to non-working mothers (88 versus 94 deaths per 1000 live births respectively).



Source: CSO, 2000 Census of Population and Housing

8.4 Child Mortality Levels, Trends and Differentials

Table 8.3 shows that overall, Child Mortality Rate (CMR) has declined slightly between 1990 and 2000, from 70 to 66 deaths per 1000 children. The 2000 levels are the same as the 1980 levels. In 1980, CMR was 66.

In comparison with the national average, Southern Province has had a significantly lower child mortality rate in 1980, 1990 and 2000. In 2000, the mortality rates were 66 and 82 for Southern and Zambia, respectively).

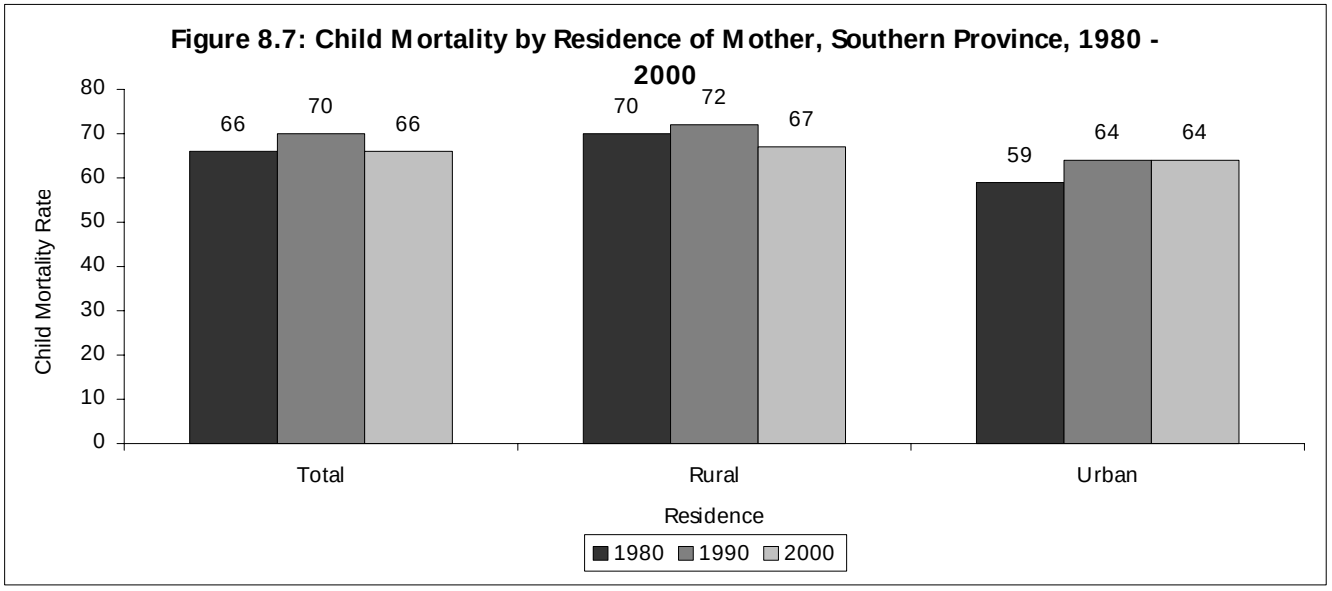
Table 8.3: Child Mortality Rate by Sex and Residence, Southern Province, 1980-2000.

Residence and sex	Child Mortality Rate (per '000)		
	1980	1990	2000
Zambia	**71**	**96**	**82**
Southern	66	70	66
Residence			
Rural	70	72	67
Urban	59	64	64
Sex Of Child			
Male	63	74	66
Female	69	66	66
Districts (2000)	**Total (2000)**	**Rural (2000)**	**Urban (2000)**
Choma	57	54	71
Gwembe	61	61	-
Itezhi tezhi	68	65	49
Kalomo	84	85	65
Kazungula	73	73	-
Livingstone	68	47	69
Mazabuka	52	48	66
Monze	60	63	44
Namwala	91	90	84
Siavonga	65	60	80
Sionazongwe	81	87	25

Sources: 1980, 1990 and 2000 Censuses of Population and Housing
Note:A dash (-) denotes that the district has no urban area

8.4.1 Child Mortality Rate by Residence

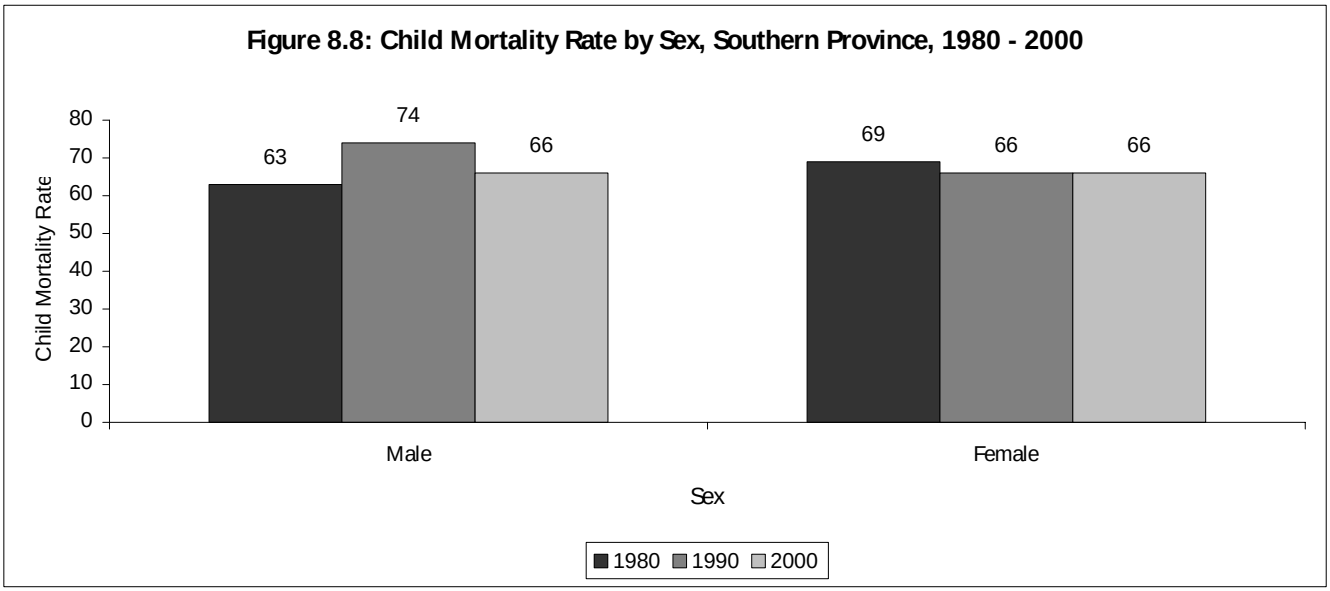
Figure 8.7 shows the OMR by residence of mother. CMR in rural areas (67) is slightly higher than that of urban areas (64). In both 1980 and 1990, the CMR has been higher in rural than in urban areas. In both rural and urban areas, CMR increased between 1980 and 1990 from 70 and 59 to 72 and 64, respectively.



Sources: CSO, 1980, 1990 and 2000 Censuses of Population and Housing

8.4.2 Child Mortality Rate by Sex

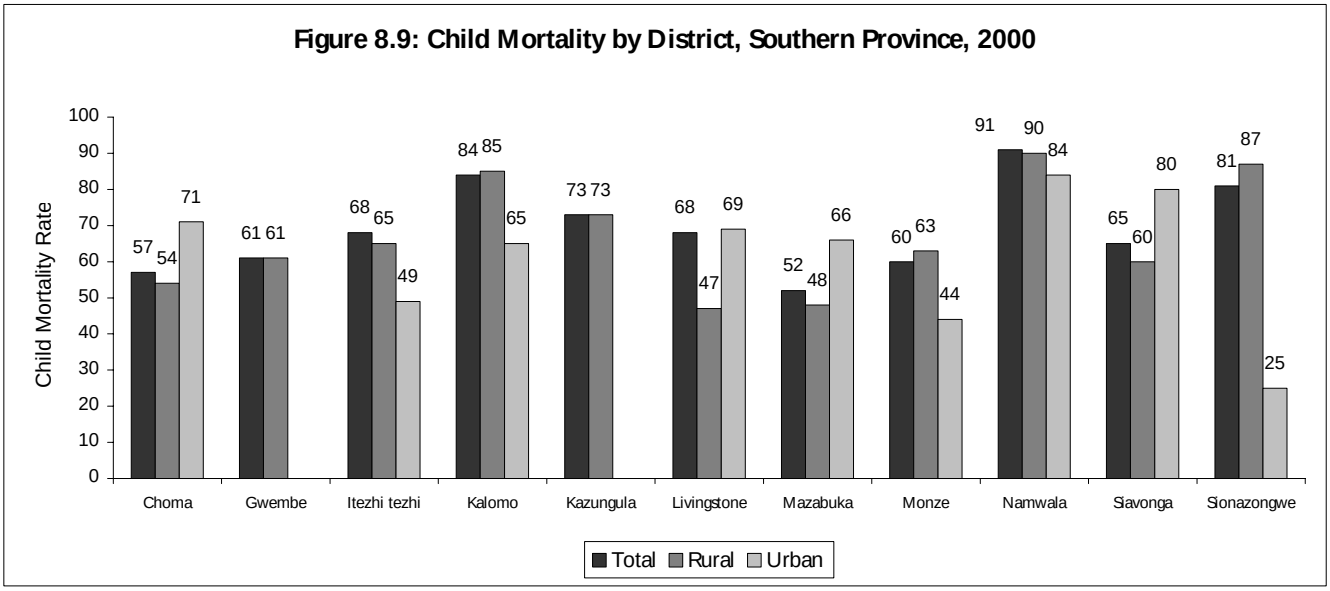
A comparison of CMR by sex shows that both male and female children have CMR of 66 in 2000. In 1990, however, the CMR among male children was higher than the female children. In 1980 the CMR was higher for females than for males, (69 versus 63 deaths per 1000 children) (See Figure 8.8).



Sources: CSO, 1980, 1990 and 2000 Censuses of Population and Housing

8.4.3 Child Mortality Rate by District

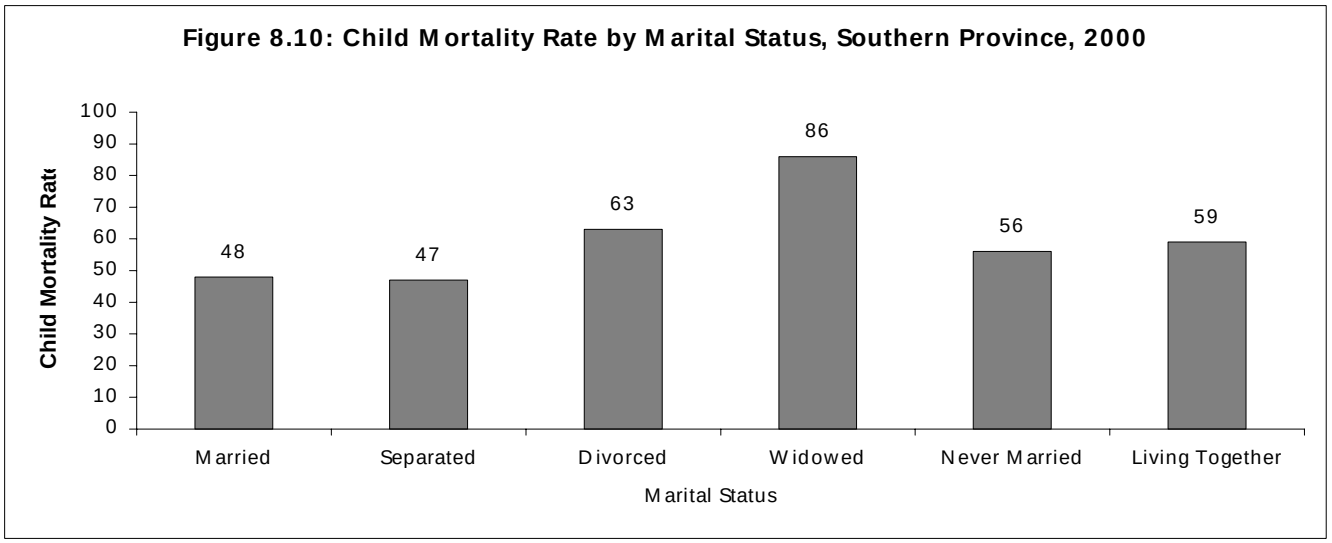
Figure 8.9 shows that CMR is highest in Namwala (91) and lowest in Mazabuka (52). CMR is lower in the rural areas of Choma, Livingstone, Mazabuka and Siavonga than urban areas, while in the rest of the districts, CMR is higher in rural than urban areas.



