2000 Census of Population and Housing

Lusaka Province Analytical Report

Volume Five

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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 Zambia 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.

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August, 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

Lusaka province's population recorded as at 16th October 2000 (Census Night) is 1,391,329, comprising 705,778 males and 685,551females. The majority of the population, 81 percent or1,133 ,002 lives in urban areas, while the rural areas have the remaining 19 percent or 258,327. Of the total population, 42.4 percent are below the age of 15, resulting in a median age of 19 years. Hence Lusaka Province has continued to have a young population with an in-built potential to grow for many years to come.

Lusaka Province's population grew at an average annual growth rate of 6.3 percent between 1969-1980, 3.6 percent between 1980-1990, and finally 3.4 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 63.5 persons per square kilometer, with the highest population density occurring in Lusaka district, with 3013.1 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 16.3 percent is female headed. There is very little variation by rural or urban residence. Luangwa district has the highest percentage of female-headed households at 22.4 percent.

A total of 1,259,258 persons reported their predominant language of communication in the 2000 census, with Nyanja being the most spoken language, spoken by 52.8 percent of the population as their predominant language of communication, followed by Bemba spoken by 14.5 percent, English is spoken by 6.6 percent, Tonga by 4.6 and Nsenga by 3.1 percent of the population.

Census results show that 70.1 percent of the provincial population is literate i.e. is able to read and write in any language, with 74.7 of males and 65.5 percent of females able to read and write in any language. Literacy rates have increased marginally from the 1990 rate of 68.6 percent. Fifty-five percent of the population in rural areas can read and write in any language compared to 73.3 percent of the population in urban areas. The proportion of youths who could read and write in any language declined from about 85.5 percent in 1990 to 82.0 percent by 2000. However, adult literacy rate stagnated at the 1990 rate of 81 percent. The problem of adult illiteracy remained much more marked among females than males.

The province's labour force population stands at 404,672. However, economic participation rates stand at 64.7 percent for males, and 29.2 percent for females. The labour force has increased by 32.1 percent between 1990 and 2000. Eighty-three percent of the labour force is in urban areas, while 17 percent is in rural areas. Slightly more than half of the labour force is in the young age group of 12-29 years. Sixty-three percent of the province's workforce is comprised of unskilled labour.

The employed population increased by 12 percent between 1990 and 2000. The female employed population increased by 17 percent, while the male employed population increased by 10 percent.

The increase in the female employed population could have been due both to 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 increased by 170 percent between 1990 and 2000. The size of the male unemployed population increased by 209 percent, while that of females increased by 121 percent.

Lusaka 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 5.8 is higher than the 4.4 estimated for urban areas. The province's TFR at 4.6 is relatively lower than the rest of the provinces.

Infant mortality rate has declined by about 17 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 23 percent in the period 1990 and 2000, from 77 to 59 deaths per 1000 children. Under-five mortality also recorded a slight decline of 19 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 affected the Life Expectancy at birth, which has increased from 50 years in 1990 to 54 years in 2000.

The disabled population forms 1.9 percent of total population of Lusaka province. The proportion of the disabled is higher in rural than urban areas. Partially sighted is the most common type of disability affecting about 34.9 percent of the disabled population, while blindness is the least common type of disability accounting for 2.9 percent of the disabled population.

Disease is the most common cause of disability reported by about 30.8 percent of the disabled population. Prenatal causes were reported by 12.6 percent, injury by 16.5 percent, and other by 12.8 percent, while 23.6 percent reported that they did not know the cause of their disability. Injury as a cause of disability is more commonly reported by males than females while disease is more common among females than males.

Chapter 1

BACKGROUND

1.1 Geography

Lusaka Province has the smallest surface area covering 21,896 square kilometers among other provinces in Zambia. It shares boundaries with Central Province in the North, Southern Province in the South and Eastern Province in the east. It also shares an international boundary with Mozambique in the southeast side. Administratively, the province is divided into four districts, namely: Chongwe, Kafue, Luangwa and Lusaka. Lusaka City is both a provincial headquarter as well as a capital city of Zambia.

The province has two major rivers, namely Kafue and Luangwa Rivers. Some of the largest variations in altitude in the country are found in Lusaka Province. The area surrounding the city rests on a highland plateau covering a quarter of the province. It also has a valley and escarpment along the eastern and southern parts. Altitude ranges from 300-400 metres above sea level in the valley to 1,200-1,400 metres above sea level on the plateau. The plateau has rich soils and sufficient rains while the valley has poor soils and insufficient rains.

1.2 Natural Resources

Lusaka's major tourism attractions include: Lower Zambezi National Park, Munda Wanga Gardens, Kabwata Village, Lusaka Museum and Chinyunyu Hot Springs. Lusaka also serves as an entry point for foreign tourist destined to Zambia's countryside. Lusaka International Airport is connected to tourist centers such as Livingstone, Mfuwe and all the provincial and district centers.

1.3 Population

The population of Lusaka Province has continued to rise, from 353,975 in 1969, 691,054 in 1980 and 991,226 in 1990 to 1,391,329 in 2000. Despite the growth in population size, the growth rate registered a decline from 6.3 percent during the 1969-1980 to 3.6 percent during the 1980-1990 intercensal period and later to 3.2 between 1990 and 2000. The rate of growth of the population in Lusaka Province has continued to be higher than the national average growth rate, which declined from 3.1 in the 1969-1980 intercensal period to 2.5 in the 1990-2000 intercensal period.

Although Lusaka Province has the smallest land surface in the country, it has the second largest population size. Its share of the population increased from 9 percent in 1969, 12 percent in 1980 and 13 percent in 1990 to 14 percent in 2000. Its population density in 2000 was 63.5 persons per square kilometer. Lusaka District with a population size of 1,084,703 has the largest number of people, both at National and Provincial Level. At Provincial Level, it accounts for 78 percent of the population. Lusaka District with population density at 3,013 per square kilometre has the highest population density in the country. The population density for the whole country stands at 13.1 per square kilometers. Table 1.1 provides more details.

TABLE 1.1: POPULATION DISTRIBUTION, DENSITY, ANNUAL GROWTH RATE AND

AREA BY DISTRICT, 1969, 1980, 1990, AND 2000

District	Population				*Percentage Distribution*				Density (Person per sq. km)				*Growth Rate (%)*			Area
	1969	1980	1990	2000	1969	1980	1990	2000	1969	1980	1990	2000	69-80	80-90	90-00	(Sq.Km)
Chongwe	-	-	95,738	137,461	-	-	9.7	9.9	-	-	10.0	15.9		-	3.7	8,669
Kafue	-	-	117,354	150,217	-	-	11.8	10.8	-	-	12.5	16		-	2.5	9,396
Luangwa	7,925	11,462	17,070	18,948	2.2	20.8	1.7	1.4	2.3	3.3	4.9	5.5	3.4	3.5	1.1	3,471
Lusaka	83,625	535,830	761,064	1,084,703	23.6	77.5	76.8	78	729	1448.4	2114.1	3013.1	18.4	3.7	3.6	360
Lusaka Total	353,975	691,054	991,226	1,391,329	100	100	100	100	16.2	31.6	45.3	63.5	6.3	3.6	3.2	21,896
Zambia	4,056,995	5,661801	7,759,117	9,885,591	100	100	100	100	5.2	7.5	10.3	13.1	3.1	2.7	2.5	752,612

Source: CSO, 1969, 1980, 1990, 2000 Census of Population and Housing
Note: "-" denotes not applicable as they refer to new districts.

1.4 Economy

There are a lot of economic activities taking place in Lusaka Province. Among them are manufacturing, quarrying, trading and farming. The province is also the headquarters to many companies, institutions and organizations such as banks, trading and manufacturing companies, mining companies, Government Departments and Non-Governmental Organizations.

There are no major mineral deposits in the province. Quarrying and stone crushing are the only mining related activities being done by a number of private quarry owners.

1.5 Agriculture

Lusaka Province saw a decline in maize production between 1990 and 2000 due to large-scale farmers' shift from its production to other crops of high value such as flowers and baby corn. An increase in production was recorded for crops like cottonseed and wheat in the period under review. Other crops produced in Lusaka Province are sorghum, sunflower, groundnuts, seed cotton, Soya beans, paddy rice and barley tobacco. Table 1.2 shows production of various crops between 1991 and 2000.

Table 1.2: Crop Production (1991-1999)

Year	Maize 90 kg	Sorghum 90 kg	Seed Cotton Kg	Virginia Tobacco Kg	Millet 90 kg	Mixed Beans Kg	Paddy Rice Kg	G/nuts 90 kg	Irr.Wheat 90 kg
1991	514,270	16,560	815,850	-	-	38	6,660	240	225,013
1992	438,563	7,148	1,750,700	-	-	402	3,360	4,741	129,501
1993	952,390	27,252	1,522,500	-	142	-	659	6,942	179,849
1994	354,325	5,552	551,700	2,490,000	-	-	273	6,746	152,298
1995	214,764	4,198	347,560	630,000	-	2,027	-	2,665	58,565
1996	849,072	14,451	1,240,000	264,300	1,855	941	55	15,051	127,822
1997	493,924	575	-	-	1,222	191	-	5,660	182,489
1998	242,464	-	-	-	-	191	-	2,985	147,778
1999	365,657	-	588,510	-	-	3,000	-	5	223,467

Source: 2000 Ministry of Agriculture , Food and Fisheries, 2000 Agricultural Statistical Bulletin
Note: "-" denotes not applicable.

There was a marked decrease in livestock production between 1990 and 1999 from 376, 000 to 188, 000 in 1997, but the decease reversed to 201,000 in 1999. Sheep decreased by 50 percent from 1990 level of 466 to 249 in 1999. Goats also decreased by 50 percent from 31,500 in 1990 to 16,900 by 1999. As regards pigs, there was a sharp decline up to 1998 from 8,800 in 1990 to a low 4,400 in

1998. However this trend seems to have reserved as figures went up to 10,500 in 1999 (Ministry of Agriculture, Food and Fisheries, 2000 Agricultural Statistical Bulletin).

1.6 Education

Enrolment between 1997 and 2000 decreased in basic schools by 0.75 percent while in high schools they went up by the same margin (See Table 1.3). The number of teachers went up by 4.7 percent in basic schools and 3.8 percent in high schools in the same period. The pupil teacher ratio in Lusaka basic schools averaged 1 teacher to 40 pupils.

Table 1.3: Basic and high School enrolment 1997-2001

School Type/Year	1997	1998	1999	2000	2001
Basic School	197,524	198,475	198,826	196,026	196,032
High School	19,765	24,841	22,038	16,374	19,913

Source: Ministry of Education

1.7. Health

The province has hundred hospitals out of which 82 are government Hospitals, 14 are privately owned, while 4 are mission owned (Refer to Table 1.4 for details). Generally, the province experienced an upward trend in the provision of health services by private institutions and private practitioners between 1990 and 2000. However, the government still remains the major service provider.

Table 1.4: Number of Health Facilities by District

District	Government	Mission	Private	Total	Beds	Cots
Chongwe	23	2	1	26	173	66
Kafue.	17	1	7	25	89	34
Luangwa	8	1	-	9	106	17
Lusaka	34	-	6	40	2,753	370
Total	82	4	14	100	3,121	487

Source: Ministry of Health, 2004

Note: "-" denotes not applicable.

1.8 HIV/AIDS

According to the 2001 Zambia Demographic and Health Survey results, Lusaka recorded 22 percent HIV/AIDS prevalence among the adult population aged between 15-59 years, that is almost one in every five adults. This is the highest among the provinces (Refer to Table 1.5 for details).

Table 1.5: HIV Prevalence Among Men and Women Aged 15-49 Years by Province

Province	Percent Positive			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

Source: 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.

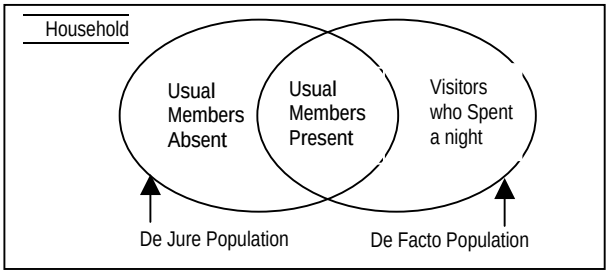
- De facto Population: **This refers to the usual household members present and visitors who spent the census night at any given household. This however excludes:**

  (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 those 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

This type of 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, poor co-operation with respondents, difficulties in communication, and lack of proper boundary descriptions. Coverage errors are usually highlighted by examining certain statistics such as growth rate, age composition, child-woman ratio and dependency ratio.

2.4.1.1 Age Composition

Table 2.1 and Figure 2.1 show the age composition of the population of Lusaka Province for 1980, 1990 and 2000 Censuses.

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

Age Group	Population					
	1980	Percent	1990	Percent	2000	Percent
0-14	341,560	49.4	435,166	44.1	573,816	42.8

15-64	341,928	49.5	541,064	54.8	747,878	55.8
65+	7,566	1.1	10,876	1.1	19,473	1.5
Total	691,054	100	987,106	100	1,341,167	100

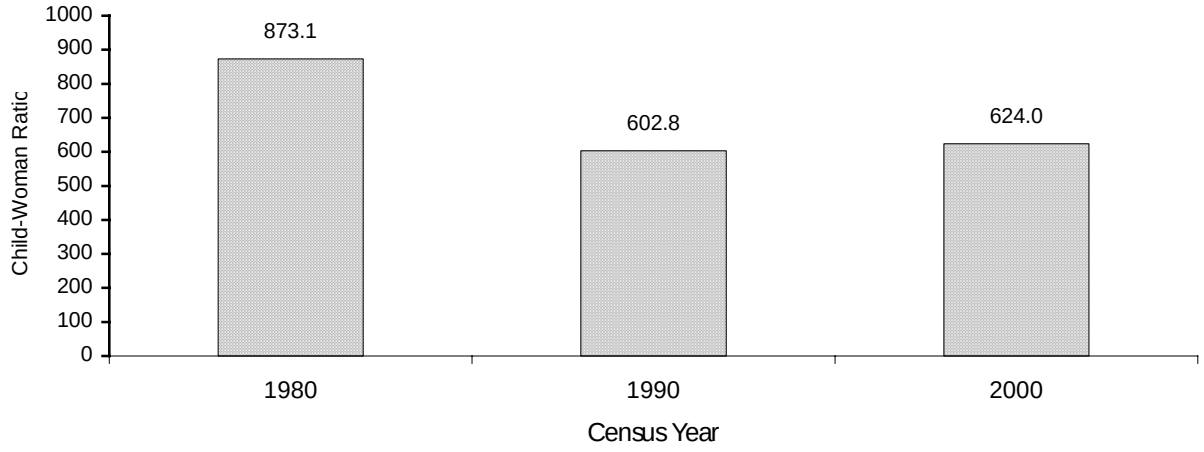
Source: CSO 1980, 1990 and 2000 Censuses of Population and Housing

The proportion of children 0-14 years reduced from 49.4 percent in 1980 to 44.1 percent in 1990 and later to 42.8 in 2000. This could be attributed to the general decline in fertility and the general decrease in child mortality in the province. In the age group 15-64 years, the proportion of persons to the overall population increased from 49.5 percent in 1980 to 54.8 percent in 1990 and later to 55.8 percent in 2000. This increase from 1980 to 2000 could be attributed to in-migration in Lusaka Province. In the older age group (65 years and over), the proportion of persons remained stable between 1980 and 1990 but increased slightly from 1.1 in 1990 to 1.5 in 2000 (See Table 2.1) The population distribution shows that the quality of age data by broad age groups is acceptable.

2.4.1.2 Child-Woman Ratio

In 1980, the child-woman ratio was 873.1 per 1000 women aged 15-49 years. It declined to 602.8 in 1990 and later rose to 624 per 1000 women aged 15-49 years in 2000. This is in line with the changes in the proportion of the population in the 0-14 year age group. The decline in the proportion of the population 0-14 years and the decline in the child-woman ratio between 1980 and 2000 (see Figure 2.1), appear to have been caused by the general decline in fertility and the general decrease in child mortality.

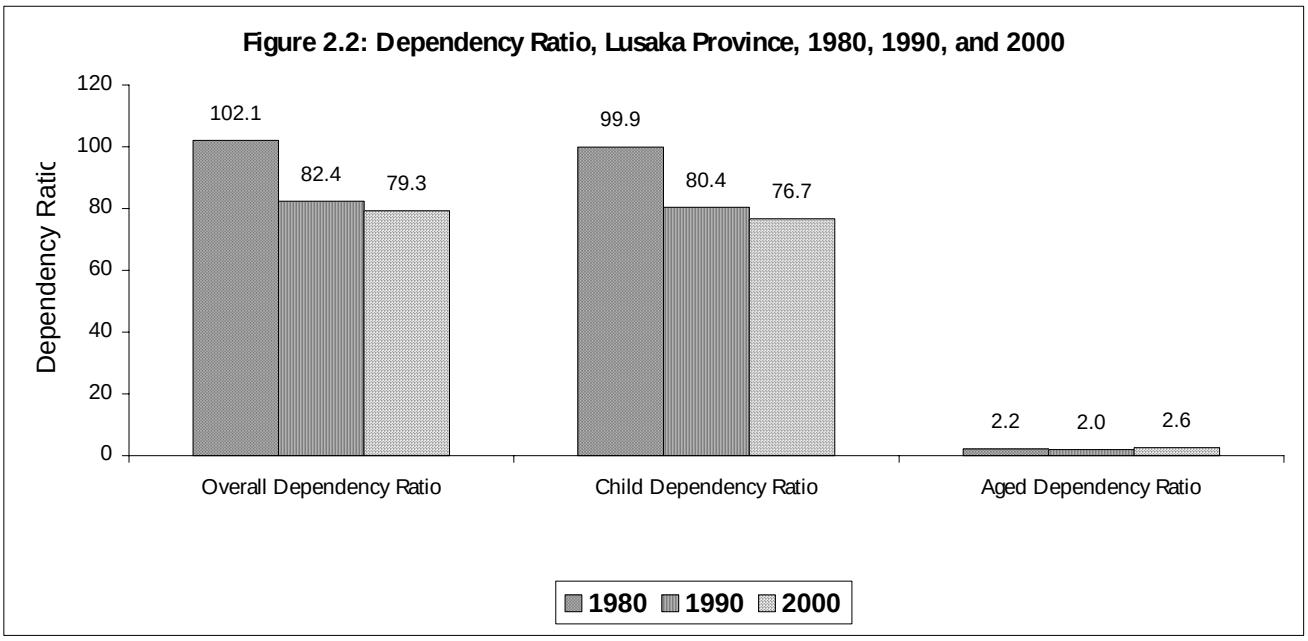
Figure 2.1: Child-Woman Ratio, Lusaka Province, 1980, 1990, and 2000



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

2.4.1.3 Dependency Ratio

The overall dependency ratio for the population of Lusaka Province declined from 102.1 persons in 1980 to 82.4 persons in 1990 and to 79.3 persons per 100 persons in age group 15-64 years in 2000. This means that for every 100 producers in the age range 15-64 years, there were 79.3 dependants in 2000. Age dependency ratio for the population aged 65 years and over to that of 15-64 years was 2.2 in 1980, 2.0 in 1990 and 2.6 in 2000 while that of children declined from 99.9 in 1980 to 80.4 in 1990 and to 76.7 in 2000. The decline in the dependency ratios could be attributed to the decline in the proportion of the population aged 0-14 years and the increase in the proportion of the population aged 15-64 years (See Figure 2.3 for details). This could be explained in relation to the significant improvement in adult survivorship levels observed between 1990 and 2000 intercensal period (See Figure 2.2 for details).



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

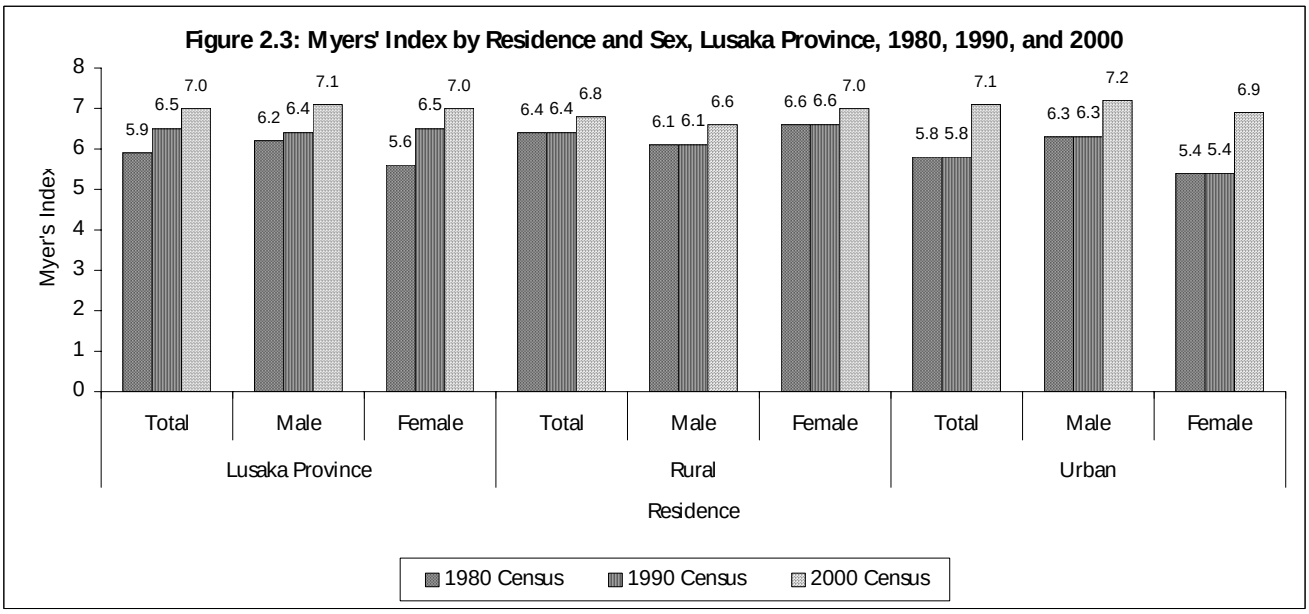
2.5 Content Error

A content error usually refers to instances where characteristics such as age, sex, marital status, and the 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 Lusaka 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 2.4. 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 Lusaka Province, in all the three censuses, the index is on the lower side (less than 10), which implies that the age reporting is good.



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

Results from Figure 2.3 show that the Myers' Index for the province rose from 5.9 in 1980 to 6.5 in 1990 and to 7.0 in 2000. In rural areas, the Myers' Index remained stable in 1980 and 1990 at 6.4 but rose to 6.8 in 2000. In urban areas, the index remained stable at 5.8 between 1980 and 1990 but rose to 7.8 in 2000. This generally shows that age reporting was worse off during the 2000 Census than in the previous censuses in Lusaka Province. In 1990, the index for males was slightly lower than that of females (6.4 Versus 6.5) while in 2000, the index for males was slightly higher than that of females (7.1 and 7.0, respectively). The rural-urban comparison shows that in 2000, age data was better reported in rural areas than in urban areas (6.8 versus 7.1). In spite of the deterioration in the quality of age data in the urban areas, the index for 1980 and 1990 was lower than the 2000 one, implying better age reporting in the former than in the latter. Generally, the Index shows that age was more accurately reported for females than for males in 2000. Overall, in all the three censuses, the index was low (less than 10) implying that the age reporting has been good.

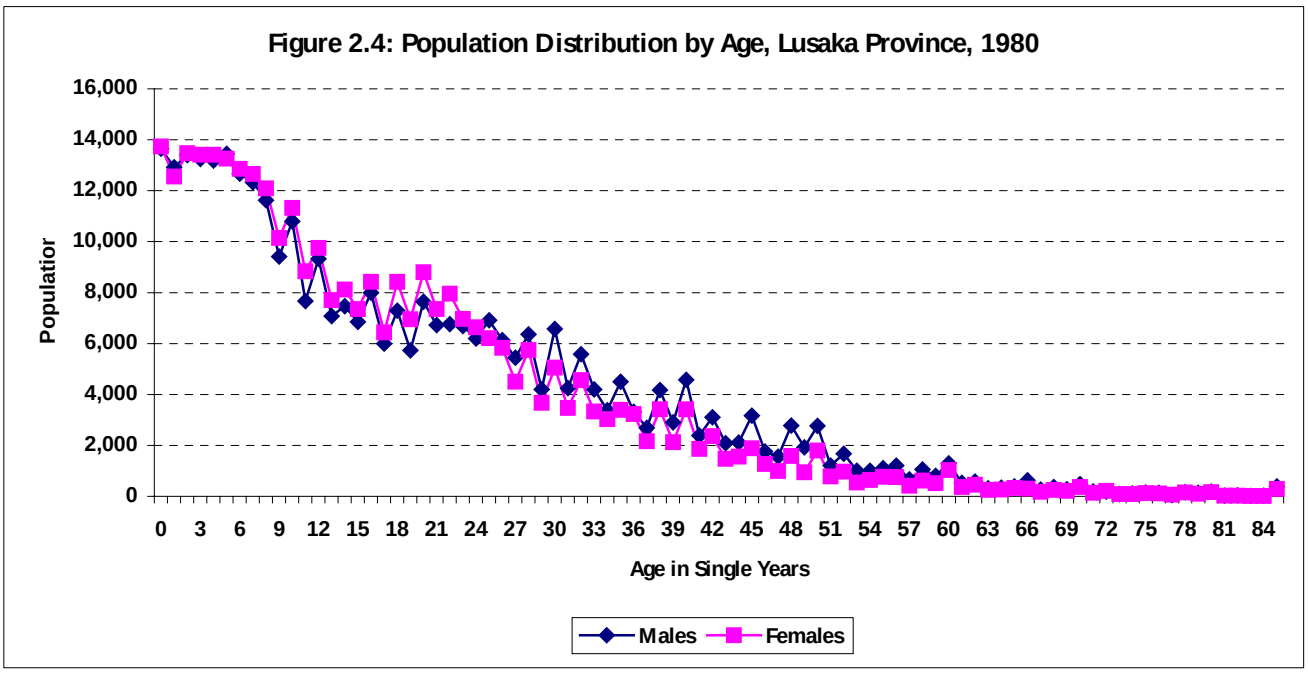
Table 2.2 and Figures 2.4 to 2.10 show that there was age heaping in all the three censuses as can be seen by the most preferred digits in all the three censuses. Preference for digits 0, 5, and 8 among males and 0,2, and 8 among females was observed in 2000. Preference for the digits 0, 2, and 8 was observed in all the three censuses under review while preference for digit 5 was observed in the 2000 Census.

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

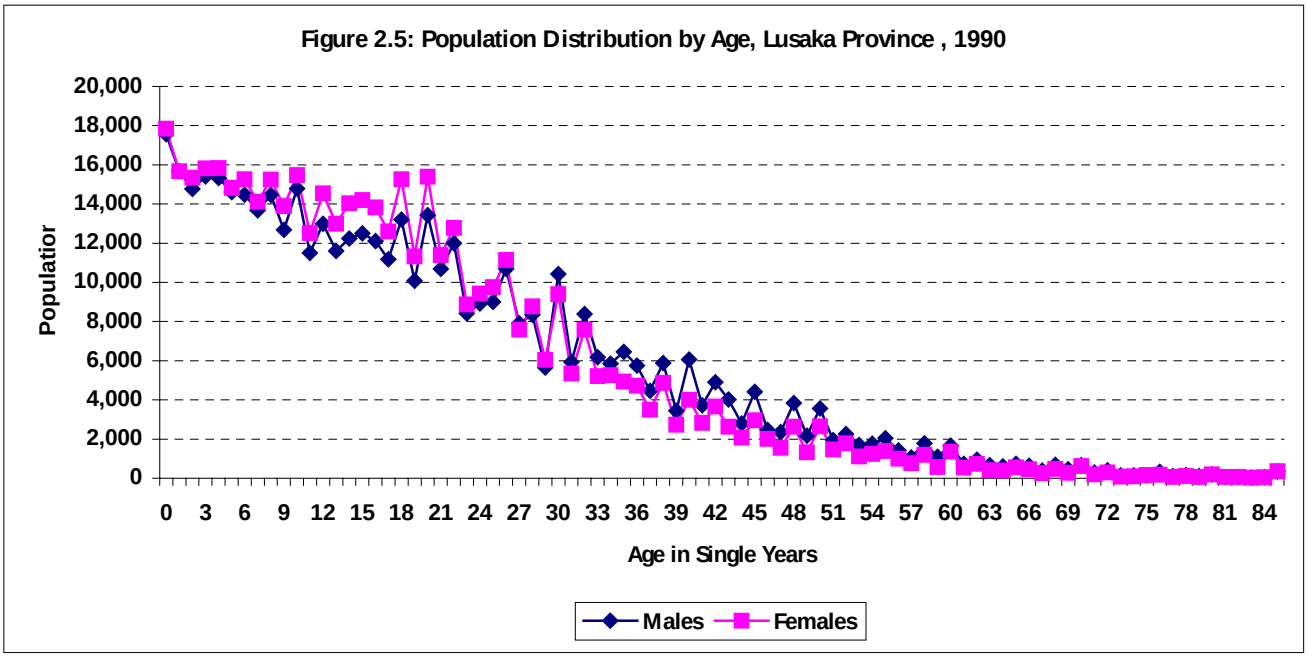
Residence	Most Preferred Digits and Census Year			
	Sex	1980 Census	1990 Census	2000 Census
Lusaka Province	Both Sexes	0,2,8	0,2,8	0,2,8
	Male	0,2,8	0,2,8	0,5,8
	Female	0,2,8	0,2,8	0,2,8
Rural	Both Sexes	0,2,8	0,2,8	0,5,8
	Male	0,2,8	0,2,8	0,5,8
	Female	0,2,8	0,2,8	0,2,8
Urban	Both Sexes	0,2,8	0,2,8	0,2,8
	Male	0,2,8	0,2,8	0,2,5,8
	Female	0,2,8	0,2,8	0,2,8

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

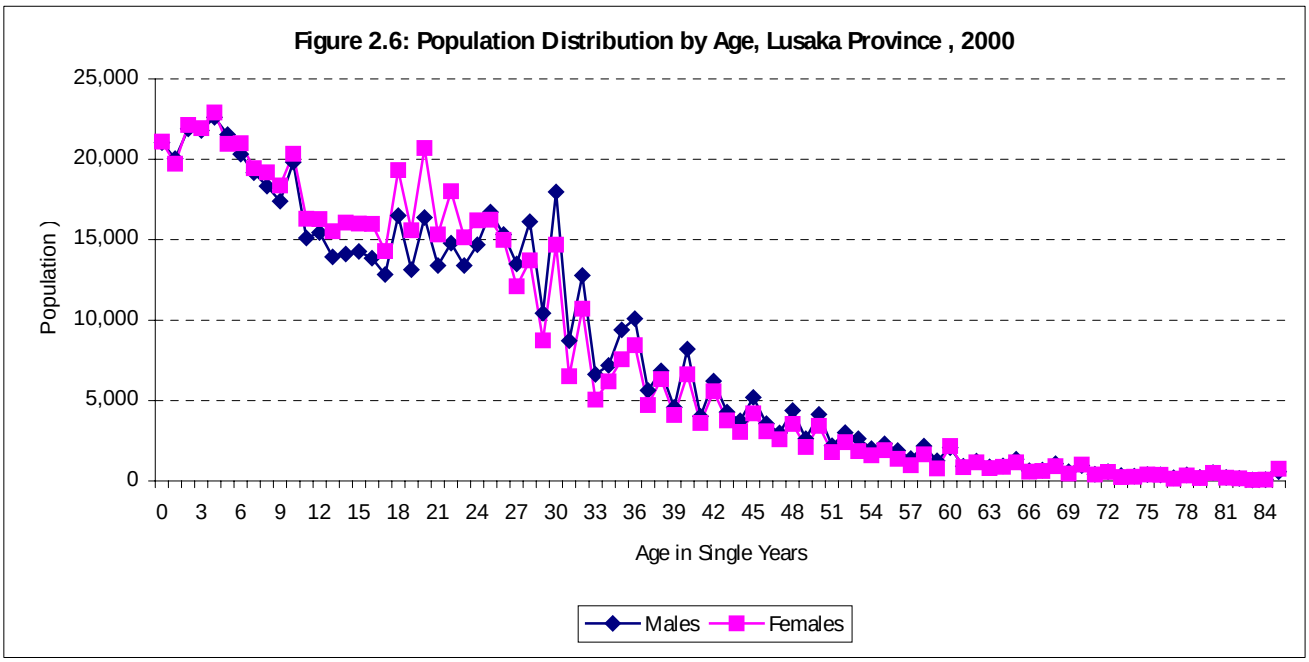
Age misreporting errors are also presented in Figures 2.5 to 2.10. The peaks on the curves indicate the most preferred ages in reporting while the troughs indicate the under reported ages. A comparison of Figures 2.5, 2.6, and 2.7 shows that the peaks and troughs are high for ages reported below age 60 in 1980 than in 1990 and 2000 and lower for ages reported after age 60 in 1980, 1990, and 2000. There is no noticeable difference in the height of the peaks and troughs for ages reported after age 60 in all the Censuses.