Source: 2000 Census of Population and housing

8.4.4 Child Mortality Rate by Marital Status Of the Mother

Variations in CMR by marital status of mother is shown in Figure 8.10 and Table 8.4. Children born to widowed mothers have the highest dying between age one and five (almost 1 in every 12 children), while children born to separated and married mothers have the lowest chance (1 in every 21).



Sources: CSO, 2000 Census of Population and Housing

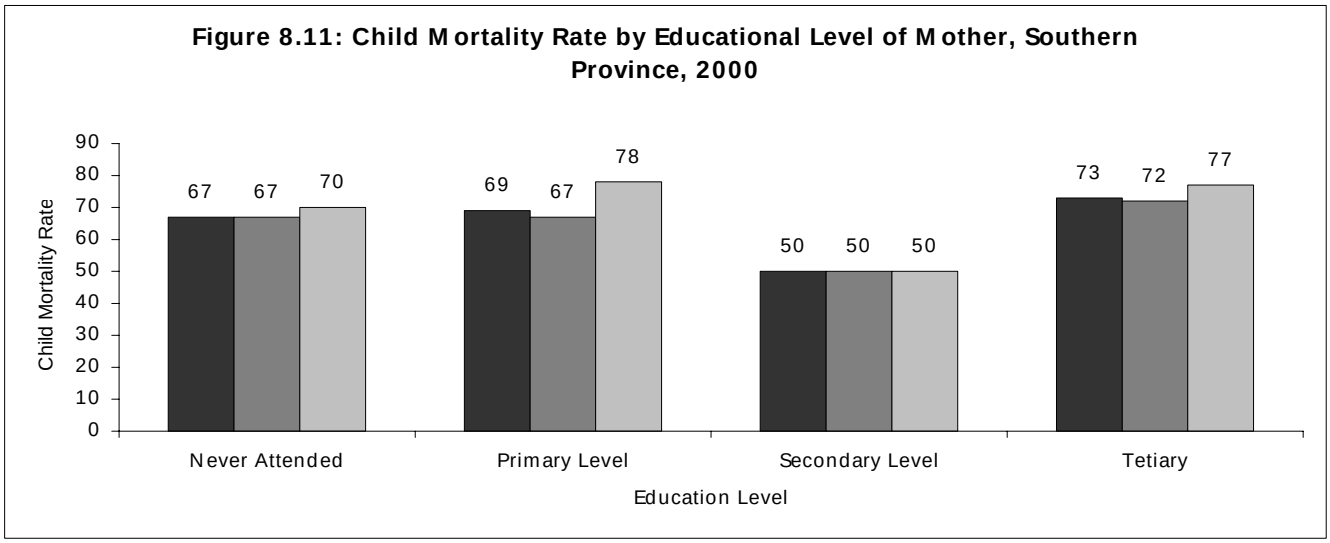
Table 8.4: Child Mortality Rate by Marital Status and Residence, Southern Province, 2000

Marital Status	Child Mortality Rate (per 000)		
	Total	Rural	Urban
Married	48	50	43
Separated	47	49	35
Divorced	63	61	71
Widowed	86	80	94
Never Married	56	59	49
Living Together	59	58	64

Source: 2000 Census of Population and Housing

8.4.5 Child Mortality Rate by Educational Level of the Mother

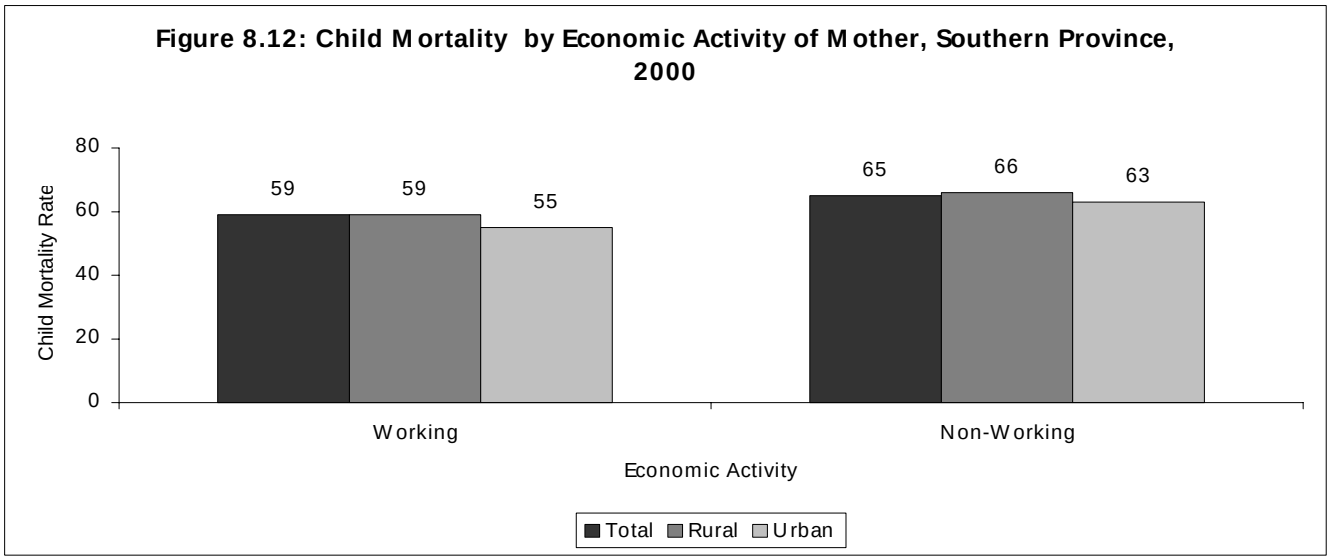
Figure 8.11 shows that child mortality rate varies with the level of education of mother. It would be expected that survival chances of children increase with increasing the level of education of mothers but this is not the case for Southern Province. Children born to mothers with tertiary of education have the highest chances of dying (73 deaths per 1000 children) while those born to mothers with secondary education have the lowest CMR of 50. There is no major variation between CMR among mothers with primary education and those who have never attended school (69 verses 67). This pattern is similar to that of rural areas in urban areas.



Source: CSO, 2000 Census of Population and Housing

8.4.6 Child Mortality Rate by Economic Activity of the Mother

Children born to working mothers have lower chances of dying between age one and five than those born to non-working mothers. The differences are relatively significant (59 versus 65 deaths per 1000 children, respectively). A similar pattern is obtaining in both rural and urban areas.



Source: CSO, 2000 Census of Population and Housing

8.5 Under- Five Mortality Levels, Trends and Differentials

Under-five Mortality Rates (UMRs) in the Southern province increased between 1980 and 1990 from 115 to 162 and then declined to 155 in 2000. Overall, there has been an increment of about 35 percent in the UMR between 1980 and 2000. Southern province exhibits a lower under- five mortality rate as compared to that of the national average.

Table 8.5: Under- Five Mortality Rate by Sex and Residence, Southern Province, 1980-2000

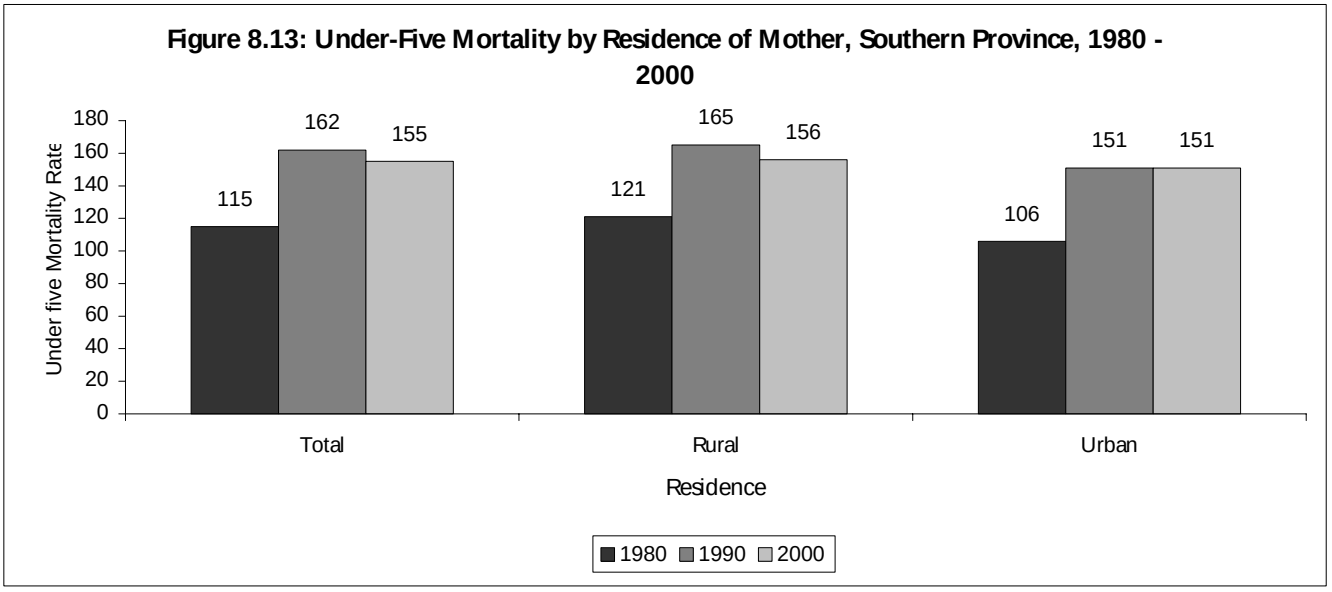
Residence and Sex	Under Five Mortality Rate (per '000)		
	1980	1990	2000
Zambia	**121**	**208**	**183**
Southern	115	162	155
Residence			
Rural	121	165	156
Urban	106	151	151
Sex Of Child			

Male	113	170	160
Female	118	154	150
Districts (2000)	**Total (2000)**	**Rural (2000)**	**Urban (2000)**
Choma	137	132	163
Gwembe	146	146	-
Itezhi tezhi	158	152	122
Kalomo	186	188	154
Kazungula	168	168	-
Livingstone	158	119	160
Mazabuka	128	121	155
Monze	143	150	112
Namwala	199	197	186
Siavonga	152	144	180
Sionazongwe	181	192	73

Sources: 1980, 1990 and 2000 Censuses of Population and Housing
Note:A dash (-) denotes that the district has no urban area

8.5.1 Under- Five Mortality Rate by Residence

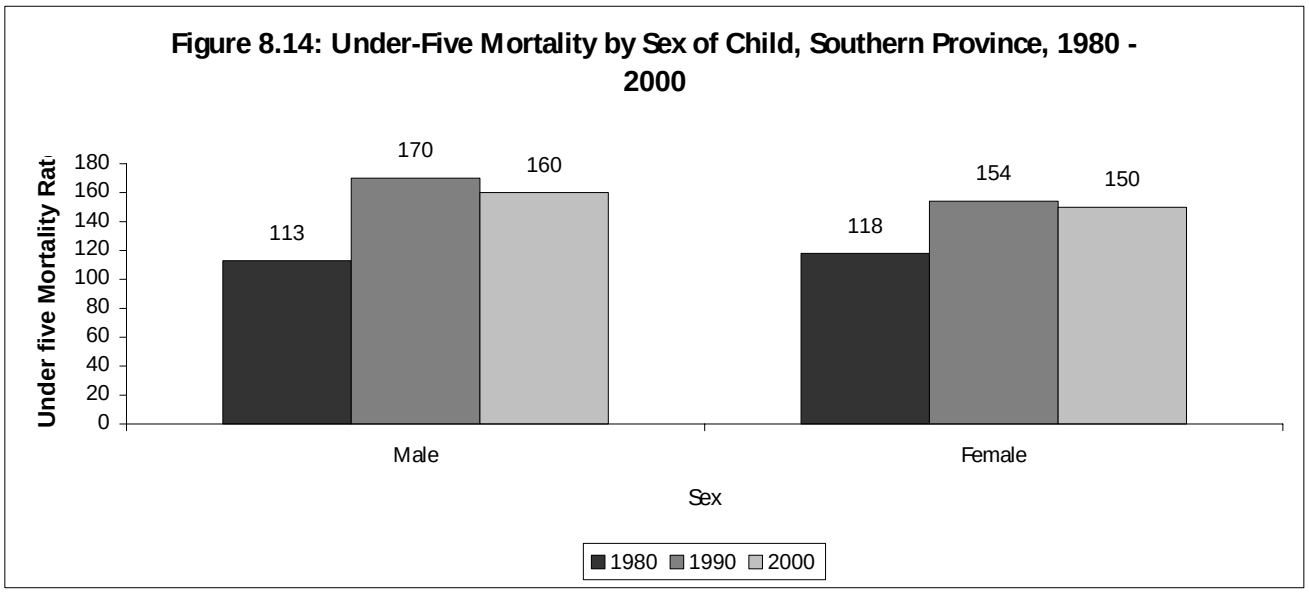
Figure 8.13 shows that UMR increased in both rural and urban areas, from 121 and 106 to 165 and 151 between 1980 and 1990, respectively. Between 1990 and 2000 it declined to 156 in rural areas while in urban areas it remained constant at 151. Overall, children born to mothers residing in rural areas than in urban areas have higher risks of dying between birth and age five.



Sources: CSO, 1980, 1990 and 2000 Censuses of Population and Housing

8.5.2 Under- Five Mortality Rate by Sex

A comparison of UMR between male and female children shows that male children have a higher UMR (160) than females (150). In 1990, UMR was also higher for males (170) than female (154). On the other hand, that of 1980 was higher for females (118) than males (113).

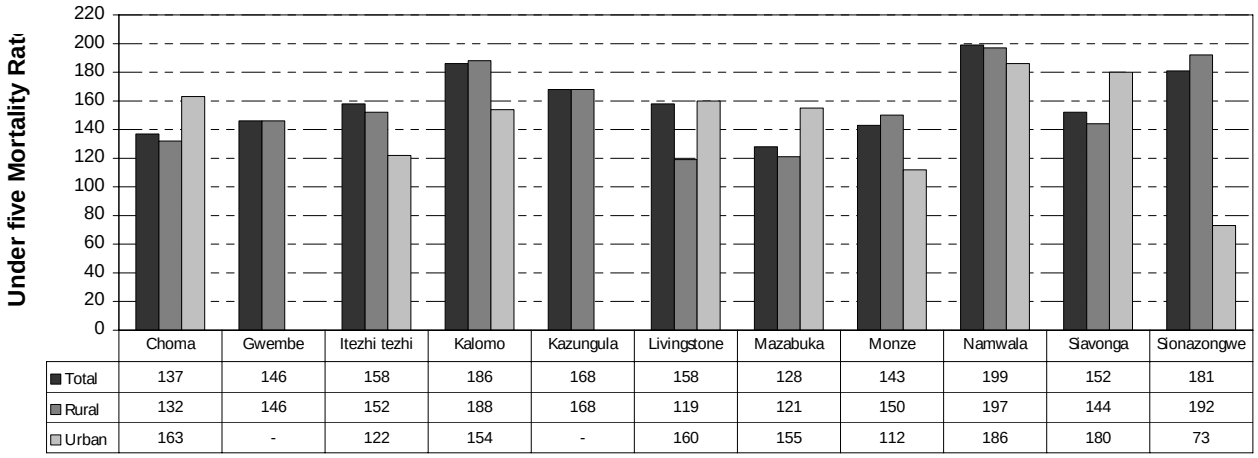


Sources: CSO, 1980, 1990 and 2000 Censuses of Population and Housing

8.5.3 Under- Five Mortality Rate by District

Figure 8.15 shows a comparison of districts with regards to UMR. The highest IMR is in Namwala (199), and lowest in Mazabuka, (128). Sinazongwe (181) and Kalomo (186) are also among districts with very high UMR in the province.

Figure 8.15: Under Five Mortality by District, Southern Province, 2000



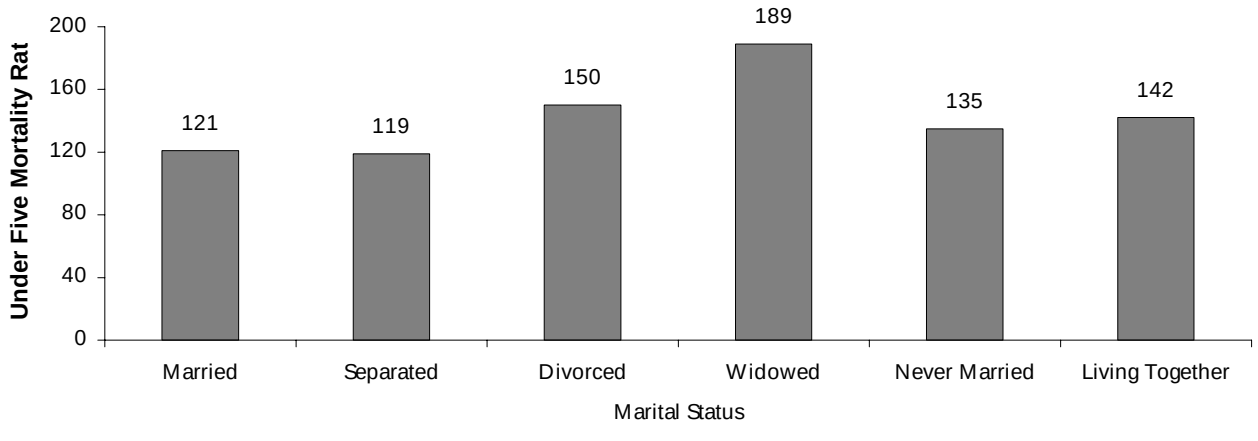
	Choma	Gwembe	Itezhi tezhi	Kalomo	Kazungula	Livingstone	Mazabuka	Monze	Namwala	Siavonga	Sinazongwe
Total	137	146	158	186	168	158	128	143	199	152	181
Rural	132	146	152	188	168	119	121	150	197	144	192
Urban	163	-	122	154	-	160	155	112	186	180	73

Source: 2000 Census of Population and housing

8.5.4 Under- Five Mortality Rate by Marital Status Of Mother

UMR varies with marital status of mother. Figure 8.16 and Table 8.6 show that UMR is highest for children born to widowed mothers (189 per 1000 under five children) and lowest for those born to separated mothers (119).

Figure 8.16: Under-Five Mortality Rate by Marital Status of Mother, Southern Province, 2000



Source: CSO, 2000 Census of Population and Housing

The under five mortality rates are higher in rural areas among the married, separated and never married than in the urban areas. For the rest of the marital status categories, UMR is higher in urban areas.

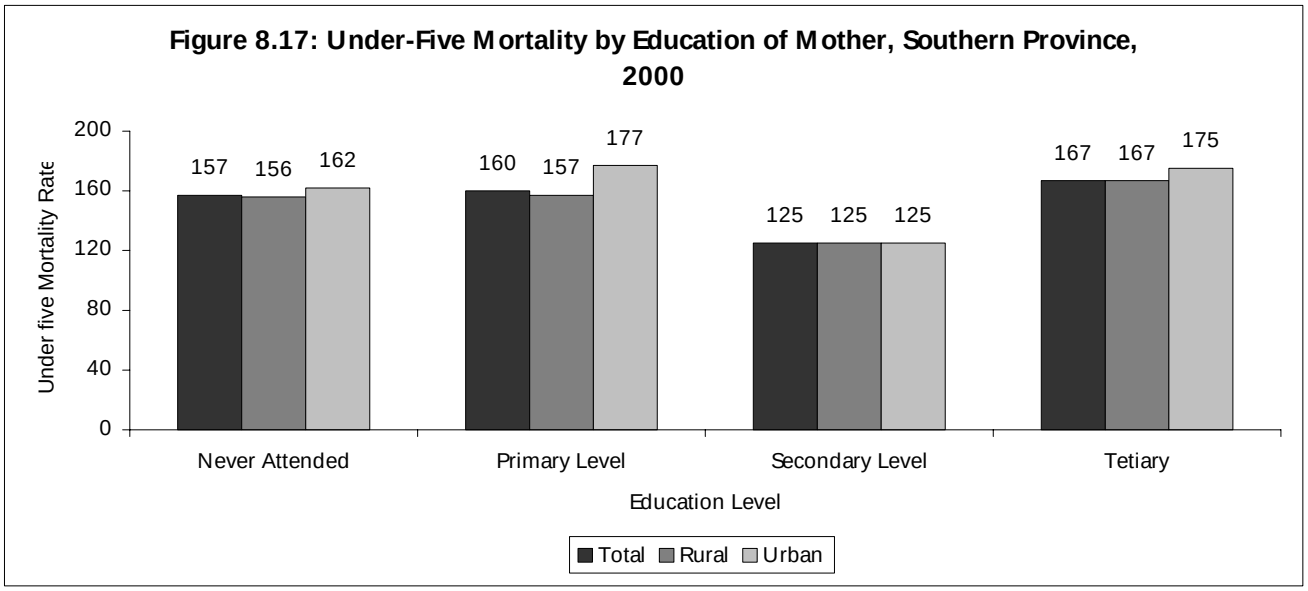
Table 8.6: Under- Five Mortality Rate by Education and Marital Status Level Of Mother by Residence, Southern Province, 2000

Marital Status	Under Five Mortality Rate (per 000)		
	Total	Rural	Urban
Married	121	124	110
Separated	119	123	94
Divorced	150	146	163
Widowed	189	180	204
Never Married	135	142	122
Living Together	142	140	152

Source: 2000 Census of Population and Housing

8.5.5 Under- Five Mortality Rate by Education Level Of Mother

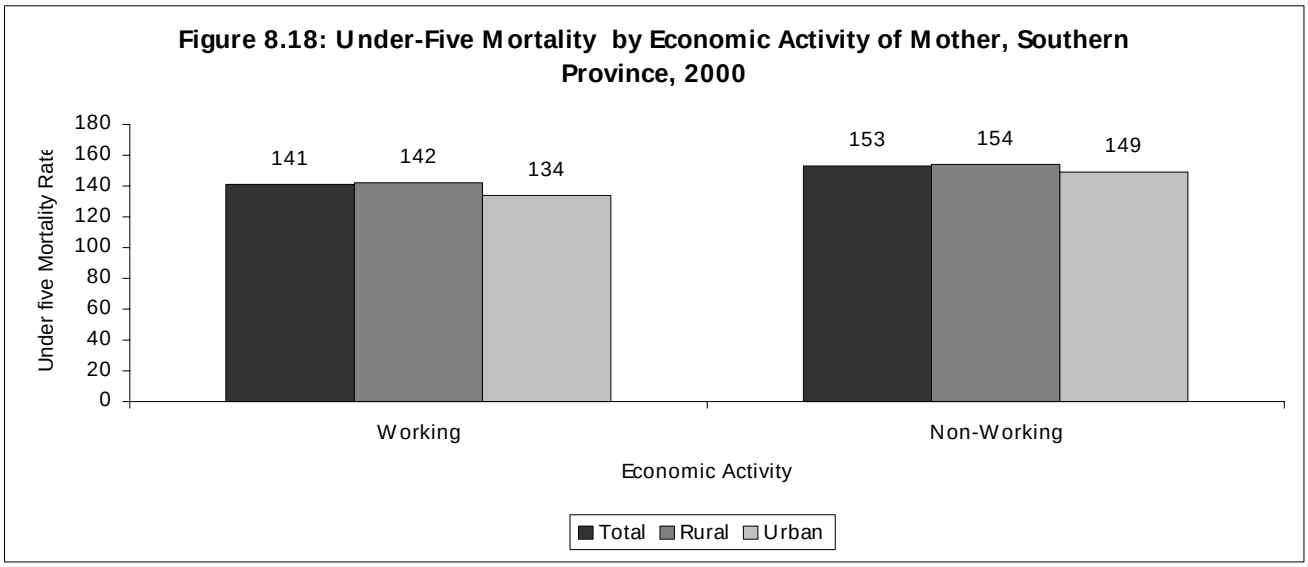
Figure 8.17 shows the variation of UMR with level of education of mother. Children born to women with tertiary education have the highest UMR (167) while those born to women with secondary education have the least (125). UMR among women with primary education (160) is slightly higher than what obtains among women who have not had any schooling (157). This pattern is similar to that of both rural and urban areas.



Source: CSO, 2000 Census of Population and Housing

8.5.6 Under- Five Mortality Rate by Economic Activity of the Mother

The UMR differentials between working and non working mothers are shown in Figure 8.18. Children born to working mothers have a lower UMR (141) than those born to non working mothers (153). Both rural and urban show a similar pattern.