Source: CSO 1980 Census of Population and Housing

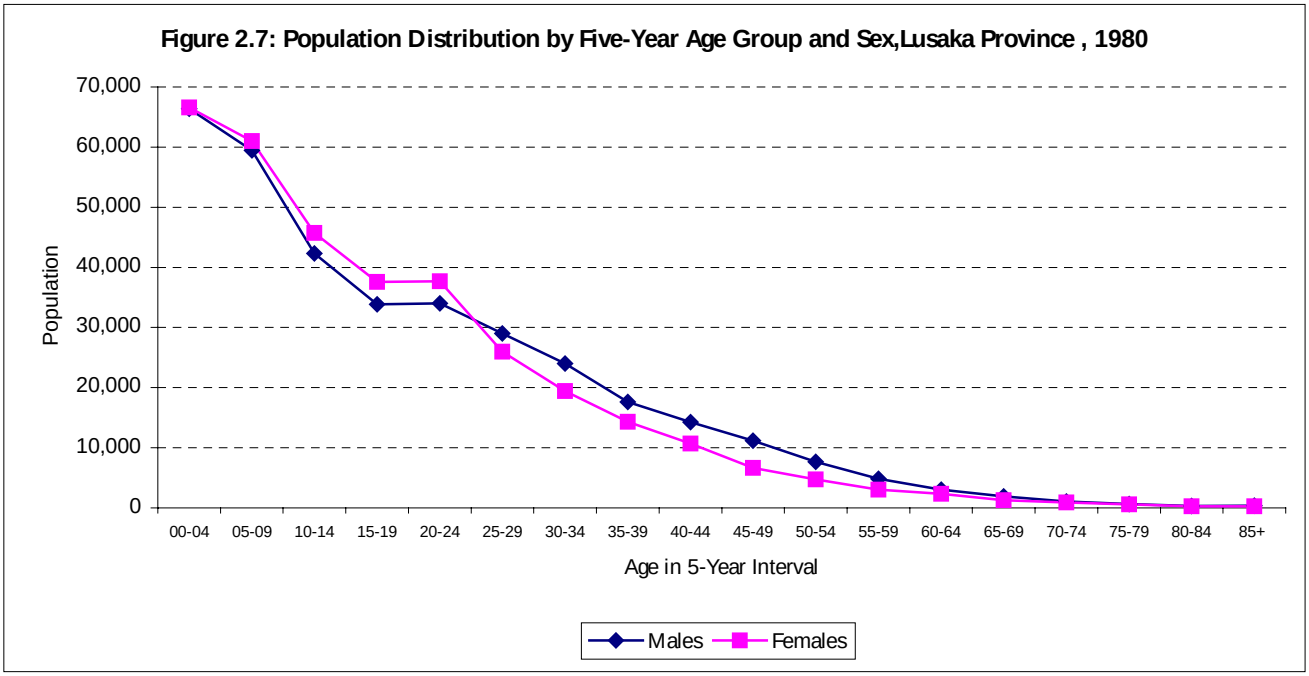


Source: CSO 1990 Census of Population and Housing

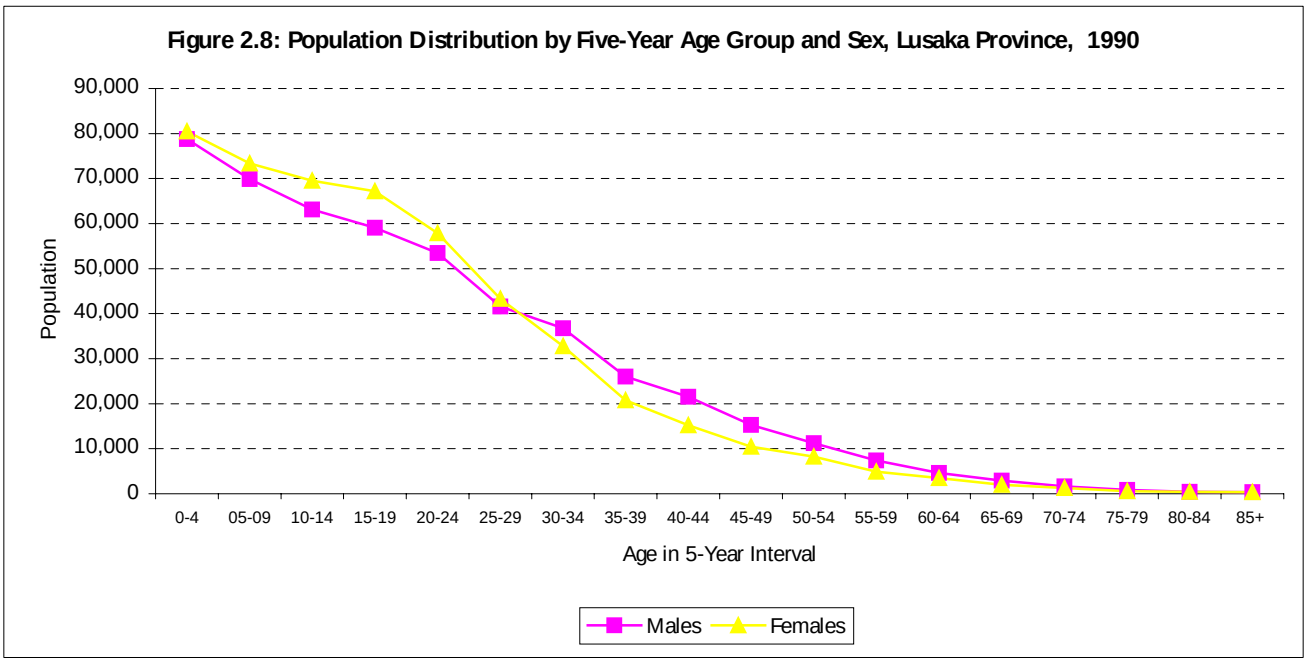


Source: CSO 2000 Census of Population and Housing

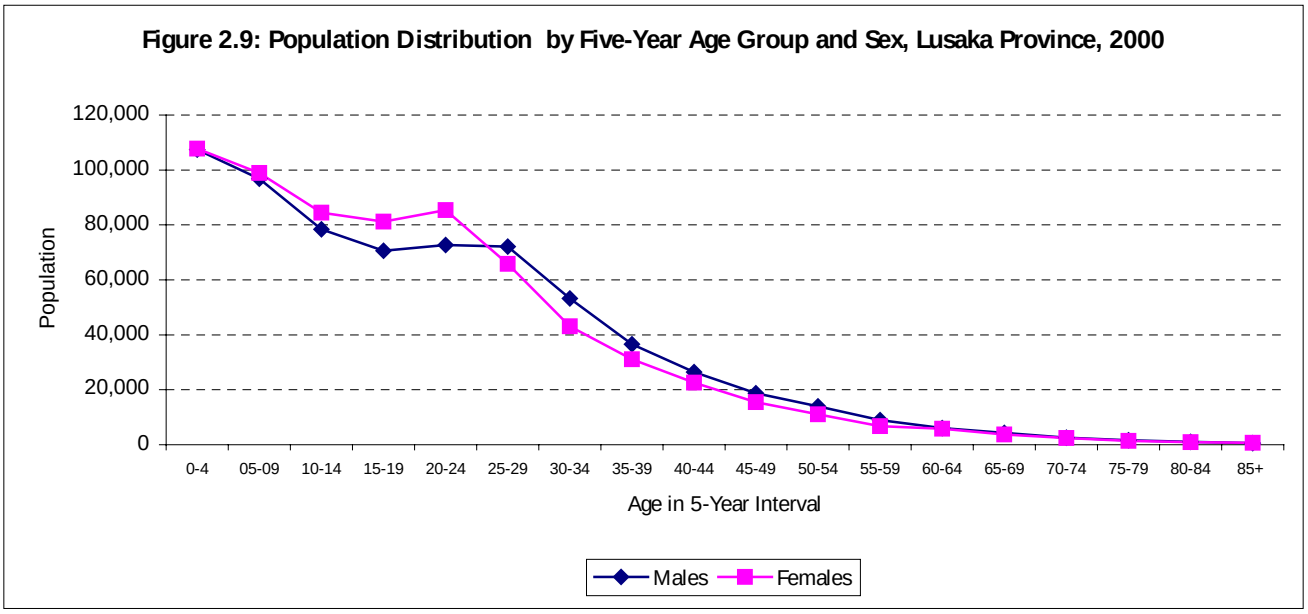
The smoothness of the curves in Figures 2.7, 2.8, and 2.9 shows that grouping of single-year age data into five-year age groups improves irregularities in age data arising from age misreporting (Compare Figures 2.5, 2.6, and 2.7 with Figures 2.7, 2.8, and 2.9).



Source: CSO 1980 Census of Population and Housing



Source: CSO 1990 Census of Population and Housing



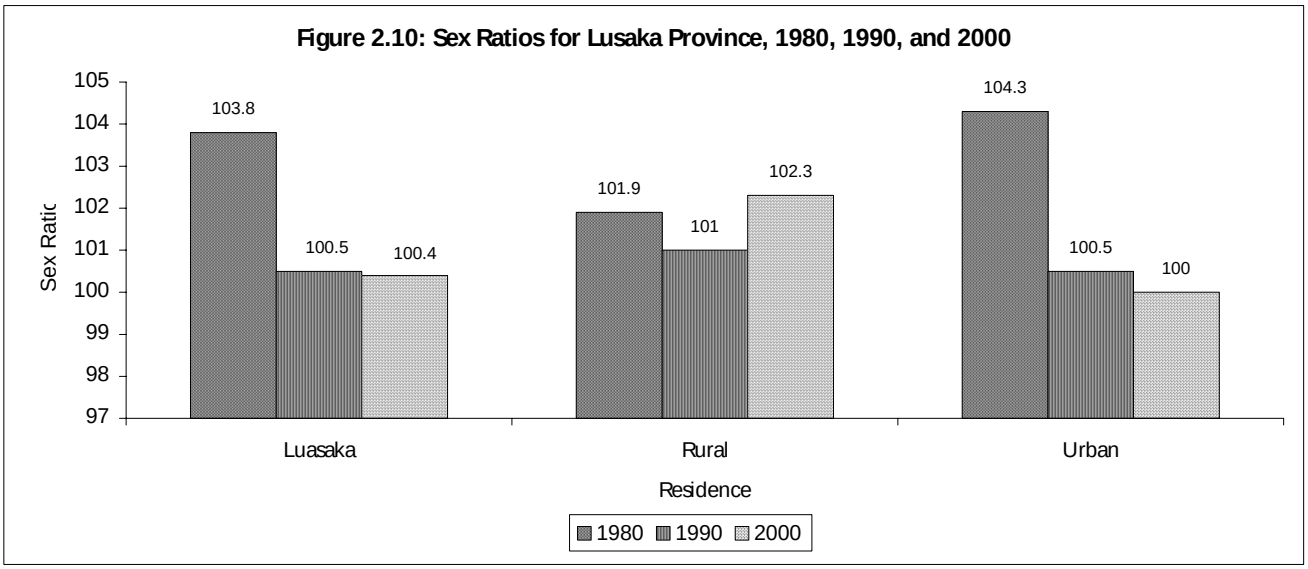
Source: CSO 2000 Census of Population and Housing

2.5.2 Sex-ratio

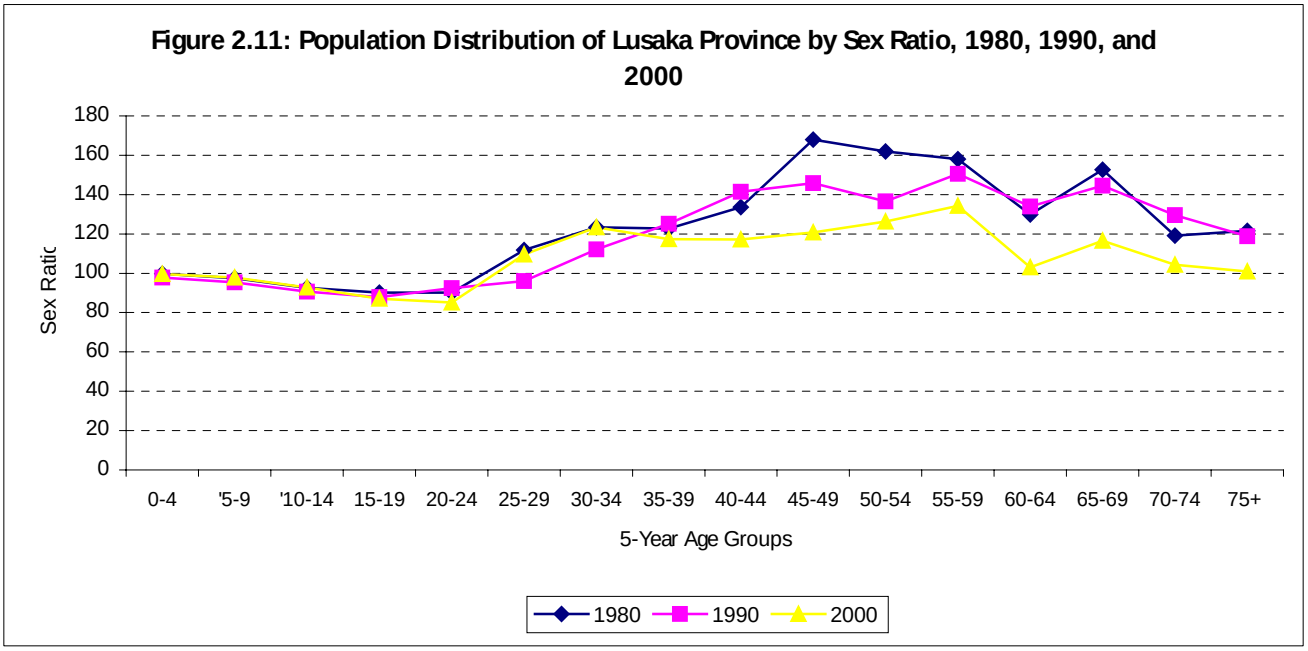
A sex-ratio is the number of males per 100 females. A sex-ratio of more than 100 shows an excess of males, a sex-ratio of less than 100 shows that there are more females than males and a sex-ratio of 100 indicates an equal number of males and females. The presence of errors of omission, age misreporting and migration may be detected by looking at the pattern of sex-ratios. 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.

The sex-ratios for Lusaka Province are given in Figures 2.10 and 2.11 and in Tables 2.3, 2.4, 2.5, and 2.6. Figure 2.10 shows that the sex-ratio for Lusaka Province declined from 103.8 in 1980 to 100.5 in 1990 and to 100.4

males per 100 females in 2000. Lusaka Province has changed from being an area of excess males in 1980 to an area of about 50/50 males and females in 1990 and 2000. In terms of residence, the sex-ratio in rural areas declined from 101.9 in 1980 to 101.0 in 1990 and later rose to 102.3 while in urban areas, the sex-ratio declined from 104.3 in 1980 to 100.5 in 1990 and later to 100.0 in 2000. The 2000 Census results indicate predominance of males over females in the rural areas and a 50/50 situation of males and females in urban areas. This could be attributed to out-migration of males. The pattern of sex-ratios cannot only be attributed to errors in the data. In this era of the HIV/AIDS pandemic, high mortality could also be a major factor affecting the sex-ratios. Sex-ratios are also influenced by sex selective migration.



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



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

An analysis of age-specific sex-ratios reveals a deficit of males in age groups 0-4, 5-9, 10-14, 15-19, 20-24 years in 1980, 1990, and 2000 (Figure 2.11 and Table 2.3). There are many possible factors responsible for this, including high male mortality especially in the younger ages and out-migration of economically active adult

males to other provinces or countries. A lower sex-ratio in the age group 0-4 and 5-9 may suggest under enumeration of children, since sex-ratio is supposed to be high at such age groups. The pattern of sex-ratio of 1980,1990 and 2000 may suggest an under enumeration of children since the sex-ratio for all the censuses are less than or about 100 at age group 0-4.

The sex-ratios are higher than 100 for age groups 25 years and above in 1980, 1990 and 2000. However, in 2000, the sex-ratios are less than 100 for persons aged 70 years and above (See Table 2.3 for more details).

Table 2.3: Sex-ratio by Residence, Lusaka Province, 1980, 1990 and 2000

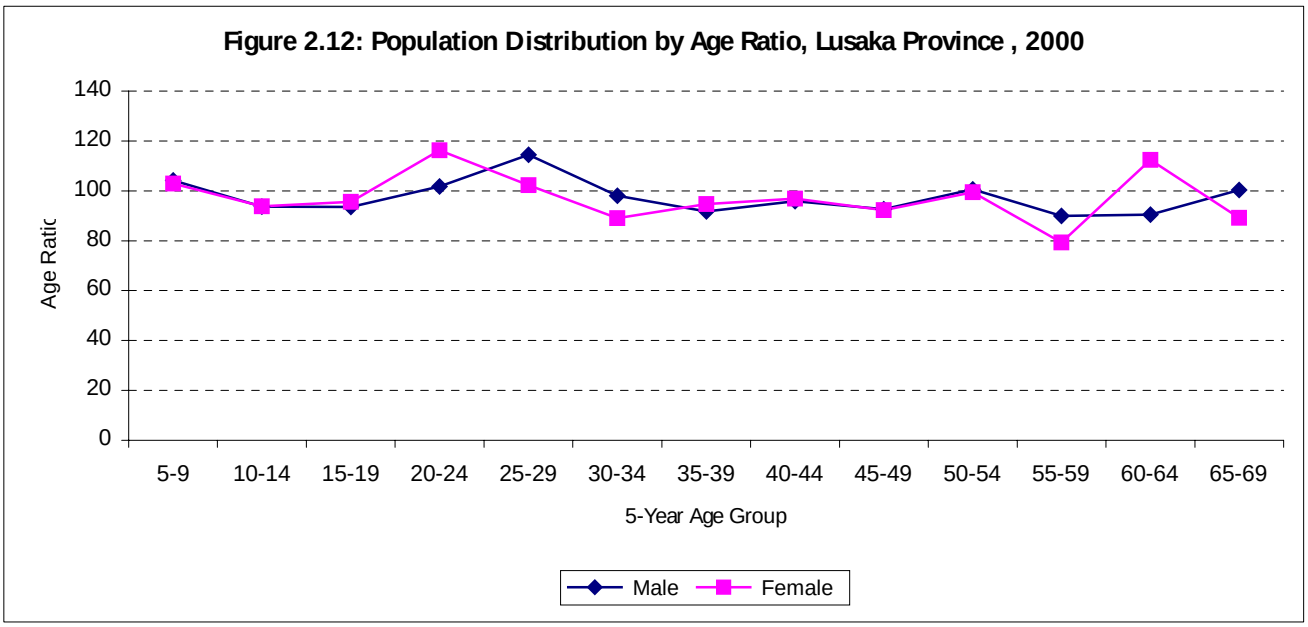
Age Group	1980			1990			2000		
Total	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
00-04	99.7	96.5	100.5	97.8	96.2	98.1	99.6	99.9	99.5
05-09	97.5	99.8	96.9	95.3	97.3	95.0	97.8	101.7	96.9
10-14	92.6	97.5	91.3	90.7	99.2	89.2	92.8	99.9	91.2
15-19	90.2	92.3	89.6	87.9	98.6	86.1	87.0	98.6	84.7
20-24	90.2	95.0	89.1	92.4	98.9	91.4	85.1	91.7	84.0
25-29	111.8	118.5	110.6	96.1	99.9	95.5	109.6	103.2	110.6
30-34	123.4	113.7	125.6	112.1	111.2	112.3	123.4	120.4	124.0
35-39	122.7	99.2	128.8	125.2	119.0	126.1	117.3	107.8	119.3
40-44	133.6	104.7	142.2	141.5	102.9	149.3	117.1	109.6	118.7
45-49	167.9	132.1	180.4	145.9	93.6	160.9	120.8	115.3	122.0
50-54	161.9	119.6	179.9	136.5	90.8	153.1	126.3	113.7	129.8
55-59	158.0	127.3	172.8	150.5	118.9	164.3	134.3	108.5	144.2
60-64	129.9	118.0	136.7	134.0	119.9	141.2	103.0	96.1	105.9
65-69	152.7	145.9	156.7	144.5	137.3	149.0	116.5	118.8	115.4
70-74	119.1	124.1	114.8	129.6	148.3	118.4	104.4	121.1	97.1
75+	121.6	122.1	120.8	118.8	124.3	115.0	100.9	105.0	87.6
Total	103.8	101.9	104.3	100.5	101.0	100.5	100.4	102.3	100.0

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). The quality of age data can also be evaluated by examining age-ratios. 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.

Information about age-ratios is presented in Figure 2.12 and Tables 2.4,2.5, 2.6. Results from the 1980 Census show that age groups with age-ratios less than 100 for males are 10-14, 15-19, 35-39, 40-44, 50-54, 55-59, 60-64, and 65-69 while for females, the age groups are 10-14, 15-19, 25-29, 30-34, 35-39, 45-49, 50-54, 55-59 and 65-69. In 1990, the age groups with ratios less than 100 for males are 5-9, 10-14, 25-29, 35-39, and 45-49, 50-54, 55-59, 60-64, and 65-69 while for females, the age groups 5-9, 10-14, 25-29, 35-39, 40-44, 45-49, 55-59, 60-64, and 65-69 show an age-ratio of less than 100. In 2000, the age groups with an age-ratio of less than 100 for males were 10-14, 15-19, 30-34, 35-39, 40-44, 45-49, 55-59, and 60-64. A similar pattern exists for females except for the age groups 60-64 and 65-69, (See Figure 2.13 and Tables 2.4, 2.5, and 2.6).



Source: CSO 2000 Census of Population and Housing

The substantial deviations of the age-ratios could be affected by age misreporting, digit preference, omission, migration or fluctuations in births and deaths. Results from Tables 2.4, 2.5, 2.6 and Figure 2.12 suggest that reporting of age is less satisfactory for females than males. This is shown by having a higher average age-ratio deviation for females than males

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

Age	Population		Age-ratio		Age-ratio deviation		Sex-ratio (males per 100 females)	Sex-ratio Difference
	Male	Female	Male	Female	Male	Female		
0-4	66,399	66,592					99.7	
5-9	59,478	61,006	109.4	108.6	9.4	8.6	97.5	-2.2
10-14	42,334	45,730	90.7	92.8	-9.3	-7.2	92.6	-4.9
15-19	33,870	37,568	88.7	90.1	-11.3	-9.9	90.2	-2.4
20-24	34,019	37,704	108.2	118.7	8.2	18.7	90.2	0.1
25-29	29,032	25,959	100.1	90.9	0.1	-9.1	111.8	21.6
30-34	23,987	19,433	102.9	96.5	2.9	-3.5	123.4	11.6
35-39	17,594	14,335	92.0	95.2	-8.0	-4.8	122.7	-0.7
40-44	14,261	10,676	99.1	101.7	-0.9	1.7	133.6	10.8
45-49	11,188	6,662	102.1	86.5	2.1	-13.5	167.9	34.4
50-54	7,650	4,727	95.5	97.2	-4.5	-2.8	161.9	-6.1
55-59	4,835	3,060	90.4	86.5	-9.6	-13.5	158.0	-3.9
60-64	3,052	2,349	90.3	108.7	-9.7	8.7	129.9	-28.1
65-69	1,926	1,262	93.6	77.8	-6.4	-22.2	152.7	22.8
70-74	1,062	892	N/A	N/A	0.0	0.0	119.1	-33.6
75+	1,331	1,094	N/A	N/A	N/A	N/A	121.6	N/A
Total	**352,018**	**339,049**			82.4*	124.2*	**103.8**	183.2*
Mean					6.3	9.6		13.1

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 13.1 + 6.3 + 9.6
= 55.1

The Age Accuracy Index reduced from 55.1 in 1980 to 40.9 in 1990 and rose to 41.4 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, 1990, and the 2000 age data were "highly inaccurate". (Refer to Tables 2.4,2.5 and 2.6 for details).

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

Age	Population		Age-ratio		Age-ratio deviation		Sex-ratio (males per 100 females)	Sex-ratio Difference
	Male	Female	Male	Female	Male	Female		
0-4	78,741	80,487					97.83	
5-9	69,916	73,336	98.57	97.75	-1.43	-2.25	95.34	-2.49
10-14	63,125	69,561	97.89	98.99	-2.11	-1.01	90.75	-4.59
15-19	59,056	67,201	101.32	105.48	1.32	5.48	87.88	-2.87
20-24	53,447	57,854	106.19	104.71	6.19	4.71	92.38	4.50
25-29	41,609	43,307	92.24	95.55	-7.76	-4.45	96.08	3.70
30-34	36,772	32,793	108.78	102.36	8.78	2.36	112.14	16.05
35-39	25,997	20,764	89.21	86.53	-10.79	-13.47	125.20	13.06
40-44	21,510	15,201	104.29	97.39	4.29	-2.61	141.50	16.30
45-49	15,253	10,453	93.18	89.23	-6.82	-10.77	145.92	4.42
50-54	11,228	8,229	99.12	107.07	-0.88	7.07	136.45	-9.47
55-59	7,403	4,919	93.42	84.24	-6.58	-15.76	150.51	14.06
60-64	4,621	3,448	89.54	99.39	-10.46	-0.61	134.00	-16.51
65-69	2,919	2,020	92.83	85.33	-7.17	-14.67	144.49	10.49
70-74	1,667	1,286	N/A	N/A	0.00	0.00	129.62	-14.87
75+	1,620	1,363	N/A	N/A	N/A	N/A	118.84	N/A
Total	494,884	492,222			74.7*	85.6	100.54	133.5
Mean					5.7	6.6		9.5

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 9.5 + 5.7 + 6.6
= 40.9

Table 2.6: Population by Five Year Age Group, Sex, Age-ratio and the Age-Sex Accuracy Index, Lusaka Province, 2000

Age	Population		Age-ratio		Age-ratio Deviation		Sex-ratio (Males per 100 Females)	Sex-ratio Difference
	Male	Female	Male	Female	Male	Female		
0-4	107,426	107,795					99.7	
5-9	96,719	98,921	104.2	102.9	4.2	2.9	97.8	-1.9
10-14	78,167	84,478	93.2	93.8	-6.8	-6.2	92.5	-5.2
15-19	70,968	81,123	93.7	95.5	-6.3	-4.5	87.5	-5.0
20-24	73,326	85,467	102.3	116.0	2.3	16.0	85.8	-1.7
25-29	72,411	66,258	115.1	103.4	15.1	3.4	109.3	23.5
30-34	52,443	42,652	96.7	87.8	-3.3	-12.2	123.0	13.7
35-39	36,047	30,847	91.2	93.9	-8.8	-6.1	116.9	-6.1
40-44	26,585	23,022	97.3	99.4	-2.7	-0.6	115.5	-1.4
45-49	18,626	15,459	91.9	90.3	-8.1	-9.7	120.5	5.0
50-54	13,961	11,207	101.4	100.9	1.4	0.9	124.6	4.1
55-59	8,924	6,757	89.1	79.0	-10.9	-21.0	132.1	7.5
60-64	6,061	5,897	91.4	111.8	-8.6	11.8	102.8	-29.3
65-69	4,340	3,794	100.4	90.3	0.4	-9.7	114.4	11.6
70-74	2,582	2,507	N/A	N/A	0.0	0.0	103.0	-11.4
75+	3,181	3,215	N/A	N/A	N/A	N/A	98.9	N/A
Total	671,767	669,399			78.9*	105.0*	100.4	127.4
Mean					6.1	8.1		9.1

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 9.1 + 6.1 + 8.1
= 41.1

2.5.4 Survival-ratios

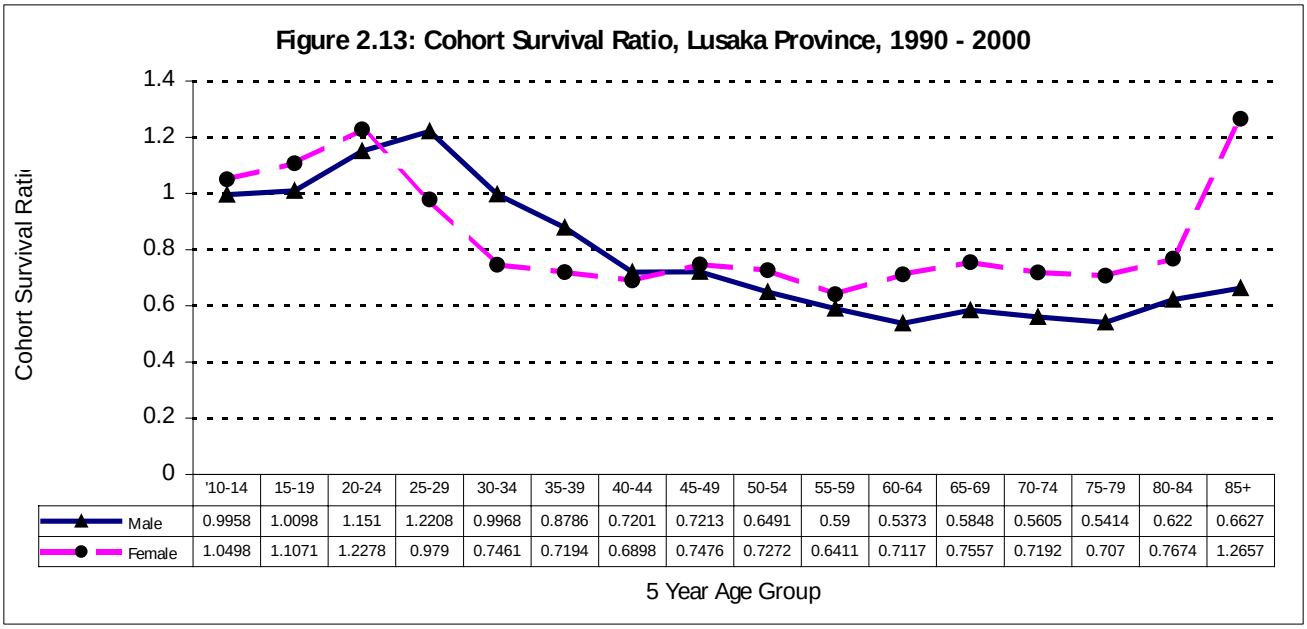
Survival-ratios represent the probability that individuals of the same birth cohort or group of cohorts will still be alive 10 years later. Evaluation of the quality of age and sex data from two censuses using the survival-

ratio method can be done only under certain assumptions; the population should be closed to migration, the influence of abnormal mortality through wars, disasters, and diseases 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 the 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 20-24 the male cohort survival-ratio is lower than in age groups 25-29, 30-34, 35-39, and 50+. The female cohort survival-ratio is higher than the male ones in the remaining age groups except at age group 45-49 where the cohort survival-ratios intersect (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. Mortality cannot also be ruled out especially with the HIV/AIDS pandemic in Zambia.

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

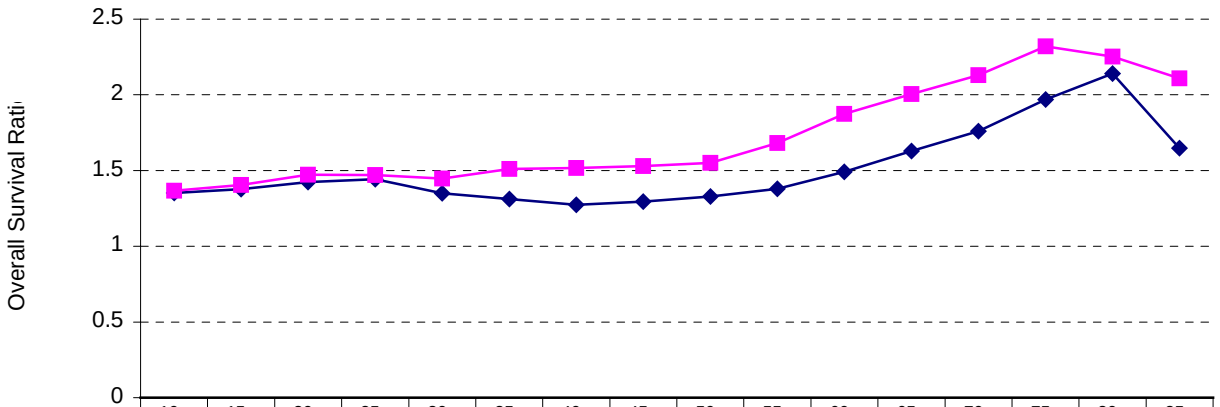


	'10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+
Male	0.9958	1.0098	1.151	1.2208	0.9968	0.8786	0.7201	0.7213	0.6491	0.59	0.5373	0.5848	0.5605	0.5414	0.622	0.6627
Female	1.0498	1.1071	1.2278	0.979	0.7461	0.7194	0.6898	0.7476	0.7272	0.6411	0.7117	0.7557	0.7192	0.707	0.7674	1.2657

Source: CSO 1990 and 2000 Censuses of Population and Housing

In the absence of abnormal mortality and migration, the overall survival-ratios are expected to decline continuously as we go up 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 the ages except that the overall survival-ratios do not show a steady decline as expected (see Figure 2.14). This could be an indication of high levels of maternal mortality in the reproductive age group (15-49) of women.

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



	10+	15+	20+	25+	30+	35+	40+	45+	50+	55+	60+	65+	70+	75+	80+	85+
Male	1.3515	1.3759	1.4235	1.4435	1.3503	1.3109	1.2736	1.294	1.3275	1.3793	1.4911	1.6292	1.7587	1.9696	2.1407	1.6475
Female	1.3662	1.4054	1.4711	1.4691	1.4475	1.511	1.5158	1.5291	1.5506	1.6814	1.8746	2.0049	2.1303	2.3209	2.2526	2.1087

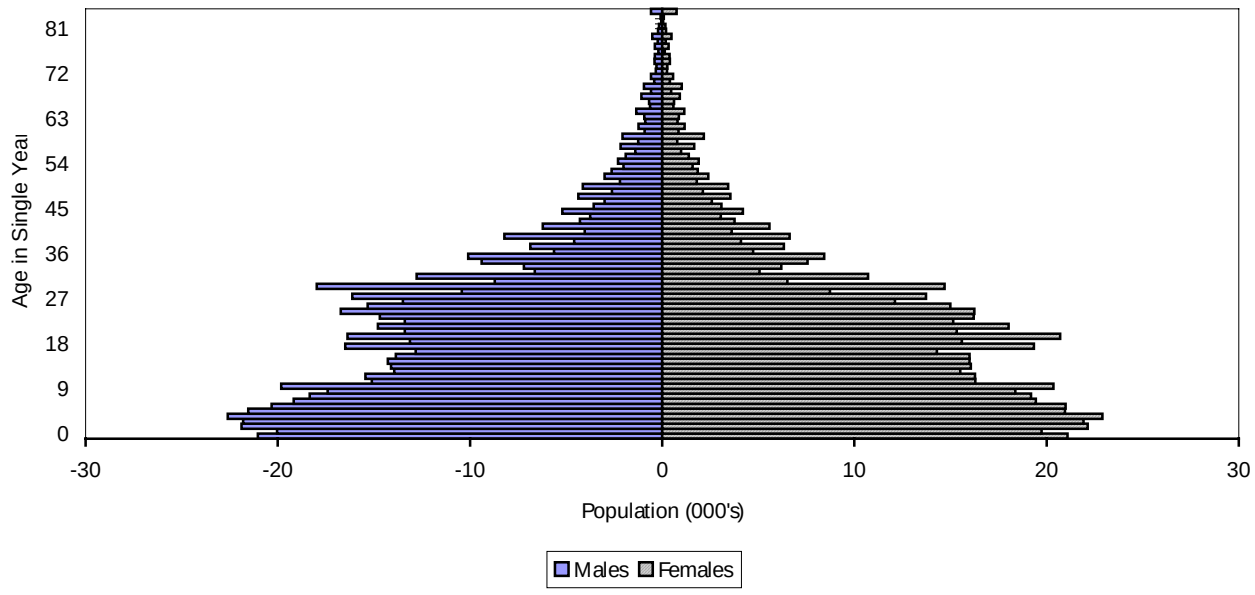
5-Year Age Group

Source: CSO 1990 and 2000 Censuses of Population and Housing

2.5.5 Population Pyramids

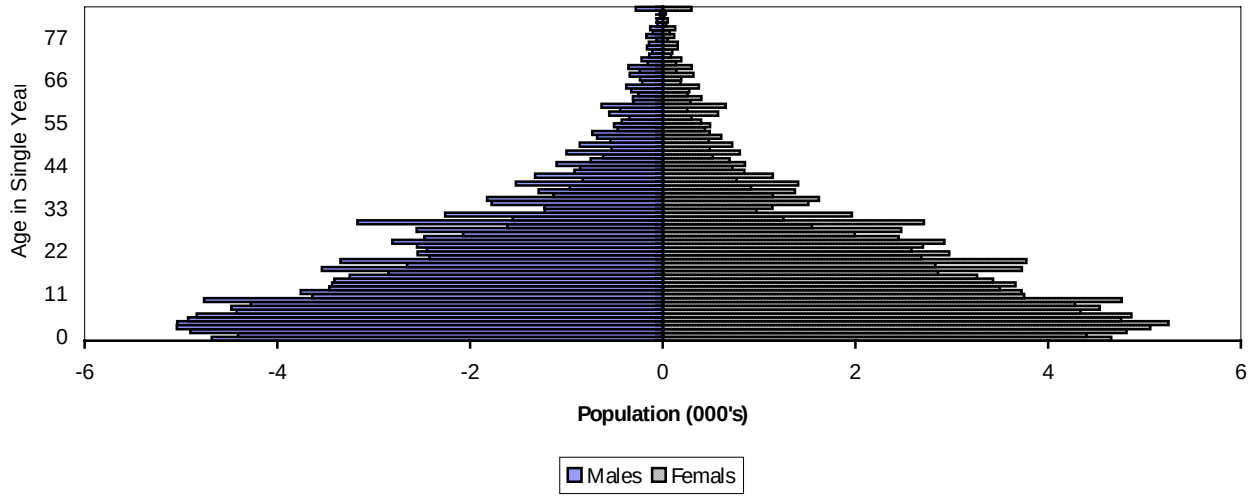
Another way of detecting irregularities in the reported age data of a survey or census is by looking at a Population Pyramid by single years of age. As already observed, when census age data are distributed in single years, one can easily spot out inaccuracies than when distributed in five-year age groups. If data are found to have a lot of inaccuracies, it is better to smooth the data. 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. Other factors could be attributed to the shapes of the pyramids for Lusaka Province which is largely urban including migration, fertility, and mortality (See Chapters 7 and 8, CSO: Migration and Urbanization 2000 Census Report, November 2003).