Source: CSO, 2000 Census of Population and Housing

8.6 LIFE EXPECTANCY AT BIRTH: LEVELS, TRENDS AND DIFFERENTIALS

Table 8.7 shows that there has been an increase in Life Expectancy at Birth between 1990 and 2000, from 50.9 to 52.8, respectively. However, there was a decline in life expectancy between 1980 and 1990. Life expectancy for males and females also show a similar pattern. Males have a lower (52.8) life expectancy than females (54.1)

Children born in Southern province in 2000 have a higher life expectancy than that of the national average (50).

Table 8.7: Life Expectancy at Birth by Residence of the Mother by Sex Of Child, Residence and District, Southern Province, 1980-2000.

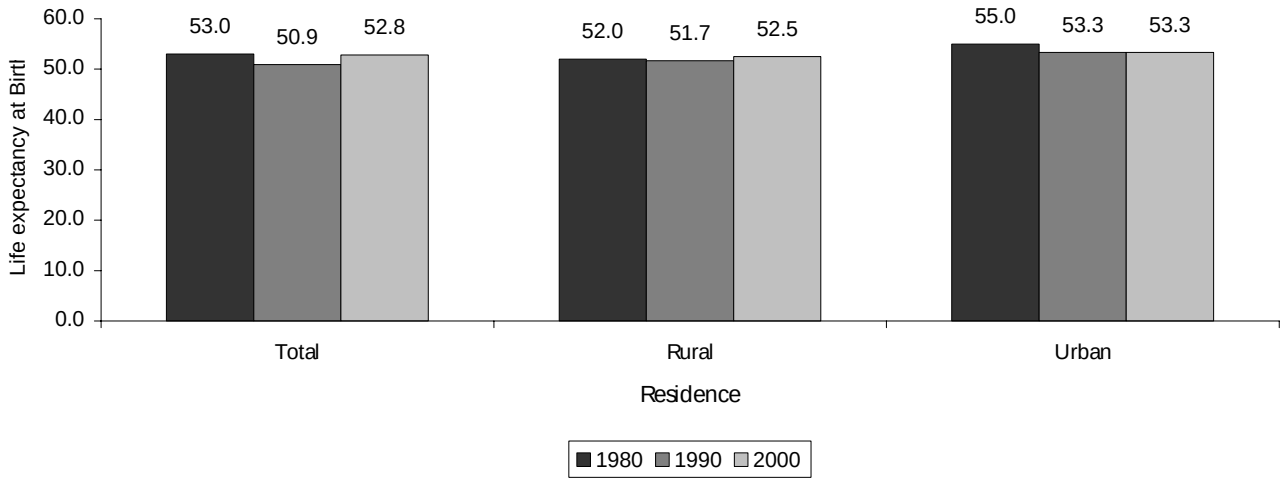
Residence and Sex	Life Expectancy At Birth (Years)		
	1980	1990	2000
Zambia	**52**	**47**	**50**
Southern	53	50.9	52.8
Residence			
Rural	52	51.7	52.5
Urban	55	53.3	53.3
Sex Of Child			
Male	54	51.1	52.8
Female	52	52.7	54.1
Districts (2000)	**Total (2000)**	**Rural (2000)**	**Urban (2000)**
Choma	55.2	55.9	51.9
Gwembe	53.9	53.9	-
Itezhi tezhi	52.3	53.0	57.1
Kalomo	48.9	48.7	53.0
Kazungula	51.2	51.2	-
Livingstone	52.3	57.6	52.1
Mazabuka	56.4	57.1	52.8
Monze	54.2	53.5	58.6
Namwala	47.7	47.9	48.9
Siavonga	53.0	54.2	49.6
Sionazongwe	49.6	48.3	64.6

Sources: CSO, 1980, 1990 and 2000 Censuses of Population and Housing
Note:A dash (-) denotes that the district has no urban area

8.6.1 Life Expectancy at Birth by Residence

Figure 8.19 shows that life expectancy for rural areas is slightly lower (52.5) than that of urban areas (53.3). This pattern is similar to that of 1980 and 1990. The increase in life expectancy between 1990 and 2000 is attributed to the increase in rural areas in the said period. In urban areas, life expectancy has remained constant between 1990 and 2000.

Figure 8.19: Life Expectancy at birth by Residence, Southern Province, 1980 - 2000

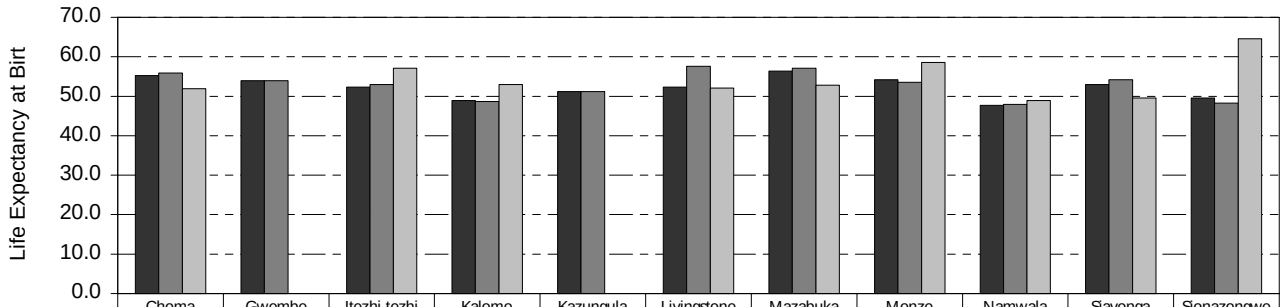


Sources: CSO, 1980, 1990 and 2000 Censuses of Population and Housing

8.6.2 Life Expectancy at Birth by District

Among the districts of Southern Province, life expectancy ranges from 47.7 in Namwala to 56.4 in Mazabuka. The low life expectancy at birth for Namwala and Kalomo districts correspond to the higher infant mortality rate in the two districts, while the high life expectancy at birth for Mazabuka and Choma districts also corresponds to their low infant mortality rates. (Figure 8.20).

Figure 8.20: Life Expectancy at Birth by District, Southern Province, 1980 - 2000



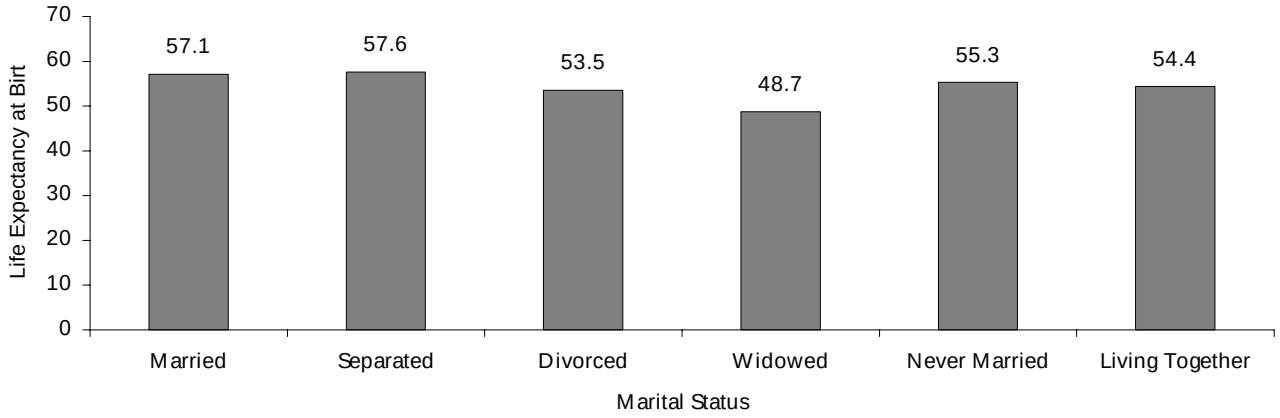
	Choma	Gwembe	Itezhi tezhi	Kalomo	Kazungula	Livingstone	Mazabuka	Monze	Namwala	Siavonga	Sionazongwe
Total	55.2	53.9	52.3	48.9	51.2	52.3	56.4	54.2	47.7	53.0	49.6
Rural	55.9	53.9	53.0	48.7	51.2	57.6	57.1	53.5	47.9	54.2	48.3
Urban	51.9	-	57.1	53.0	-	52.1	52.8	58.6	48.9	49.6	64.6

Source: CSO, 2000 Census of Population and housing

8.6.3 Life Expectancy at Birth by Marital Status Of the Mother

Figure 8.21 and Table 8.8 show variations of life expectancy with marital status. Babies born to mothers who are separated have the highest life expectancy of 57.6 while that of children born to widowed mothers is the least (48.7). Urban areas show a similar pattern to that of the province. In rural areas, life expectancy for children born to married and separated mothers equal, and highest.

Figure 8.21: Life Expectancy at Birth by Marital Status of Mother, Southern Province, 2000



Source: CSO, 2000 Census of Population and Housing

In both rural and urban areas, the lowest life expectancy is among the widowed women while the highest is among the separated in urban areas and among the separated and married in rural areas.

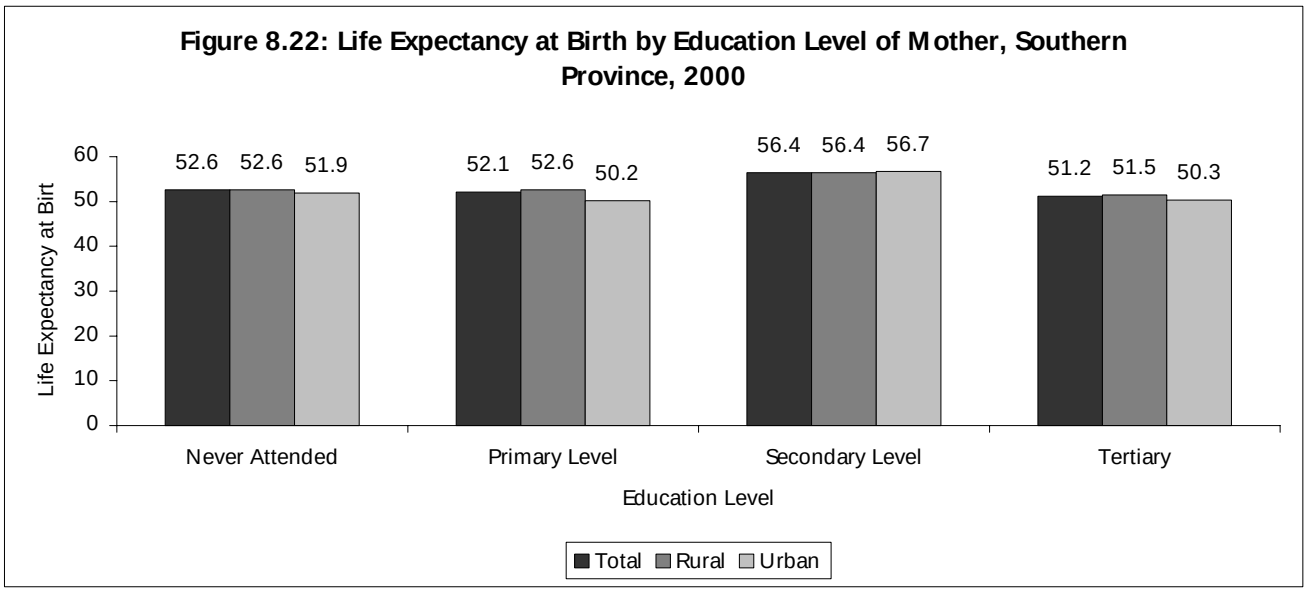
Table 8.8: Life Expectancy at Birth by Education and Marital Status of the Mother by Rural-Urban, Southern Province, 2000

Marital Status	Life Expectancy (per 000)		
	Total	Rural	Urban
Married	57.1	56.7	58.6
Separated	57.6	56.7	60.8
Divorced	53.5	53.4	57.1
Widowed	48.7	49.6	47.4
Never Married	55.3	54.4	57.1
Living Together	54.4	54.6	53.2

Source: CSO, 2000 Census of Population and Housing

8.6.4 Life Expectancy at Birth by Education Level of the Mother

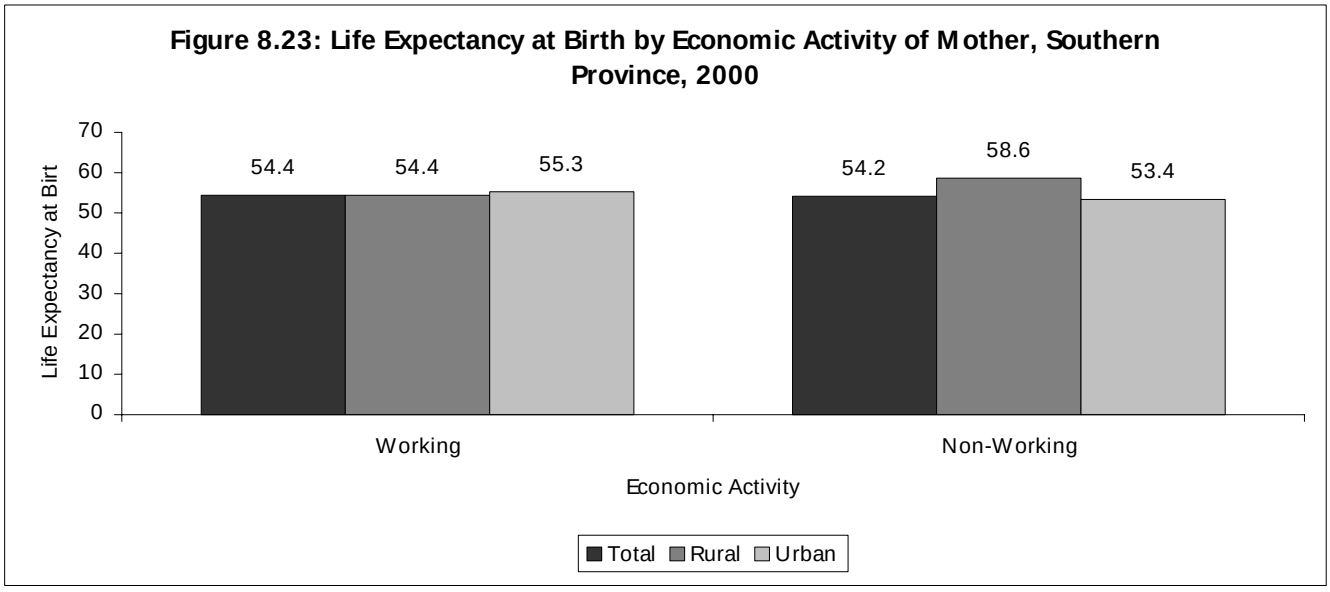
Life Expectancy at Birth by level of education of mother is shown in Figure 8.22. Children born to women with secondary education have the highest life expectancy at birth (56.4) while those born to women with tertiary education have the lowest (51.2). In both rural and urban areas, the highest life expectancy is of mothers who have secondary education.



Sources: CSO, 2000 Census of Population and Housing

8.6.5 Life Expectancy at Birth by Economic Activity of the Mother

Figure 8.23 shows the life expectancy differentials by economic activity of the mother. Children of working non working mothers have life expectancies which are almost the same (54.4 years versus 54.2 years, respectively). However, in urban areas, life expectancy is much higher (58.6) among the non working mothers than among the working mothers (54.4)

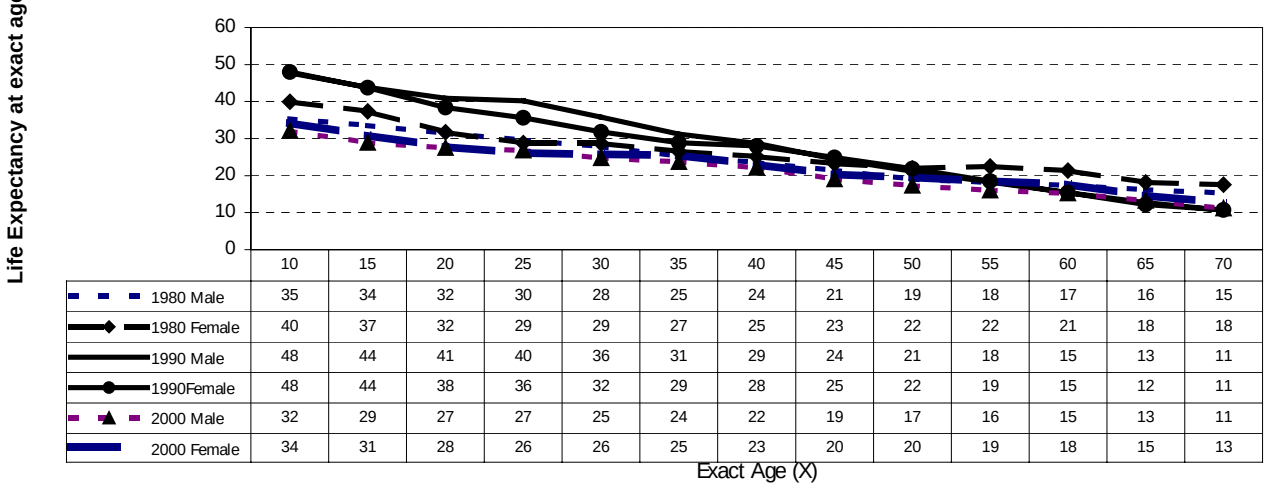


Source: CSO, 2000 Census of Population and Housing

8.7 Adult Mortality: Life expectancy Levels, Trends and Differentials

Life expectancy levels at exact ages 10 to 70 in the Southern Province have been fluctuating in the last 20 years (1980-2000). The highest life expectancy for both male and female adults were in the 1990. In 2000 adult life expectancy levels deteriorated significantly, especially between 10 and 45 years. Between 1980 and 1990, life expectancy increased at ages 10 to 50 for males and 10 to 45 for females.

Figure 8.24: Adult Life expectancy (at exact age x) by Sex, Southern Province, 1980-2000



	10	15	20	25	30	35	40	45	50	55	60	65	70
1980 Male	35	34	32	30	28	25	24	21	19	18	17	16	15
1980 Female	40	37	32	29	29	27	25	23	22	22	21	18	18
1990 Male	48	44	41	40	36	31	29	24	21	18	15	13	11
1990Female	48	44	38	36	32	29	28	25	22	19	15	12	11
2000 Male	32	29	27	27	25	24	22	19	17	16	15	13	11
2000 Female	34	31	28	26	26	25	23	20	20	19	18	15	13

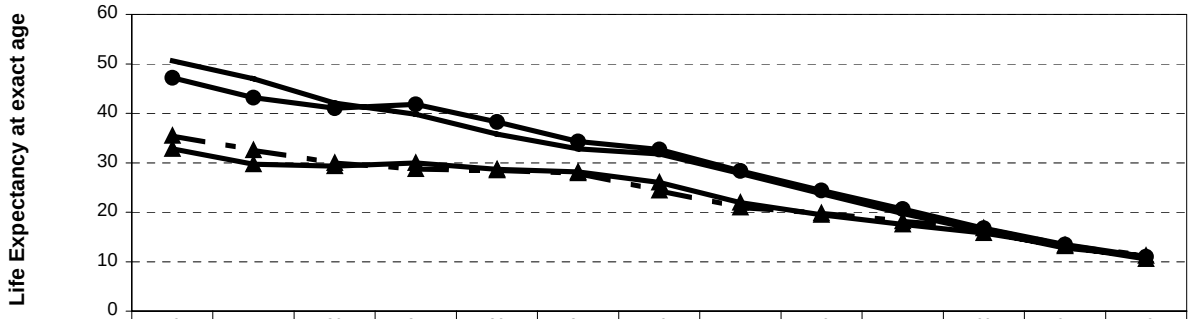
Sources: 1980, 1990 and 2000 Censuses of Population and Housing

In 1980, females had a higher life expectancy than males at all ages (10-70). In 1990, at younger ages (10 – 15) life expectancy for the females was the same as that of males. In the middle age group (20- 40), life expectancy was higher for males than females. Between 40 and 55, the pattern changed; males had a lower life expectancy than females. In 2000, life expectancy for females is slightly higher than that of males, between ages 10 and 45. The gap widens at older ages.

Figure 8.25 and 8.26 show that in 1990, life expectancies for males and females at the various ages are higher in rural than urban areas with the exception of males at exact ages 10 and 15. This pattern was maintained in 2000.

In rural areas, female adults have high life expectancy than males between age 10 and 25. Between ages 30 and 40, life expectancy is higher for males than females. In urban areas, on the contrary, the pattern is very different. In both 1990 and 2000, males have a higher life expectancy than females between 10 and 45 in 1990 and between 10 and 30 in 2000.

Figure 8.25: Adult Life Expectancy Levels (at exact age x) by Sex, Southern Province, Rural, 1990-2000

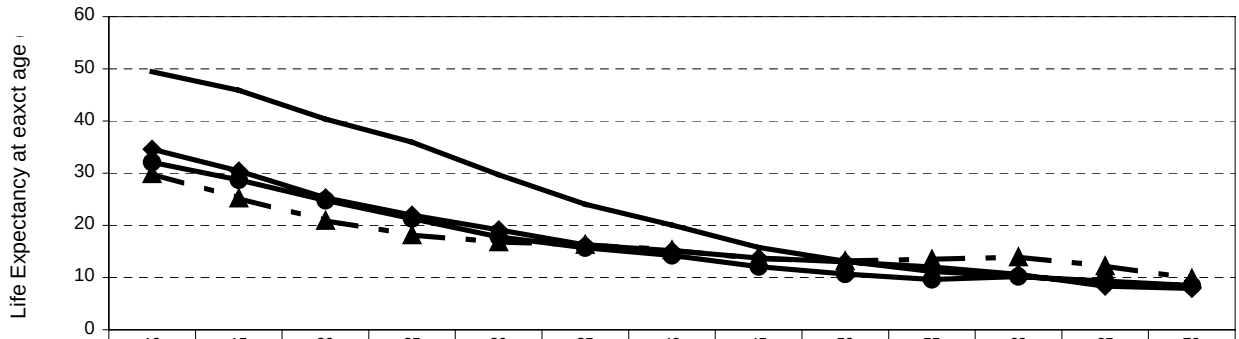


	10	15	20	25	30	35	40	45	50	55	60	65	70
1990 Male	47	43	41	42	38	34	33	28	24	21	17	13	11
1990Female	51	47	42	40	36	33	32	28	24	20	16	13	11
2000 Male	33	30	29	30	29	28	26	22	19	18	16	13	11
2000 Female	35	33	30	29	28	28	24	21	20	18	17	13	11

Exact Age (Years)

Sources: CSO, 1990 and 2000 Censuses of Population and Housing

Figure 8.26: Adult Life Expectancy Levels (at exact age x) by Sex, Southern Province, Urban, 1990-2000



	10	15	20	25	30	35	40	45	50	55	60	65	70
1990 Male	49	46	40	36	30	24	20	16	13	11	10	9	8
1990Female	35	30	25	22	19	16	15	14	13	12	11	8	8
2000 Male	32	29	25	21	18	16	14	12	11	10	10	9	8
2000 Female	30	25	21	18	17	16	15	14	13	13	14	12	10

Exact Age (Years)

Sources: 1980, 1990 and 2000 Censuses of Population and Housing

8.8 Summary

Infant mortality rate has declined in the Southern Province by about 4 percent between 1990 and 2000. Despite the decline, the current IMR of 95 deaths per 1000 live births is still high. The decline in infant mortality has had impact on reduction of under-five mortality. Among the districts, Namwala had the highest IMR while Mazabuka registered the least. In Namwala district 1 in 8 infants do not survive to their first birthday compared to 1 in 13 in Mazabuka district. Higher Infant mortality rates are associated with mothers who live in rural areas, widowed, with tertiary education and not working.

There was a 6 percent decline in Child Mortality Rate (CMR) between 1990 and 2000, from 70 to 66. The 2000 levels are the same as the 1980 levels. At the district level CMR was highest in Namwala (91) and lowest Mazabuka (52). Higher CMR are associated with children of widowed, non-working mothers and mothers who have completed tertiary education compared to other categories .

The number of children that die before their fifth-birthday has declined in the Southern province between 1990 and 2000 by about 4 percent. Currently, 1 in 6 under-five children die before their fifth birthday. At district level, Mazabuka district recorded the least under-five deaths while Namwala recorded the highest. About one in five under-five children in Namwala die before reaching age five. Higher UMRs are associated with mothers from rural areas, and with a low level education.

Life expectancy at birth in Southern province, decreased from 53 in 1980 to 51 in 1990 then increased to 53 in 2000. At district level, Namwala had the lowest life expectancy at birth of 48 years, while, Mazabuka (56.4) had the highest. Life Expectancy at Birth is associated with babies born to rural mothers, widowed mothers, and, children born to mothers with tertiary education.