Figure 2.15: Graphical Population Distribution in Single Years by Sex, Lusaka Province, 2000



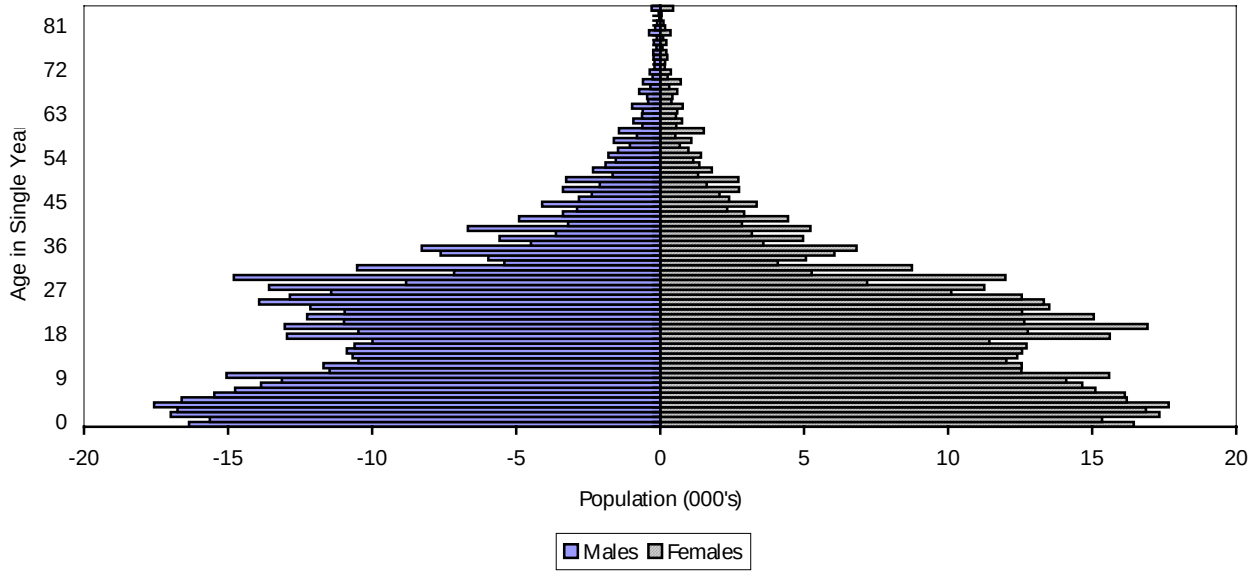
Source: CSO 2000 Census of Population and Housing

Figure 2.16: Graphical Population Distribution by Single Years and Sex, Lusaka Province Rural, 2000



Source: CSO 2000 Census of Population and Housing

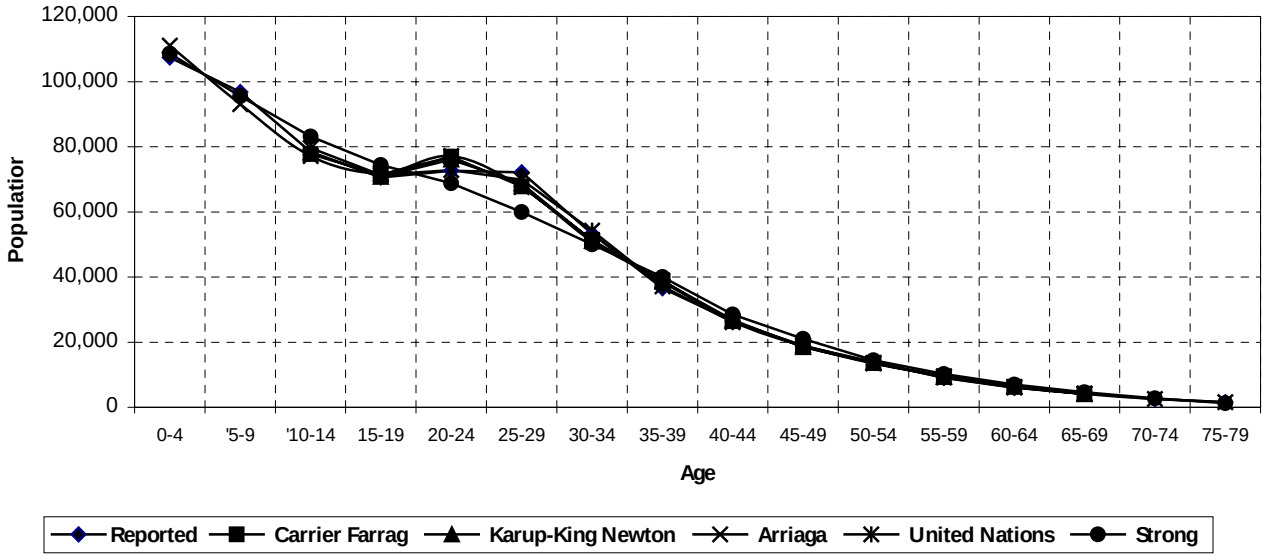
Figure 2.17: Graphical Population Distribution in Single Years by Sex, Lusaka Province Urban, 2000



Source: CSO 2000 Census of Population and Housing

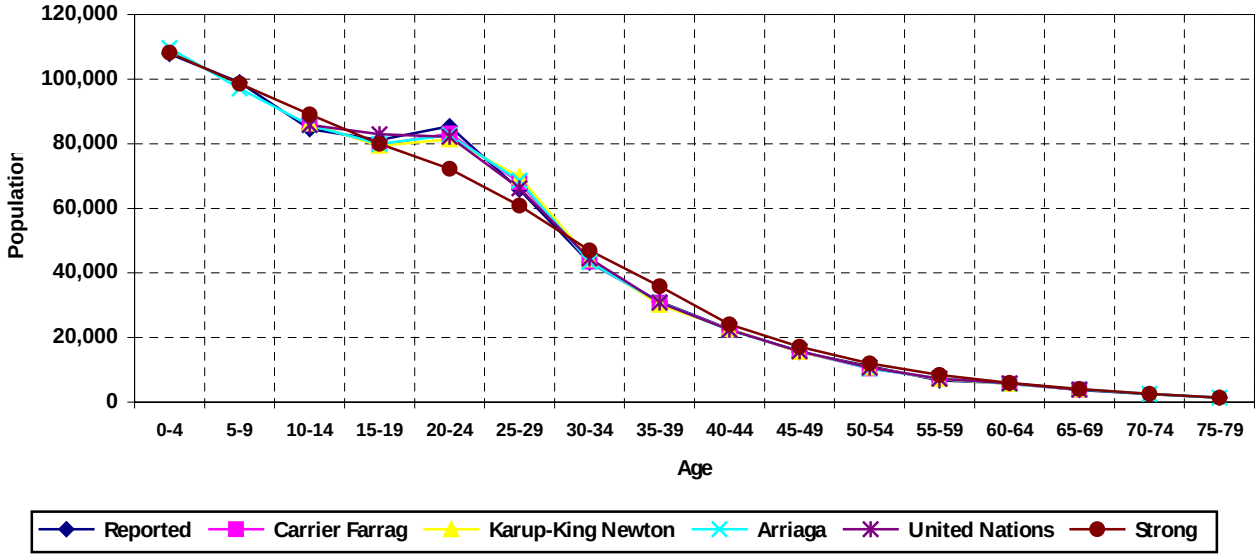
Smoothing the age data using selected techniques for light smoothing of the population (Edwardo E. Arriaga: November 1994, pages 11-42) shows that the irregularities in the structure are not severe, except at age groups 20-24 and 25-29, see Figures 2.18 and 2.19. The smoothing of data has been done using AGESMTH software program one of the Population Analysis Spreadsheet (PAS) programmes developed by the United Nations. Selected techniques for light smoothing of the population that have been used include Carrier Farrag, Karup-King Newton, Arriaga and United Nations. The strong smoothing technique has also been incorporated.

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



Source: CSO 2000 Censuses of Population and Housing

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



Source: CSO 2000 Censuses 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

In the evaluation of content and coverage errors, the notable observations made were that the pattern of Age Composition, Child-woman ratio and Dependency Ratio in 2000 are in line with the observed general declines in fertility, mortality and significant improvement of adult survivorship levels. Lusaka Province has a young population. Out of the total number of 1,341,166 persons in 2000, 42.8 percent were below the age of 15 and 55.8 percent were aged 15-64 while 1.5 percent were aged 65 years or older. Lusaka Province has about the same number of males and females and a sex-ratio of 100.4 males per 100 females was recorded in 2000. The low age specific sex-ratio of 99.6 in 2000 for those aged 0-4 suggests that there could have been an under-coverage of children. There was also digit preference during age reporting. The preferred digits were 0,2,5, and 8. Age heaping in the 2000 Census was also observed, just like in the two previous censuses. In spite of the age heaping, the 2000 age-sex data shows an improvement over the 1980 but about the same with the 1990 age-sex data as evidenced by the Age-Sex Accuracy Index of 55.1 in 1980 and 41 apiece in 1990 and 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 are 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 Concepts 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 refers to the usual household members present and visitors who spent the census night at any given household. This however excludes:

(c) Foreign diplomatic personnel accredited to Zambia; and

(d) 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 etc).

- **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, it 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).

- **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 therefore is 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.

- **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 de jure population for Lusaka Province is 1,391,329 of which 685,551 are females and 705,778 are males, indicating for the first time in Zambian censuses that males have outnumbered females (see Table 3.1a).

Table 3.1a: Population Size (De jure) and Percent Distribution by Sex and Residence, Lusaka 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
Lusaka	1,391329	100	705,778	50.7	685,551	49.3
Rural	258,327	100	132,391	51.2	125,936	48.8
Urban	1,133,002	100	573,387	50.6	559,615	49.4

Source: 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, political etc.) of individuals. The de jure population becomes important as far as the age sex distribution is concerned.

The defacto population for Lusaka Province however, presented in Table 3.1b is 1,341,167 of which 49.9 percent are females. The de facto count allows for detailed analysis of individuals because these are present at the time of count. 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, Lusaka 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
Lusaka	1,341,167	100	672,087	50.1	669,080	49.9
Rural	238,483	100	120,679	50.6	117,804	49.4
Urban	1,102,684	100	551,408	50.0	551,276	50.0

Source: 2000 Census of Population and Housing

The district population for Lusaka Province is displayed in Table 3.2. Lusaka District has the highest population of 1,084,703 followed by Kafue and Chongwe with a population of 148,403 and 131,125, respectively. The least population is found in Luangwa district (18,818). Amongst the districts, Lusaka continues to be the most urbanised, given that in comparison to others, it bears the highest number of urban population (1,084,703) in relation to the total provincial urban population of 1,138,460.

Table 3.2: Population Size by Sex, Residence and District, Lusaka Province, 2000

Province/ District	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total	1,391,329	705,778	685,551	252,869	129,695	123,174	1,138,460	576,083	562,377
Chongwe	137,461	70,211	67,250	132,237	67,604	64,633	5,224	2,607	2,617
Kafue	150,217	77,001	73,216	104,327	53,909	50,418	45,890	23,092	22,798
Luangwa	18,948	9,546	9,402	16,305	8,182	8,123	2,643	1,364	1,279
Lusaka	1,084,703	549,020	535,683	-	-	-	1,084,703	549,020	535,683

Source: 2000 Census of Population and Housing

Note: "-" denotes not applicable as Lusaka is a predominantly urban district.

The rate at which Lusaka Province has grown in between censuses of 1969, 1980, 1990 and 2000 is shown in Table 3.3. The Table also shows that the provincial population has grown from below a million (691,054) in 1980 to over a million in 2000. The province has in general experienced a drop in annual growth rate from 3.6 in 1980-90 to 3.4 in the last intercensal period. On average, the population of Lusaka province grew the most, at 6.3 percent, during the 1969-80 inter-censal period. Its annual population growth rate between 1990 and 2000 is higher than the national average of 2.4 percent, presenting a deviation of 1.0 percent. While the annual growth rate for rural areas increased by 3.9 percentage points that of urban areas dropped by 1.0 percent points (i.e. from 4.2 in 1980-90 to 3.2 in 1990-2000).

Table 3.3 Population Size and Annual Average Population Growth Rate, Lusaka Province, 1969-2000

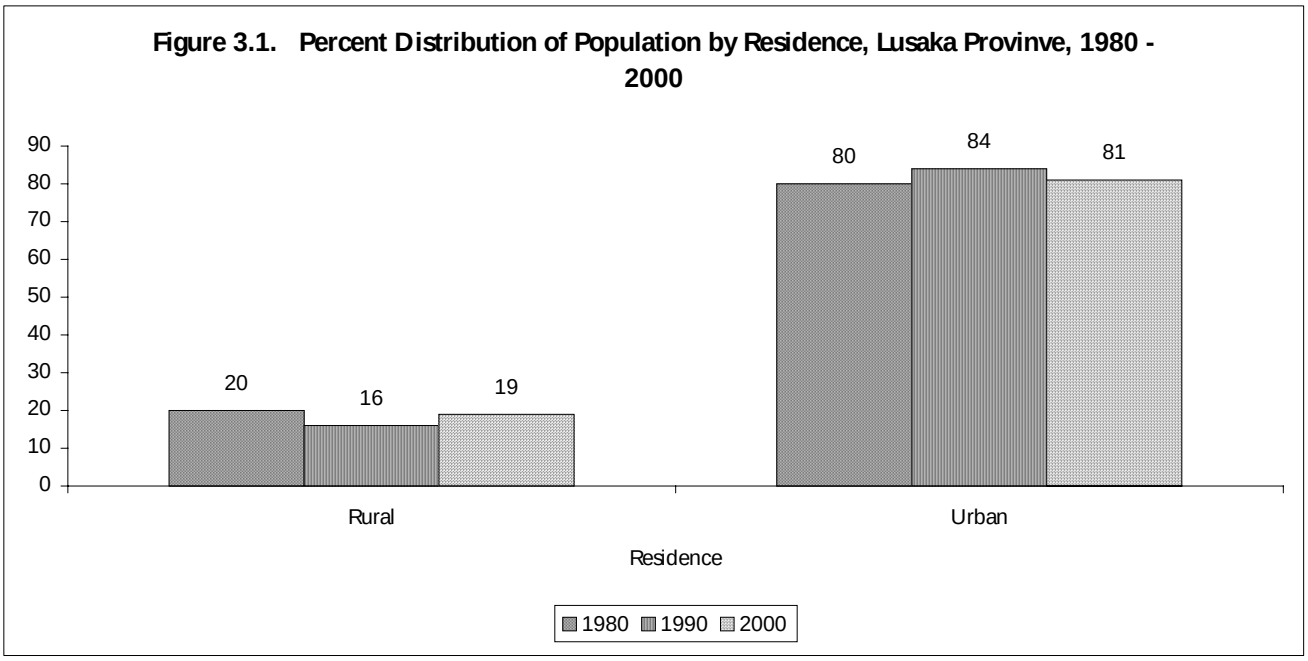
Residence	Population Size 1980	Annual Growth Rate 69-80	Population Size 1990	Annual Growth Rate 1980-1990	Population Size 2000	Annual Growth Rate 1990-2000
Zambia	5,661,801	3.1	7,759,117	2.7	9,885,591	2.5
Lusaka	691,054	6.3	991,226	3.6	1,391,329	3.2
Rural	139,687		167,213	1.2	258,327	5.1
Urban	551,367		824,013	4.2	1,133,002	3.2
DISTRICT						
Chongwe	-	-	95,738	-	137,461	3.7
Kafue	-	-	117,354	-	150,217	2.5
Luangwa	143,762	3.4	17,070	3.5	18948	1.1
Lusaka	535,830	18.4	761,064	3.7	1,084,703	3.6

Source: 2000 Census of Population and Housing
Note: "-" denotes not applicable as they refer to new districts.

At District level, Chongwe, Lusaka and Kafue exhibit growth rates of over 2 percent per year during the inter-censal period of 1990-2000. Notably, Luangwa grew the least during the same period, at a rate of 1.0 percent

3.4. Population Distribution and Density

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



Source: 2000 Census of Population and Housing

Figure 3.1 illustrates that about 1 in 5 person in Lusaka Province resides in rural areas. The proportion of rural population decreased slightly from 20 percent in 1980 to 16 percent in 1990 and then increased to 19 percent in 2000. This implies an urban-rural migration trend, which is also apparent in Copperbelt, another urbanized province of Zambia. 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 Census Migration Report.

Table 3.4: Population Distributions by District, Lusaka Province, 1990 and 2000

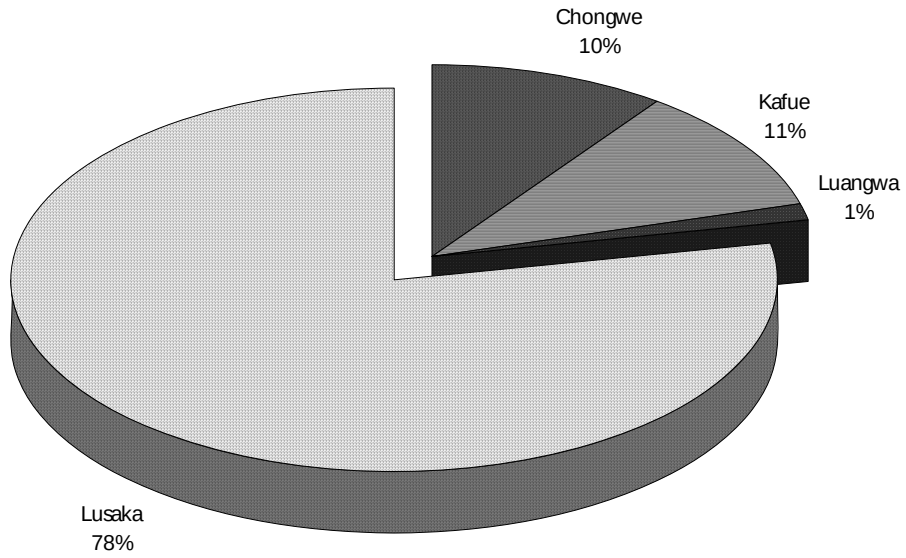
Residence	1980		1990		2000	
	Number	Percent	Number	Percent	Number	Percent
Lusaka Total	691054	100	987,106	100	1,391,329	100
Chongwe	-	-	-	-	137,461	9.9

Kafue	-	-	-	-	150,217	10.8
Luangwa	143,762	20.8	16,246	1.6	18,948	1.4
Lusaka	535,830	77.5	769,353	77.9	1,084,703	78.0

Source: 1990 and 2000 Census of Population and Housing
Note: "-" denotes not applicable as they refer to new districts.

The percent distribution of district population from 1980-2000 is shown in Table 3.4 and further illustrated for 2000 is in Figure 3.2. Lusaka District had the largest share of the population in Lusaka Province, followed by Kafue District with 78 percent and 10.8 percent, respectively (see also Figure 3.2). Population size for Luangwa District reduced over the ten-year period from 1.6 in 1990 to 1.4 in 2000.

Figure 3.2: Population Distribution by District, Lusaka Province, 2000



Source: 2000 Census of Population and Housing

3.4.1 Population Density

Table 3.5 shows the land area and population density for Lusaka Province from 1969 to 2000. Generally, with an increasing population in the past decades, the provincial population density has also been increasing, from 16.2 in 1969 to 31.6 and 45.1 in 1980 and 1990, respectively. In 2000, 63.5 persons per square kilometer were recorded for Lusaka province. The population density for Lusaka Province in 2000 is significantly higher than the national population density of 13.1 persons per square kilometer.

Table 3.5: Area and (de Jure) Population Density by District and Population Census Year, Lusaka Province, 1969-2000

Residence	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
Lusaka Province Total	21,896	16.2	31.6	45.1	63.5
Districts					
Chongwe	8,669	-	-	-	15.9
Kafue	9,396	-	-	-	16.0
Luangwa	3,471	2.3	3.3	4.7	5.5
Lusaka	360	729.0	1448.4	2137.1	3013.1

Source: 2000 Census of Population and Housing
Note: "-" denotes not applicable as they refer to new districts.

With the smallest land area of 360 square kilometer, Lusaka has maintained the highest population density of 729 (1969), doubled to 1488.1 in1980. It further increased to 2,137in 1990 and 3,013 persons per square

kilometer in 2000. While Lusaka's density has increased tremendously, those of other districts display slight increases in population.

3.5 Population Composition

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

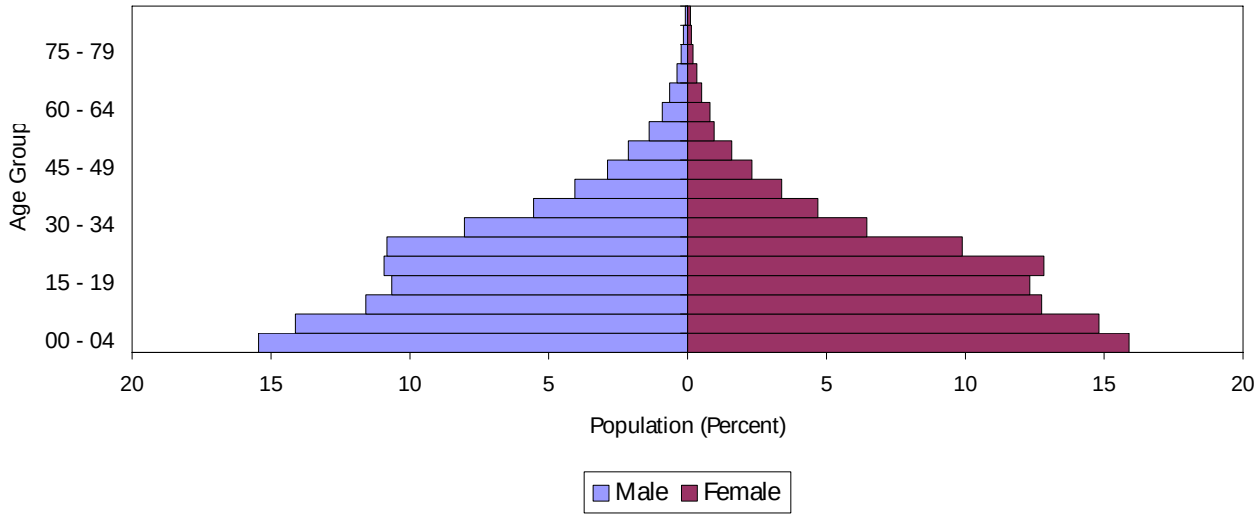
3.5.1 Age and Sex Composition

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.

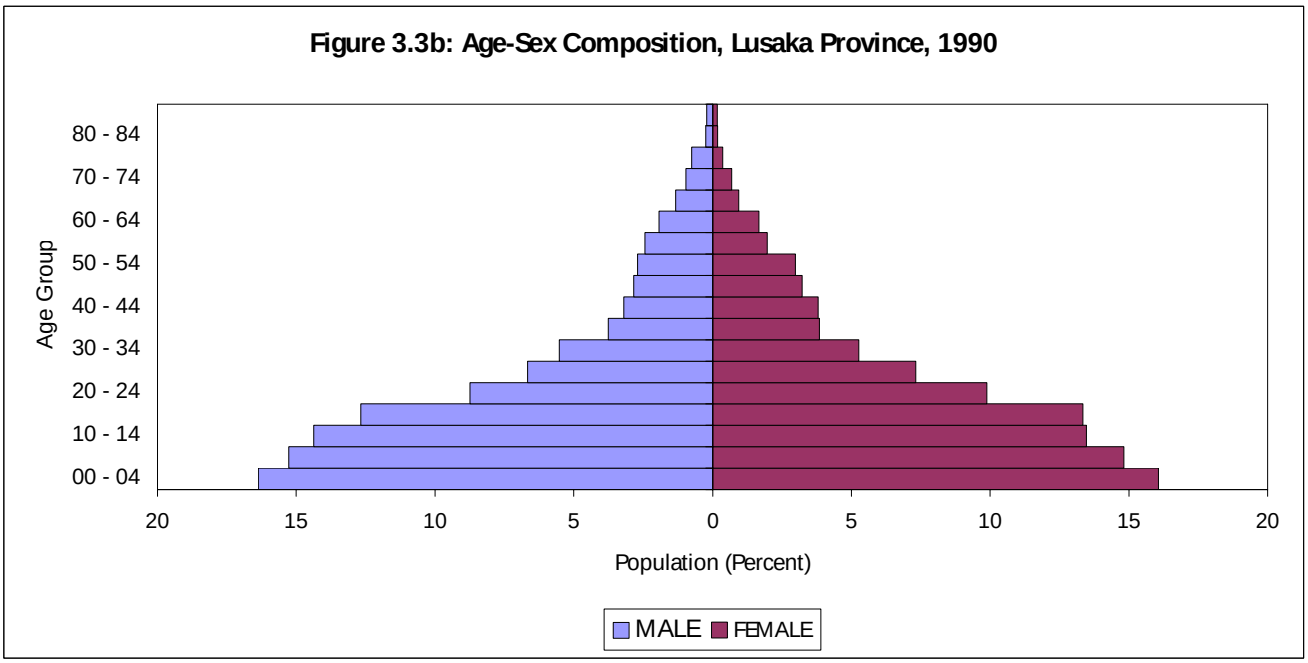
The age and sex structure of population in Lusaka Province is illustrated in proportion by way of population pyramids for 1990 and 2000 in Figure 3.3a and 3.3b. Population pyramids are useful in describing the population by age and sex pictorially. Another important feature of population pyramids is their strength in illustrating whether a population is 'young' or 'old'. Similar to the national pattern, Lusaka Province continues to exhibit a Young population given that it bears 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 1990 population pyramid (Figure 3.3b) has a smoother appearance although it had a bump or near- funnel look at age groups 10-14 up to 25-29, than that of 2000. The pyramid for 2000 shows that some younger age groups have lower populations than some older age groups. This could be attributed to net in-migration during the 1990-2000 period.

Figure 3.3a: Age-Sex Composition, Lusaka Province 2000



Source: 2000 Census of Population and Housing



Source: 2000 Census of Population and Housing

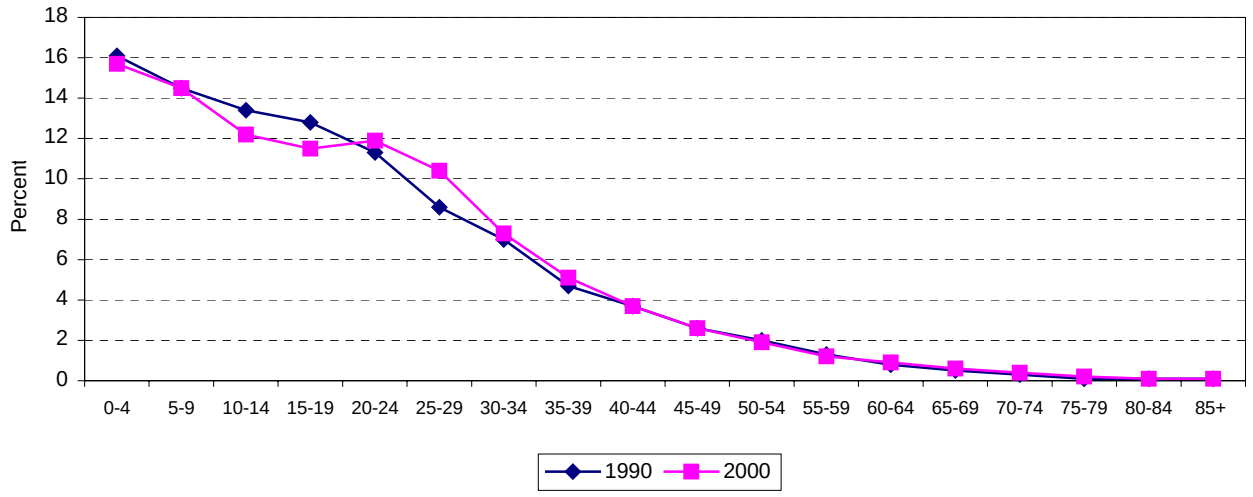
The age-sex population distribution for Lusaka Province, including the rural and urban areas is shown in Table 3.6. In 2000, children (0-14 years) constituted 42.4 percent of the total population in Lusaka Province, which is a 1.6 percentage point decrease from 44.0 recorded in 1990. Similarly, rural and urban populations mostly comprise the child population, with the rural proportion being higher by 4.1 percent (45.6 vs. 41.5 percent). The proportion of the population declines with increasing age, with less than 1 percent of persons being 80 years and older. The broad base of the population pyramid has an impact on growth given the potential that lies in the huge proportion of young persons as they enter reproductive ages of 15 years and above.

Table 3.6: Age-Sex Distribution of Population by Residence (Percent), Lusaka Province, 2000

Age Group	Lusaka			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
0-4	15.7	15.4	15.9	16.6	16.3	17.0	15.4	15.3	15.6
5-9	14.5	14.1	14.8	15.8	15.5	16.0	14.2	13.8	14.6
10-14	12.2	11.6	12.7	13.2	12.9	13.6	11.9	11.3	12.6
15-19	11.5	10.7	12.3	11.2	11.0	11.5	11.5	10.6	12.5
20-24	11.9	10.9	12.8	10.0	9.5	10.4	12.3	11.2	13.4
25-29	10.4	10.8	9.9	8.2	8.3	8.1	10.9	11.4	10.3
30-34	7.3	8.0	6.5	6.1	6.6	5.6	7.5	8.4	6.7
35-39	5.1	5.5	4.7	4.8	4.9	4.6	5.2	5.7	4.7
40-44	3.7	4.1	3.4	3.6	3.8	3.4	3.8	4.1	3.4
45-49	2.6	2.9	2.3	2.6	2.8	2.4	2.6	2.9	2.3
50-54	1.9	2.1	1.6	2.2	2.4	2.0	1.8	2.1	1.5
55-59	1.2	1.4	1.0	1.7	1.8	1.6	1.1	1.3	0.8
60-64	0.9	0.9	0.8	1.4	1.4	1.4	0.7	0.8	0.7
65-69	0.6	0.6	0.5	1.0	1.2	0.9	0.5	0.5	0.4
70-74	0.4	0.4	0.3	0.7	0.8	0.6	0.3	0.3	0.3
75-79	0.2	0.2	0.2	0.5	0.5	0.4	0.2	0.2	0.2
80-84	0.1	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1
85+	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1
Total Percent	100	100	100	100	100	100	100	100	100
Total Pop	1,391,329	705,778	685,551	258,327	132,391	125,936	1,133,002	573,387	559,615

Source: 2000 Census of Population and Housing

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



Source: 1990 and 2000 Census of Population and Housing

3.5.2 Age Dependency Ratio

Table 3.7 shows that the overall dependency ratio for Lusaka Province in 2000 was 79.3 per 100 persons in the working age group. Its overall dependency ratio is lower than the national ratio of 96 .7 per 100 persons It is apparent from the table that dependency on the working age population substantially decreased during the 1990s. For instance, *overall* and *child* dependency ratios decreased by almost 3 persons from 82.4 and 80.4 dependants per 100, working age persons, respectively in 1990 to 79.3 and 76.7 dependants in 2000.

It is also observed that persons in productive ages who reside in rural areas continue to bear a heavy burden of dependants compared to their urban counterparts, whose dependency between 1990 and 2000 has decreased. Table 3.7 shows that there were 75.8 dependants per 100 persons in urban areas and that there were 97.5 dependants for every 100 persons in rural areas.

Table 3.7 Age Dependency Ratio by Residence and District, Lusaka Province, 1990 and 2000

Residence	Ratio	1990	2000
Zambia	Overall Dependency Ratio	95.1	96.9
	Child Dependency Ratio	87.2	90.9
	Aged Dependency Ratio	5.0	5.4
Lusaka Total	Overall Dependency Ratio	82.4	79.3
	Child Dependency Ratio	80.4	76.7
	Aged Dependency Ratio	2.0	2.6
Rural	Overall Dependency Ratio	93.4	97.5
	Child Dependency Ratio	88.1	92.3
	Aged Dependency Ratio	5.3	5.2
Urban	Overall Dependency Ratio	80.5	75.8
	Child Dependency Ratios	1.4	73.7
	Aged Dependency Ratio	1.4	2.1
Chongwe	Overall Dependency Ratio	-	104.1
	Child Dependency Ratio	-	98.1
	Aged Dependency Ratio	-	6.0
Kafue	Overall Dependency Ratio	-	87.3
	Child Dependency Ratio	-	84.0
	Aged Dependency Ratio	-	3.3
Luangwa	Overall Dependency Ratio	103.2	111.6
	Child Dependency Ratio	94.7	103.7
	Aged Dependency Ratio	8.5	7.9
Lusaka	Overall Dependency Ratio	93.4	75.4
	Child Dependency Ratio	88.1	73.3
	Aged Dependency Ratio	5.3	2.1

Source: 1990 and 2000 Census of Population and Housing

Note: "-" denotes not applicable as they refer to new districts.

Table 3.7 further shows that between 1990 and 2000 census periods, dependency ratios of all types (overall and child) have increased for Luangwa district and have decreased for Lusaka, which makes up most of the provincial urban population.

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 Zambia, Lusaka province has less female-headed households than that of the national level of one in five households. With a high urban provincial population, there are more than four times as many heads of household in urban (225,351) than rural areas (46,743). 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)

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

Residence/ Marital Status	Number of Household Heads	Total Percentage of Household heads	Sex of Head	
			Male	Female
Residence				
Zambia	1,884,741	100	81.1	18.9
Lusaka	272,094	100	83.7	16.3
Rural	46,743	100	84.0	16.0
Urban	225,351	100	83.6	16.4
Marital Status				
Married	200,362	100	95.7	4.3
Separated	6,887	100	46.9	53.1
Divorced	12,342	100	36.4	63.6
Widowed	25,901	100	21.0	79.0
Never Married	25,824	100	85.8	14.2
Living together/Cohabiting	778	100	67.0	33.0
District				
Chongwe	23,786	100	83.1	16.9
Kafue	29,311	100	85.3	14.7
Luangwa	3,681	100	77.6	22.4
Lusaka	215,316	100	83.6	16.4

Source: 2000 Census of Population and Housing

Table 3.8 further shows that headship of household for a female is more likely to occur when they are separated (53 percent), divorced (64 percent) and widowed (79 percent). However, the majority of the married and never married heads of households are males. Amongst the districts, Luangwa exhibits the highest proportion of female heads of households with 22 percent, while Kafue has the least at 15 percent.

3.5.4 Marital Status

The marital status categories 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, sex, residence and district. The majority of young males and females in the young age group 15-19 years have never married. However, slightly below a quarter of the females (23 percent) compared to 3 percent of males are married.

Table 3.9 Percent Distribution of Population 12 years and above by Age, Sex and Marital Status, Lusaka Province, 2000

Age Group	Married		Separated		Divorced		Widowed		Never Married		Cohabiting		Total Number of Cases	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
12-14	0.7	0.9	0.0	0.1	0.0	0.0	0.1	0.1	98.9	98.6	0.2	0.3	43120	47557
15 - 19	2.7	23	0.1	1.1	0.2	0.9	0.1	0.3	96.6	88.5	0.3	0.8	70140	80435
20 - 24	22.0	67.6	1.1	3.1	0.8	3.5	0.3	1.6	75.1	40.9	0.6	0.8	72418	85158
25 - 29	55.6	63.9	1.8	2.9	2	4.6	1	3.8	39.1	16.1	0.6	0.4	71460	65450
30 - 34	76.4	59.7	1.9	2.7	2.8	4.9	1.8	6.7	16.7	6.8	0.4	0.3	52821	42780
35 - 39	83.3	62.3	2.0	2.8	2.9	5.4	2.5	10.3	9.0	4.2	0.3	0.2	36169	30803
40 - 44	87.0	59.1	1.8	2.4	3.4	6.6	3.5	14.8	4.2	2.4	0.2	0.2	26102	22340
45 - 49	87.0	54.1	2.0	2.5	3	6.5	4.5	17.4	3.3	2.2	0.1	0.1	18455	15291
50 - 54	87.8	45	2.1	2.2	3.2	6.5	5	24.5	1.9	1.2	0.1	0.1	13658	10859
55+	81.5	34.3	2.0	1.8	4.3	6.4	10.4	44.0	1.8	1.1	0.1	0.1	24514	21486
Total Population	**199,158**	**205,141**	**5,542**	**9,397**	**7,591**	**16,391**	**7,852**	**32,622**	**207,172**	**156,710**	**1,542**	**1,898**	**428,857**	**422,159**

Source: 2000 Census of Population and Housing

It is common practice for males to marry later than females. [Females present higher rates of those separated, divorced and widowed than their male counterparts. This could be due to another common practice; that of males re-marrying more frequently than females.] Though not collected in 2000 census, the reported average age at marriage for Lusaka Province in 1990 was 27 years for males and 22 years for females (CSO, 1995). Age at marriage is usually associated with levels of fertility (see Fertility Chapter). Table 3.9 also shows that about 2 in 3 females in their early 20s are married compared to about 1 in 4 males of the same age.

3.5.5 Ethnicity and Citizenship

Table 3.10 shows the ethnic composition of the population in Lusaka Province by rural and urban. 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 Lusaka Province mostly constitutes persons of African origin, with 98.9 percent. The American, Asian, European and 'Other' ethnic groups make up the remaining 1.1 percent. This ethnic composition, dominated by Africans, is similar to that of 1990 Population census, with slight variations in proportions. In 1990, the proportion of Africans was 97.7 percent.

Rural and urban comparison shows a higher presence of non-African ethnic groups in urban areas, where Asians are significantly dominant (0.7 percent). The table further shows that there are more males than females of non-African origin.

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

Residence/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**	**100.0**
Total	Male	664,337	209	3,966	1,193	2,382	672,087
	Female	662,123	163	3,554	953	2,287	669,080
	Both Sexes	1,326,460	372	7,520	2,146	4,669	1,341,167
Percentage of total population		**98.9**	**0.03**	**0.6**	**0.2**	**0.3**	**100.0**
Rural	Male	119,646	16	133	184	700	120,679
	Female	116,841	12	112	166	673	117,804
	Both sexes	236,487	28	245	350	1,373	238,483
Percentage of total population		**99.2**	**0.01**	**0.1**	**0.1**	**0.6**	**100.0**
Urban	Male	544,691	193	3,833	1,009	1,682	551,408
	Female	545,282	151	3,442	787	1,614	551,276
	Both sexes	1,089,973	344	7,275	1,796	3,296	1,102,684
Percentage of total population		**98.8**	**0.03**	**0.7**	**0.2**	**0.3**	**100.0**

Source: 2000 Census of Population and Housing

3.5.5.2 Citizenship

Like past censuses, the 2000 Population census included questions on citizenship. In Zambia, data on citizenship is collected for purposes of classification of members of its population either as citizens or foreigners.

Table 3.11 presents information on the citizenship of the population in Lusaka Province. It is most apparent that the majority of foreign citizens in the province hail from Zaire (20 percent), followed by those from Zimbabwe (17.1 percent) and India (14.5 percent. In the 1990 Census, Zimbabweans formd the highest proportion (20.4 percent) of foreigners in Lusaka Province. This shows an actual decrease in the number of foreign citizens from Zimbabwe between 1990 and 2000. The influx of foreigners from Zaire could be mostly attributed to refugees fleeing from war and civil strife in these countries as well as for economic reasons.

Table 3.11: Foreign Population of Lusaka by Citizenship, 1990 and 2000

Country/Region	Percent 1990	Population 2000	Percent 2000
Zimbabwe	20.4	2,528	17.1
Malawi	9.8	867	5.9
Botswana	0.2	22	0.2
Mozambique	4	123	0.8
Angola		96	0.7
Namibia (SW Africa)		15	0.1
South Africa		586	4.0
Other Southern Africa	6.7	33	0.2
Ghana		69	0.5
Mali		89	0.6
Nigeria		83	0.6
Senegal		32	0.2
Other Western Africa	2.7	143	1.0
Kenya		144	1.0
Tanzania	5.6	-	
Uganda		187	1.3
Other Eastern Africa	3.2	1,091	7.4
Congo		633	4.3
Zaire (Congo DR)	6.1	3,001	20.3
Other Central Africa		35	0.2
Egypt		51	0.3
Other Northern Africa	1.3	39	0.3
Other African Countries		12	0.1
United Kingdom	4.2	453	3.1
France		30	0.2
Germany (East and West)		52	0.4
Other Europe	3.4	576	3.9
United States Of America		191	1.3
Canada		51	0.3
Other Americas	1	51	0.3
Australia		20	0.1
China		107	0.7
India		2,152	14.5
Japan		81	0.6
Other Asia & Oceania	7.9	496	3.6
Not Stated	23.5	677	4.6
Total Percent	100		100
Total foreign Citizens	27,282	14,816	
Foreign Population (Percent)	2.8		1.1

Source: 1990 and 2000 Census of Population and Housing

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

3.6 Economic Characteristics

Data on economic characteristics of Lusaka Province 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 shows a summary of economic characteristics.

Out of the total population in Lusaka Province, 858,688 comprise those over 12 years, commonly referred to as the *working age population*. Majority of these are found in urban than rural areas (144,651 vs. 714,037) and are mostly male. Of the total working age population in the province, about 1 in 2 are economically active or make up the labour force (47.1).

Table 3.12 Summary of Economic Characteristics, Lusaka Province, 2000

Characteristics	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total Population (12 yrs and above)	858,688	433,009	425,679	144,651	73,606	71,045	714,037	359,403	354,634
Current Labour Force Size	404,672	280,315	124,357	67,849	46,720	21,129	336,823	233,595	103,228
Current Participation Rate	47.1	64.7	29.2	46.9	63.5	29.7	47.2	65	29.1
Overall Dependency Ratio	79.3	77.1	81.6	97.5	96.5	98.6	75.8	73.4	78.3
Economic Dependency Ratio	112	54	242	113	57	236	112	54	244

Source: 2000 Census of Population and Housing

Generally, as already noted age dependency is higher for persons in rural than urban areas. However, the reverse is true for economic dependency ratios. 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 not significantly different from those in rural areas (244 vs. 236)

3.7 Summary

Lusaka Province's de jure or *resident* population recorded in 2000 census is 1,391,329. However, the de facto population adopted for analytical purposes in this chapter and the rest of the report is 1,341,167 of which 49.9 percent are females. The population has continued to grow from 6.3 percent during the 70s to a declining average annual population growth rate of 3.6 percent in the 80s and 3.4 percent during the last inter-censal period of 1990-2000. It is apparent that the increase in rural population obtaining in the past decades has continued, whilst the proportion of the urban population has declined from 4.2 percent in 1990 to 3.2 percent in 2000.

Analysis of the age-sex distribution indicates that Lusaka Province has overtime maintained a young population. The proportion of those below the age of 15 years has decreased from 44.0 (1990) to 42.4 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 population gaps for adults in the 20s and 30s (as of 2000) who are apparently more susceptible to terminal illnesses (e.g. AIDS).

Some economic characteristics of the population show that the overall dependency ratio as of 2000 Census was 79.3 per 100 persons in the economically active group (15-64 years). It is apparent that dependency on those with economically productive abilities during the 1980s rose during the 1990s. In addition, the chapter reveals that as of 2000 unlike urban counterparts, economically active persons in rural areas have a bigger challenge of providing for those who are economically inactive.

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 several dialects exist. Although these languages are taught in schools in some 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 of communication. The former referred to the language a person uses most frequently in their day-to-day communication. The second language of communication is the next frequently used language for communication. The matter of second language shows the phenomenon of trans-tribe of some languages in that they are spoken by other tribes.

guages presented in this chapter 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 Nyanja and have become increasingly so. Fourthly, there are some languages that are slowly becoming extinct. For example, when a person says they are Chishinga, Tabwa, they will say their mother tongue is Bemba. Fifthly, languages are presented in this chapter by sex. 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.

4.2 Predominant Language of Communication

.1. Provincial Distribution

le 4.1 and Figure 4.1 show the 15 most spoken languages in Lusaka. The predominant language of communication in Lusaka in the year 2000 was Nyanja with 52.8 percent of the population using it.

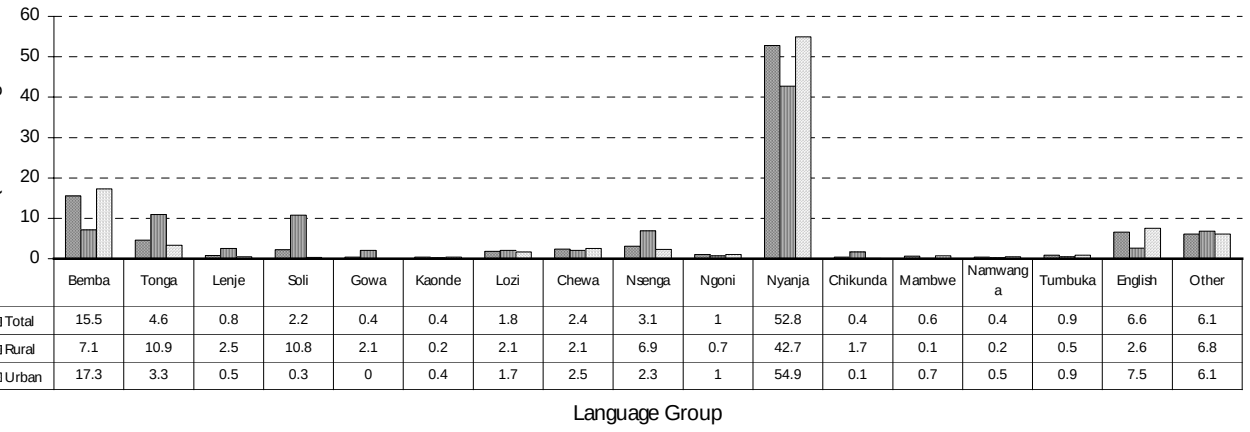
ble 4.1: Predominant Language of Communication by Residence, Lusaka Province, 2000

Predominant Language of Communication	Total	Rural	Urban
Bemba	15.5	7.1	17.3
Tonga	4.6	10.9	3.3
Lenje	0.8	2.5	0.5
Soli	2.2	10.8	0.3
Gowa	0.4	2.1	0
Kaonde	0.4	0.2	0.4
Lozi	1.8	2.1	1.7
Chewa	2.4	2.1	2.5
Nsenga	3.1	6.9	2.3
Ngoni	1	0.7	1
Nyanja	52.8	42.7	54.9
Chikunda	0.4	1.7	0.1
Mambwe	0.6	0.1	0.7
Namwanga	0.4	0.2	0.5
Tumbuka	0.9	0.5	0.9
English	6.6	2.6	7.5
Other Language	6.1	6.8	6.1
Total	100	100	100
Population	1,259,258	222,833	1,036,425

rce: 2000 Census of Population and Housing

In descending order of magnitude the first seven widely spoken languages in Lusaka Province are, Nyanja (52.8 percent), Bemba (15.5 percent), English (6.6 percent), Tonga (4.6 percent). Others are: Nsenga (3.1 percent), Chewa (2.4 percent), Soli (2.2 percent). These 7 languages are spoken by 87.2 percent of the population as compared with 82.3 percent of the population speaking the same languages in 1990; the remaining languages are each spoken by less than 2.0 percent of the population. See Table 4.1 and Figure 4.1 for details.

Figure 4.1: Predominant Language of Communication by Residence, Lusaka Province, 2000



Source: 2000 Census of Population and Housing

4.2.2 District Distribution

At district level, Nyanja is spoken by a large proportion of the population in three districts, Chongwe (50.6), Kafue (40.5) and Lusaka (55.2), while in Luangwa District it is second (19.7 percent) after Nsenga (50.7 percent). In the same district, 19.7 percent of the people speak Chikunda as their predominant language of communication. Soli is used as a predominant language of communication mostly in Chongwe District (18.7 percent), while Tonga is used mostly in Kafue District (16.1 percent). Bemba is more spoken in Lusaka (17.3 percent) and Kafue (12.9 percent) districts than in Chongwe and Luangwa districts.

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

Predominant Language of Communication	**Total**	**Chongwe**	**Kafue**	**Luangwa**	**Lusaka**
Bemba	15.5	4.6	12.9	2.1	17.3
Tonga	4.6	5.7	16.1	0.6	3
Lenje	0.8	2.9	1.9	0	0.5
Soli	2.2	18.7	2.1	0.1	0.3
Gowa	0.4	0.2	3.4	0	0
Kaonde	0.4	0.1	0.5	0	0.4
Lozi	1.8	1	3.6	0.6	1.6
Chewa	2.4	2.1	2.3	0.7	2.5
Nsenga	3.1	4.6	1.7	50.7	2.3
Ngoni	1	0.5	1.1	0.1	1
Nyanja	52.8	50.6	40.5	19.7	55.2
Chikunda	0.4	0.4	0.1	19.7	0.1
Mambwe	0.6	0.1	0.4	0.1	0.6
Namwanga	0.4	0.1	0.3	0	0.5
Tumbuka	0.9	0.5	0.7	0.2	1
English	6.6	2.1	4.8	0.7	7.5
Other Language	6.1	5.8	7.6	4.7	6.2
Total	100	100	100	100	100
Population	1,259,258	114,678	134,235	16,941	993,404

Source: 2000 Census of Population and Housing

. Predominant Language Groups

east 60 percent of all languages spoken in Lusaka province are in the Nyanja language group. In addition, 54.2 percent of the rural population and 61 percent of the urban population speak a language in this group. The next most widely spoken languages are in the Bemba group (16.1 percent), Tonga group (8.5 percent) and English (6.6 percent).

out 4 of 5 persons in urban areas speak a language in the Nyanja or Bemba language groups while in the rural areas of the province these two language groups account for more than three-fifths (62 percent) of the languages spoken. A higher proportion of women speak a language within the Nyanja group compared to men while the opposite holds true for the English group. This is true for urban and rural areas (Refer to Table 4.3).

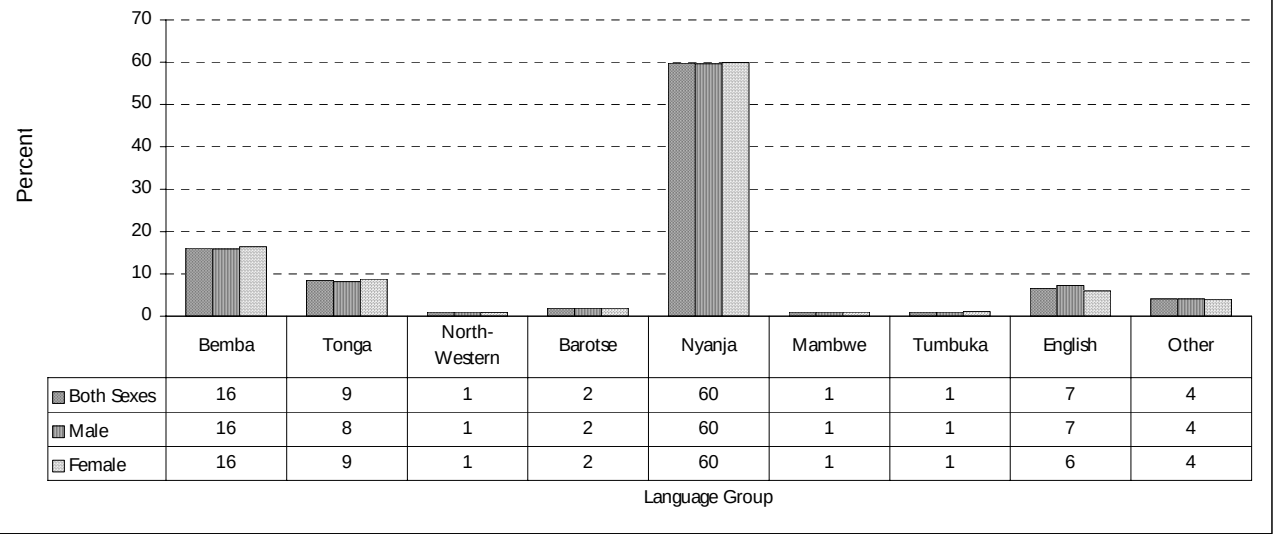
ble 4.3: Predominant Language Groups by Sex and Residence, Lusaka province, 2000

Language Group	**Total**			**Rural**			**Urban**		
	Both Sexes	**Male**	**Female**	**Both Sexes**	**Male**	**Female**	**Both Sexes**	**Male**	**Female**
Bemba	16	16	16	8	8	8	18	18	18
Tonga	9	8	9	27	29	29	5	4	5
North-Western	1	1	1	1	1	1	1	1	1
Barotse	2	2	2	2	3	2	2	2	2
Nyanja	60	57	60	54	54	54	61	61	61
Mambwe	1	1	1	0.4	0.4	0.4	1	1	1
Tumbuka	1	1	1	0.6	0.6	0.6	1	1	1
English	7	7	6	3	3	2	8	8	7
Other	4	4	4	4	4	4	4	4	4
Total	100	100	100	100	100	100	100	100	100
Population	1,259,258	631,006	628,252	222,833	112,858	109,975	1,036,425	518,148	518,277

rce: 2000 Census of Population and Housing

ure 4.2 shows that there are more females who speak the languages in the Tonga groups while in the rest of language groups proportions of male and female speakers are equal.

Figure 4.2: Predominant Language group by sex, Lusaka Province, 2000



	Bemba	Tonga	North-Western	Barotse	Nyanja	Mambwe	Tumbuka	English	Other
Both Sexes	16	9	1	2	60	1	1	7	4
Male	16	8	1	2	60	1	1	7	4
Female	16	9	1	2	60	1	1	6	4

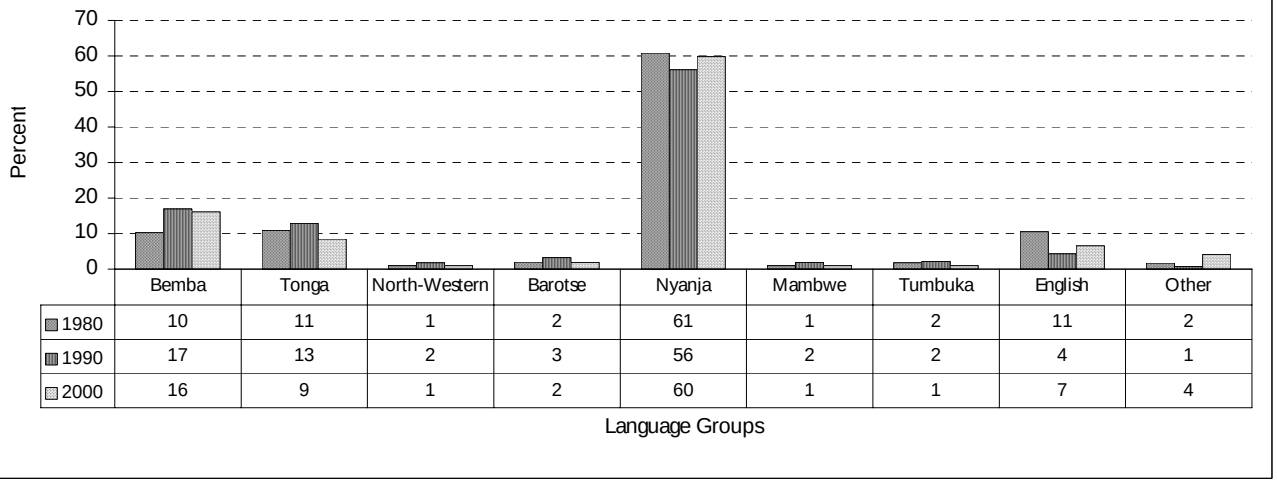
rce: 2000 Census of Population and Housing

Trends in Language Groups' Distribution, 1980 – 2000

ure 4.3 and Table 4.4 show the trends in the percentage share of each language group for the period 1980 –2000. The Nyanja group has remained dominant throughout the last 20years followed by Bemba and Tonga.

all the language groups, only Nyanja and English recorded an increase in usage as predominant languages between 1990 and 2000. The percent increase was 4 and 3 percent for Nyanja and English, respectively. There was a sharp decline in the Tonga group as a predominant language of communication from 13 percent in 1990 to 9 percent in 2000. Even though there were some declines in the other language groups, they were not all that significant.

Figure 4.3: Predominant Language Groups by Census Year, Lusaka Province, 1980-2000



	Bemba	Tonga	North-Western	Barotse	Nyanja	Mambwe	Tumbuka	English	Other
1980	10	11	1	2	61	1	2	11	2
1990	17	13	2	3	56	2	2	4	1
2000	16	9	1	2	60	1	1	7	4

Source: 2000 Census of Population and Housing

re so, through out the 20 year period, there have been fewer changes in the Northwestern, Barotse, Mambwe and Tumbuka language groups as predominant languages of communication in Lusaka province.

ble 4.4: Predominant Language Groups by Census year, Lusaka Province, 1980-2000

Language Group	Percent Of The Total Population		
	1980	1990	2000

Bemba	10	17	16.1
Tonga	11	13	8.5
North-Western	1	2	1
Barotse	2	3	1.9
Nyanja	61	56	59.8
Mambwe	1	2	1
Tumbuka	2	2	1
English	10	4	6.6
Other	2	1	4.1
Total	100	100	100
Population	626,389	923,238	1,259,258

Source: 2000 Census of Population and Housing

4.5 Second Language of Communication

For each respondent, information was collected on the second language besides the predominant language of communication that they used from day to day. In Lusaka Province a total of 764,022 respondents (60.7 percent) reported use of a second language out of the total of 1,259,258 persons who spoke a predominant language. The four most common second languages of communication are Nyanja (34.8 percent), English (25.1 percent), Bemba (17.4 percent) and Tonga (5.0 percent).

Table 4.5: Second Language of communication by Residence: Lusaka Province, 2000

Second Language of Communication	Total	Rural	Urban
Bemba	17	10	79
Tonga	5	8	4
Lenje	1	3	1
Soli	2	9	1
Ila	0.3	0.4	0.3
Luvale	0.3	0.2	0.3
Kaonde	1	0.3	1
Lozi	2	2	2
Chewa	2	2	2
Nsenga	2	2	2
Ngoni	1	1	1
Nyanja	35	48	32
Mambwe	1	0.2	1
Namwanga	0.4	0.2	0.4
Tumbuka	1	1	1
English	25	12	28
Other Language	3	4	3
Total	100	100	100
Population	764,022	129,131	634,891

Source: 2000 Census of Population and Housing

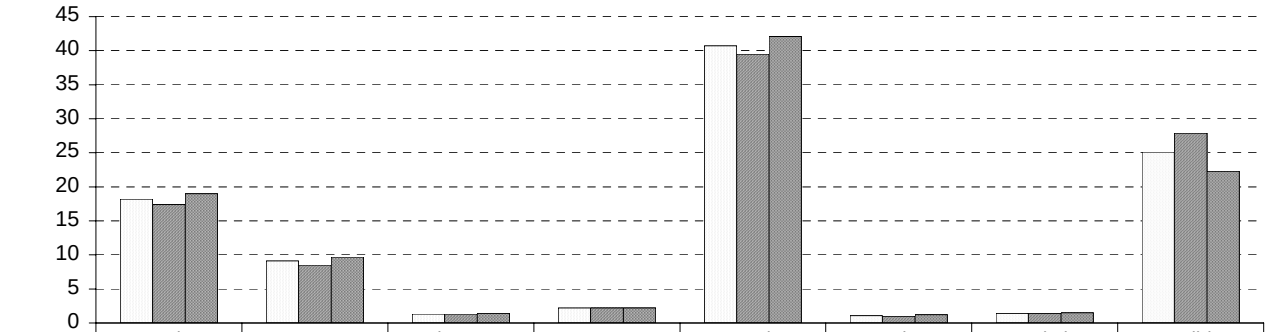
The distribution of the second language groups by residence and sex and is presented in Table 4.6 and Figure 4.4. Results from Table 4.6 present a picture similar to that for predominant languages with the exception of the proportion of the population using English, which is significantly higher (25.1 percent). This may be attributed to the fact that it is the nation's official language and as such many people who have had some years of schooling speak it. Adding to this perhaps could be the fact that Lusaka city which is in Lusaka Province is the administrative and commercial center of the country and as such the number of people using English, as a second language is high.

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

Second Language Group	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Bemba	18.2	17.4	19.0	10.2	10.1	10.2	19.8	18.9	20.8
Tonga	9.1	8.5	9.7	20.7	20.0	21.5	6.7	6.2	7.3
North-Western	1.3	1.3	1.4	0.7	0.7	0.7	1.4	1.4	1.5
Barotse	2.2	2.2	2.2	2.1	2.2	2.1	2.2	2.2	2.2
Nyanja	40.7	39.5	42.1	52.8	51.9	53.9	38.3	36.9	39.7
Mambwe	1.1	1.0	1.2	0.4	0.4	0.4	1.2	1.1	1.3
Tumbuka	1.4	1.4	1.5	0.9	0.9	0.8	1.6	1.5	1.6
English	25.1	27.9	22.3	11.6	13.4	9.7	27.9	30.9	24.8
Other	0.8	0.9	0.7	0.6	0.6	0.6	0.8	0.9	0.8
Total	100.0	100.0	100.0	100.0	100.0	100	100	100	100
Population	764,022	387,895	376,127	129,131	66,316	62,815	634,891	321,579	313,312

Source: 2000 Census of Population and Housing

Figure 4.4: Second Language of Communication by Sex, Lusaka Province, 2000



	Bemba	Tonga	North-Western	Barotse	Nyanja	Mambwe	Tumbuka	English
Total	18.2	9.1	1.3	2.2	40.7	1.1	1.4	25.1
Male	17.4	8.5	1.3	2.2	39.5	1	1.4	27.9
Female	19	9.7	1.4	2.2	42.1	1.2	1.5	22.3

The other language groups showing dominance in magnitude are Nyanja (40.7), Bemba (18.2 and Tonga (9.1). These three languages account for over half the population speaking a second language (68 percent). It must be noted that English is spoken as the second language of communication by more than one quarter (27.9 percent) of the population in urban areas compared with only 11.6 percent using the language in rural areas. There is a significant difference between urban women who speak English for this purpose (24.8) and their rural counterparts (9.7 percent). Furthermore, English is the only language with a higher proportion of males than females.

4.6 ETHNICITY

he 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. All the tribes in Lusaka Province belong to one of these broad tribal groupings. The Bemba group includes all tribes originally from Luapula Province, some tribes originally from Central and Copperbelt provinces and all but those tribes belonging to the Mambwe group from Northern Province. The Tonga group consists of all the tribes originally from 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 from 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 from 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 from the northern part of Eastern Province.

Table 4.7 shows the 26 predominant ethnic groups in Lusaka Province by residence as reported in the 2000 Census of Population and Housing. In descending order, the 10 largest ethnic groups are Bemba (17.9 percent), Nsenga (11.6 percent), Tonga (10.6 percent), Chewa (10.5 percent), Ngoni (7.4 percent) and Tumbuka (5.4 percent). Others are: Lozi, (5.0 percent), Soli (4.0 percent), Africans 3.0 percent) and Mambwe (2.8 percent) of the total population.

Table 4.7: Ethnic groups by Residence, Lusaka Province, 2000

Ethnic Group	**Total**	**Rural**	**Urban**
Bemba	17.9	8.7	19.8
Lunda (Luapula)	0.5	0.4	0.5
Lala	1.5	1.0	1.6
Bisa	0.8	0.4	0.9
Ushi	0.5	0.3	0.6
Lamba	1.0	0.7	1.1
Tonga	10.6	17.0	9.2
Lenje	2.1	3.5	1.8
Soli	4.0	13.9	1.9
Ila	0.8	0.8	0.8
Gowa	0.7	2.7	0.3
Luvale	1.1	0.8	1.2
Lunda (N/West)	0.9	0.5	1.0
Kaonde	2.1	1.2	2.3
Lozi	5.0	5.5	4.9
Chewa	10.5	7.8	11.1
Nsenga	11.6	12.9	11.3
Ngoni	7.4	4.1	8.1
Nyanja	0.7	1.4	0.6
Kunda	1.3	0.7	1.4
Chikunda	1.6	4.4	1.0
Mambwe	2.8	0.9	3.2
Namwanga	2.2	0.9	2.5
Tumbuka	5.4	3.3	5.9
Africans	3.0	3.0	3.0
Asians	0.6	0.1	0.7
Other	3.4	3.3	3.5
Total	100	100	100
Population	1,341,167	238,483	1,102,684

rce: 2000 Census of Population and Housing

In terms of residence, Bemba, Mambwe, Chewa and Tumbuka are more prevalent in urban than in rural areas of the province. There are more than twice as many Bemba people in urban as in rural areas (19.8 percent versus 8.7 percent). Conversely, Tonga people are almost double their numbers in the rural than urban areas.

4.7 Broad Ethnic Groups

e broad ethnic groups, are analyzed by looking at their distribution by sex and residence (see Table 4.8). Tribes in the Nyanja ethnic group account for more than one - third of all tribes in Lusaka Province. Additionally, 31.3 percent and 33.4 percent of the people belonging to the Nyanja tribal group reside in rural and urban areas respectively. The distribution of the people of the Bemba group by sex shows very little variability.

order of size, the Bemba Group (22.6) and the Tonga group (18.6) are the next largest of the tribal groups. The others are: Tumbuka (5.9 percent), Barotse (5.6 percent) and Mambwe (5.3 percent). The distribution by residence of all these tribes does not show much variation except the Tonga and Bemba groups. More than twice of the Tonga people live in the rural part of Lusaka Province compared with those in the urban areas, while for the Bemba ethnic group, more than twice the people live in the urban than in the rural areas of Lusaka Province.

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

Ethnic Group	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Bemba	22.6	22.6	22.6	11.7	11.8	11.7	25.0	25.0	24.9
Tonga	18.6	18.3	19.0	38.4	38.0	38.9	14.4	14.0	14.8
North-Western	4.8	5.0	4.6	2.9	3.1	2.8	5.2	5.4	5.0
Barotse	5.6	5.7	5.4	6.1	6.5	5.6	5.4	5.6	5.3
Nyanja	33.1	32.8	33.4	31.3	31.0	31.7	33.4	33.2	33.7
Mambwe	5.3	5.4	5.3	2.0	2.0	1.9	6.1	6.1	6.0
Tumbuka	5.9	6.1	5.7	3.7	3.9	3.5	6.4	6.5	6.2
English	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	4.1	4.1	4.0	3.8	3.7	3.9	4.1	4.2	4.0
Total	100	100	100	100	100	100.0	100	100	100
Population	1,341,167	672,087	669,080	238,483	120,679	117,804	1,102,684	551,408	551,276

Source: 2000 Census of Population and Housing

ble 4.9 shows that the predominant ethnic group at district level does not follow the provincial pattern. The predominant ethnic group in Chongwe is Soli (22.8 percent), Kafue is Tonga (23.3 percent), Luangwa is Nsenga (50.7 percent) and Lusaka is Bemba (19.9 percent), see Table 4.9 for details.

ble 4.9: Ethnic Group by District: Lusaka Province, 2000

Ethnic Group	Total	Chongwe	Kafue	Luangwa	Lusaka
Bemba	17.9	6.7	14.3	4.0	19.9
Lunda (Luapula)	0.5	0.2	0.7	0.3	0.5
Lala	1.5	1.1	1.1	0.2	1.6
Bisa	0.8	0.3	0.7	0.1	0.9
Ushi	0.5	0.3	0.4	0.0	0.6
Lamba	1	0.7	0.9	0.1	1.1
Tonga	10.6	11.7	23.3	2.2	8.9
Lenje	2.1	4.6	2.5	0.4	1.8
Soli	4	22.8	4.3	1.2	1.8
Ila	0.8	0.5	1.1	0.0	0.8
Gowa	0.7	1.0	3.8	0.3	0.2
Luvale	1.1	0.6	1.3	0.2	1.1
Lunda (N/West)	0.9	0.4	0.7	0.1	1.0
Kaonde	2.1	1.0	1.7	0.1	2.3
Lozi	5.0	4.2	7.6	1.7	4.8
Chewa	10.5	9.2	7.4	2.3	11.2
Nsenga	11.6	13.3	5.7	50.7	11.5
Ngoni	7.4	4.3	4.8	1.0	8.2
Nyanja	0.7	1.1	1.4	3.0	0.6
Kunda	1.3	0.8	0.8	0.3	1.4
Chikunda	1.6	3.5	1.3	27.7	0.9
Mambwe	2.8	0.7	2.1	0.3	3.2
Namwanga	2.2	0.7	1.9	0.3	2.5
Tumbuka	5.4	3.5	3.8	1.7	5.9
Africans	3	4.0	1.8	0.2	3.0
Asians	0.6	0.0	0.2	0.0	0.7
Other	3.4	2.9	4.2	1.5	3.4
Total	100	100.0	100.0	100.0	100.0
Population	1,341,167	122,840	142,744	18,371	1,057,212

Source: 2000 Census of Population and Housing

4.8 Summary

Overall, there are 1,259,258 persons who spoke a predominant language. Of this population, about three quarters of the population in Lusaka 764,022 reported speaking a second language.

e distribution of languages by residence shows that of the 5 predominant languages of communication, Bemba , Nyanja and English are more widely used in urban areas as opposed to Tonga and Nsenga which are mostly spoken in rural areas. Bemba is spoken by more than twice as many people in urban than in rural areas (17.3 percent versus 7.1 percent). Three (3) times as many people speak Tonga and Nsenga in rural areas (10.9 and 6.9 percent respectively) than in urban areas (3.3 and 2.3 percent respectively).

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. Therefore periodical monitoring of an education system is beyond doubt necessary especially that education has become a human rights issue.

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, 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 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 absorption power of the same system. The 2000 Census of Population and Housing captured the following education aspects for all persons as per UN recommendations for the 2000 census round:

- Literacy, i.e. whether an individual can read and write in any language,
- School attendance
- Academic Educational attainment
- Professional or Vocational attainment, 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 that have been undertaken in Lusaka province 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.

Zambian education system conforms to the 1997 International Standard Classification of Education (ISCED97), which consists of 7 levels of education provision. These levels can be outlined as follows:

- Level 0: Early childhood Education programmes including Pre-Schools
- Level 1: Primary education programmes
- Level 2: Junior Secondary Education programmes (Also referred to as Upper Basic education)
- Level 3: Upper Secondary Education programmes (Also referred to as High School education)
- Level 4: "A" Level Education programmes (Still on pilot)
- Level 5: College and undergraduate education programmes, and
- Level 6: Graduate and Post Graduate education programmes

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.

- **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 to 4 correspond to pupils aged 7 to 10 years.
- Upper primary (Middle basic) grades 5 to 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 to 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 under and over-age school attendance in an education system. The difference between gross and net school attendance is an indication of the degree of under and over-age enrolment in 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 above 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 well informed. Table 5.1 shows the proportion of the population aged 5 years and above who were able to read and write in any language in Lusaka province. Results from the table indicate that the literacy rate for the population aged 5 years and above marginally increased from 68.6 to 70.1 percent between 1990 and 2000. The proportions of males and females who could read and write also barely rose from 73.5 and 63.6 percent in 1990 to 74.7 and 65.5 percent in 2000. Results further show that the problem of illiteracy is still much more common among the

female than their male counterpart since 1990. In 1990, about 7 out of every 10 males aged 5 years and above were literate (73.5 percent) as opposed to 6 out of every 10 females (63.6 percent). The results further reveal that almost 1 in every 3 females (34.5 percent) was illiterate compared to nearly 1 in every 4 males (25.3 percent) by the year 2000.

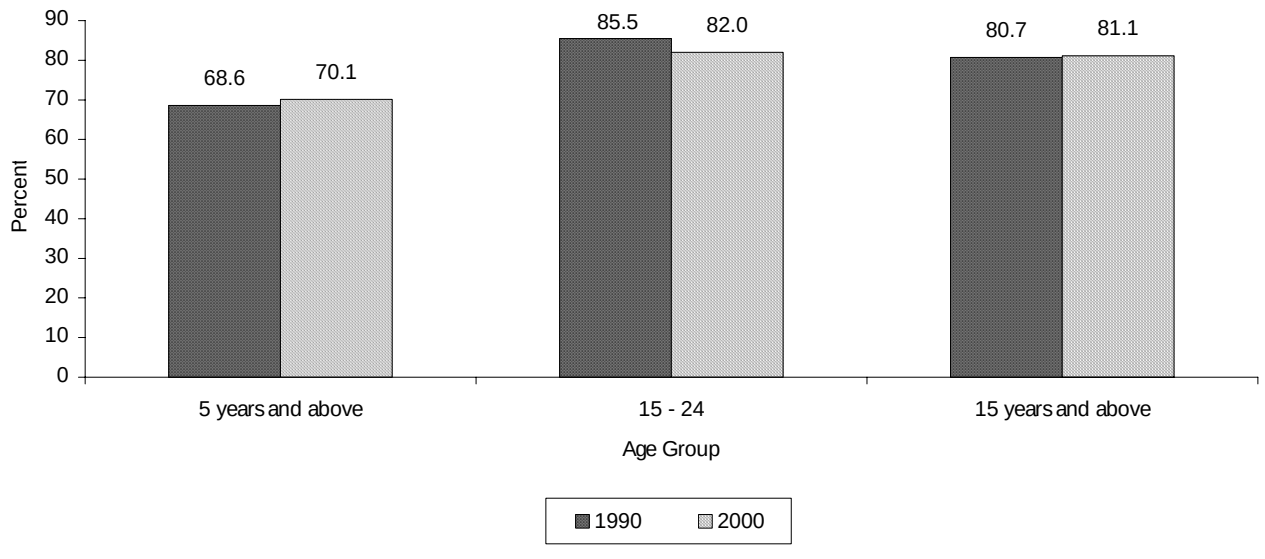
The problem of illiteracy was more pervasive among the rural population. In rural areas, the proportion of the population that could read and write in any language increased from 50.3 to 55.0 percent between 1990 and 2000. On the other hand, literacy levels for the general population marginally increased in urban areas by about 1 percentage point during the same period, from 72.0 to 73.3 percent. These results imply that almost 5 in every 10 persons in rural areas of Lusaka province were illiterate compared to about 7 out of every 10 persons in urban areas.

Table 5.1: Literacy Rates by Age Group, Sex and Residence, Lusaka Province, 1990 – 2000

Sex, Residence and District	5 years and above	15 - 24	15 and above	Population
Zambia (1990)	55.3	74.9	66.0	6,181,285
Lusaka (1990)				
Both sexes	68.6	85.5	80.7	827,395
Male	73.5	88.3	87.5	415,855
Female	63.6	83.0	73.5	411,540
Rural	50.3	70.0	60.3	130,597
Urban	72.0	88.1	84.4	696,798
Zambia (2000)	55.3	70.1	67.2	7,680,705
Lusaka (2000)				
Both sexes	70.1	82.0	81.1	1,125,985
Male	74.7	85.7	87.6	564,708
Female	65.5	78.8	74.5	561,277
Residence				
Rural	55.0	68.5	65.4	192,762
Urban	73.3	84.4	84.1	933,223
District				
Chongwe	53.0	67.2	63.3	101,371
Kafue	64.6	76.9	74.7	119,513
Luangwa	45.7	61.5	57.3	14,919
Lusaka	73.2	84.4	84.1	890,182

Source: 1990 and 2000 Census of population and housing

Figure 5.1: Literate Population by age group (Percent), Lusaka Province, 1990 and 2000



Source: 1990 and 2000 Census of population and housing

Comparison of 2000 literacy rates among districts in Lusaka province reveals high literacy rates for the general population in the highly urbanized districts of Lusaka (73.2 percent), followed by Kafue (64.6 percent).