Chapter 9
DISABILITY

9.1 INTRODUCTION

Zambia has been collecting disability data in all the four censuses of 1969, 1980, 1990 and 2000. In collecting information for the past four censuses 1969, 1980, 1990, and 2000, categories used are shown in Table 9.1. During the 2000 Census of population and housing, data collected on disability included eight categories, unlike the 1990 Census where only five categories were captured. This was in recognition of the varying degrees of disability. The increase in the number of disability categories in the 2000 Census was also aimed at capturing more persons with disability who were left out in the previous censuses such as those who are partially sighted and hard of hearing.

Persons with disabilities have the same rights as other citizens to opportunities for self-actualization and participation in the economic and social development of this country. Information on persons with disabilities is important for addressing barriers that limit their enjoyment of these human rights and their integration into the mainstream of society.

Table 9.1: Disability Categories Used in Censuses 1969 - 2000

1969	1980	1990	2000
1. Blind 2. Deaf and/or mute 3. Loss of limb 4. Sick	1. Blind 2. Deaf and/or mute 3. Crippled, or loss of limb 4. Mentally Retarded 5. Sick 6. Combination of two or more categories	1. Blind 2. Deaf-Dumb 3. Crippled 4. Mentally Retarded 5. Multiple Disabilities	1. Blind 2. Partially sighted 3. Deaf/Dumb 4. Hard of Hearing 5. Mentally ill 6. Ex- Mental 7. Mentally Retarded 8. Physically Handicapped

Source: CSO, 1969, 1980, 1990 and 2000 Censuses of Population and Housing

The International Classification of Functioning (ICF), Disability and Health provide a theoretical framework for classifying health related human functioning. The ICF provides standardized concepts that provide a standardized classification framework for data compilation. The use of a common framework also contributes to greater comparability of data at the national and international levels and makes it relevant to various users (UN, 2001).

Among the principles of the ICF is neutrality; i.e. classifying disabilities in a neutral language with no use of negative terms. In this chapter, however, some terms used may not be neutral but have been used as was done during data collection. However, effort has been made to provide in brackets the neutral terms that are internationally accepted as will be observed in this and provincial chapters on disability.

9.2. CONCEPTS AND DEFINITIONS

According to the 2000 Census definition, disability refers to a person who is limited in the kind or amount of activities that he or she can do because of on-going difficulties due to a long term physical, mental or health problem. This is in line with the National Policy on Disability which defines disability as any restriction or lack of ability to perform any action in the manner or within the range considered 'normal' for a human being and would or would not entail the use of supportive and auxiliary aids (World Health Organization).

Types of Disability

- Blind (Visually Impaired)- complete loss of sight
- Partially sighted- loss of one eye or poor sight but not complete blindness
- Deaf/Dumb (speech impaired)- complete loss of sense of hearing/speech
- Hard of Hearing- Partial loss of sense of hearing but not complete loss
- Mentally ill- A disorder related to the individuals mental state or state of mind

- Ex-mental- a person that suffered from mental disorder before but is now rehabilitated or undergoing rehabilitation
- Mentally retarded- a person that is very slow to learn or has deficiency of mental intellect
- Physically handicapped (Physically disabled)- A person with a physical impairment relating to the loss of bodily stature

CAUSES OF DISABILITY

- Congenital/Prenatal- disabilities which one is born with
- Disease/illness- e.g. Leprosy, Polio, cataract, etc
- Injury/Accident/Trauma- road accidents, injuries from accidental falls, fire, etc
- Other - e.g. unsuccessful medical operation, wrongful application/misuse of traditional and conventional medicine

9.3. Limitations of Data on Disability

Policy makers and planners require data on disabled persons. Information needs are more than just basic counts of the number of people with disabilities but also on the quality of life of people living with disabilities.

The categories employed in the current census, however, do not take into account the international definitions of disabilities, which include variations in the intensity of disability, such as the loss of feelings in fingers (UN, 1996).

Detailed data on disability can only be included in a specialized survey. Census data on disability are collected mainly to study the socio-economic situations of these individuals. Since the census is a large exercise, which includes a lot of topics, it becomes difficult to include a lot of questions on one topic.

9.4 Proportion of the Disabled to the Total Population

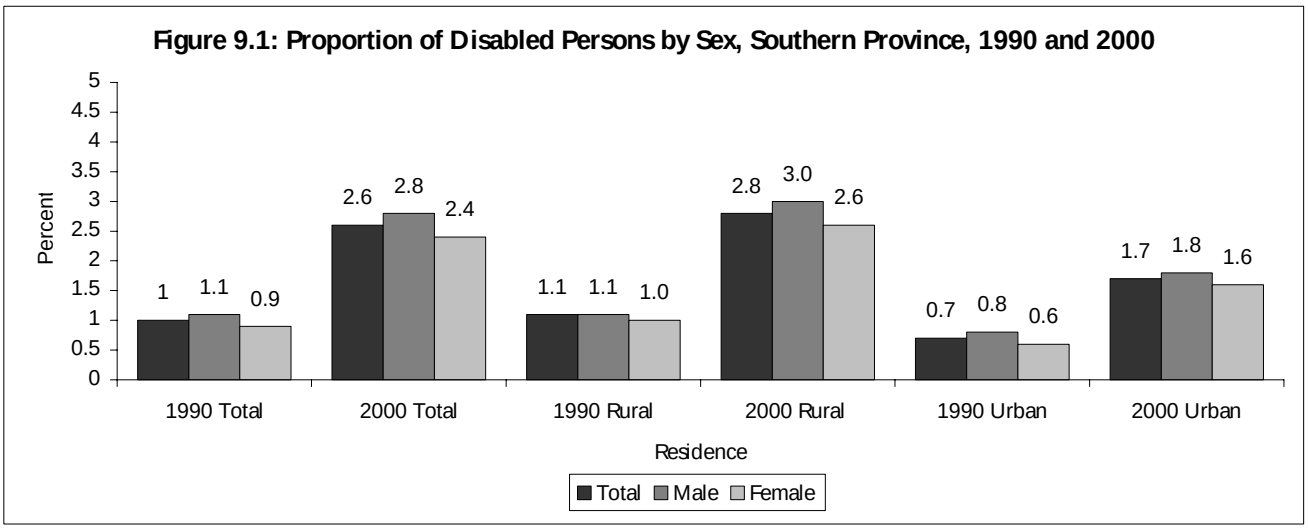
Out of a total population of 1.1 million, 29,404 reported to be disabled; a proportion of 2.6 percent of the total population. This proportion was an increase over 1990 census when only 1 percent of the total population reported to be disabled. An examination of the proportions of the disabled between the two censuses, may indicate that there has been an increase in the prevalence of disability between 1990 and 2000. While this may be true, the observed increase was largely caused by the increase in the categories of the disabled (see Figure 9.1 and Table 9.2).

Compared to the national average, the proportion of the disabled for the province was slightly higher in 1990 but in 2000 it was slightly lower(1 percent against 0.9 percent in 1990 and 2.6 percent against 2.7 percent for Southern province and the national average respectively). For both the province and the national average the highest proportions of the disabled are in rural areas as opposed to urban areas.

Table 9.2 Proportion of the Disabled by Sex and Residence, Southern Province, 1990 and 2000

Sex and year	Total Population			Proportions Of The Disabled		
	Total	Rural	Urban	Total	Rural	Urban
1990						
Zambia Total	7,383,097	4,477,814	2,905,283	0.9	1.1	0.7
Southern Total	907,150	692,253	214,897	1.0	1.1	0.7
Male	443,315	336,569	106,746	1.1	1.1	0.8
Female	463,835	355,684	108,151	0.9	1	0.6
2000						
Zambia Total	9,337,425	5,990,356	3,347,069	2.7	3.2	0.2
Southern Total	1,132,810	892,141	240,669	2.6	2.8	1.7
Male	553,657	434,542	119,115	2.8	3.0	1.8
Female	579,153	457,599	121,554	2.4	2.6	1.6

Sources: CSO, 1990 and 2000 Censuses of Population and Housing



Sources: CSO, 1990 and 2000 Censuses of Population and Housing

Rural-urban differentials exist in terms of proportions of persons with disabilities. Of the total rural population, 2.8 percent is disabled compared to 1.7 percent in urban areas.

9.5 Types of Disability

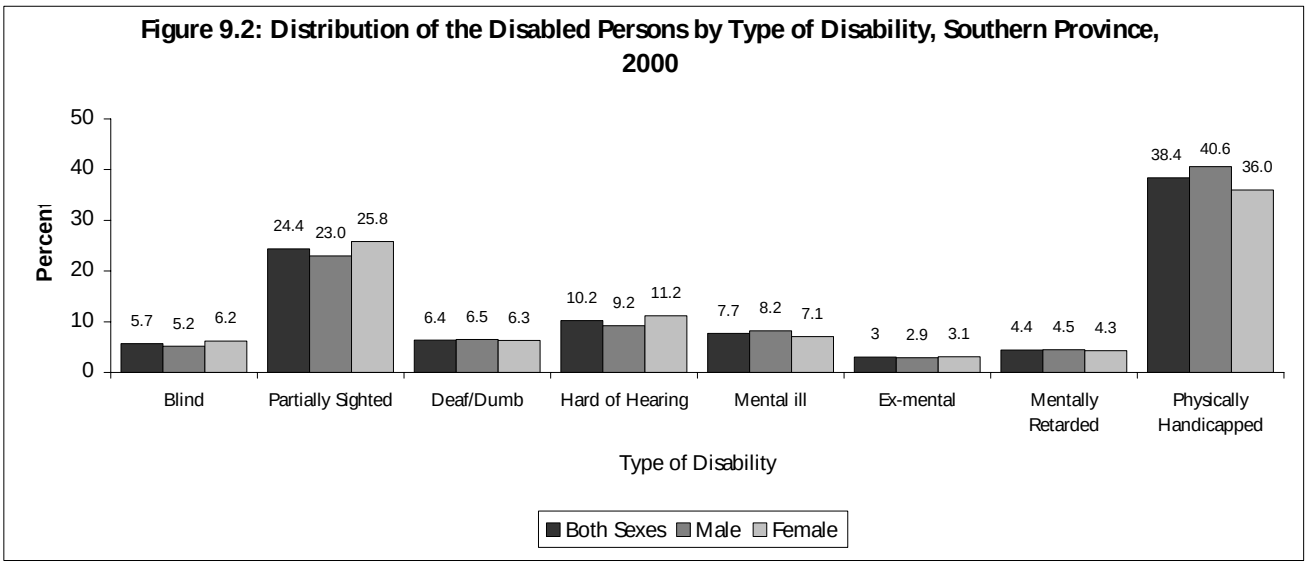
The distribution of disabled persons by type of disability in Southern Province shows that out of a total of 29,404 persons reported to be disabled, 52 percent are male and 48 percent female.

Table 9.3: Distribution of the Disabled by Type of Disability and District, (Percent)Southern Province, 2000

Type of Disability	Zambia Total	Southern Total	Choma	Gwembe	Itezhi-itezhi	Kalomo	Kazungula	L/stone	Mazabuka	Monze	Namwala	Siavonga	Sinazongwe
Total disabled	256,690	29,404	5,135	716	1,427	5,275	2,187	1,570	3,694	4,161	2,582	996	1,661
Blind	5.3	5.7	5.7	10	4.7	6.9	6	5.3	5.2	3.8	4.4	5.3	7.1
Partially sighted	30.2	24.4	22.3	18.7	32.2	21.1	32	35.4	24	22.4	21.4	26.2	30.8
Deaf/dumb	6.2	6.4	6.7	9.3	5.1	8.3	5.4	4.7	6.2	5.1	4.1	7.9	5.7
Hard of hearing	12.4	10.2	11.2	8.8	12.3	11.7	10.3	9.2	8.5	9.1	8.7	10.1	8.3
Mentally ill	8.1	7.7	9.1	9.6	5.3	8.7	5.9	7.2	7.4	8.8	3.9	6.9	5.8
Ex-mental	3.6	3	4.2	3.7	2.6	4.4	1.8	1.2	1.9	2.3	2.1	2	1.3
Mentally retarded	5.4	4.4	4.8	4.3	4.2	5.1	2.3	5.1	4	4.5	4.1	4.2	3.9
Physically handicapped	38.8	38.3	35.9	35.6	33.4	34	36.3	31.9	42.8	44	51.4	37.3	37
Male	135,613	15,356	2,646	381	792	2,675	1,080	838	2,077	2,135	1,368	528	836
Blind	5	5.2	5.4	9.9	4.2	5.9	5.8	2.6	2.8	1.9	2.1	3	2.7
Partially sighted	27.7	23	21	19.4	30.1	20.3	27.1	18.6	12.3	10.8	10.3	13.8	15
Deaf/dumb	6.2	6.5	6.6	7.7	4.6	8.1	6.3	2.7	3.7	3.1	2.1	3.8	3.3
Hard of hearing	11.5	9.2	10.5	9.9	10.9	10.9	9.7	4.2	4.4	4	3.8	4.4	3.3
Mentally ill	8.8	8.2	9.7	10.4	6.3	8.8	7	4.3	4.5	5.2	2.1	4.2	2.7
Ex-mental	3.7	2.9	4	3.1	2.1	4.1	1.7	0.6	1.1	1.1	1.5	1.2	0.5
Mentally retarded	5.6	4.5	4.6	4.8	4.7	4.6	2.8	2.7	2.3	2.6	2.3	2.5	2.3
Physically handicapped	40.7	40.6	38.3	34.6	37	37.4	39.6	17.8	25.2	22.6	28	19.3	19
Female	121,077	14,048	2,489	335	635	2,600	1,107	732	1,617	2,026	1,214	468	825
Blind	5.6	6.2	6.1	10	5.4	7.8	6.2	2.7	2.5	1.9	2.3	2.4	4.3
Partially sighted	33	25.8	23.6	18	34.7	21.8	36.6	16.8	11.6	11.7	11	12.5	15.8
Deaf/dumb	6.2	6.3	6.9	11.1	5.8	8.4	4.6	2	2.6	2	2	4.2	2.4
Hard of hearing	13.3	11.2	12	7.4	14	12.4	10.8	5.1	4.1	5.1	4.9	5.7	5.1
Mentally ill	7.3	7.1	8.5	8.6	4.2	8.6	4.8	2.9	2.9	3.6	1.8	2.8	3.2
Ex-mental.	3.6	3.1	4.4	4.3	3.3	4.6	1.9	0.6	0.8	1.1	0.6	0.8	0.8
Mentally retarded	5.3	4.3	5	3.7	3.6	5.5	1.9	2.4	1.7	1.9	1.8	1.7	1.6
Physically handicapped	36.7	36	33.5	36.9	29.2	30.9	33.1	14.1	17.6	21.5	23.4	18	18

Source: CSO, 2000 Census of Population and Housing

Note: It is worth noting that the percentages will not necessarily add up to 100 because some persons reported more than one disability.



Source: CSO, 2000 Census of Population and Housing

As mentioned earlier, the types of disability include the blind, partially sighted, deaf/dumb, hard of hearing, mentally ill, ex-mental, mentally retarded and the physically handicapped. The physically handicapped form the largest proportion of the disabled persons. These form 38.3 percent of the disabled persons. The second most common disability is partial sight, which was reported by 24.4 percent of the disabled population. This scenario is the same as that of the national average, though for both the physically handicapped and the partially sighted the provincial proportions are lower than the national ones. Some disability categories such as ex-mental (3.0 percent) and mental retardation (4.4 percent) are less common.

The table also shows that Gwembe (10.0 percent), Sinazongwe (7.1 percent) and Kalomo (6.9 percent) have higher proportion of the blind compared to districts such as Monze (3.8 percent), Namwala (4.4 percent) and Itezhi-tezhi (4.7 percent). Partial sightedness is most common in Livingstone (35.4 percent) and least in Gwembe (18.7 percent). The proportion of the deaf and dumb ranges from 4.1 percent in Namwala to 9.3 percent in Gwembe while that of the hard of hearing ranges from 8.3 percent in Sinazongwe to 11.7 percent in Kalomo. A comparison of the districts as regards the physically disabled shows that it is most common in Namwala with 51.4 percent and least in Livingstone with 31.9 percent (Table 9.3 and Figure 9.2).

9.6 AGE STRUCTURE OF THE DISABLED

The age structure of the disabled is shown in Table 9.4. Data shows that the number of the disabled increases with increasing age up to age group 10-14 at which it reaches the peak and then it starts declining up to age group 55-59. After this age group, the numbers fluctuate. Across age groups 0-4 to 60-64, the largest proportion of the disabled are physically handicapped closely followed by the partially sighted. For the older age groups, the largest proportion is partially sighted closely followed by the physically handicapped.

Table 9.4: Distribution of the Disabled by Type of Disability and Age, (Percent),Southern Province, 2000

Age Group	Type of Disability								
	Total Number	Blind	Partially Sighted	Deaf/Dumb	Hard of Hearing	Mentally ill	Ex Mental	Mentally Retarded	Physically Handicapped
0-4	1,662	8.5	19.0	14.0	14.6	11.9	7.1	6.9	50.4
5-9	2,362	5.6	16.7	15.7	17.7	10.9	5.8	6.7	42.4
10-14	2,448	5.4	18.6	14.7	15.6	12.1	4.5	8.5	40.8
15 - 19	2,125	5.0	18.3	10.8	12.8	13.8	5.0	9.4	44.5
20 - 24	2,065	5.8	16.7	10.0	9.7	13.4	4.8	8.0	49.0
25 - 29	2,108	4.6	18.7	6.9	9.0	13.0	3.3	6.9	46.7
30 - 34	2,085	3.8	20.0	5.2	10.0	10.6	3.3	5.7	49.8
35 - 39	1,879	4.8	25.1	4.0	8.0	9.8	3.9	4.9	46.1
40 - 44	1,757	4.3	26.5	3.8	7.2	8.8	2.3	3.6	48.1
45 - 49	1,528	5.2	32.5	3.1	8.1	6.5	2.0	3.1	45.0
50 - 54	1,527	4.2	39.0	3.3	7.5	5.0	2.2	2.2	40.5
55 - 59	1,380	5.0	36.4	3.8	9.7	3.9	1.7	2.4	43.4
60 - 64	1,558	7.4	39.3	2.6	10.8	2.8	1.4	2.3	41.6
65 - 69	1,397	8.8	44.0	2.6	10.3	2.6	1.7	1.3	39.3
70 - 74	1,269	10.5	46.3	2.3	13.2	3.9	1.3	1.3	37.0
75+	2,254	15.3	48.5	3.6	16.1	2.0	0.9	1.2	31.2
Total	29,404	6.5	27.7	7.2	11.6	8.7	3.4	5.0	43.5

Source: CSO, 2000 Census of Population and Housing

9.7 Causes of Disability

The various causes of disability were categorized as prenatal, disease, injury and other. Of these, the most common cause is disease, which was reported by 38.9 percent of the disabled population and the least is 'other', reported by 7.6 percent while 18.1 percent reported that they did not know the cause of their disability. This is in line with what is depicted on the national level where more than one-third (38.9 percent) were disabled due to disease / illness. The pattern is also the same for both males and females in both cases though the national levels are higher for both males and females.

Some causes of disability affect females more than they do males. These include disease and other causes. Injuries and prenatal causes are more common among males than females.

As already mentioned, 38.9 percent of the disabled population cited disease as a cause of their disability in Southern province. Among the districts, Sinazongwe has the largest proportion of 43.5 percent while Livingstone has the least proportion with 35.7 percent reporting disease as a cause of disability.

Table 9.5: Distribution of the Disabled by District and Cause, (Percent)Southern Province, 2000

Cause of Disability	Zambia Total	Southern Total	Choma	Gwembe	Itezhitezhi	Kalomo	Kazungula	L/stone	Mazabuka	Monze	Namwala	Siavonga	Sinazongwe
Total disabled	**256,690**	29,404	5,135	716	1,427	5,275	2,187	1,570	3,694	4,161	2,582	996	1,661
Congenital/pre-natal	13.7	15.9	17	14.2	16.1	16	13.7	14	14.5	15.9	18.2	15.7	16.9
Disease/illness	38.9	38.9	37.3	39.4	38.1	40.8	38.6	35.7	38.1	38.1	38.8	42.2	43.5
Injury/accident/trauma	17.2	18.1	18.5	16.6	15.6	17.3	16.7	14.8	17.7	20	22.4	17	17.6
Other	9.3	7.6	7	7.1	8.6	6.9	10.2	10.9	6.7	8.2	6.2	8.1	6.2
Unknown	20.2	18.1	18	26.4	19.9	16.7	18.6	17.6	20.1	19.7	13.2	19.1	16.7
Male	**135,613**	15,356	2,646	381	792	2,675	1,080	838	2,077	2,135	1,368	528	836
Congenital/pre-natal	13.7	16.2	17.7	15.2	16	16.8	14.7	14.1	14	16.5	18.6	14.6	16.3
Disease/illness	36.3	35.9	33.8	38.6	33.6	37.2	35	32.9	35.6	36.9	34.9	39.8	41.4
Injury/accident/trauma	20.7	21.5	23.1	16.5	19.4	20	20.6	18.3	20.8	22.3	26.4	21.2	21.7
Other	8.9	7.1	6.3	6.8	8.6	5.9	9.8	11	6.6	8.3	6	7.4	4.5
Unknown	19.4	17.7	17.3	21.5	20.3	16.8	19.1	16.9	20.1	18.5	13.1	18.8	14.8
Female	**121,077**	14,048	2,489	335	635	2,600	1,107	732	1,617	2,026	1,214	468	825
Congenital/pre-natal	13.7	15.5	16.2	13.1	16.2	15.2	12.6	13.9	15	15.2	17.8	16.9	17.5
Disease/illness	41.9	42.1	41.1	40.3	43.8	44.4	42.2	38.8	41.4	39.3	43.2	44.9	45.7
Injury/accident/trauma	13.2	14.4	13.6	16.7	10.7	14.5	12.8	10.9	13.6	17.7	17.9	12.2	13.5
Other	9.7	8.1	7.8	7.5	8.7	8	10.5	10.8	6.7	8	6.3	9	7.9
Unknown	21	18.7	18.7	31.9	19.4	16.6	18.2	18.3	20.2	21	13.3	19.4	18.7

Source: CSO, 2000 Census of Population and Housing

Note: It is worth noting that the percentages will not necessarily add up to 100 because some persons reported more than one cause of disability.

Education Levels of the Disabled

le 9.6 and Figure 9.3 show the percent distribution of the disabled persons 5 years and over, by type of disability and level of education. In all, about two fifths of the disabled have never attended school and another two fifths have only completed primary education while 1.7 percent have acquired post secondary education.

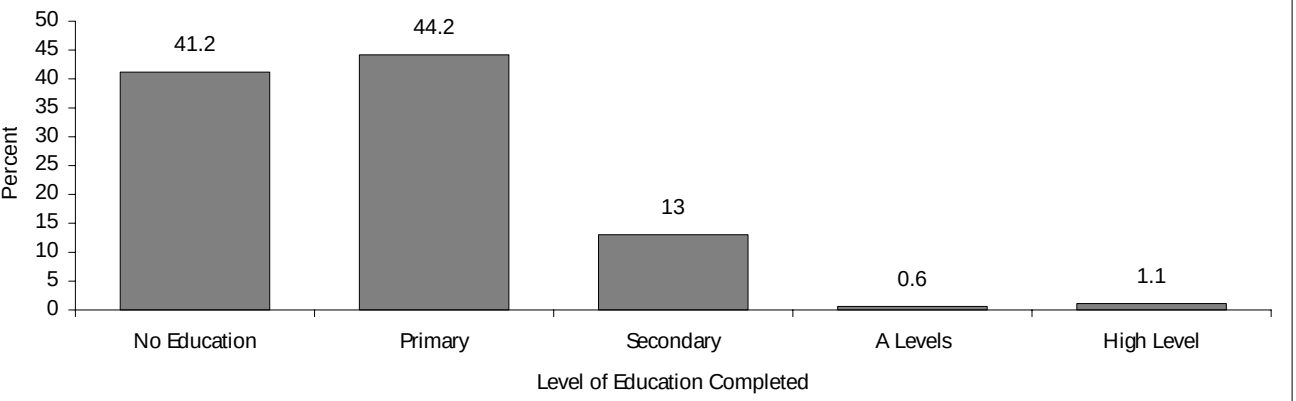
Table 9.6: Distribution of the Disabled Persons 5 Years and Over, by Type of Disability and Level of Education, (Percent) Southern Province, 2000

Type of Disability	Level of Education Completed						
	Total Number	Percentage Total	No Education	Primary	Secondary	A Levels	Higher Level
Blind	1,759	100.0	54.9	32.9	9.7	1.1	1.5
Partially Sighted	7,831	100.0	38.7	45.7	13.2	1.0	1.3
Deaf/Dumb	1,898	100.0	60.0	29.3	8.9	0.7	1.1
Hard of Hearing	3,162	100.0	43.3	46.1	9.0	0.7	1.0
Mentally Ill	2,362	100.0	50.0	34.8	13.6	0.6	1.0
Ex-Mental	873	100.0	34.5	46.2	16.0	1.5	1.8
Mentally Retarded	1,363	100.0	50.3	37.1	10.5	0.8	1.2
Physically Handicapped	11,966	100.0	35.8	48.0	14.5	0.5	1.2
Total	27,742	100.0	41.2	44.2	13.0	0.6	1.1

rce: CSO, 2000 Census of Population and Housing

e proportion of those who have never attended school is highest among the deaf/dumb (60 percent) while the highest proportion of those who completed higher education was among the ex mental.