Luangwa and Chongwe districts, which are predominantly rural, recorded the lowest rates of 45.7 and 53 percent respectively. Overall, these findings indicate that the population in predominantly rural districts is less likely to be literate than the population in urbanized districts. This may be as a result of disparities in the availability of educational facilities between urbanized and rural districts.

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

Youth literacy rate is defined as the proportion of the population aged 15 to 24 years who can read and write in any language. Youth literacy rate declined from 85.5 percent in 1990 to 82.0 percent in 2000. The drop in the proportion of the population aged 15 to 24 years was more pronounced among females, from 83.0 to 78.8 percent than among the male population, from 88.3 to 85.7 percent. The problem of youth illiteracy still remained pervasive among female than male youths between 1990 and 2000. By the year 2000, about 14 percent of the males aged 15 to 24 years were illiterate as opposed to 21 percent of females of the same age group. Also, the youth literacy rate for the province in 2000 is above the national youth literacy rate of 70.1 percent.

The problem of youth illiteracy is still more of a rural than urban phenomenon. By the year 2000, the percentage of illiterate youths in rural areas (31.5 percent) was twice that obtaining in urban areas 15.6 percent. However, the youth literacy rate in rural areas dropped by only 1.5 percentage points, from 70.0 percent to 68.5 percent, between 1990 and 2000 compared to a decline of 3.7 percent in urban areas.

Lusaka district recorded the highest youth literacy rate of 84.4 percent in the year 2000, followed by Kafue district, at 76.9 percent. Luangwa district had the lowest rate of 61.5 percent, followed by Chongwe district, at 67.2 percent. Once again the problem of youth literacy is more identifiable with predominantly remote districts than the urbanized ones in the province.

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

Table 5.1 also shows adult literacy rates by sex, residence and districts. In Lusaka province, adult literacy rate for 2000 stagnated at the 1990 level of about 81 percent. The proportion of female adults who were literate barely increased by 1 percentage point over the 1990 level of 73.5 percent while the rate for males almost stagnated at about 88 percent. Whereas adult literacy rate increased by about 5 percentage points over the 1990 level of 60 percent in rural areas, it stagnated at the 1990 level of about 84 percent in urban areas. By 2000, the results show that female adults were more likely to be illiterate than their male counterparts. The proportion of female illiterates (25.5 percent) was twice that of the male adult illiterates (12.4 percent). The provincial adult literacy rate is above the national adult literacy rate of 67.2 percent

In Lusaka province, the 2000 adult literacy rates ranged from 57.3 and 63.3 percent in Luangwa and Chongwe districts to 84.1 and 74.7 percent in Lusaka and Kafue district. These results clearly portray the variation in adult literacy rates by the degree of urbanization of the districts in Lusaka province.

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 shows the population aged 5 years and above presently attending school in Lusaka province. Overall, the proportion of the population presently attending school marginally increased from about 30 to 31 percent between 1990 and 2000. Compared to the national average, the proportion of the population currently attending school is higher for the province than the national (30.7 percent for the province against 26.7 percent for the nation), Since 1990, there have been proportionately more males than females attending school. The proportion of males and females attending school increased from 30.6 and 28.6 percent in 1990 to 31.1 and 30.3 percent 2000, respectively. By the year 2000, about 3 out of every 10 persons aged five years and above were attending school in the province.

During the same period under review, there was an increase in the proportion of children aged 5 to 14 years presently attending school. This population cohort almost befits the official primary school age population. The population attending school in the age group 15 to 19 almost remained at the 1990 level of about 51 percent. Marginal declines were recorded for the tertiary school age population (20 – 29 years). These results clearly demonstrate that older members of the population are less likely to be attending school than young ones.

Table 5.2: Population Aged 5 Years and Above Presently Attending School by Sex and Age Group, Lusaka Province, 1990 – 2000

Age	1990				2000			
	Total	Male	Female	Population	Total	Male	Female	Population
Lusaka	29.6	30.6	28.6	827,395	30.7	31.1	30.3	1,125,985
Zambia	25.8	28.1	23.6	6,181,285	26.7	28.7	24.9	7,680,705
5 – 9	37.2	36.4	38	143,015	50.4	49	52	195,727
10 – 14	77.4	79.2	75.8	132,452	81.2	82.5	80	162,907
15 – 19	51.3	60.3	43.4	126,046	50.6	57.9	44	151,794
20 – 24	14.6	20.5	9.2	111,094	12.5	15.9	9.7	158,063
25 – 29	4.6	6.1	3.1	84,768	5.3	5.9	4.6	137,890
30 – 44	2.4	2.9	1.6	152,773	3.9	4.3	3.4	213,250
45+	0.8	1	0.6	77,247	2.3	2.8	1.7	106,354

Source: 1990 and 2000 Census of population and housing

Table 5.3 shows school attendance rates by residence and age group in Lusaka Province. Results in the table reveal that almost 1 in every 4 persons in rural areas was attending school, as opposed to 1 in every 3 persons in urban parts of the province. However, there was some increase in the proportion of the rural population attending school from 24.5 percent in 1990 to 28.8 percent by 2000. In urban areas, school attendance remained more or less at the 1990 level of about 31 percent. In general, there were proportionately more persons in urban than rural areas attending school at all the age groups, particularly among the primary and secondary school age population. In general also, older persons are less likely to be attending school than younger ones particularly those residing in rural parts of Lusaka province.

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

Age	1990				2000			
	Total	Rural	Urban	Population	Total	Rural	Urban	Population
Lusaka	29.6	24.5	31.0	827,425	30.7	28.8	31.1	1,125,985
5 – 9	37.2	29.0	39.0	143,015	50.4	41.0	52.6	195,727
10 – 14	77.4	65.9	80.0	132,452	81.2	76.0	82.4	162,907
15 – 19	51.3	43.3	53.0	126,046	50.6	47.2	51.2	151,794
20 – 24	14.6	9.9	15.4	111,094	12.5	9.8	13.0	158,063
25 – 29	4.6	3.2	4.8	84,768	5.3	3.7	5.6	137,890
30 – 44	2.4	1.8	2.4	152,774	3.9	3.3	4.0	213,250
45+	0.8	0.8	0.9	77,276	2.3	1.8	2.4	106,354

Source: 1990 and 2000 Census of population and housing

Table 5.4 reveals that since 1990 females are less likely to be attending school than their male counterparts, particularly those residing in rural areas. By the year 2000, the rate of school attendance among females in rural parts of the province (27.8 percent) was much lower than that obtaining in urban areas (30.8 percent). The proportion of rural and urban females attending school increased by 5 and 1 percentage points between 1990 and 2000. No major sex differences in terms of school attendance rates were observed in both rural and urban areas by 2000.

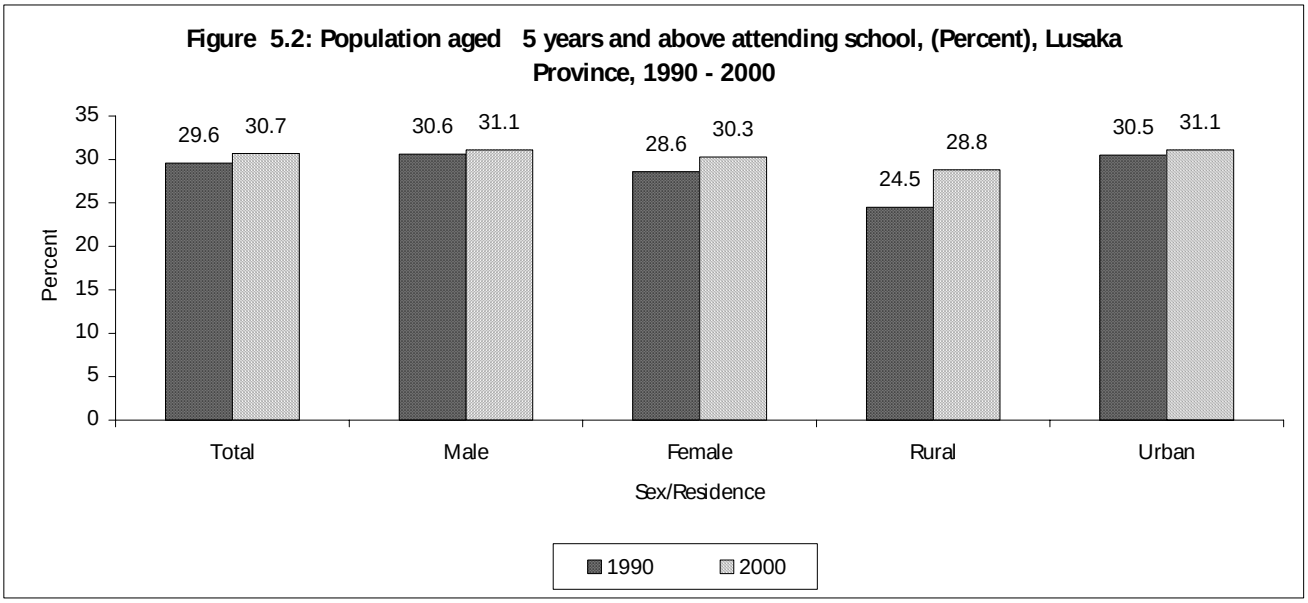
Variations in the proportion of the population presently attending school in all the 4 districts of Lusaka province have also been observed. Table 5.4 also shows that during the year 2000, nearly 1 in every 3 persons aged 5 years and above attended school in the highly urbanized districts in the province opposed to about 1

in every 4 in Luangwa and Chongwe districts. The proportions of the population presently attending school varied from 27.5 percent in Chongwe to 31.7 percent in Kafue districts. No major sex differences were revealed especially in the urbanized districts of the province.

Table 5.4: Population aged 5 Years and Above Presently Attending School by district, (Percent). Lusaka Province, 1990 – 2000

Residence and Province	Total	Male	Female	Population
Zambia(1990)	25.8	28.1	23.6	6,181,285
Lusaka (1990)				
Total	29.6	30.6	28.6	827,395
Rural	24.5	26.2	22.7	130,597
Urban	30.5	31.4	29.7	696,798
Zambia (2000)	26.7	28.7	24.9	7,680,705
Lusaka (2000)				
Total	30.7	31.1	30.3	1,125,985
Rural	28.8	29.9	27.8	192,762
Urban	31.1	31.3	30.8	933,223
District				
Chongwe	28.9	30.3	27.5	101,371
Kafue	32.3	33	31.7	119,513
Luangwa	30.1	32.5	27.8	14,919
Lusaka	30.7	30.9	30.5	890,182

Source: 1990 and 2000 Census of population and housing



Source: 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 becomes more meaningful 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 the first 7 grades of basic education. However, some of the members of this

cohort may not be attending any form of school. The Census results in Table 5.5 shows the percentage of the population aged 7 to 13 years presently attending school in the province. The census results in the table show that school attendance by the population aged 7 to 13 years increased by about 7 percent, from 67.5 percent in 1990 to 75.1 percent in 2000. This increase is 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 (67.5 percent versus 75.1 in 1990 and 55.8 percent versus 62.2 percent in 2000 for Lusaka and National Average respectively). These results imply that 1 in every 3 children aged 7 to 13 years was not attending school in 1990 as opposed to 1 in every 4 during the year 2000. The increase in school attendance was slightly higher among females, (from 67.3 to 75.3 percent) than among males (from 67.8 to 74.9 percent) between 1990 and 2000. No major sex differences have existed in school attendance among children in both the rural and urban parts of the province. Since 1990, the rate of school attendance has been the more or less the same for both boys and girls particularly in urban areas.

Results from the 1990 and 2000 censuses indicate that children in urban parts of the province are more likely to be attending school than their rural counterpart. In 1990, only about 5 in every 10 children aged 7 to 13 years were attending school in rural areas compared to nearly 7 in every 10 in urban areas. However, the percentage of the population aged 7 to 13 years presently attending school in rural and urban areas drastically rose from 55.8 and 69.9 percent to 68.3 and 76.7 percent between 1990 and 2000, respectively. The percent increase implies that a third and quarter of children in rural and urban areas were not attending school by 2000. School attendance among rural and urban girls increased by about 14 and 7 percentage points above the 1990 levels of 55.6 and 69.6 percent, respectively. Similarly, school attendance among boys in rural and urban areas also increased by 11 and 7 percent over the 1990 levels of 56.1 and 70.2 percent.

Out of the total 31,661 rural children aged 7 to 13 years in the province, only 55.8 percent were attending school, compared to 69.9 percent of the 158,497 urban children in 1990. The school attendance rates increased from 56 to 75 percent and from 70 to 77 percent for the rural and urban areas between 1990 and 2000, respectively. School attendance among rural girls rose by 19 percentage points from about 56 percent in 1990 to nearly 75 percent in 2000. In urban areas, female school attendance rate increased by only 7 percent from 70 percent to 77 percent between 1990 and 2000. The same pattern was observed for the rural and urban boys of primary school age.

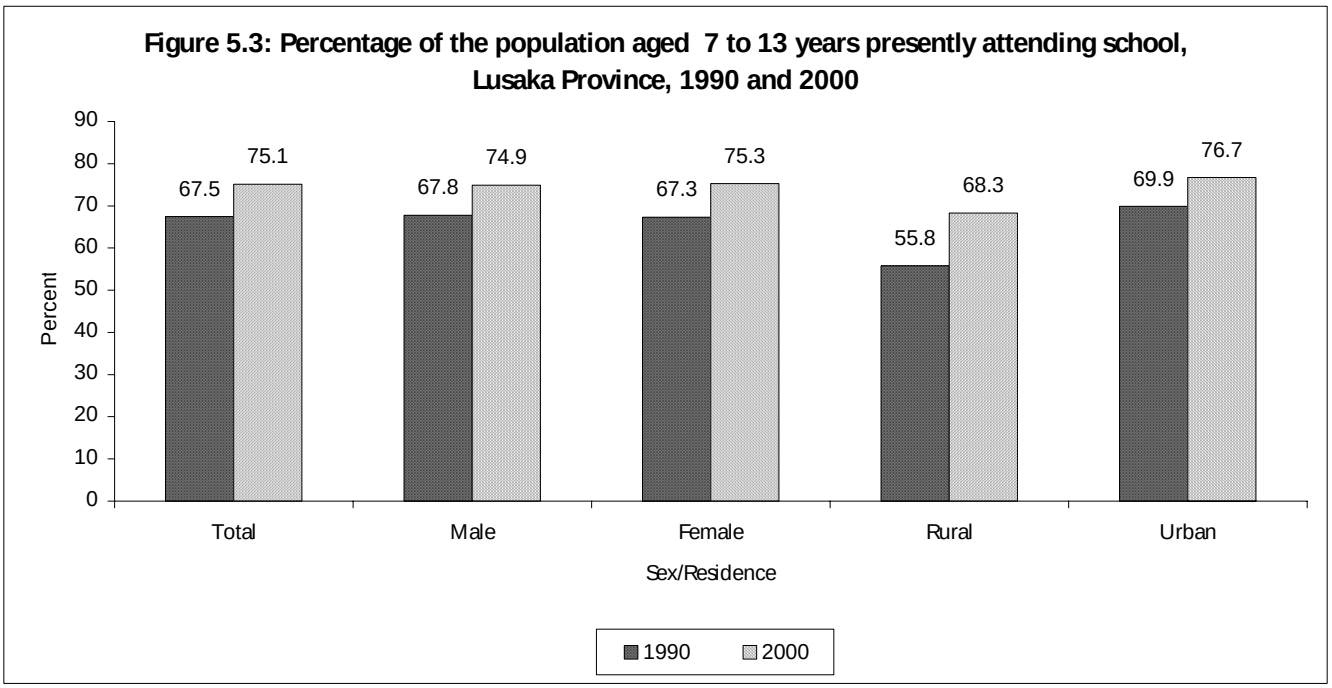
Despite the high rate of increase in rural areas, these results clearly indicate the continued disparities in education participation between the rural and urban children of primary school age. Urban children are more likely to be attending school than their rural counterparts.

Table 5.5 further reveals that during the year 2000, school attendance rates for children aged 7 to 13 years ranged from 76.4 percent in Lusaka district to 67.4 percent in Chongwe district. Generally, girls were more likely to be attending school than boys, particularly in Chongwe and Luangwa districts.

Table 5.5: Population aged 7 to 13 Years Presently Attending School by Sex and Residence, (Percent), Lusaka province, 1990 – 2000

Residence	School Attendance Rates			
	Total	Male	Female	Population
Zambia (1990)	55.8	55.4	56.2	1,486,062
Lusaka (1990)				
Total	67.5	67.8	67.3	190,154
Rural	55.8	56.1	55.6	31,661
Urban	69.9	70.2	69.6	158,493
Zambia (2000)	62.2	61.8	62.6	1,826,590
Lusaka (2000)	75.1	74.9	75.3	244,665
Total				
Rural	68.3	67.5	69.2	47,082
Urban	76.7	76.7	76.7	197,583
District (2000)				
Chongwe	67.4	66.4	68.5	25,763
Kafue	73.9	73.6	74.2	28,020
Luangwa	72.1	71.3	72.9	3,764
Lusaka	76.4	76.3	76.4	187,118

Source: 1990 and 2000 Census of population and housing



Source: 1990 and 2000 Census of population and housing

5.7 Gross Primary School Attendance Rates by Children of all Ages

Gross school attendance rate at primary level shows the ratio of children of all ages attending primary grades to the eligible school age population. Due to school attendance by under and over aged children in primary schools, the ratio is sometimes more than 100 percent. Results in table 5.6 show that the gross primary school attendance ratio in Lusaka province declined from about 93.8 percent in 1990 to about 91.8 percent in 2000. In comparison to the national average, the gross rates for the province are higher in both 1990 and 2000. Whilst the gross rates for males dropped by about 4 percent, from 97.4 to 93.3 percent during the same period while that of the females stagnated at the 1990 level of about 90 percent.

Results from the last the two census surveys further demonstrate that more males than females have had access to primary education in relative terms. The Gender Parity Index (GPI) calculated as a ratio of female gross rate to that of males increased from 0.93 to 0.97 between 1990 and 2000, an indication of growing equality in terms of participation of girls and boys in primary education in the province. The GPI for rural and urban areas rose from 0.89 and 0.93 to 0.97 and 0.97 between 1990 and 2000, respectively

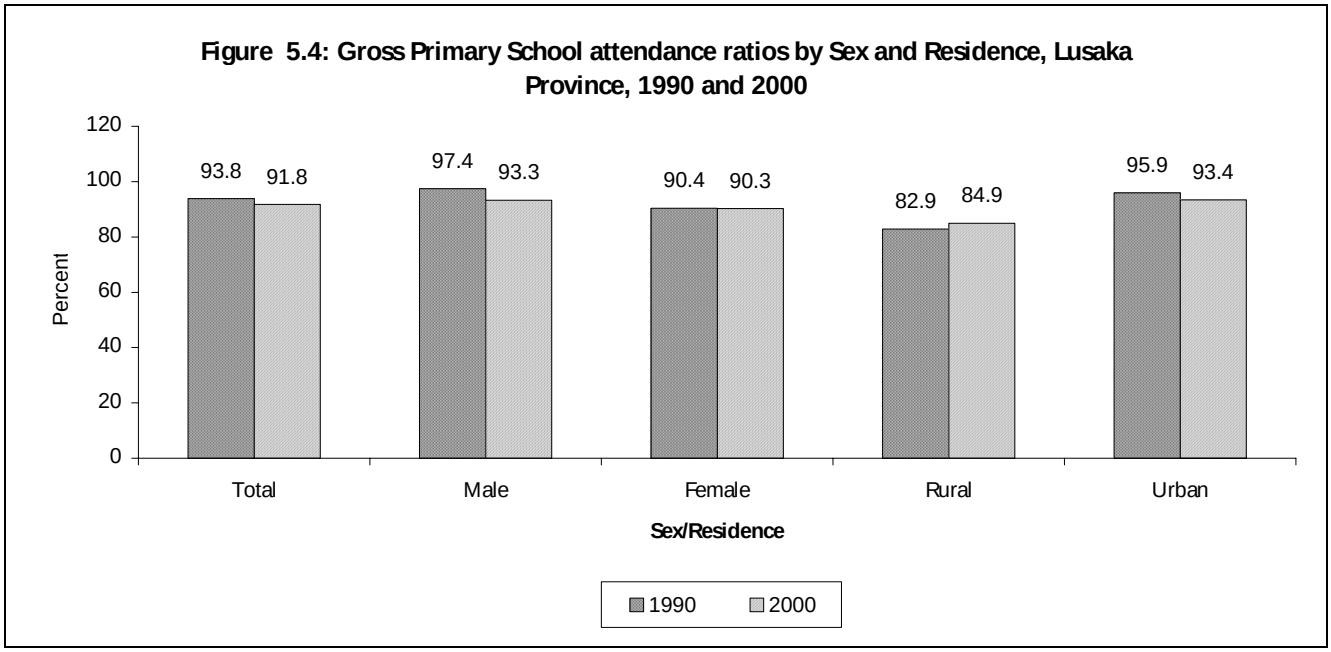
The Gross Primary School Attendance ratios for urban children declined from 95.9 to 93.4 percent between 1990 and 2000. On the other hand, the ratio increased in rural areas from 82.9 to 84.9 percent during the same period. The GPI for rural and urban areas in the province increased from 0.89 and 0.93 to 0.97 and 0.97 between 1990 and 2000 respectively. Therefore, gender equality in terms of education participation can be said to be within reach in both urban and rural areas of the province.

District level analysis of the 2000 gross primary school attendance rates shows high levels of participation in Luangwa (98.0 percent), closely pursued by Lusaka district, at 93.2 percent. Chongwe district recorded the lowest ratio of 82.4 percent.

Table 5.6: Gross Primary School Attendance Ratio by Sex, Residence and district, Lusaka Province, 1990 – 2000

Residence and District	Gross Primary School Attendance Rates			
	Total	**Male**	**Female**	**Population**
Zambia (1990)	82.3	85.7	78.9	1,486,062
Lusaka (1990)				
Total	93.8	97.4	90.4	190,154
Rural	82.9	87.6	78.2	31,661
Urban	95.9	99.4	92.8	158,493
Zambia (2000)	79.1	81.4	76.8	1,826,590
Lusaka (2000)				
Total	91.8	93.3	90.3	244,665
Rural	84.9	86.2	83.6	47,082
Urban	93.4	95	91.9	197,583
District (2000)				
Chongwe	82.4	83.6	81.1	25,763
Kafue	90.3	91.7	88.9	28,020
Luangwa	98.0	99.7	96.2	3,764
Lusaka	93.2	94.8	91.7	187,118

Source: 1990 and 2000 Census of population and housing



Source: 1990 and 2000 Census 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 (7 to 13 years) currently attending primary grades (Grades 1 to 7). Table 5.7 shows an increase in the proportion of the primary school age population attending primary education in Lusaka province, from about 66.1percent in 1990 to 71.3 percent in 2000. In 2000 and 1990, the net primary school attendance rates are higher for the province than the national. Both of the rates for males and females increased from about 66 to 71 percent between 1990 and 2000. These results indicate that both the males and females have had equal chance of access to primary education since 1990. Net school attendance rate in rural areas increased from about 55 to 66 percent between 1990 and 2000. In urban areas the rate rose from about 68 to 73 percent during the same period. The 1990 and 2000 census results on net school attendance rates further indicate that about 34 and 29 percent of children of the official primary school age were out of the school system in the province, respectively.

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, almost half of the rural children aged 7 to 13 years (55.2 percent) were out of primary education compared to about a third of their urban counterpart (68.3 percent). By 2000, the proportion of children attending school in rural areas drastically increased by about 10 percentage points, from about 55 to about 66 percent. In urban areas, net school attendance rate also increased by 5 percentage points, from about 68.3 percent in 1990 to about 73 percent in 2000. No major sex differences were noticed in both rural and urban areas since 1990, an indication of efforts towards achievement of gender parity in net attendance at primary level.

The urban – rural differences are mainly as a result of existing disparities in resource allocation and availability of accessible amenities such as schools, health facilities, recreational facilities and pre-schools. The Living Conditions Monitoring Surveys have shown that long distance to schools inhibits school attendance particularly for younger children who may not safely walk alone to school.

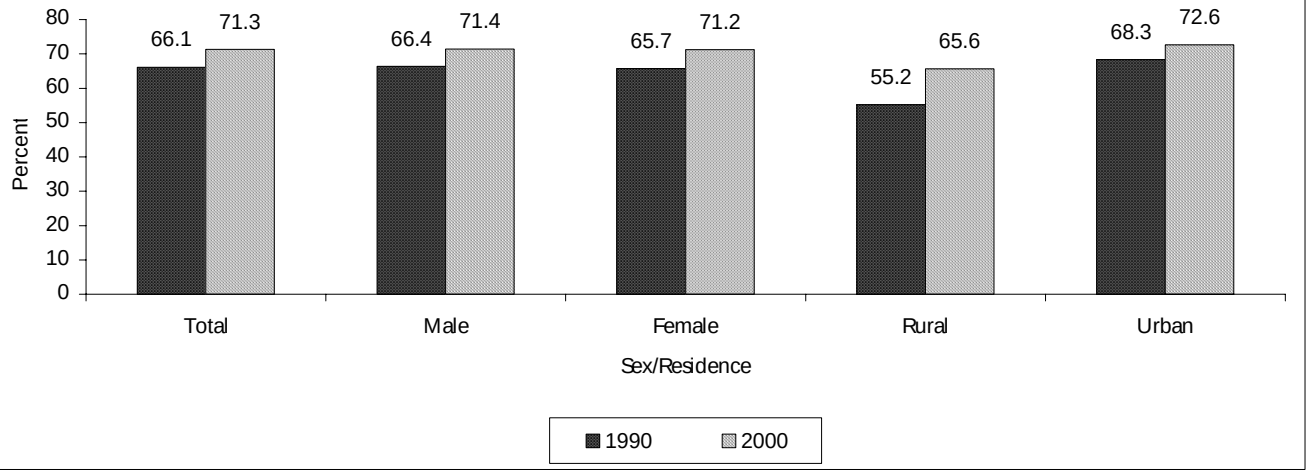
In 2000, the proportion of children aged 7 to 13 years attending primary education varied from 64.5 percent in Chongwe district to 72.4 percent in Lusaka district. No significant sex differences in school attendance rates were noticed in all the districts. However, the proportions of girls attending school were slightly higher than those for boys in Luangwa and Chongwe districts.

Table 5.7: Net Primary School Attendance Rates by Sex and Residence and district, Lusaka province, 1990 – 2000

Residence and District	Net Primary School Attendance Rates			
	Total	Male	Female	Population
Zambia (1990)	55.8	54.6	55.3	1,486,062
Lusaka (1990)				
Total	66.1	66.4	65.7	190,154
Rural	55.2	55.5	54.8	31,661
Urban	68.3	68.7	67.8	158,493
Zambia (2000)	60.0	59.8	60.2	1,826,590
Lusaka (2000)				
Total	71.3	71.4	71.2	244,665
Rural	65.6	65.0	66.3	47,082
Urban	72.6	73.0	72.3	197,583
District (2000)				
Chongwe	64.5	63.7	65.3	25,763
Kafue	70.5	70.5	70.4	28,020
Luangwa	70.8	69.5	72.2	3,764
Lusaka	72.4	72.7	72.1	187,118

Source: 1990 and 2000 Census of population and housing

Figure 5.5: Net Primary School attendance ratios by Sex and Residence, Lusaka Province, 1990 and 2000



Source: 1990 and 2000 Census 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 years attending school in the province. Overall, the percentage of the secondary school age children attending school stagnated at the 1990 level of about 59 percent by 2000. The proportion of males attending school declined from about 67 to 66 percent between 1990 and 2000. On the other hand, the percentage of females attending school marginally increased from about 52 to 54 percent during the same period. Notable from table 5.8 is the high rate of school attendance in urban areas compared to rural areas. In 1990, about 5 in every10 children aged 14 to 18 years were attending school as opposed to 6 out of 10 children in urban areas. This scenario did not change much by the year 2000 despite the increase in attendance rate in rural areas of 4 percentage points.

By 2000, 44 and 40 percent of the rural and urban children were not attending school. In rural areas, about half of the females were not attending school compared to almost 1 third of the males. In general, 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), particularly in rural areas. At primary level there is normally near equality in terms of school attendance by boys and girls.

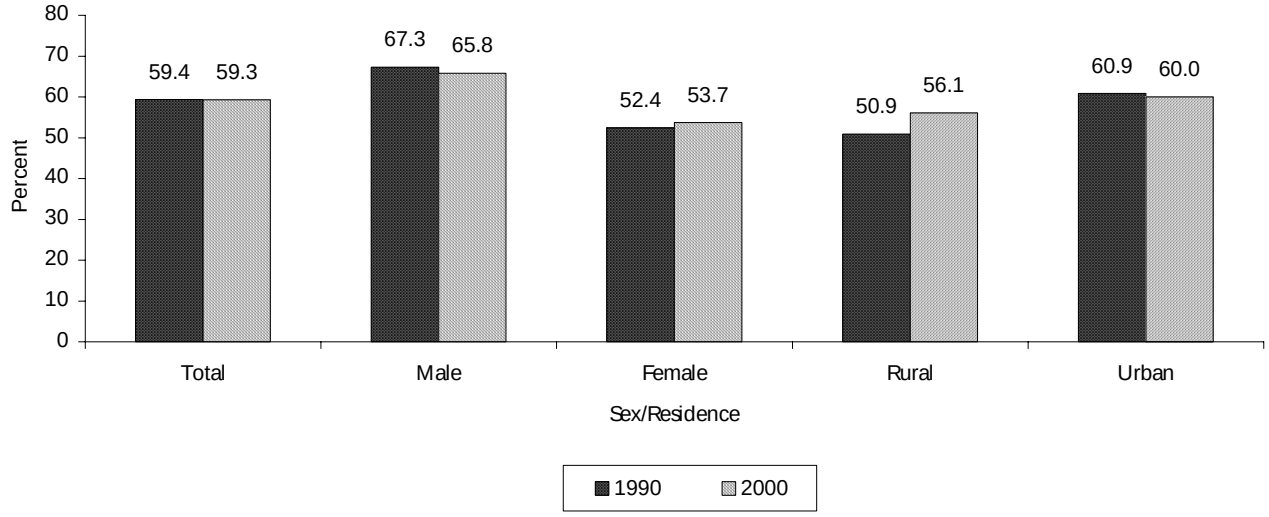
In 2000, school attendance by children of secondary school age ranged from about 63 percent in Kafue district to 55 percent in Chongwe district. Generally, more boys than girls of the same cohort are likely to be attending school in all districts.

Table 5.8: Population Aged 14 to 18 years Presently Attending School by Sex, (Percent), Lusaka province, 1990 – 2000

Residence and District	School Attendance Rates			
	Total	Male	Female	Population (14 – 18 Yrs)
Zambia (1990)	53.9	61.1	47.1	996,450
Lusaka (1990)				
Total	59.4	67.3	52.4	130,919
Rural	50.9	59.0	43.0	20,317
Urban	60.9	68.9	54.1	110,602
Zambia (2000)	53.9	61.3	47.0	1,105,484
Lusaka (2000)				
Total	59.3	65.8	53.7	153,236
Rural	56.1	62.8	49.5	26,644
Urban	60.0	66.4	54.5	126,592
District				
Chongwe	55.4	62.6	48.1	14,513
Kafue	62.8	68.5	57.6	16,807
Luangwa	58.4	67.4	49.0	2,011
Lusaka	59.3	65.7	53.8	119,905

Source: 1990 and 2000 Census of population and housing

Figure 5.6: Population aged 14 to 18 years attending school by Sex and Residence, Lusaka Province, 1990 and 2000



Source: 1990 and 2000 Census of population and housing

5.10 Gross Secondary School Attendance by the Children aged 14 to 18 Years

Results in Table 5.9 shows the gross secondary school attendance rates by sex, residence and district. Results in the table reveal that a sizeable proportion of secondary school age population in Lusaka province has had no access to secondary education. Overall, the proportion of children attending secondary education expressed as a percentage of the eligible secondary school age population increased from about 43 to 59 percent between 1990 and 2000. The increase in the attendance ratio was more pronounced in rural (21 percent) than in the urban parts of the province (15 percent) during the same period.

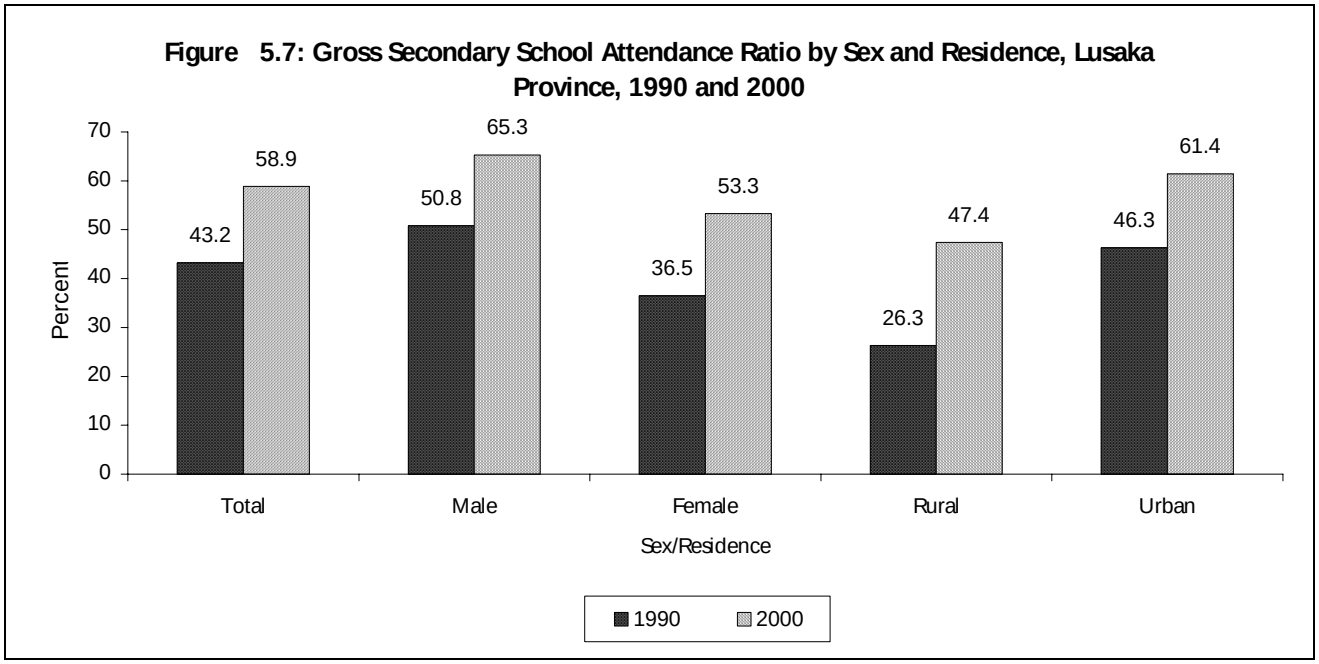
However, gross school attendance ratios remained much higher in urban than in rural areas. In 1990, the gross rate in urban areas was 20 percent higher than the one obtaining in rural areas. By 2000, the gross rate in rural and urban areas were at 47.4 and 61 4 percent respectively. These results clearly indicate that children in urban areas of the province are more likely to be attending secondary school education than those in rural areas. Once again the gross ratios indicate that females, more especially those residing in rural areas, are less likely to be attending secondary education than their male counterpart in the province.

The 2000 census results further demonstrate high levels of participation in secondary education in Kafue and Lusaka districts, at about 61 percent each. Luangwa district recorded the lowest rate of 36.7 percent. The gross secondary school attendance ratios were higher for male than female population in all the districts.

Table 5.9: Gross Secondary School Attendance Ratio by Sex, Residence and District, Lusaka Province 1990 – 2000

Residence and District	Gross Secondary School Attendance Rates			
	Total	Male	Female	Population (14 – 18 Yrs)
Zambia (2000)	34.6	40.4	29.0	996,450
Lusaka (1990)				
Total	43.2	50.8	36.5	130,919
Rural	26.3	32	20.8	20,317
Urban	46.3	54.5	39.2	110,602
Zambia (2000)	44.5	50.2	39.1	1,105,484
Lusaka (2000)				
Total	58.9	65.3	53.3	153,236
Rural	47.4	53.0	41.8	26,644
Urban	61.4	68.1	55.6	126,592
District				
Chongwe	46.5	52.6	40.3	14,513
Kafue	61.3	67.5	55.5	16,807
Luangwa	36.7	45.0	28.2	2,011
Lusaka	60.5	67.1	54.9	119,905

Source: 1990 and 2000 Census of population and housing



Source: 1990 and 2000 Census 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 had no access to secondary school education in Lusaka province. In 1990, only about 28 percent of the children aged 14 to 18 years were attending secondary education. This proportion increased to 41.2 percent during the year

2000 but it is slightly higher than the national average which increased to 30.9 in 2000. Since 1990 there were proportionately more boys than girls attending secondary school.

Glaring rural – urban differentials in net secondary school attendance rates have existed since 1990. In 1990, the proportion of urban eligible children attending secondary education (30.1 percent) was almost twice that of their rural counterpart (16.1 percent). Net secondary school attendance rates for rural and urban areas increased by 17 and 13 percent from the 1990 levels of 16.1 and 30.1 percent respectively. By 2000, about 3 out of every 10 children aged 14 to 18 years were attending secondary school education in rural areas as opposed to almost 4 out of every 10 children in urban parts of the province. These results clearly indicate how inaccessible secondary education is to majority of the rural children aged 14 to 18 years particularly among females.

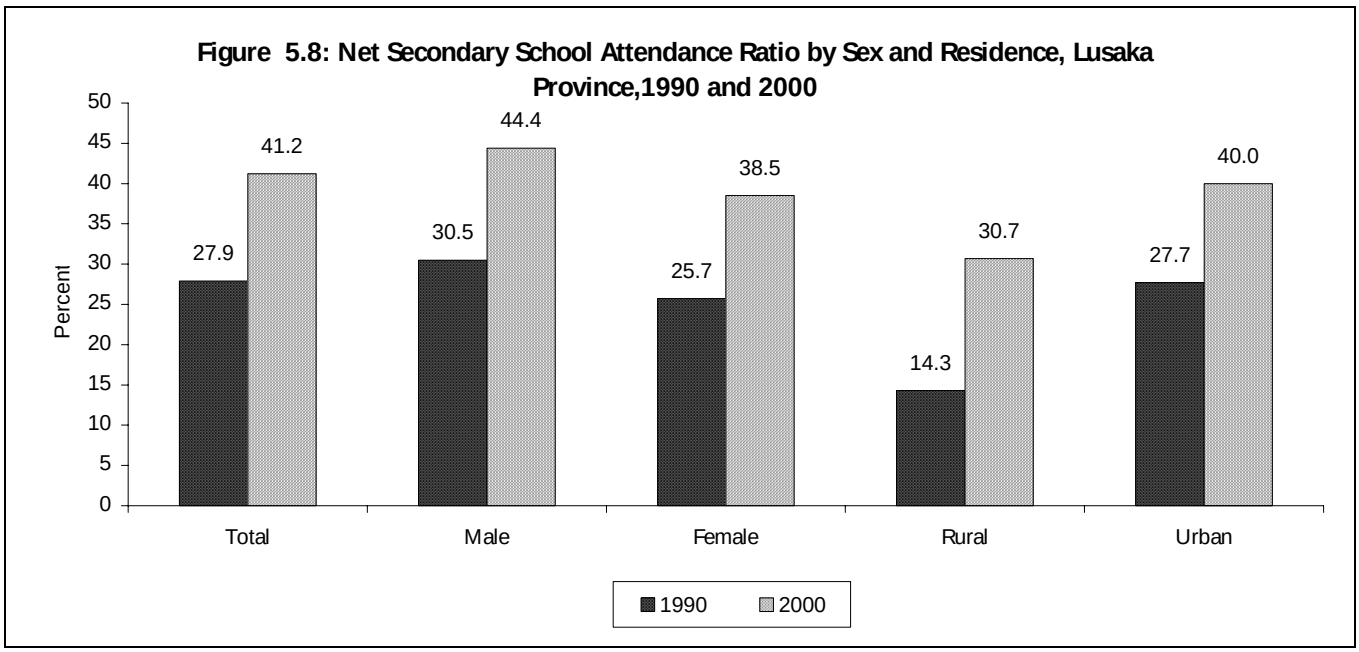
Analysis of the 2000 census results by districts shows low levels of secondary school attendance among children aged 14 to 18 years in the predominantly rural districts of the province, namely Luangwa (25.4 percent) and Chongwe (32.5 percent). Conversely, high rates of secondary school attendance were observed in Kafue (43.1 percent) and Lusaka district (42.3 percent).

The obvious increase in net secondary school attendance between 1990 and 2000 could be attributed to the rise in the number of basic schools, which have provided additional school spaces for grades 8 and 9 pupils, regarded in this case as part of secondary education. As for urban areas there has been marked increases in the number of private schools offering secondary education. The 1996 education policy has championed the need to promote private participation in education delivery system at all levels.

Table 5.10: Net Secondary School Attendance Ratio by Sex, Residence and District, Lusaka Province 1990 – 2000

Residence and District	Net Secondary School Attendance Rates			
	Total	**Male**	**Female**	**Population (14 – 18 Yrs)**
Zambia (2000)	21.4	22.8	20.0	996,450
Lusaka (1990)				
Total	27.9	30.5	25.7	99,320
Rural	16.1	18.0	14.3	68,677
Urban	30.1	33.0	27.7	30,643
Zambia (2000)	30.9	33.3	28.7	1,105,484
Lusaka (2000)				
Total	41.2	44.4	38.5	153,236
Rural	33.0	35.3	30.7	26,644
Urban	43.0	46.4	40.0	126,592
District				
Chongwe	32.5	35.5	29.3	14,513
Kafue	43.1	45.3	41.1	16,807
Luangwa	25.4	28.5	22.1	2,011
Lusaka	42.3	45.7	39.4	119,905

Source: 1990 and 2000 Census of population and housing



Source: 1990 and 2000 Census of population and housing

5.12 Population Distribution by Fields of Study

Table 5.11 shows the distribution of the population aged 5 years and over by some selected fields of study and sex in Lusaka province. The table reveals that the most popular field of study since 1990 has been Accountancy and Teacher training. In 1990, Accountancy and Teacher training accounted for about 15 and 14 percent of the population, while secretarial training, Mechanics, Business Administration and Nursing catered for about 10, 9, 8 and 6 percent of the same population, respectively. The dominant fields of study by the female population were Secretarial (26.5 percent), Teacher Training (21.6 percent) and Nursing (15.6 percent). On the other hand, the majority of the male population was concentrated in Accountancy (19.4 percent), Mechanics (13.6 percent), Teacher Training (10.3 percent), Business Administration (10.3 percent) and fields of study.

There was an increase in the number of persons undertaking all the popular selected fields of study between 1990 and 2000. Notable among the fields of study is computer science which increased by more than 200 percent. There were marked increases in the population undertaking Nursing and textile trade. The proportion of the population who reported computer sciences as their field of study rose from about 1.6 to 4.8 percent. The percentage of male nurses soared from about 1.6 to 4.0 percent between 1990 and 2000.

By 2000, Accountancy and teacher training still accounted for the larger segment of the population, at about 16 and 14 percent, respectively. The next dominant fields of study were nursing (9.8 percent), Business Administration (8.6 percent) mechanics and secretarial training, at 8.2 and 7.9 percent respectively. In 2000, the most popular fields of study for females were Teacher Training (20.3 percent), Secretarial Training (18.0 percent), Nursing (13.8 percent), Accountancy (10.6 percent) and textile trades (8.9 percent). Conversely, accountancy and Mechanics accounted for a significant segment of the male population, at 19 and 12.9 percent respectively. Business Administration, Teacher Training, Electronics and Nursing catered for about 10, 9 and 7 percent of the population respectively. Notable from the results in the table is the sudden increase in the proportion of males who reported nursing as their field of study from about 1 percent to 7 percent between 1990 and 2000.

These results 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 reveals the fact that very few females have been attempting more technically oriented fields of study such as engineering and other technical programmes since 1990. In order to enhance the participation of females in sciences and mathematics, the Ministry of Education started a program aimed at enhancing pupils' performance in English, mathematics and Sciences called AIEMS in 1994.

Table 5.11: Population by Sex and Field of Study, Lusaka province, (1990 – 2000)

Field of Study	1990			2000		
	Total	Male	Female	Total	Male	Female
All Fields	41,342	26,489	14,853	76,713	46,798	29,915
Percent Total	100.0	100.0	100.0	100.0	100.0	100.0
Natural Science	2.0	2.4	1.3	1.2	1.6	0.7
Civil Engineering	1.5	2.2	0.2	1.5	2.2	0.5
Electronic Engineering	4.6	7.0	0.4	5.0	7.4	1.4
Mechanic Engineering	8.9	13.6	0.4	8.2	12.9	0.9
Mining Engineering	0.3	0.5	0.1	0.2	0.3	0.0
Industrial Engineering	0.7	1.0	0.3	0.3	0.4	0.0
Architecture	0.9	1.2	0.4	0.4	0.6	0.1
Medicine/Surgery	1.7	2.0	1.0	1.2	1.4	0.8
Pharmacy	0.7	0.8	0.5	0.6	0.6	0.5
Nursing	6.0	0.6	15.6	9.8	7.3	13.8
Medical Technology	1.4	1.8	0.8	0.9	1.1	0.5
Computer Science	1.6	1.6	1.5	4.8	4.0	6.0
Economics	2.4	2.7	2.0	2.2	2.7	1.4
Accountancy	15.4	19.4	8.1	15.7	19.0	10.6
Teacher Training	14.3	10.3	21.6	13.6	9.3	20.3
Law/jurisprudence	2.6	3.4	1.0	2.3	3.1	1.0
Fine arts	1.1	1.3	0.6	1.0	1.2	0.6
Social Welfare	1.1	1.0	1.2	0.8	0.8	0.9
Criminology	1.3	1.9	0.2	1.1	1.6	0.3
Business Administration	8.1	10.3	4.2	8.6	9.9	6.6
Secretarial Training	9.9	0.6	26.5	7.9	1.4	18.0
Office Machine	1.3	1.5	1.0	0.7	0.9	0.4
Service Trade	1.8	1.7	2.0	2.7	2.0	3.9
Agriculture/Forestry/Fisheries	3.7	5.1	1.3	3.1	4.0	1.7
Wood Working	3.0	4.6	0.2	2.0	3.3	0.1
Textile Trade	3.6	1.4	7.5	4.2	1.1	8.9

Source: 1990 Census 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 5.12a and 5.12b shows the distribution of the population aged 5 years and above by field of study and education level completed. 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 5.12a: Education level completed by Field of Study (Percent), Lusaka Province, 1990

Field of Study	Size	Total	Level of Education Completed				
			1-7	8-9	10-12	'A' Level	Degree
Natural Science	823	100	4.9	3.0	61.1	8.7	22.2
Civil Engineering	617	100	11.5	2.4	68.4	5.3	12.3
Electronics/Engineering	1,915	100	11.9	5.6	75.8	2.5	4.3
Mechanics/Engineering	3,673	100	16.3	7.8	70.2	1.9	3.8
Chemical Engineering	194	100	13.9	6.7	59.8	4.6	14.9
Mining Engineering	143	100	16.8	7.7	55.9	3.5	16.1
Industrial Engineering	302	100	23.8	8.6	59.3	2.0	6.3
Metallurgical Engineering	829	100	37.0	10.1	16.2	0.6	36.1
Architecture	386	100	13.0	9.8	54.7	8.0	14.5
Other Engineering	1,051	100	9.1	4.2	78.4	3.6	4.7
Medicine/Surgery	687	100	7.3	4.7	63.0	8.2	16.9
Pharmacy	294	100	4.1	2.7	84.7	3.4	5.1
Dentistry	201	100	8.0	2.5	76.6	6.5	6.5
Nursing	2,480	100	6.4	8.1	80.5	2.5	2.5
Medical Technology	595	100	6.7	4.9	74.6	4.0	9.7
Veterinary	137	100	10.9	7.3	69.3	2.9	9.5
Computer Science	646	100	2.8	2.9	83.1	5.1	6.0
Economics	1,000	100	4.8	3.0	64.9	9.8	17.5
Accountancy	6,350	100	4.9	4.0	84.0	3.2	4.0
Teacher Training	5,932	100	8.3	10.6	73.1	3.3	4.7
Law/jurisprudence	1,057	100	10.6	7.2	63.4	8.9	9.9
Journalism	505	100	4.8	3.2	81.4	5.9	4.8
Fine arts	436	100	14.9	5.3	64.2	6.4	9.2
Social Welfare	447	100	16.1	8.5	57.9	5.1	12.3
Criminology	537	100	17.5	12.3	67.4	0.6	2.2
Business Administration	3,359	100	8.1	6.6	74.4	5.1	5.8
Secretarial Training	4,102	100	3.2	6.7	87.4	1.3	1.4
Shorthand Typing	1,762	100	5.9	12.7	79.3	0.9	1.3
Clerical typing	2,442	100	9.4	14.7	74.3	0.4	1.1
Office Machine	536	100	12.7	9.1	74.1	0.6	3.5
Service Trade	759	100	29.8	11.5	54.4	1.1	3.3
Agriculture/Forestry/Fisheries	1,534	100	14.3	8.9	67.7	3.6	5.6
Food/Drink Production	438	100	24.0	10.0	60.5	1.8	3.7
Wood Working	1,251	100	40.3	12.8	43.1	0.2	3.7
Textile Trade	1,481	100	24.0	21.9	50.3	0.5	3.3

Source: 2000 Census 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 5.12b: Education level completed by Field of Study (Percent), Lusaka Province, 2000

Field of Study	Size	Total	Level of Education Completed				
			1-7	8-9	10-12	'A' Level	Degree
Natural Science	954	100	0.8	0.8	19.6	2.2	76.5
Civil Engineering	1,151	100	2.3	2.5	37.0	1.9	56.3
Electronics/Engineering	3,865	100	3.8	4.0	30.0	4.4	57.8
Mechanics/Engineering	6,321	100	3.5	6.7	35.3	3.9	50.6
Chemical Engineering	270	100	2.2	4.4	30.0	2.6	60.7
Mining Engineering	148	100	4.1	2.7	22.3	3.4	67.6
Industrial Engineering	200	100	3.0	6.0	30.5	2.5	58.0
Metallurgical Engineering	108	100	6.5	7.4	22.2	1.9	62.0
Architecture	340	100	2.4	2.6	23.2	1.5	70.3
Other Engineering	1,140	100	2.8	4.7	26.2	1.8	64.5
Medicine/Surgery	908	100	1.4	0.4	21.0	2.0	75.1
Pharmacy	443	100	1.6	1.6	35.9	2.0	58.9
Dentistry	255	100	3.9	6.7	39.2	4.7	45.5
Nursing	7,511	100	5.3	7.4	44.7	3.6	39.0
Medical Technology	677	100	1.9	1.3	38.1	1.6	57.0
Veterinary	225	100	6.7	1.8	35.1	2.7	53.8
Computer Science	3,667	100	1.1	0.9	24.8	3.8	69.4
Economics	1,674	100	1.4	1.4	20.7	2.0	74.6
Accountancy	12,063	100	0.8	1.1	25.8	2.8	69.6
Teacher Training	10,433	100	2.0	3.4	32.6	4.4	57.6
Law/jurisprudence	1,757	100	1.5	1.5	15.1	1.1	80.8
Journalism	1,061	100	1.1	1.1	23.5	2.5	71.8
Fine arts	736	100	4.9	6.9	29.2	2.7	56.3
Social Welfare	633	100	4.6	4.4	31.0	1.9	58.1
Criminology	830	100	1.8	4.8	40.2	1.1	52.0
Business Administration	6,619	100	1.3	1.6	22.4	3.0	71.7
Secretarial Training	6,032	100	1.1	2.5	29.2	3.6	63.6
Shorthand Typing	1,468	100	5.6	11.4	32.9	2.8	47.3
Clerical typing	1,479	100	3.7	13.4	31.0	2.2	49.8
Office Machine	524	100	3.2	7.8	30.0	2.9	56.1
Service Trade	2,097	100	9.6	12.0	23.3	2.2	52.8
Agriculture/Forestry/Fisheries	2,372	100	4.4	4.6	35.2	3.2	52.6
Food/Drink Production	923	100	6.3	8.8	26.4	3.8	54.7
Wood Working	1,562	100	16.6	19.0	27.5	1.1	35.9
Textile Trade	3,191	100	13.1	25.4	21.8	2.8	36.9

Source: 1990 and 2000 Census 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. Overall, the number of certificate holders rose by 51.6 percent between 1990 (45,017) and 2000 (68,244). The proportion of persons with certificates who had attained grades 1 to 7 declined from 17.7 percent in 1990 to 10.9 percent in 2000, whilst the proportions attaining higher grades increased drastically. These findings demonstrate how difficult it has become to get certification with limited education background. On the other hand, the number of diploma holders after grades increased by 32.9 percent from 16,135 in 1990 to 21,444 in 2000. Once again there was a decline in the proportions of diploma holders with up to grade 7 and 9 education from 3.7 to 3.1 percent during the same period. The same scenario applies to male and female holders alike. (Refer to table 5.13).

Table 5.13 Certificates and Diplomas by level of Education and Sex, Lusaka Province, 1990-2000

Certificates	Size	Education Level Completed				
		1-7	8-9	10-12	'A' Level	Total
Certificates						
Lusaka 1990						
Total	45,017	17.7	11.6	70.0	0.7	100
Male	27,209	21.8	10.6	66.9	0.7	100
Female	17,808	11.4	13.1	74.7	0.8	100
Lusaka 2000						
Total	68,244	10.9	17.0	65.0	7.0	100
Male	38,466	11.1	14.9	68.0	5.9	100
Female	29,778	10.5	20.1	61.0	8.5	100
Diploma						
Lusaka 1990						
Total	16,135	3.7	3.1	83.9	9.3	100
Male	12,376	3.9	2.9	83.8	9.3	100
Female	3,759	2.7	3.6	84.3	9.3	100
Lusaka 2000						
Total	21,444	3.1	3.5	86.0	7.0	100
Male	14,937	3.2	3.4	87.0	6.3	100
Female	6,507	2.9	3.7	85.0	8.7	100

Source: 1990 and 2000 Census of population and housing

5.14. Summary

In Lusaka Province literacy rates did not significantly improve between 1990 and 2000, they rose from 68.6 to 70.1 percent between 1990 and 2000 respectively. Thus 70.1 percent of all persons 5 years and above were literate. Literacy rates for persons in urban areas are much higher than those for females and rural areas, 73.3 percent and 55.0 percent respectively. The youth (15-24) and adults (15 years +) recorded better overall rates of 82.0 percent and 81.1 percent respectively, in 2000.

In 2000, 30.7 percent of the 5 years and above were in school an increase of only 1.1 percent from the 1990 level. The male children had a higher attendance rate of about 31.1 percent compared to 30.3 percent for their female counterparts.

At primary level, there are more female children enrolled than there are males. Seventy-five percent of the males are enrolled compared to seventy-four percent for the females. This situation is reversed at secondary school level where more males (65.8 percent) than females (53.7 percent) are attending school.

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

The most popular fields of study are Accountancy, Teacher training, nursing and Business administration. This is a typical urban province with a considerably high 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 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 have 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 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.

- **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 and/or sex group is 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:** The unemployed population consists of all persons 12 years and over who are actively seeking work or are available for work during reference period, i.e. the last seven days before the enumeration day.

6.3 Working-Age Population

Figure 6.1 is a diagrammatic presentation of the various categories of the population of the working-age. Table 6.1 presents the population 12 years and over by age group, residence and sex for 1990 and 2000. The table shows that the working-age population in Lusaka province increased by 36 percent. The increase of the female working-age population of 37 percent is higher than the increase in the male working-age population of 35 percent. In rural areas, the working-age population has increased by 47 percent, while in urban areas it has increased by 34 percent. The male and female working–age population in rural areas increased by the same margin 47.4 percent. In urban areas the increase of 32.9 percent in the male working-age population is slightly less than the increase in the female working-age population of 35.2 percent.

Figure 6.1 Working-age Population 12 years and above

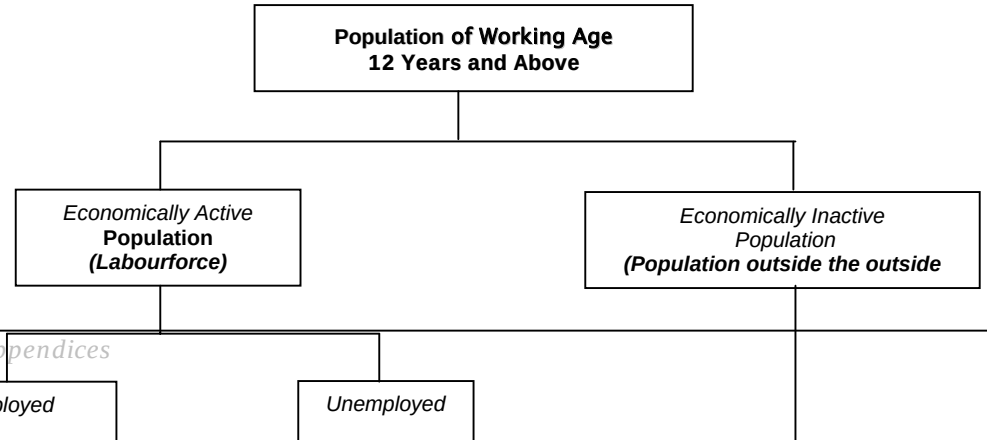
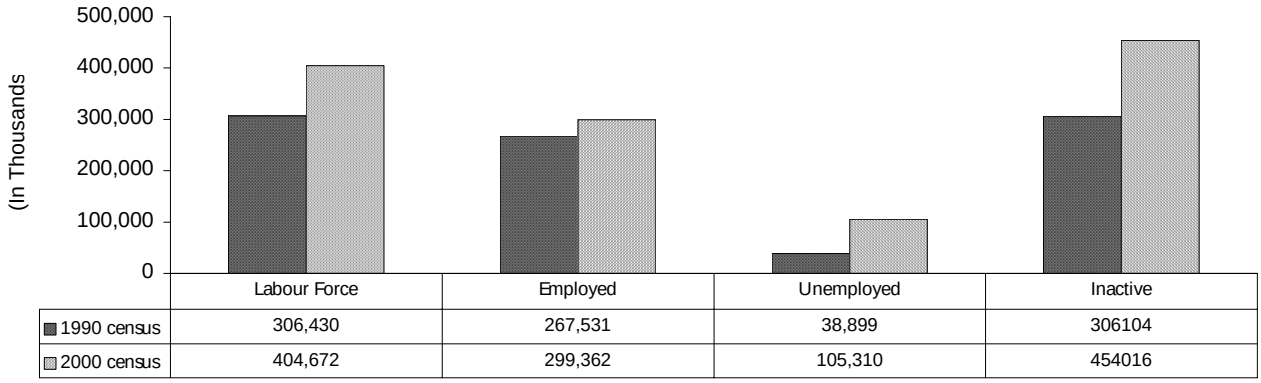


Table 6.1: Population 12 Years and Over by Broad Age-Groups, Residence and Sex, Lusaka Province, 1990 and 2000

Residence and Sex	Year	Size	Total	12-19	20-24	25-29	30-59	60+	Not Stated
Total	**1990**	630,851	100	32.4	17.6	13.5	33.3	3.0	0.2
	2000	858,688	100	28.3	18.4	16.1	33.6	3.7	0.0
Percent increase		36.1							
Male	**1990**	320,269	100	29.9	16.6	13	36.8	3.4	0.3
	2000	433,009	100	26.3	16.8	16.7	36.5	3.7	0.0
Percent increase		35.2							
Female	**1990**	310,582	100	35	18.6	13.9	29.7	2.6	0.2
	2000	425,679	100	30.3	20.1	15.5	30.6	3.6	0.0
Percent increase		37.1							
Residence									
Rural									
Total	**1990**	98,123	100	29.9	16	10.6	32.5	5.7	5.3
	2000	144,651	100	30.2	16.1	13.2	33.8	6.7	0.0
Percent increase		47.4							
Male	**1990**	49,925	100	31.5	15.2	11.5	33.2	7.7	0.9
	2000	73,606	100	29.5	15.1	13.2	35.3	6.8	0.0
Percent increase		47.4							
Female	**1990**	48,198	100	33.2	16	12	32.4	6.2	0.2
	2000	71,045	100	30.9	17.1	13.2	32.3	6.5	0.0
Percent increase		47.4							
Urban									
Total	**1990**	532,728	100	32.4	18	13.7	33.4	2.3	0.2
	2000	714,037	100	27.9	18.9	16.6	33.5	3.0	0.0
Percent increase		34.0							
Male	**1990**	270,344	100	29.6	16.9	13.2	37.5	2.6	0.2
	2000	359,403	100	25.7	17.1	17.4	36.7	3.1	0.0
Percent increase		32.9							
Female	**1990**	262,384	100	35.3	19.1	14.3	29.2	2.0	0.1
	2000	354,634	100	30.2	20.7	15.9	30.3	3.0	0.0
Percent increase		35.2							

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

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



	Labour Force	Employed	Unemployed	Inactive
1990 census	306,430	267,531	38,899	306104
2000 census	404,672	299,362	105,310	454016

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

6.4 The Economically Inactive Population

Table 6.2 show the current economically inactive population by reason of activity, residence and sex in 2000.Almost two thirds (66 percent) of the inactive population is female, while about a third (34 percent) are male. About 83 percent are in rural areas while 17 percent are in the urban areas. Homemaking 41.0 percent is the most important reason for inactivity, followed by studying (38.0) and lastly other reasons (21.1 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. However, it can be noted that there are slightly more homemakers in rural areas (41.7 percent) than in the urban areas (35.7 percent); slightly more students in the urban areas (38.4 percent) than in the rural areas (36.9 percent);and there are equal number of economically inactive people for other reasons in both the rural and urban areas (21.4 percent).

In 2000, males were economically inactive mainly because of studying (59.5 percent) while females are inactive primarily because of home making (57.2 percent).

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

Residence And Sex	Reason For Inactivity				
	Total Number	Total	Home Maker	Student	Other
Lusaka Province					
Total	454,016	100	40.5	38.1	21.4
Rural	76,802	100	41.7	36.9	21.4
Urban	377,214	100	40.3	38.4	21.4
Sex					
Male	152,694	100	7.5	59.5	32.9
Female	301,322	100	57.2	27.3	15.5

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

6.5 Economically Active Population (Labourforce)

Figure 6.1 gives an illustration of the economically active population and economically inactive population. The economically active population by residence and sex are given in Table 6.3. According to this table, the labour force increased by 32.1 percent from 306,430 in 1990 to 404,672 in 2000 in absolute terms. However the average annual growth rate was 2.8 percent. The provincial growth rate was below the national average of 3.8 percent. The increase of 36 percent in the female labour force is more than the increase of 30 percent in male labourforce. A big proportion of the labourforce (82.3 percent in 1990 and 83.2 percent in 2000) is in urban areas as compared to the labourforce in rural areas (17.7 percent in 1990 and 16.8 percent in 2000).

TABLE 6.3: TRENDS IN THE LABOUR FORCE AND AVERAGE ANNUAL GROWTH RATE OF THE LABOUR FORCE BY DISTRICT, LUSAKA PROVINCE, 1990 AND 2000

District	1990	2000	Average Annual Growth Rate
Zambia	2,162,487	3,165,151	3.8
Lusaka Province	306,430	404672	2.8
Chongwe	-	33,152	-
Kafue	-	38,079	-
Luangwa	5,626	7815	3.3
Lusaka Rural	66,478	-	-
Lusaka	234,326	325626	3.3

Sources: 1990 and 2000 Censuses of Population and Housing
Note:"-" denotes not applicable as they refer either to new or non-existent districts

Lusaka and Luangwa districts both recorded average annual growth rates in the Labour force above the provincial average at 3.3 percent each.

In terms of percentage distribution of the labourforce in 2000, Lusaka district had the highest (80.5 Percent), followed by Kafue and Chongwe districts with 9.4 percent and 8.2 percent respectively. Luangwa district had the least with 1.9 percent.

Table 6.4: Distribution of the Labour force (Percent) by District, Lusaka Province, 2000

District	Total	Male	Female
Lusaka Province Total Labourforce			
Total %	100	100	100
Chongwe	8.2	8.1	8.3
Kafue	9.4	9.9	8.3
Luangwa	1.9	1.4	3.2
Lusaka	80.5	80.6	80.2

Sources: 2000 Census of Population and Housing

Of the 404,672 total labourforce in Lusaka province in 2000 299,362 or 74 percent are employed. The employed population increased by 12 percent from 267,531 in 1990 to 299,362 in 2000.The proportion of the employed population residing in rural areas has decreased from 18.3 percent in 1990 to 17.8 percent in 2000 while the proportion of the employed labour force residing in urban areas has increased from 81.7 percent in 1990 to 82.2 percent in 2000.

According to Table 6.5 the unemployed population has increased by 170 percent from 38,899 in 1990 to 105310 in 2000.The increase of 209 percent in the male unemployed population is more than the increase in the female unemployed population of 121 percent.

In 1990 there were less unemployed people in the rural areas (13.4 percent for total; 14.7 percent for male and 11.7 percent for female) than in the urban areas (86.6 percent for total; 85.3 percent for male and 88.3 percent for female). In 2000 the same situation prevailed, there were more unemployed people residing in the urban areas (86.2 percent for total; 85.3 percent for male and 87.8 percent for female) than rural areas (13.8 percent for total, 14.7 percent for male and 12.2 percent for female).

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

Activity and Sex	Residence							
	1990				2000			
	Total Number	Total	Rural	Urban	Total Number	Total	Rural	Urban
Population								
Total	630,851	100.0	15.6	84.4	858,688	100	16.8	83.2
Male	320,269	100.0	15.6	84.4	433,009	100	17.0	83.0
Female	310,582	100.0	15.5	84.5	425,679	100	16.7	83.3
Labour Force								
Total	306,430	100.0	17.7	82.3	404,672	100	16.8	83.2
Male	214,963	100.0	17.1	82.9	280,315	100	16.7	83.3
Female	91,467	100.0	19.1	80.9	124,357	100	17.0	83.0
Employed								
Total	267,531	100.0	18.3	81.7	299,362	100	17.8	82.2
Male	192,968	100.0	17.3	82.7	212,339	100	17.3	82.7
Female	74,563	100.0	20.8	79.2	87,023	100	19.0	81.0
Unemployed								
Total	38,899	100.0	13.4	86.6	105,310	100	13.8	86.2
Male	21,995	100.0	14.7	85.3	67,976	100	14.7	85.3
Female	16,904	100.0	11.7	88.3	37,334	100	12.2	87.8
Inactive								
Total	306,104	100.0	13.7	86.3	454,016	100	16.9	83.1
Male	96,565	100.0	12.6	87.4	152,694	100	17.6	82.4
Female	209,539	100.0	14.2	85.8	301,322	100	16.6	83.4
Not Stated								
Total	18,317	100.0	11.3	88.7	0.0	0.0	0.0	0.0
Male	8,741	100.0	12.5	87.5	0.0	0.0	0.0	0.0
Female	9,576	100.0	10.1	89.9	0.0	0.0	0.0	0.0

Source: 2000 Census of Population and Housing

The economically inactive population comprises all persons 12 years and over who are classified neither as employed nor as unemployed during the reference period; i.e. the part of the population that is considered to be outside the labour force. This category includes all persons who are full time housewives/homemakers, full time students and those who are not available for work aged 12 years and over.

Out of the total working population of 858,688, 454,016 were classified as being economically inactive. The economically inactive population has increased by 48.3 percent from 306,104 in 1990 to 454,016 in 2000. Economic inactivity for males increased by 58.1 percent from 96,565 in 1990 to 152,694 in 2000. Female economic inactivity also increased by 43.8 percent from 209,539 in 1990 to 301,322 in 2000. In both 1990 and 2000, there were more economically inactive persons in the urban areas than in the rural areas, the differences are significant.

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 (28.1 percent for total; 29.4 percent for males and 25.2 percent for females and 32.9 percent for total; 33.3 percent for males and 31.7 percent for females, respectively).

For the unemployed population, the peak is in the age-groups 12-19 (22.0 percent for total, 17.4 percent for males and 30.4 percent for females) and 20-24 (30.0 percent for total, 28.5 percent for males and 30.4 percent for females, respectively).

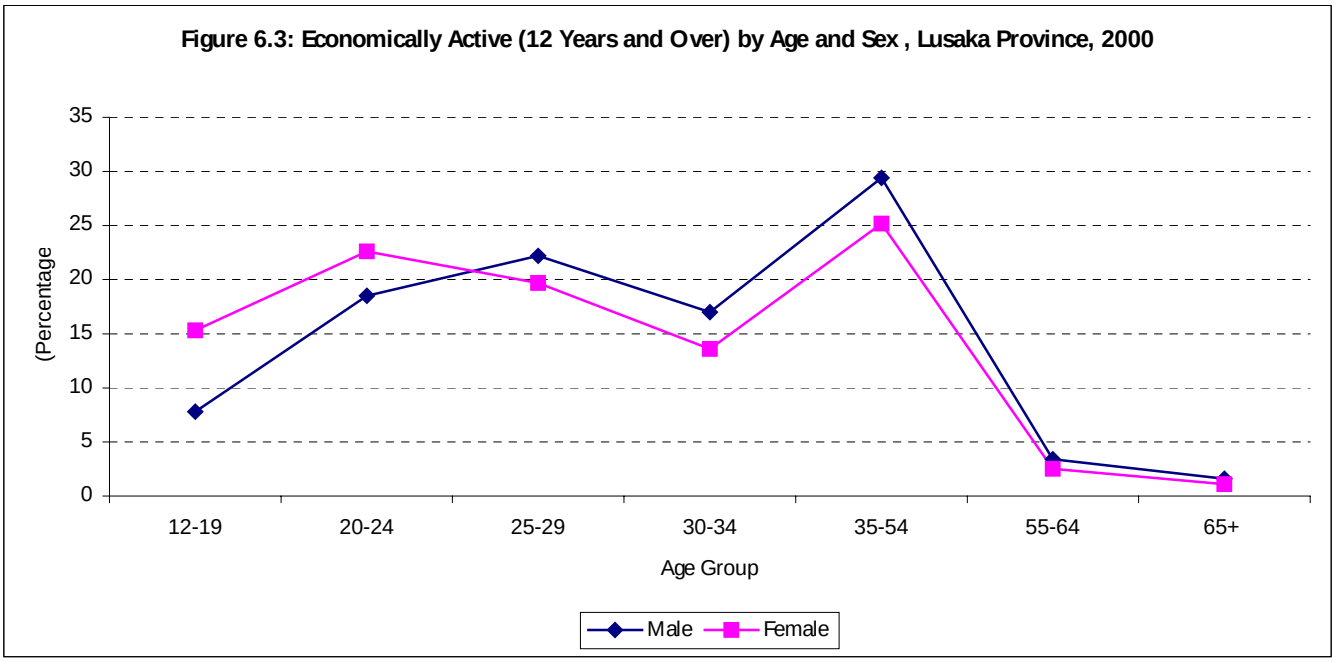
In so far as the economically inactive population is concerned, the peak is in the 12-19 age-group largely due to the fact that this is the age-range where you have a lot of school going persons on a full time basis.