Figure 9.3: Distribution of the Disabled Population, 5 years and Older by Level of Education, Southern Province, 2000



Source: CSO, 2000 Census of Population and Housing

Economic Activity of the Disabled

le 9.7 and figure 9.4 show the economic activities of the disabled persons. Over half of the disabled persons are working and almost two fifths are students. The percentages of the disabled who are working are lower than those of the national average, while those who are students are more (50.1percent against 55.5 percent for the working and 38 percent against 33.1 percent for students).

s worth noting that none of the disabled persons falls in the categories "not available for work" and "available for work" but not seeking work. Details on the definitions of the various economic activities are given in Chapter 6.

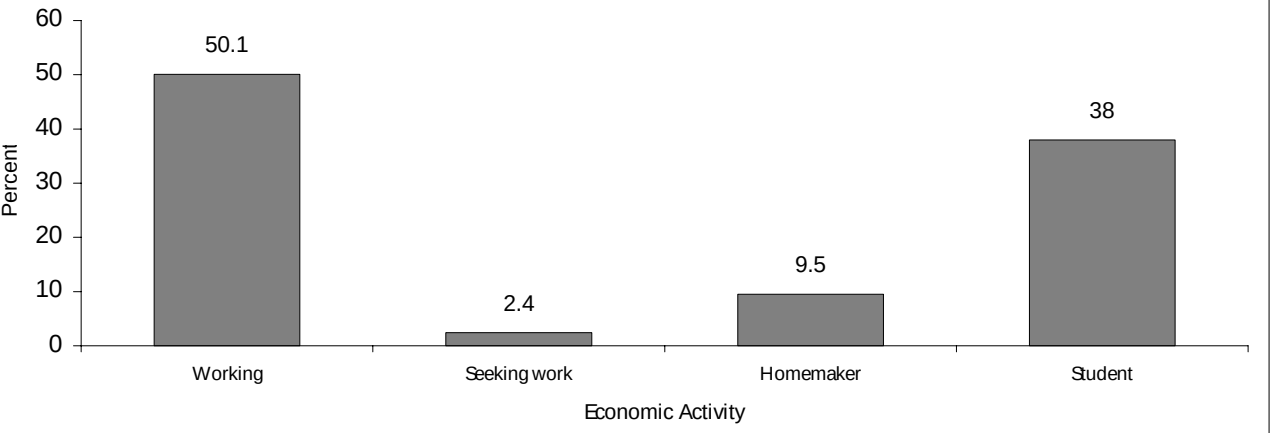
ong the blind, deaf/dumb, mentally ill and mentally retarded, the majority are students while in the rest of the disability categories, the majority are working followed by students.

Table 9.7: Percent Distribution of the Disabled Persons 12 Years and Over by Type of Disability and Economic Activity, Southern Province

Usual Economic Activity	Zambia Total	Type of Disability								
		Southern Total	Blind	Partially Sighted	Deaf/Dumb	Hard of Hearing	Mentally ill	Ex Mental	Mentally Retarded	Physically Handicapped
Working	55.5	50.1	22.9	55.6	36.8	49.7	25.5	41.5	29.9	53.1
Seeking work	2.6	2.4	1.7	2.2	1.9	1.4	2.2	2.1	2.6	2.5
Homemaker	8.8	9.5	9.5	8.4	15.3	14.4	10.1	19.1	14.5	9.9
Student	33.1	38	65.9	33.9	46	34.5	62.2	37.2	53	34.4
Percent Total	100	100	100	100	100	100	100	100	100	100
Total Number	194,039	20,662	1,309	6,040	1,113	2,158	1,750	564	993	8,959

rce: CSO, 2000 Census of Population and Housing

Figure 9.4: Distribution of the Disabled Persons, 12 years and Older by Economic Activity, Southern Province, 2000



Source: CSO, 2000 Census of Population and Housing

0 Occupation Of The Disabled

a on occupation of the disabled persons was also collected during the 2000 Census. Table 9.8 and Figure 9.5 show that the most common occupation among the disabled is agriculture (80.6 percent). Administrative, clerical and sales are hardly common occupations.

Table 9.8: Percent Distribution of the Usually Working Disabled by Type of Disability and Occupation, Southern Province, 2000

Type of Disability	Occupation									
	Total Number	Percent Total	Prof & Tech	Admin & manag. Workers	Clerical & Related Workers	Sales Workers	Service Workers	Agric.	Production and Transport	Unclass.
Blind	1,900	100.0	3.9	0.4	1.4	3.9	4.9	81.4	4.2	0.0
Partially Sighted	8,147	100.0	4.5	0.3	0.9	4.5	2.6	80.7	6.1	0.4
Deaf/Dumb	2,131	100.0	2.1	0.3	0.5	5.2	5.4	81.7	4.7	0.3
Hard Hearing	3,404	100.0	2.3	0.3	0.1	5.3	3.0	83.4	5.4	0.1
Mentally ill	2,559	100.0	3.3	0.2	0.5	4.2	3.8	84.7	3.3	0.0
Ex Mental	991	100.0	4.9	0.4	0.4	5.3	2.7	83.6	2.7	0.0
Mentally Retarded	1,477	100.0	2.5	0.4	0.4	4.2	4.2	84.9	3.5	0.0
Physically Handicapped	12,804	100.0	3.6	0.2	0.7	5.5	2.7	79.0	8.2	0.2
Total	33,413	100.0	3.7	0.3	0.7	5.0	2.9	80.6	6.6	0.2

rce: CSO, 2000 Census of Population and Housing

Figure 9.5: Distribution of the Usually Working Disabled Persons by Occupation, Southern Province, 2000

Source: CSO, 2000 Census of Population and Housing

1 Employment Status of the Disabled Household Heads

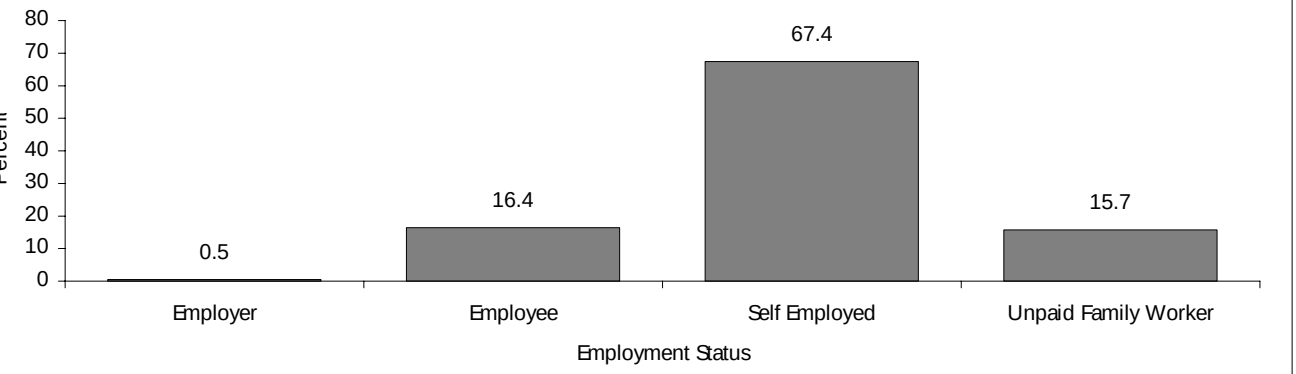
Table 9.9 and Figure 9.6 show the percent distribution of the disabled household heads by type of disability and employment status. Amongst all categories of disability, the largest proportions of the disabled are self-employed while the least proportion is among the employers. Proportions of the self employed range from 58.7 percent among the deaf/dumb to 71.8 percent among the ex mental and mentally ill.

Table 9.9: Percent Distribution of the Disabled Household Heads by Type of Disability and Employment Status, Southern Province, 2000

Type of Disability	Employment status					
	Total Number	Percent Total	Employer	Employee	Self Employed	Family Worker
Blind	170	100.0	0.6	18.2	67.1	14.2
Partially Sighted	2,243	100.0	0.3	10.9	68.4	20.4
Deaf/Dumb	155	100.0	0.0	25.2	58.7	16.1
Hard of Hearing	431	100.0	0.2	14.8	72.2	12.8
Mentally Ill	110	100.0	0.0	15.5	71.8	12.7
Ex-Mental	146	100.0	0.0	15.5	71.8	12.7
Mentally Retarded	144	100.0	0.0	14.6	64.6	20.8
Physically Handicapped	2,708	100.0	0.5	17.5	67.2	14.8
Total	6,126	100.0	0.5	16.4	67.4	15.7

Source: CSO, 2000 Census of Population and Housing

Figure 9.6: Distribution of the Disabled Household Heads by Employment Status, Southern Province, 2000



Source: CSO, 2000 Census of Population and Housing

9.12 Summary

Out of the total population of Southern Province, 2.6 percent is disabled. The proportion of the disabled is higher in rural than urban areas. There are more disabled male (52 percent) than female (48 percent).

Physical disability is the most common type of disability affecting about 38.3 percent of the disabled population while the ex mental forms the smallest proportion of 3 percent.

ease is the most common cause of disability reported by about 38.9 percent of the disabled population while the least is 'other', reported by 7.6 percent.

out two fifths of the disabled have never been to school and another two fifths have completed primary education. As regards employment status, the largest proportion is self employed amongst all categories of disability. The least proportion is among the employers. The most common occupation among the disabled is agriculture, which takes up about 80.6 percent.

REFERENCES

Arriaga, E. A (1994); Population Analysis with Microcomputers, Volume 1: Presentation Techniques. Bucen, Washington DC, USA.

Central Statistical Office (1995); 1990 Census of Population, Housing and Agriculture: Central Province Analytical Report, Vol. 1, Government Printers, Lusaka, Zambia.

Central Statistical Office (1995); 1990 Census of Population, Housing and Agriculture: Central Province Descriptive Tables Report, Vol. 1, Government Printers, Lusaka, Zambia.

Central Statistical Office (1995); 1990 Census of Population, Housing and Agriculture: Zambia Analytical Report, Vol. 10, Government Printers, Lusaka, Zambia.

Central Statistical Office (1998); Living Conditions Monitoring Survey in Zambia,1998. CSO, Lusaka.

Central Statistical Office [Zambia], Central Board of Health [Zambia], and ORC Macro. (2003);Zambia Demographic and Health Survey, 2001-2002. Calverton, Maryland, USA: CSO, CBoH and ORC Macro.

Central Statistical Office [2003], MCDSS, National Disability Policy

Henry Shyrock Jacob S. Siegel, and Associates (1972); The Methods and Materials of Demography. Condensed Edition by Edward Stockwell, Academic Press, New York, USA.

Hinde, Andrew (1998); Demographic Methods. MPG Books, Great Britain.

Pressant, Roland (1985); The Dictionary of Demography, Dotesios Printers Ltd, Trowbridge, Wiltshire.

Pressat, Roland (1988); The Dictionary of Demography. Basil Blackwell Ltd, United Kingdom.

Shryock Henry S. et al (1976); The Methods and Materials of Demography. Academic Press INC, London.

United Nations (1983); Manual X: Indirect Techniques for Demographic Estimation. UN, New York, USA.

United Nations (1996); Manual for the Development of Statistical Information for Disability Programmes and Policies, New York, USA.

United Nations (2001); Guideline and Principles for the Development of Disability Statistics, New York.

United Nations (1996); Manual for the development of Statistical information for disability programs and policies, New York., 1996

World Health Organisation (2002); World Mortality in 2000: Life Tables for 191 Countries. World Health Organisation (WHO), Geneva.

Appendix A

KEY PERSONS INVOLVED IN THE ANALYSIS

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- **Margaret Tembo Mwanamwenge**
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- **Iven Sikanyiti**
- **Patrick Mumba Chewe**
- **Sheila Shimwambwa Mudenda**
- **Christine S. Chikolwa**
- **Stanely Kamocha**
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- **Palver Sikanyiti**
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- Margaret M. Ndakala
- Chilekwa Munkonge
- Alice Mbewe
- Micheal Kunda
- Akayombokwa Ngubai
- Mambo Simataa