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 older) by Age, Sex and nature of Current Economic Activity, Lusaka 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	404,672	100.0	10.1	19.7	21.5	16.0	28.1	3.1	1.5	0.0
Male	280,315	100.0	7.8	18.5	22.2	17.0	29.4	3.4	1.6	0.0
Female	124,357	100.0	15.3	22.6	19.7	13.6	25.2	2.5	1.1	0.0
Employed										
Total	299,362	100.0	5.9	16.1	21.9	17.9	32.9	3.6	1.7	0.0
Male	212,339	100.0	4.7	15.3	22.4	18.6	33.3	3.8	1.8	0.0
Female	87,023	100.0	8.7	18.2	20.6	16.1	31.7	3.2	1.5	0.0
Unemployed										
Total	105,310	100.0	22.0	30.0	20.3	10.5	14.8	1.7	0.8	0.0
Male	67,976	100.0	17.4	28.5	21.7	12.0	17.3	2.1	1.0	0.0
Female	37,334	100.0	30.4	32.7	17.7	7.8	10.1	0.9	0.4	0.0
Inactive										
Total	454,016	100.0	44.6	17.2	11.2	7.0	13.7	3.3	3.0	0.0
Male	152,694	100.0	60.4	13.7	6.4	3.7	8.6	3.6	3.6	0.0
Female	301,322	100.0	36.5	19.0	13.7	8.7	16.3	3.1	2.6	0.0

Source: 2000 Census of Population and Housing



Source: 2000 Census of Population and Housing

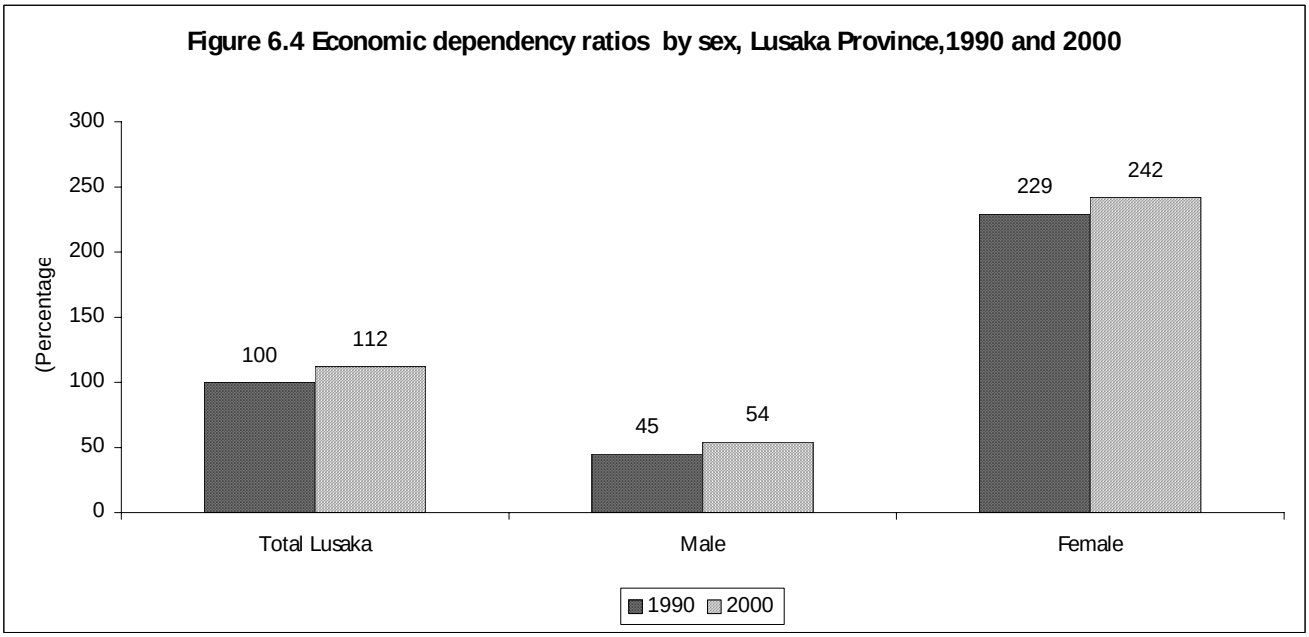
6.6 Economic Dependency Ratio

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 categories. The most significant increase was in the rural areas (77 percent in 1990 to 113 percent in 2000). The dependency ratio for urban areas increased by only 7 percentage points. The economic dependency ratio for the province was higher than the national dependency ratio in 2000 (112 versus 79 percent in 2000).

Table 6.7 Current Economically Active Population and Economic Dependency Ratio by Sex and Residence, Lusaka Province, 1990 and 2000

Labour force	1990	2000
Total Lusaka	306,430	404,672
Male	214,963	280,315
Female	91,467	124,357
Rural	54,238	67,849
Urban	252,192	336,823
Economic dependency ratio (Percentage)		
Total Zambia	114	79.0
Total Lusaka	100	112
Male	45	54
Female	229	242
Rural	77	113
Urban	105	112

Source: 2000 Census of Population and Housing



Source: 2000 Census of Population and Housing

6.7 Current Labour Force Participation Rates

Labour force participation rates by district and sex are shown in Table 6.8. The has been a decline in the extent to which the working-age population are involved in economic activities between the two censuses. The Labourforce participation rate declined from 48.6 percent in 1990 to 47.1 percent in 2000.In absolute terms the decline in males labour force participation from 67.1 percent in 1990 to 64.7 percent in 2000 is more than the decline for female labourforce participation rate from 29.4 percent in 1990 to 29.2 percent in 2000. The provincial labour force is below the national rate of 56 percent.

The trend by districts is different for it shows increase for both males and females. Luangwa district showed an increase from 60.7 percent in 1990 to 72.8 percent in 2000. Lusaka district also showed an increase from 46.3 percent in 1990 to 47.5 percent in 2000.Luangwa district experienced a more significant increase compared to Lusaka district.

Table 6.8: Trends in Labour Force Participation Rates by district and Sex, 1990 and 2000, Lusaka Province, 2000

Province/District	1990	2000

	Total	Male	Female	Total	Male	Female
Zambia	46.6	62.2	31.9	56.0	67.0	45.0
Lusaka Total	48.6	67.1	29.4	47.1	64.7	29.2
District						
Chongwe	-	-	-	45.2	61.6	28.4
Kafue	-	-	-	42.7	60.9	23.6
Luangwa	60.7	70.3	52.2	72.8	73.1	72.4
Lusaka	46.3	64.5	27.3	47.5	65.4	29.3

Source: 1990 and 2000 Census of Population and Housing.

Note: "-" denotes not applicable as they refer either to new or non-existent districts.

An examination of the labour force participation rates by age reveals that they were lowest (6.1 percent) in the age-group 12-14 years, rose with the increase in ages to reach a peak of 67 percent for the age-group 30-34 years and 35.39 years, and then started to decline until it reaches 20.5 percent for the oldest age-group 75 years and over (refer to Table 6.9 and figure 6.5). The pattern of the distribution of the labour force participation rates by age in rural and urban areas is almost similar to the pattern described above for the total population. The patterns are also the same for both sexes except for the pattern for females in urban areas where the peak is reached in the age group 35-39 age group. Figures 6.5 and 6.6 gives a trend of the current Labourforce participation rates by age and sex for rural and urban areas respectively.

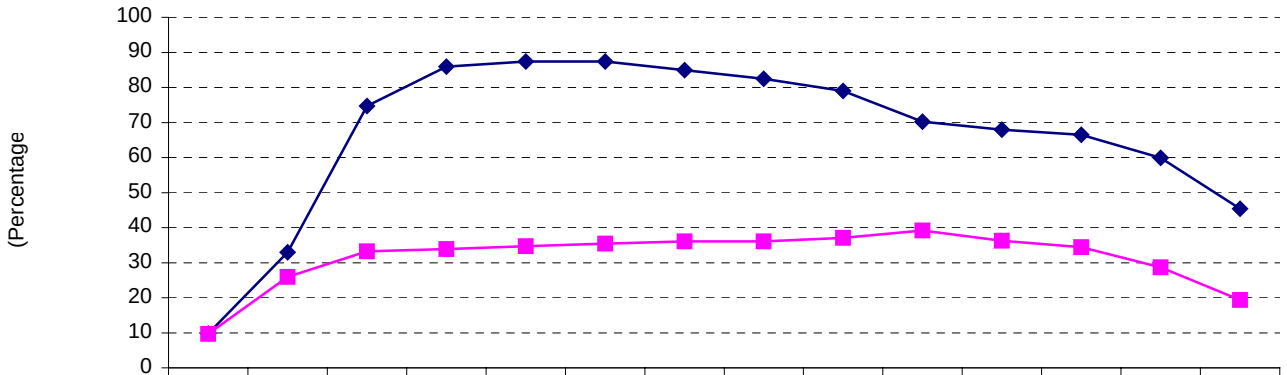
The male labour force participation rates are higher than those for females at every age-group; this pattern is the same between the two sexes and in both rural and urban areas.

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

	Current Participation Rates								
	Total			Rural			Urban		
Age-Group	Both	Male	Female	Both	Male	Female	Both	Male	Female
1990	48.6	67.1	29.4	55.2	73.4	36.3	47.4	66	28.2
2000	47.1	64.7	29.2	46.9	63.5	29.7	47.2	65	29.1
2000 Census Age Group									
Total									
12 – 14	6.10	5.90	6.30	9.80	9.80	9.70	5.20	4.90	5.50
15 – 19	23.2	27.4	19.7	29.4	32.9	25.9	22.0	26.1	18.4
20 – 24	50.5	71.3	32.9	53.1	74.7	33.3	50.1	70.7	32.8
25 – 29	63.0	86.5	37.3	60.3	85.9	33.9	63.5	86.6	37.9
30 – 34	67.0	89.5	39.2	63.5	87.4	34.7	67.6	89.6	40.0
35 – 39	67.0	89.6	40.4	62.4	87.4	35.4	67.9	90.0	41.4
40 – 44	66.3	88.3	40.7	61.6	84.9	36.1	67.3	88.9	41.4
45 – 49	63.7	84.2	39.0	61.0	82.5	36.1	64.3	84.5	39.6
50 – 54	56.5	76.1	31.7	59.4	79.0	37.1	55.7	75.4	30.2
55 – 59	49.6	65.6	28.0	55.4	70.2	39.2	47.7	64.3	23.7
60 – 64	40.9	59.9	21.3	51.8	67.9	36.3	36.6	56.9	15.1
65 – 69	38.5	54.6	19.6	51.8	66.5	34.4	32.6	49.4	13.3
70 – 74	30.6	46.5	14.1	45.8	59.9	28.7	23.2	39.1	7.7
75+	20.5	30.8	10.1	33.3	45.4	19.4	14.0	22.6	5.8
Not stated	-	-	-	-	-	-	-	-	-

Source: 1990 and 2000 Census of Population and Housing.

Figure 6.5: Current Labour Force Participation Rates By Age and Sex , Lusaka Province Rural, 2000.

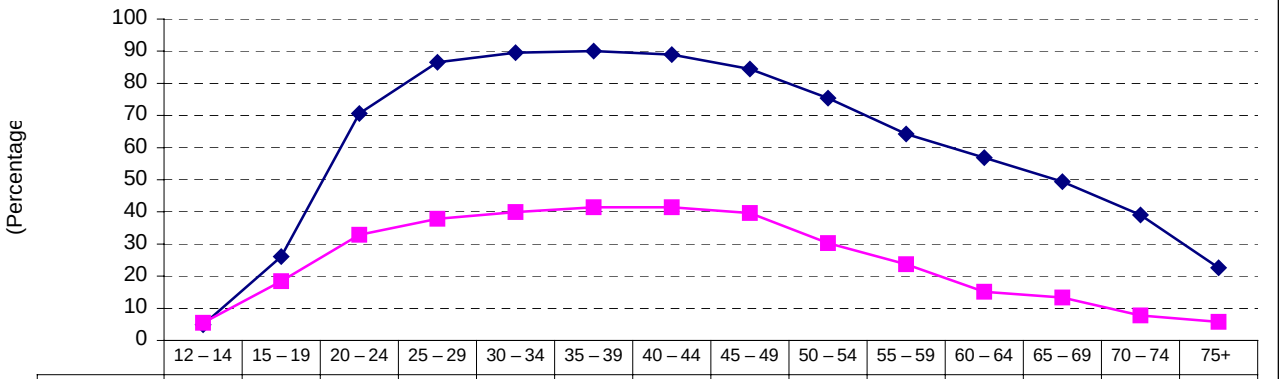


	12 – 14	15 – 19	20 – 24	25 – 29	30 – 34	35 – 39	40 – 44	45 – 49	50 – 54	55 – 59	60 – 64	65 – 69	70 – 74	75+
Male	9.81	32.94	74.7	85.9	87.39	87.43	84.9	82.51	78.99	70.22	67.9	66.49	59.87	45.42
Female	9.72	25.9	33.25	33.85	34.69	35.4	36.07	36.11	37.05	39.2	36.29	34.44	28.67	19.38

Age Group

Source: 2000 Census of Population and Housing

Figure 6.6: Current Labour Force Participation Rates By Age and Sex , Lusaka Province Urban, 2000



	12 – 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+
Male	4.87	26.09	70.66	86.59	89.59	90.03	88.94	84.49	75.39	64.29	56.91	49.37	39.09	22.59
Female	5.52	18.44	32.82	37.86	39.98	41.44	41.44	39.63	30.23	23.66	15.13	13.3	7.72	5.79

Age Group

Source: 2000 Census of Population and Housing

6.8 Employment Status, Occupation And Industrial Classification

The occupational and industrial structure and employment status of a provinces' 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 its primary industries. The work force is found in various forms of self-employment activities and unskilled. These activities are in the Agricultural sector and other occupations characterized by low skill requirements.

6.8.1 Employment Status

Table 6.10 shows that the usually working population increased by 13.6 percent between 1990 and 2000 from 247,644 in 1990 to 281,397 in 2000. The increase in the working population for the province is much lower than the increase of 52.9 percent at national level.

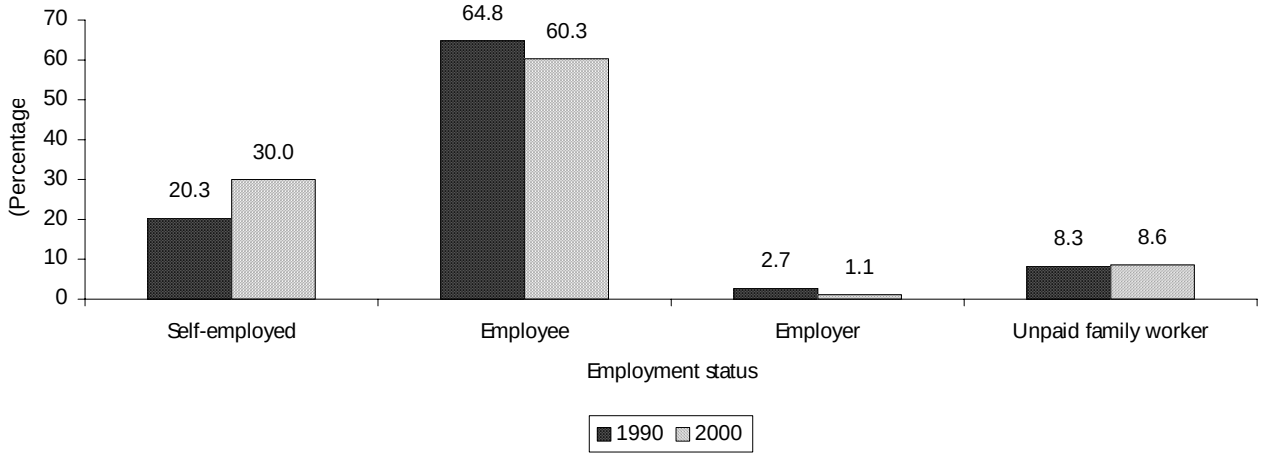
In terms of employment status, the total self-employed persons as a proportion of the total usually working population increased from 20.3 percent in 1990 to 30.0 in 2000. The ratio of the self-employed persons by sex also increased between the two intercensal periods. However, the increase in the male self- employed persons (from 17.8 percent in 1990 to 28.7 percent in 2000) is more than the increase in the female self-employed persons (from 27.1 percent in 1990 to 33.1 percent in 2000). With regard to residence, a similar pattern is observed, in urban areas the proportion of the male self-employed population increased by a bigger percentage (from 15.9 percent in 1990 to 27.8 percent in 2000) than the female self-employed population (from 27.3 percent in 1990 to 35 percent in 2000). In rural areas the male self-employed population increased, whereas the female self employed population declined slightly from 26.1 percent in 1990 to 25.1 percent in 2000.

There was a decrease in the proportion of the workforce classified as employers. From a proportion of 2.7 percent in 1990 , it dropped to 1.1 percent in 2000. A similar trend by sex and residence is observed.

The proportion of the total population classified as employees decreased from 64.8 percent in 1990 to 60.3 percent in 2000. Similarly, the proportion of male employees decreased from 70.8 percent in 1990 to 64.2 percent in 2000, in contrast female employees increased slightly from 48.4 percent in 1990 to 51.1 percent in 2000. In general, both urban and rural areas experienced a drop in employees between the intercensal periods.

The proportion of the unpaid family workers increased in general from 8.3 percent in 1990 to 8.6 percent in 2000. The proportion of the urban unpaid family workers decreased slightly from 3.7 percent in 1990 to 3.6 percent in 2000. In contrast there was an increase in the proportion of the unpaid family workers in the rural areas.

Figure 6.7:Usually Working Population (12 Years and Over) by Employment status, Sex and Residence,Lusaka Province, 1990 and 2000



Source: 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, Lusaka Province 1990 and 2000

Employment status and sex	Residence and Year					
	Total Lusaka		Rural		Urban	
	1990	2000	1990	2000	1990	2000
Total number						
Total	247,644	281,397	42,588	49,998	205,056	231,399
Male	181,373	197,467	29,158	33,942	152,215	163,525
Female	66,271	83,930	13,430	16,056	52,841	67,874
Total percentage						
Total	100	100	100	100	100	100
Male	100	100	100	100	100	100

Employment status and sex	Residence and Year					
	Total Lusaka		Rural		Urban	
	1990	2000	1990	2000	1990	2000
Female	100	100	100	100	100	100
Self-employed						
Total	20.3	30.0	27.4	30.7	18.8	29.9
Male	17.8	28.7	27.9	33.4	15.9	27.8
Female	27.1	33.1	26.1	25.1	27.3	35.0
Employee						
Total	64.8	60.3	37.2	37	70.5	65.3
Male	70.8	64.2	45.8	44.3	75.6	68.3
Female	48.4	51.1	18.5	21.5	56.0	58.1
Employer						
Total	2.7	1.1	2.0	0.8	2.9	1.1
Male	3.1	1.2	2.4	0.9	3.2	1.3
Female	1.8	0.7	1.1	0.4	2.1	0.8
Unpaid family worker						
Total	8.3	8.6	30.4	31.5	3.7	3.6
Male	5.1	5.9	21.4	21.3	2.0	2.6
Female	17	15	50	52.9	8.6	6.0
Not stated						
Total	3.9	0.0	3.0	0.0	4.0	0.0
Male	3.2	0.0	2.5	0.0	3.3	0.0
Female	5.7	0.0	4.3	0.0	6.0	0.0

Source: 2000 Census of Population and Housing

6.8.2 Working population by occupation

The distribution of male and female workers among occupations showed some similarities. The three most common occupations for males are Production and related workers (16 percent in 1990 and 26 percent in 2000) Agriculture (13 percent in 1990 and 16 percent in 2000) and Sales workers (11 percent in 1990 and 19 percent in 2000).

The three most common occupations for females are Sales workers (22 percent in 1990 and 29 percent in 2000),Agriculture (15 percent in 1990 and 17 percent in 2000) and service workers (11 percent in 1990 and 18 percent in 2000).

In rural areas, the distribution of workers among the various occupations is similar to the one for total Lusaka Province, except that the proportion of workers who are in Agriculture and related occupations is much higher in rural 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 common occupations in urban areas are Sales workers (26.1 percent in 2000) Production and related workers (23.4 percent in 2000) Service workers (16.7 percent) and Professional, technical and related workers (14.3 percent in 2000).

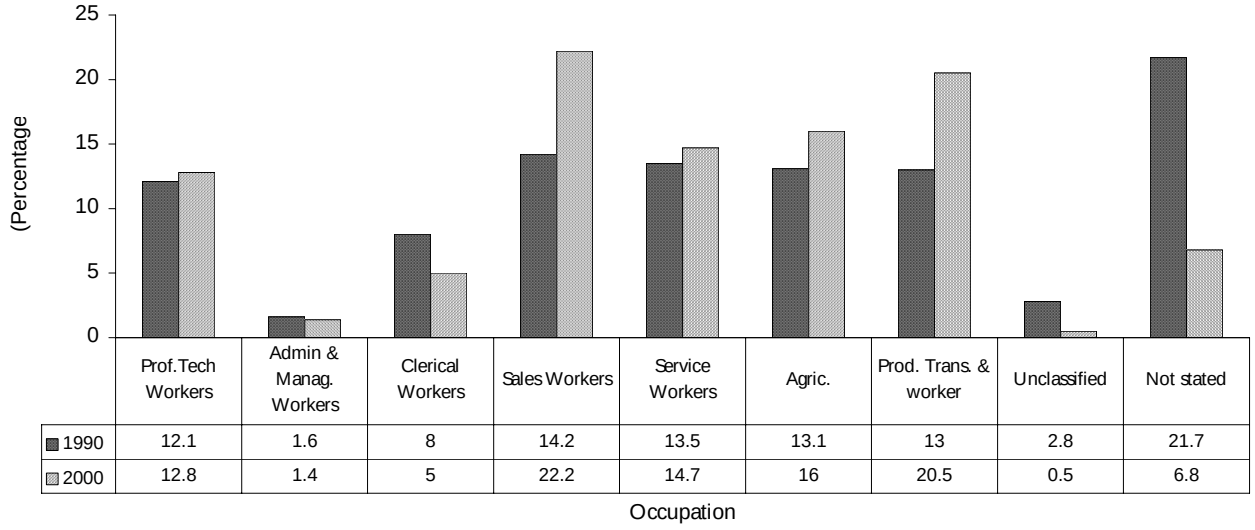
Table 6.11: Percent Distribution of the Usually Working Population By Occupation, Sex and Residence, Lusaka Province, 1990 and 2000

Occupation		Percentage of Working Population								
		Total			Rural			Urban		
		Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females
Total Number of Workers	1990	247,644	181,373	66,271	42,588	29,158	13,430	205,056	152,215	52,841
	2000	281,397	197,467	83,930	49,998	33,942	16,056	231,399	163,525	67,874
Total (%)	1990	100	100	100	100	100	100	100	100	100
	2000	100	100	100	100	100	100	100	100	100

Prof.Tech Workers	1990	12.1	11.9	12.7	4.4	4.7	3.8	13.7	13.3	14.9
	2000	12.8	12.6	13.4	6.0	6.1	5.6	14.3	13.9	15.3
Admin & Manag. Workers	1990	1.6	1.9	0.9	0.4	0.5	0.1	1.9	2.2	2.0
	2000	1.4	1.6	1.0	0.3	0.3	0.2	1.6	1.8	1.2
Clerical Workers	1990	8.0	5.9	13.8	1.3	1.2	1.6	9.3	6.7	16.9
	2000	5.0	4.3	6.6	1.1	1.1	1.2	5.9	5.0	7.9
Sales Workers	1990	14.2	11.3	22.1	4.5	3.6	6.6	16.2	12.7	26.0
	2000	22.2	19.4	28.6	3.8	3.0	5.6	26.1	22.8	34.0
Service Workers	1990	13.5	14.4	10.7	5.6	6.3	4.1	15.1	16.0	12.5
	2000	14.7	13.4	17.9	5.9	6.1	5.5	16.7	14.9	20.8
Agric.	1990	13.1	12.6	14.5	59.5	58.5	61.7	3.5	3.8	2.5
	2000	16.0	15.6	17.0	68.7	66.8	72.7	4.6	5.0	3.8
Prod. Trans. & worker	1990	13.0	15.7	5.6	5.3	6.5	2.5	14.6	17.5	6.4
	2000	20.5	26.1	7.3	7.1	9.4	2.1	23.4	29.6	8.6
Unclassified	1990	2.8	2.7	3.1	1.4	1.3	1.6	3.1	3.0	3.5
	2000	0.5	0.5	0.5	0.2	0.2	0.1	0.5	0.5	0.5
Not stated	1990	21.7	23.6	16.6	17.6	17.4	18.0	22.6	24.8	16.3
	2000	6.8	6.5	7.7	7.0	7.0	7.0	6.8	6.3	7.9

Source: 2000 Census of Population and Housing

Figure 6.8 Usually working Population (12 Years and Over) by occupation, Lusaka Province,1990 and 2000



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

6.8.3 Working population by Industry

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.

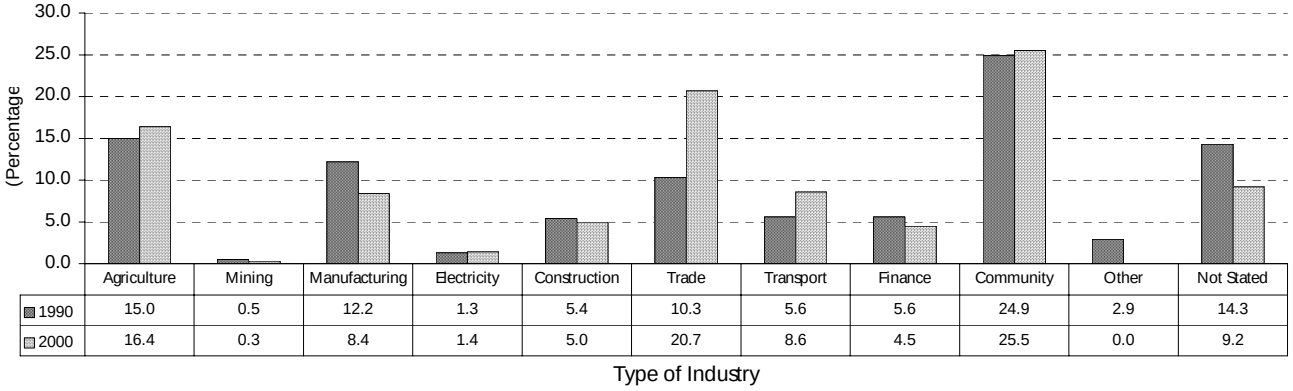
The industrial structure in Lusaka Province continues to be dominated by the Community industry. In 2000 the community sector employed 25.5 percent of the workers, the Trade industry employed 20.7 percent and Agriculture employed 16.4 percent, while transport industry employed 8.6 percent. In comparison to 1990, the trade sector has recorded the highest increase from 10.3 percent in 1990 to 20.7 in 2000,while Agriculture and Electricity industry recorded the slightest increase. However, the rest of the other sectors have shown decreases. The most significant is Manufacturing (12.2 percent in 1990 to 8.4 percent in 2000). A study of the shifts of workers from one industry to another shows that all non-agricultural industries (with the exception of Trade, Electricity and Community industry) experienced manpower losses during the 1990's, while the Agricultural, Trade and Community gained manpower. The industrial distribution of workers by employment status revealed that the unpaid family workers (47.1 percent in 1990 and 60.5 percent in 2000) were mostly in the Agricultural sector. Self-employed and Employees are more widely distributed over the industries than other statuses. Employers were more predominant in Trade (7.6 percent in 1990 and 41.7 percent in 2000) followed by Agriculture (11.3 percent in 1990 and 17.6 percent in 2000).

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

Industrial and Year		Total Number Working	Self Employed	Employee	Employer	Unpaid Family Worker	Not Stated
Total Number							
	1990	247,644	50,306	160,450	6,831	20,501	9,556
	2000	281,397	84,546	169,710	3,000	24,141	0
Lusaka Province							
	1990	100	100	100	100	100	100
	2000	100	100	100	100	100	0
Agriculture							
	1990	15	20	10	11.3	47.1	20.2
	2000	16.4	11.8	9.7	17.6	60.5	0
Mining							
	1990	0.5	0.1	0.7	0.7	0.0	0.4
	2000	0.3	0.8	0.4	0.1	0.0	0
Manufacturing							
	1990	12.2	11.3	14.1	13.2	1.4	7.7
	2000	8.4	10.7	8.8	9.0	3.0	0
Electricity							
	1990	1.3	0.3	1.8	1.6	0.0	0.8
	2000	1.4	1.5	2.0	0.4	0.4	0
Construction							
	1990	5.4	2.8	6.8	7.1	0.6	3.4
	2000	5.0	6.1	6.1	4.0	0.6	0
Trade							
	1990	10.3	27.4	6.1	7.6	3.6	6.3
	2000	20.7	16.7	10.7	41.7	18.4	0
Transport							
	1990	5.6	4.9	6.6	6.4	1.7	3.1
	2000	8.6	10.6	12.7	2.4	1.1	0
Finance							
	1990	5.6	4.9	6.6	6.4	1.7	3.1
	2000	4.5	6.6	5.5	3.5	0.9	0
Community							
	1990	24.9	16.5	30.6	24.8	5.6	13.4
	2000	25.5	21.5	35.3	11.8	5.2	0
Other							
	1990	2.9	2.5	2.5	3.1	4	9.5
	2000	0	0	0	0	0	0
Not Stated							
	1990	14.3	11.7	10.6	14.4	36.1	42.7
	2000	9.2	13.7	8.9	9.5	9.9	0

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

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



	Agriculture	Mining	Manufacturing	Electricity	Construction	Trade	Transport	Finance	Community	Other	Not Stated
1990	15.0	0.5	12.2	1.3	5.4	10.3	5.6	5.6	24.9	2.9	14.3
2000	16.4	0.3	8.4	1.4	5.0	20.7	8.6	4.5	25.5	0.0	9.2

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

The distribution of the usually working population by employment status in each industry is shown in Table 6.13.Employees (64.8 percent in 1990 and 60.3 percent in 2000) are the most predominant status for all industries. The employment status of the unpaid family workers is not very predominant in any industry in both censuses. Self-employed is prominent in the Agriculture and Trade industries in 2000 (27.0 percent in mining and 54.2 percent in Finance). Unpaid family workers are dominant in the Agricultural industry in both Censuses.

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

Industry and Year	Total Number Working	Total	Self Employed	Employee	Employer	Unpaid Family Worker	Not Stated
Total							
1990	247,644	100	20.3	64.8	2.8	3.8	3.8
2000	281,397	100	1.1	60.3	30.0	8.6	0.0
Agriculture							
1990	372,22	100	27.0	42.9	2.1	25.9	2.1
2000	462,27	100	0.8	35.5	32.2	31.6	0.0
Mining							
1990	1,253	100	5.2	87.3	3.9	0.5	3.1
2000	782	100	2.9	82.1	14.3	0.6	0.0
Manufacturing							
1990	30,201	100	18.8	74.8	3.0	1.0	0.2
2000	23,540	100	1.4	63.1	32.5	3.0	0.0
Electricity							
1990	3,272	100	4.5	89.6	3.4	0.1	2.4
2000	3,872	100	1.2	87.2	8.9	2.7	0.0
Construction							
1990	13,313	100	10.4	82.6	3.6	1.0	0.1
2000	14,154	100	1.3	73.5	24.1	1.1	0.0
Trade							
1990	25,383	100	54.2	38.4	2.1	2.9	2.4
2000	58,380	100	0.9	31.2	60.4	7.6	0.0
Transport							
1990	18,851	100	6.6	87.0	3.6	0.5	2.3
2000	24,159	100	1.3	89.3	8.3	1.1	0.0
Finance							
1990	13,944	100	17.8	75.3	3.1	1.6	2.2
2000	12,650	100	1.6	73.5	23.2	1.7	0.0
Community							

1990	61,607	100	13.5	79.8	2.7	1.9	2.1
2000	71,810	100	0.9	83.5	13.9	1.7	0.0
Other							
1990	0	100	17.4	55.9	2.9	11.3	12.5
2000							
Not Stated							
1990	35,324	100	16.7	48.0	2.8	20.9	11.6
2000	25,823	100	1.6	58.2	31.0	9.3	0.0

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

Table 6.14 and Table 6.15 show the distribution of the usually working population by industry, sex and residence for the year 2000.The majority of the labourforce are employed in the Community and Personal services sector (26 percent) followed by the Trade sector with 21 percent. By residence, the rural areas employed 71 percent of the Agricultural industry, followed by The Community and personal services with 10 percent. In urban areas, Community and Personal services and Trade, els accounted for 29 percent and 24 percent in urban areas, respectively.

Table 6.14: Percentage Distribution of the Usually Working Population by Industry, Residence and Sex, Lusaka Province, 2000

Industry	**Total Number**	**Rural**	**Urban**	**Male**	**Female**
Total Number	281,397	49,998	231,399	197,467	83,930
Total Percentage	100	100	100	100	100
Agriculture, Hunting,	16	71	5	16	18
Mining & Quarrying	0	0	0	0	0
Manufacturing	8	3	10	10	5
Elect., Gas and water	1	0	2	2	0
Construction and Allied	5	1	6	7	1
Trade, Restaurants & Hotels	21	4	24	18	27
Transport & Communication	9	2	10	11	2
Finance, Insurance,	4	1	5	5	4
Community and Personal Service	26	10	29	23	32
Not Stated	9	8	10	9	10

Source: 2000 Census of Population and Housing

Disaggregated by gender, 32 percent of the total usually working population of females were in the Community and Personal services sectors, while 18 percent were in the Agricultural sector while

Table 6.15 Percent Distribution of the Usually Working Population by Industry, Residence and Sex, Lusaka Province, 2000.

Industry	Total Number	Total Percent	Male Percent	Female Percent	Rural Number	Total Percent	Male Percent	Female Percent	Urban Number	Total Percent	Male Percent	Female Percent
Total Number	281,397	100	70	30	49,998	100	68	32	231,399	100	71	29
Agriculture, Hunting,	782	100	85	15	149	100	92	8	633	100	83	17
Mining & Quarrying	23,540	100	81	19	1,336	100	85	15	22,204	100	81	19
Manufacturing	3,872	100	89	11	164	100	92	8	3,708	100	89	11
Elect., Gas and water	14,154	100	94	6	736	100	97	3	13,418	100	94	6
Construction and Allied	58,380	100	61	39	1,995	100	57	43	56,385	100	62	38
Trade, Restaurants & Hotels	24,159	100	92	8	778	100	96	4	23,381	100	91	9
Transport & Communication	12,650	100	70	30	378	100	69	31	12,272	100	70	30
Finance, Insurance,	71,810	100	63	37	5,249	100	68	32	66,561	100	62	38
Community and Personal Service	25,823	100	68	32	3,792	100	66	34	22,031	100	68	32

Source: 2000 Census of Population and Housing

For the males while 16 percent are in the Agricultural sector, 23 percent are in the Community and Personal services sector.

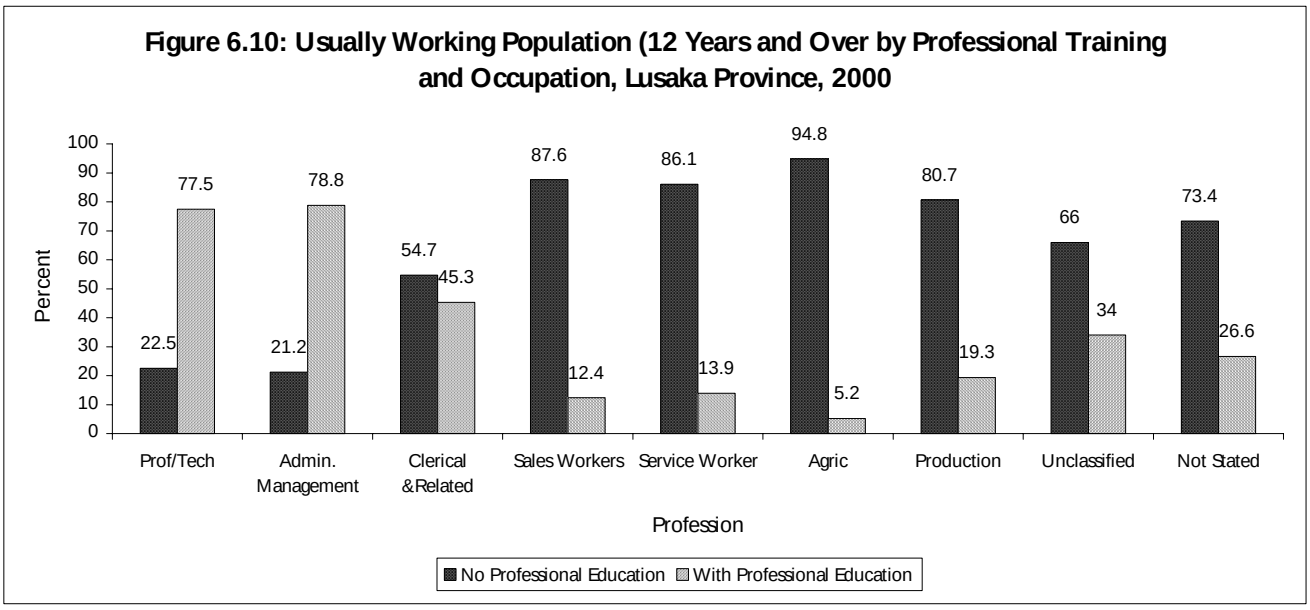
From the total working population by industry, sex and residence, 70 percent were male and 30 percent were females. The Electricity, Trade and Manufacturing sectors account for majority of the male working population of 94 percent, 92 percent and 89 percent respectively. The distribution by rural and urban does not differ much from the total distribution.

6.9 Educational Attainment

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

It is necessary for the province to invest time and money in the development of its human resources because of the benefits that result from increased efficiency and productivity of those who receive training. The 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 prompted, 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 that 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.

Figure 6.10 shows the distribution of the usually working population 12 years and over by professional/vocational training and occupation in 2000. According to this figure, 75.1 percent of the provinces's workforce have absolutely no professional /vocational education while only 24.9 percent have such education. The distribution among the various occupations, shows that more than three-quarters of those in the Professional, Technical and related occupations have professional education, while a quarter do not have. Also more three quarters of the Administrative and Managerial occupations have professional education while a quarter does not have. For the Clerical and related workers, the distribution is almost equal (54.7 with no professional education while 45.3 percent have). Over three quarters 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.



Source: 2000 Census of Population and Housing

An examination of the levels of training of those who are reported to have professional education shows that almost two thirds (65.5 percent) are trained at Certificate level, more than a fifth (22.4 percent) are trained up to Diploma level and only 12.1 percent are trained up to Degree level. Except for the Administrative and Managerial workers (33.2 percent), the proportion that has been trained up to Degree level was still very low by 2000 (refer to Table 6.16). A substantial number of workers trained up to Diploma level in the three occupations; Administrative and managerial (35.3 percent); Professional and technical (28.7 percent) and Sales workers (25.4 percent). The majority (ranging from 31.5 percent to 88.9 percent) of the workers 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.

Table 6.16: Usually Working Population 12 Years and Over by Professional/Vocational Training; Occupation and Sex Percent), Lusaka 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	281,397	100	75.1	24.9	70,078	100	65.5	22.4	12.1
Prof/Tech	36,145	100	22.5	77.5	28,030	100	53.0	28.7	18.4
Admin. Managerial	3,916	100	21.2	78.8	3,087	100	31.5	35.3	33.2
Clerical & Related	14,106	100	54.7	45.3	6,396	100	78.5	17.4	4.0
Sales workers	62,332	100	87.6	12.4	7,736	100	66.6	25.4	8.0
Service workers	41,491	100	86.1	13.9	5,783	100	85.5	11.2	3.4
Agric	45,091	100	94.8	5.2	2,323	100	67.0	21.9	11.1
Production	57,764	100	80.7	19.3	11,153	100	88.9	9.2	1.9
Unclasfied	1,336	100	66.0	34.0	454	100	55.1	25.8	19.2
Not Stated	19,216	100	73.4	26.6	5,116	100	63.1	22.8	14.0
Males									
Total	197,467	100	76.1	23.9	47,215	100	61.4	24.2	14.4
Prof/Tech	24,884	100	25.7	74.3	18,500	100	46.6	31.4	22.1
Admin. Managerial	3,082	100	21.8	78.2	2,411	100	29.9	35.3	34.7
Clerical & Related	8,558	100	69.2	30.8	2,633	100	71.6	21.2	7.2
Sales workers	38,331	100	87.1	12.9	4,937	100	60.1	29.3	10.5
Service workers	26,500	100	83.7	16.3	4,311	100	84.5	11.8	3.7
Agric	30,816	100	93.9	6.1	1,891	100	65.5	22.8	11.7
Production	51,602	100	82.4	17.6	9,067	100	88.3	9.8	1.9
Unclasfied	955	-	-	-	313	-	-	-	-
Not Stated	12,739	100	75.3	24.7	3,152	100	55.9	26.3	17.7
Females									
Total	83,930	100	72.8	27.2	22,863	100	73.9	18.6	7.4
Prof/Tech	11,261	100	15.4	84.6	9,530	100	65.5	23.4	11.2
Admin. Managerial	834	100	18.9	81.1	676	100	37.1	35.2	27.7
Clerical & Related	5,548	100	32.2	67.8	3763	100	83.4	14.8	1.8
Sales workers	24,001	100	88.3	11.7	2,799	100	78.1	18.5	3.4
Service workers	14,991	100	90.2	9.8	1,472	100	88.2	9.3	2.4
Agric	14,275	100	97.0	3.0	432	100	73.6	17.8	8.6
Production	6,162	100	66.1	33.9	2,086	100	91.6	6.9	1.5
Unclasfied	381	100	63.0	37.0	141	100	65.2	17.7	17.0
Not Stated	6,477	100	69.7	30.3	1,964	100	74.7	17.2	8.1

Source: 2000 Census of Population and Housing

Table 6.17 shows 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 25.3 percent in 1990 to 24.9 percent in 2000 while those having no professional qualification increased from 74.7 percent in 1990 to 75.1 percent in 2000. This pattern is similar in all the occupations. The declines (especially in the technical and administrative sectors) could be as a result of the brain drain, as doctors, nurses and teachers, college and University lecturers migrate to work abroad (within the Southern African sub-region, as well as overseas) where they get comparatively better remuneration and conditions of service.

The comparison of the educational levels reached by those having professional/vocational training shows that the proportion both those who were trained at the level of Certificate and Diploma declined from 69.9 percent in 1990 to 65.5 percent in 2000 for Certificate and from 27.6 percent in 1990 to 22.4 percent in 2000 for Diploma. The proportion of those trained at degree level has increased from 2.5 percent in 1990 to 12.1 percent in 2000. The

above pattern of change between the two Censuses is maintained in all occupations. It should 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 8.6 percent in 1990 to 33.2 percent in 2000, and Professional and Technical from 4.0 percent in 1990 to 18.4 percent in 2000).

Although Lusaka province has made big strides in increasing the number of workers who have received professional/vocational training at Certificate, Diploma and Degree levels in view of the fact that the province had very few persons with university education and with secondary education at the time of independence in 1964-the above data still shows that the bulk of the province's workforce is unskilled (and may 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), Lusaka 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	205,056	100	74.7	25.3	51,137	100	69.9	27.6	2.5
Prof/Tech	28,073	100	29.8	70.2	19,391	100	56.3	39.6	4.0
Admin. Managerial	3,848	100	29.4	70.6	2,632	100	34.0	57.4	8.6
Clerical & Related	19,177	100	56.6	43.4	8,190	100	84.6	14.7	0.8
Sales workers	33,138	100	87.9	12.1	3,946	100	70.5	28.0	1.5
Service workers	30,927	100	88.4	11.6	3,561	100	86.0	13.5	0.4
Agric	7,169	100	89.8	10.2	723	100	66.1	30.8	3.0
Production	30,010	100	83.4	16.6	4,938	100	87.3	12.4	0.4
Unclasfied	6,420	100	82.0	18.0	1,133	100	56.6	39.1	4.3
Not Stated	46,294	100	85.5	14.5	6,623	100	86.4	12.8	0.8
Males									
Total	152,215	100	76.6	23.4	35,201	100	65.5	31.6	2.9
Prof/Tech	20,209	100	33.8	66.2	13,169	100	49.5	45.9	4.5
Admin. Managerial	3,306	100	30.1	69.9	2,243	100	32.3	59.1	8.6
Clerical & Related	10,246	100	73.0	27.0	2,725	100	74.8	23.4	1.7
Sales workers	19,390	100	85.3	14.7	2,818	100	64.7	33.7	1.6
Service workers	24,355	100	87.5	12.5	3,018	100	86.1	13.5	0.4
Agric	5,836	100	89.7	10.3	594	100	64.1	32.7	3.2
Production	26,626	100	84.5	15.5	4,101	100	86.2	13.4	0.4
Unclasfied	4,566	100	81.9	18.1	811	100	51.9	43.6	4.4
Not Stated	37,681	100	84.6	15.4	5,722	100	87.6	11.7	0.7
Females									
Total	52,841	100	69.4	30.6	15,936	100	79.6	18.6	1.7
Prof/Tech	7,864	100	19.7	80.3	6,222	100	70.7	26.3	3.0
Admin. Managerial	542	100	25.0	75.0	389	100	44.2	47.6	8.2
Clerical & Related	8,931	100	38.0	62.0	5,465	100	89.5	10.3	0.3
Sales workers	13,748	100	91.7	8.3	1,128	100	85.0	13.8	1.2
Service workers	6,572	100	476.6	43.5	543	100	86.0	13.6	0.4
Agric	1,333	100	90.3	9.7	129	100	75.2	22.5	2.3
Production	3,384	100	74.9	25.1	837	100	92.2	7.5	0.2
Unclasfied	1,854	100	82.3	17.7	322	100	68.3	27.6	4.0
Not Stated	8,613	100	89.3	10.7	901	100	78.8	19.9	1.3

Source: 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 63.2 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: Accountancy (12.3 percent), Teacher Training (11.5 percent), Nursing (7.3 percent), Mechanical Engineering (6.9 percent) and Business Administration (6.4 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), Lusaka province 2000

Field of Training	Total usually Working Population	No Professional Education	Professional/vocational training			
			Total	Certificate	Diploma	Degree
Total Working Number	281397	211319	70078	45901	15669	8508
Total Percent	100	100	100	100	100	100
Natural science	0.3	0.0	1.0	0.2	1.0	5.4
Civil engineering	0.3	0.0	1.4	1.2	1.2	2.7
Elec. & Electronic Engineering.	1.0	0.0	4.2	4.5	4.0	3.1
Mechanical Engineering	1.7	0.0	6.9	8.2	5.1	3.2
Chemical Engineering	0.1	0.0	0.3	0.2	0.5	0.6
Mining Engineering	0.0	0.0	0.1	0.1	0.1	0.4
Industrial Engineering	0.0	0.0	0.0	0.0	0.0	0.0
Metallurgical Engineering	0.0	0.0	0.1	0.1	0.1	0.2
Architectural& T/Planning	0.1	0.0	0.4	0.2	0.6	1.3
Other Engineering	0.3	0.0	1.2	1.0	1.4	1.7
Medicine and Surgery	0.3	0.0	1.1	0.3	1.1	4.8
Pharmacy	0.1	0.0	0.4	0.2	0.7	0.6
Dentistry	0.1	0.0	0.2	0.2	0.4	0.3
Nursing	1.8	0.0	7.3	9.0	5.7	1.2
Medical Technology	0.2	0.0	0.7	0.2	1.1	2.6
X-RAY Technology	0.0	0.0	0.2	0.0	0.2	0.9
Veterinary	0.1	0.0	0.2	0.2	0.3	0.5
Statistics	0.0	0.0	0.2	0.1	0.2	0.4
Mathematics	0.0	0.0	0.2	0.1	0.2	0.9
Computer Science	0.8	0.0	3.1	2.7	4.7	2.5
Economics	0.4	0.0	1.7	0.5	1.3	8.8
Accountancy	3.1	0.0	12.3	8.8	22.6	12.3
Teacher Training	2.9	0.0	11.5	12.7	9.2	9.0
Law and Jurisprudence	0.5	0.0	2.1	1.7	1.6	5.0
Journalism	0.2	0.0	0.9	0.5	2.3	0.8
Fine Arts	0.2	0.0	0.7	0.6	0.7	1.0
Physical Education	0.0	0.0	0.2	0.1	0.2	0.4
Library Science	0.1	0.0	0.4	0.5	0.2	0.5
Social Welfare	0.2	0.0	0.6	0.5	0.5	1.3
Criminology	0.3	0.0	1.0	1.4	0.5	0.3
Business Administration	1.6	0.0	6.4	4.5	10.5	9.3
Secretarial Training	1.3	0.0	5.2	6.7	3.1	0.6
Shorthand Typing	0.3	0.0	1.1	1.5	0.4	0.1
Clerical Typing	0.3	0.0	1.1	1.6	0.2	0.1
Operating of Off. Machine	0.1	0.0	0.6	0.7	0.3	0.1
Service Trade	0.5	0.0	1.9	2.4	1.2	0.3

Radio & TV Broadcasting	0.0	0.0	0.2	0.1	0.3	0.3
Fire Protection & Fire Fighting	0.0	0.0	0.2	0.2	0.1	0.0
Agriculture, Forestry & Fishery	0.6	0.0	2.3	2.1	2.6	3.3
Food and drink Processing	0.2	0.0	0.8	0.9	0.5	0.2
Wood working	0.5	0.0	1.8	2.7	0.2	0.0
Textile Trades.	0.5	0.0	2.2	3.1	0.4	0.1
Leather Trades	0.1	0.0	0.2	0.1	0.6	0.0
Other Programmes	3.8	0.0	15.2	17.1	11.3	12.2
No Training	63.2	84.1	0.0	0.0	0.0	0.0
Not stated	12.0	15.9	0.2	0.2	0.3	0.4

Source: CSO, 2000 Census of Population and Housing

6.10 Unemployment

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 and 6.20 show unemployment rates by sex and residence for 1990 and 2000. There was an increase in the overall unemployment rate from 14 percent in 1990 to 26 percent in 2000. The male unemployment rate increased more (11 percent to 24 percent) than the female unemployment rate (20 percent to 30 percent) during the reference period.

In the rural areas the unemployment rate has increased for both male and females. The total unemployment rate increased from 10 percent in 1990 to 21 percent in 2000. The male unemployment rate increased from 9 percent in 1990 to 21 percent in 2000 while the Female unemployment rate increased from 11 percent in 1990 to 22 percent in 2000. Unemployment rates have increased in the urban areas as well. The total unemployment rate increased from 13 percent in 1990 to 27 percent in 2000. The increase in the male urban unemployment rate (from 10 percent in 1990 to 25 percent in 2000) is more than the increase in the urban female unemployment rate (from 20 percent in 1990 to 32 percent in 2000).

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

District	1990			2000		
	Both Sexes	Male	Female	Both Sexes	Male	Female
Lusaka-Total	13.7	11.0	20.5	26.0	24.2	30.0
Chongwe	-	-	-	21.4	21.7	21.8
Kafue	-	-	-	26.9	24.3	30.0
Luangwa	8.40	9.70	6.80	5.60	5.80	5.50
Lusaka	13.7	11.1	20.1	27.0	24.8	31.9

Source:1990 and 2000 Census of Population and Housing.
Note: "-" denotes not applicable as they refer either to new or non-existent districts.

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. Unemployment rates increased in Lusaka district (from 13.7 percent in 1990 to 27.0 percent in 2000), while in Luangwa district, unemployment rates declined from 8.4 percent in 1990 to 5.6 percent in 2000.

Table 6.20: Unemployment Rates by Sex and Residence, Lusaka Province, 1990 and 2000.

Residence	Sex	1990	2000
Lusaka Province	Both sexes	13.7	26

	Male	11	24.2
	Female	20.5	30
	Both sexes	9.6	21.4
	Male	8.8	21.4
Rural	Female	11.3	21.6
	Both sexes	13.4	26.9
	Male	10.5	24.8
Urban	Female	20.2	31.7

Source: 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 figure shows that unemployment is a more serious problem in the young age groups 12-14 (60.6 percent); 15- 19 (56.2 percent); 20-24 (39.5 percent) and 25-29 (24.6 percent). The peak is in the age-group 12- 14 years. This pattern is the same for males and females, however rural areas have tended to show slightly lower unemployment rates compared to urban areas.

The overall unemployment rate of 24.2 percent for males is less than that of females of 30.0 percent. A comparison of the rates by age between the two sexes shows that apart from the age-group that fall within 12-34 years, the male unemployment rates are higher than the female unemployment rates at all ages.

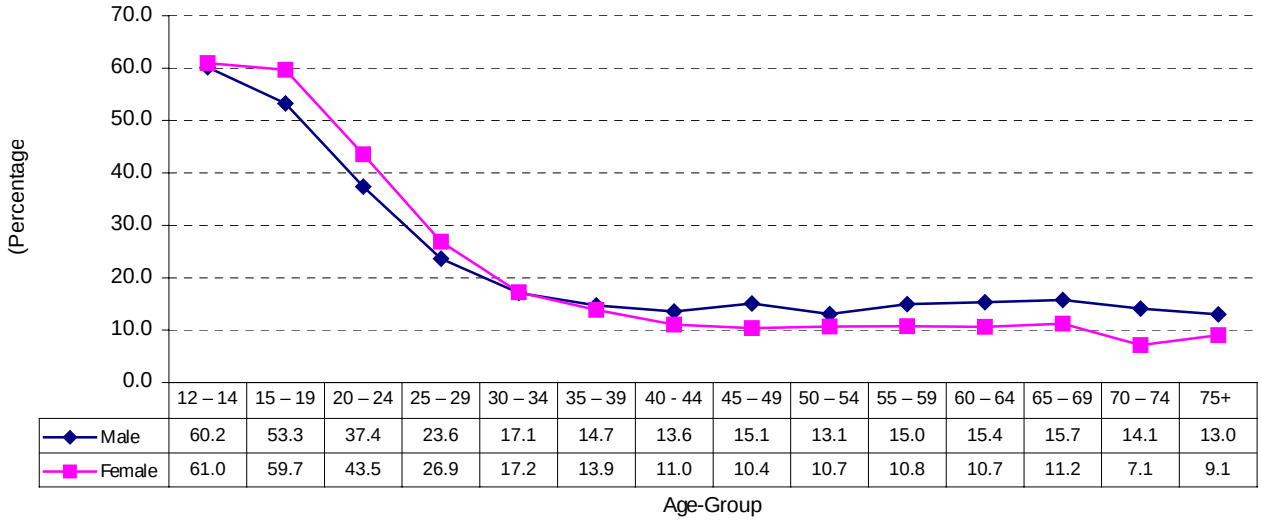
In rural areas the male unemployment rates are higher than the female unemployment rates in age groups falling within 25- 75 years, whereas in urban areas, the female unemployment rates are higher than the male unemployment rate in the age groups falling within 15-34 years and age group 65-69, male unemployment rates are higher for the rest of the age groups.

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

Age Group	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total	26.0	24.2	30.0	21.4	21.4	21.6	26.9	24.8	31.7
12 – 14	60.6	60.2	61.0	42.1	40.2	44.0	68.9	70.4	67.7
15 – 19	56.2	53.3	59.7	39.6	39.5	39.8	60.8	57.2	65.1
20 – 24	39.5	37.4	43.5	30.9	30.7	31.5	41.1	38.7	45.5
25 – 29	24.6	23.6	26.9	22.5	23.4	20.1	24.9	23.7	27.9
30 – 34	17.1	17.1	17.2	16.4	17.0	14.5	17.3	17.1	17.7
35 – 39	14.5	14.7	13.9	14.5	15.3	12.3	14.5	14.6	14.1
40 - 44	12.9	13.6	11.0	12.8	14.0	9.6	12.9	13.5	11.3
45 – 49	13.8	15.1	10.4	10.9	12.4	6.7	14.4	15.6	11.1
50 – 54	12.5	13.1	10.7	8.7	10.0	5.5	13.5	13.8	12.5
55 – 59	14.0	15.0	10.8	9.1	10.7	5.9	15.8	16.3	13.9
60 – 64	14.2	15.4	10.7	8.0	9.8	4.8	17.6	17.9	16.4
65 – 69	14.7	15.7	11.2	8.9	11.1	3.6	18.7	18.5	19.7
70 – 74	12.6	14.1	7.1	5.4	6.2	3.2	19.6	20.8	13.5
75+	12.0	13.0	9.1	6.0	6.7	4.1	19.4	20.1	16.8

Source: CSO, 2000 Census of Population and Housing

Figure 6.11: Current Unemployment Rates by Sex ,Lusaka Province,2000



	12 – 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+
Male	60.2	53.3	37.4	23.6	17.1	14.7	13.6	15.1	13.1	15.0	15.4	15.7	14.1	13.0
Female	61.0	59.7	43.5	26.9	17.2	13.9	11.0	10.4	10.7	10.8	10.7	11.2	7.1	9.1

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 one in six (17 percent) of the unemployed population in the province have completed no education and 42 percent have a basic education of grade 1 to 7. Slightly over a third of the unemployed population (35 percent) had secondary school education of grade 8 to 12. Those who have 'A' level education and Degree are almost negligible (3 and 2 percent respectively). 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 province 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 15-19 years.

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

Age Group	Total Number Unemployed	Total	None	Grade 1-7	Grade 8-12	A Level	Degree
Total .	209,221	100	17.1	42.5	35.3	3.3	1.8
12 - 14 .	56,943	100	8.9	83.2	7.9	0.0	0.0
15 - 19.	63,660	100	10.2	41.5	47.4	0.8	0.0
20 - 24.	26,539	100	14.3	31.6	49.0	4.5	0.7
25 - 29.	14,265	100	17.0	32.6	42.2	6.0	2.3
30 - 34.	9,395	100	20.1	33.9	35.7	5.2	5.1
35 - 39.	6,982	100	21.8	34.2	32.5	5.2	6.3
40 - 44.	4,871	100	25.3	35.2	27.6	5.7	6.2
45 - 49	3,777	100	29.7	31.2	26.9	6.5	5.7
50 - 54.	3,712	100	35.8	30.4	21.8	7.4	4.5
55 - 59.	3,018	100	43.6	31.4	16.1	5.2	3.6
60 - 64.	3,340	100	49.3	32.5	11.8	3.9	2.6
65 - 69	3,023	100	53.2	31.0	10.4	3.1	2.3
70 - 74.	3,290	100	56.0	30.8	7.8	3.1	2.2
75+.	6,406	100	63.4	26.6	6.4	2.0	1.6

Source: 2000 Census of Population and Housing

Table 6.23 shows the distribution of the currently unemployed population by marital status, sex and residence. According to the table, the majority (59 percent) of the unemployed population have never been married, close to a third (30 percent) are married and those who are either widowed, divorced or separated fall within 0.5 to 4 percent. The proportion of the female never married unemployed population is higher (60 percent in rural and 61 percent in urban areas) than the male never married unemployed population (53 percent in rural and 59 percent in urban areas) in both rural and urban areas.

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

Residence and Sex	Total Number Unemployed	Marital Status						
		Total	Never Married	Married	Widowed	Divorced	Separated	Living together/ Cohabiting
Total								
Both Sexes	105,310	100	58.8	30.4	3.5	4.0	2.9	0.5
Male	67,976	100	57.8	36.3	1.5	2.2	1.7	0.4
Female	37,334	100	60.5	19.7	7.0	7.2	4.9	0.7
Rural								
Both Sexes	14,540	100	54.9	34.6	3.2	4.3	2.5	0.5
Male	9,977	100	52.6	41.7	1.5	2.4	1.7	0.2
Female	4,563	100	60.2	19.1	6.8	8.6	4.4	1.0
Urban								
Both Sexes	90,770	100	59.4	29.7	3.5	3.9	2.9	0.5
Male	57,999	100	58.7	35.4	1.5	2.2	1.8	0.4
Female	32,771	100	60.6	19.7	7.1	7.0	5.0	0.6

Source: 2000 Census of Population and Housing

6. 12. Summary

The size of the working-age population in Lusaka Province has increased by 36 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 32 percent between 1990 and 2000 Census years. In 2000, 17 percent of the Labour force is in rural areas, while 83 percent is in urban areas. Half (51 %) of the Labour force is in the young age group of 12-29 years.

The employed population has increased by 12 percent. The female employed population has increased by an impressive 17 percent, while male employed Labour force increased by 10 percent.

The number of the unemployed has increased tremendously by 171 percent between 1990 and 2000. The size of the male unemployed population has also increased greatly by 209 percent, while that of females has increased by 121 percent. There are more unemployed persons in the urban than in the rural areas for both males and females. In 2000, unemployment is a more serious problem for the young age group of 20-24 years than for the adult age group of 25 years and over.

The economically inactive population has increased by 48 percent against an increase of 32 percent in the Labour force between 1990 and 2000. This implies that most of the 22 percent increase in the working-age population between 1990 and 2000 has increased the inactive population more than the Labour force. Hence the Labour force participation rate has declined from 49 percent in 1990 to 47 percent in 2000. Similarly the overall unemployment rate has increased from 13.7 percent in 1990 to 26 percent in 2000.

The results showed that two out of every three persons are employees in Lusaka province, while one in every three persons is an employer. The proportion of self employed persons increased from 20 percent in 1990 to 30.0 percent in 2000, while that of unpaid family workers increased slightly.

Sales and Production related occupations seem to be the most important in the province with each accounting for just over 22 and 20 percent of employees, respectively.

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 Lusaka Province for the 2000 Census**.** According to the 2000 Census results, the total fertility rate is 4.6. This means that on average, a woman in Lusaka province at the beginning of her child bearing years, is expected to birth to about 5 children by the end of her reproductive period if current fertility levels remain constant. The provincial TFR is below the national average of 6.0.

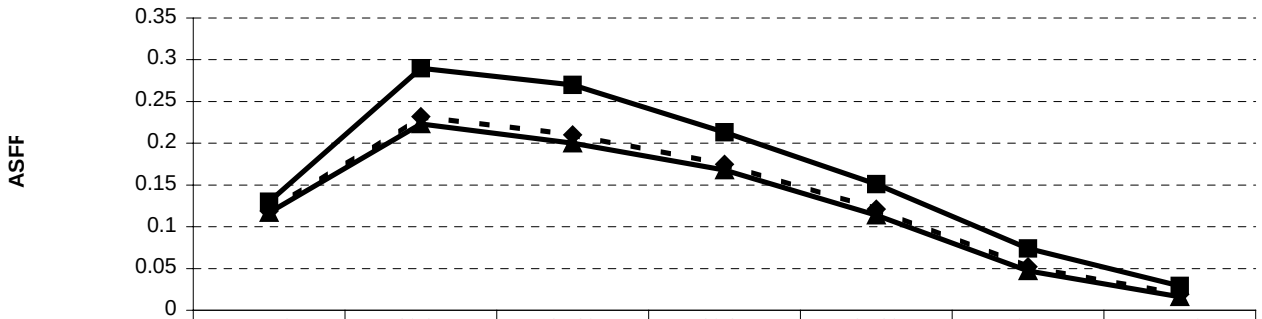
Table 7.2: Age Specific Fertility rate (ASFR) and Total Fertility rate (TFR), Rural and Urban, Lusaka Province, 2000.

	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	81191	5755	0.071	0.119	13139	1036	0.079	0.130	68052	4719	0.069	0.117
20-24	85407	13912	0.163	0.232	12149	2511	0.207	0.290	73258	11401	0.156	0.223
25-29	65792	9954	0.151	0.210	9402	1878	0.200	0.270	56390	8076	0.143	0.200
30-34	43164	5525	0.128	0.175	6540	1046	0.160	0.213	36624	4479	0.122	0.168
35-39	31154	2807	0.090	0.121	5356	617	0.115	0.151	25798	2190	0.085	0.114
40-44	22620	907	0.040	0.052	4001	233	0.058	0.074	18619	674	0.036	0.047
45-49	15524	260	0.017	0.019	2772	73	0.026	0.029	12752	187	0.015	0.016
Observed TFR			**3.3**				**4.2**				**3.1**	
Adjusted TFR				**4.6**				**5.8**				**4.4**

Source: CSO, 2000 Census of Population and Housing

The table and Figure 7.1 show that child bearing is at its peak in the age group 20 – 24 after which it steadily declines. Figure 7.1 also clearly shows that urban women have lower ASFR at all ages.

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



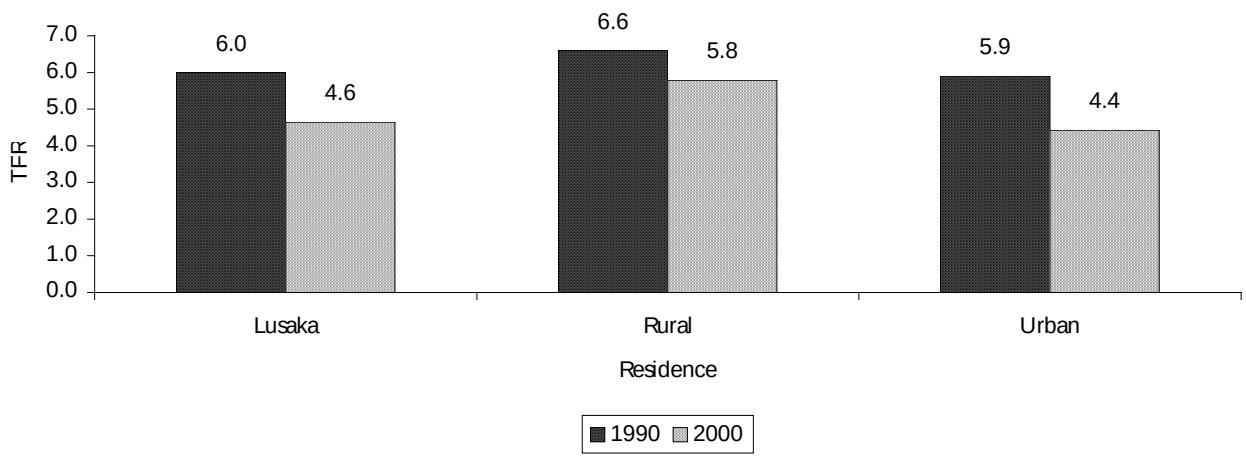
	15-19	20-24	25-29	30-34	35-39	40-44	45-49
Total	0.119	0.232	0.21	0.175	0.121	0.052	0.019
Rural	0.13	0.29	0.27	0.213	0.151	0.074	0.029
Urban	0.117	0.223	0.2	0.168	0.114	0.047	0.016

Age Group

Source: CSO, 2000 Census of Population and Housing

Figure 7.2 shows that the TFR has declined from 6.0 to 4.6, with the decline being more pronounced in urban areas, where TFR has declined by 1.5, from 5.9 in 1990 to 4.4 in 2000. The TFR for rural areas has declined by 0.8 from 6.6 in 1990 to 5.8 in 2000. The decline in fertility in the urban areas could point 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 etc as opposed to the conditions prevailing in rural areas.

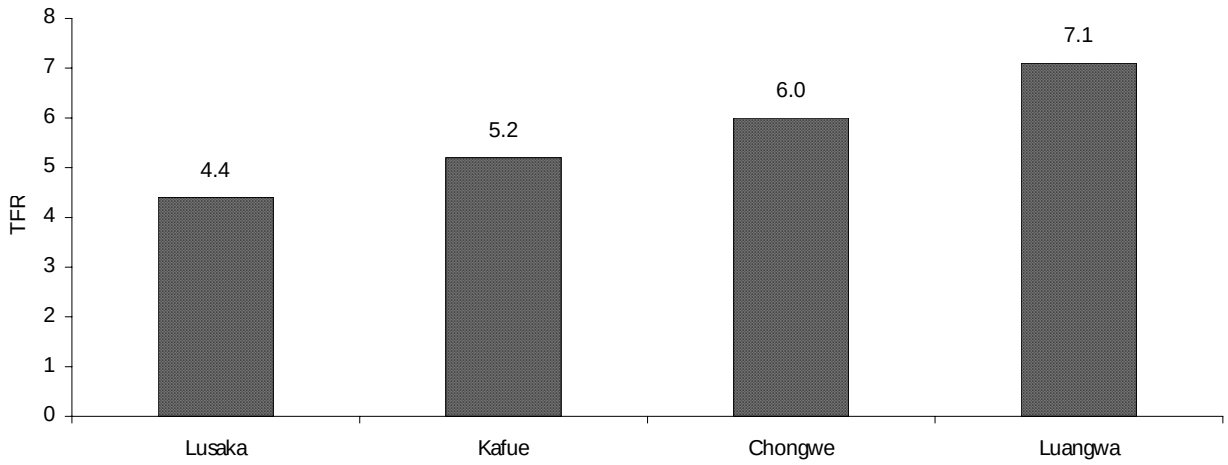
Figure 7.2: Trends in Total Fertility Rates (TFR), Lusaka. Rural and Urban, 1990 and 2000



Source: CSO, 2000 Census of Population and Housing

Among the Districts, Figure 7.3 shows that Lusaka district has the lowest TFR of 4.4. While Lusaka Province has the lowest rate of fertility among all provinces, Luangwa district is among districts with the highest TFRs (7.1).

Figure 7.3: Adjusted Total Fertility Rate, by District, Lusaka Province, 2000



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 5.4, followed by the widowed 4.4 and least among the never married 1.6.

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

District	Marital status						
	Total	Married	Separated	Divorced	Widowed	Never Married	Living Together
Chongwe	6.0	6.0	4.3	4.3	4.8	2.1	8.0
Kafue	5.2	5.4	4.0	3.7	4.0	1.9	3.6
Luangwa	7.1	8.4	5.9	6.9	9.1	1.5	7.0
Lusaka	4.4	4.5	3.5	3.1	3.6	1.3	3.0
Lusaka Province	**4.6**	**5.4**	**4.2**	**4.1**	**4.4**	**1.6**	**4.1**

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 3.9 than those classified otherwise (5.0). This pattern is similar for all the districts in the province.

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

Districts	Economic Status		
	Total	Working	Not Working
Chongwe	**6.0**	**5.7**	**6.1**
Kafue	**5.2**	**4.1**	**5.5**
Luangwa	**7.1**	**6.5**	**7.5**
Lusaka	**4.4**	**3.8**	**4.8**
Lusaka Province	**4.6**	**3.9**	**5.0**

Source: CSO, 2000 Census of Population and Housing

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

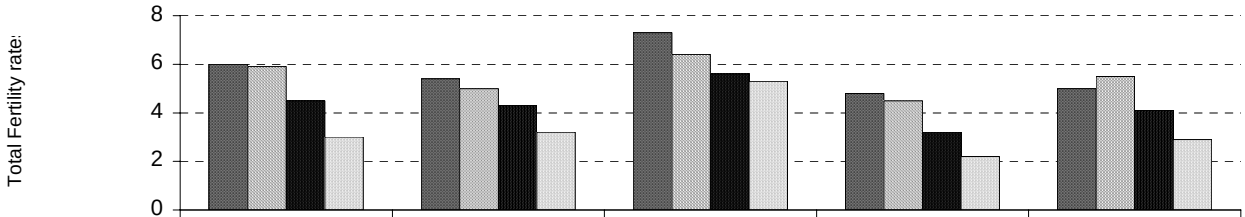
Table 7.5 shows the fertility levels according to women's levels of education in Lusaka province. Women with tertiary education have lower fertility than women in other education categories. For instance, women with tertiary education had a TFR of 2.9 compared with TFR of 5.0 for women without any schooling. The difference is highest in Chongwe district where women without schooling have on average about three children more than those with tertiary education.

Table 7.5: Fertility Differentials by level of Education of Women aged 15-49, Lusaka , 2000

District	Level of education				
	Total	No Education	Primary	Secondary	Tertiary
Chongwe	6.0	6.0	5.9	4.5	3.0
Kafue	5.2	5.4	5.0	4.3	3.2
Luangwa	7.1	7.3	6.4	5.6	5.3
Lusaka	4.4	4.8	4.5	3.2	2.2
Lusaka Province	4.6	5.0	5.5	4.1	2.9

Source: CSO, 2000 Census of Population and Housing

Figure 7.4: Fertility differentials by Education Attainment of Women aged 15-49 by district, Lusaka Province, 2000.



Source: CSO, 2000 Census of Population and Housing

7.6 Gross Reproduction Rate (GRR)

Table 7.6 shows that the GRR for Lusaka province is estimated at 1.6. This implies that almost two daughters will replace a woman experiencing the fertility pattern prevailing at the time of the census by the time she reaches the end of her reproductive period. The GRR for rural areas (2.1) is higher than that of urban areas (1.5). The provincial GRR is lower than the national average of 2.3.

Table 7.6: Gross Reproduction Rate (GRR), Lusaka Province, Rural and Urban, 2000

Age group	Total			Rural			urban		
	Total Women	Female Births	ASFR (f)	Total Women	Female Births	ASFR (f)	Total Women	Female Births	ASFR (f)
15-19	81191	2981	0.037	13139	511	0.039	68052	2470	0.036
20-24	85407	6804	0.080	12149	1220	0.100	73258	5584	0.076
25-29	65792	4853	0.074	9402	919	0.098	56390	3934	0.070
30-34	43164	2617	0.061	6540	523	0.080	36624	2094	0.057
35-39	31154	1362	0.044	5356	286	0.053	25798	1076	0.042
40-44	22620	454	0.020	4001	120	0.030	18619	334	0.018
45-49	15524	136	0.009	2772	32	0.012	12752	104	0.008
GRR			**1.6**			**2.1**			**1.5**

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. An NRR equal to 1.0 is referred to as the "replacement level fertility" because it indicates that on average each woman will be replaced by exactly one daughter after a generation. A higher value indicates a growing population and a lower value shows a declining population. The NRR for Lusaka province in 2000 was estimated at 1.3 daughters, implying that each woman will be replaced by one daughter who will survive up to the end of their reproductive age. The NRR is higher in rural (1.5) than in Urban areas (1.2). This means that the population will continue growing at a faster rate in rural than in urban areas (See Table 7.7)

Table 7.7: Net Reproduction Rate (NRR), Lusaka, Rural- Urban, 2000

Age Group	Total			Rural			Urban		
	ASFR (f)	Survival Ratios	*ASFR (f)	ASFR (f)	Survival Ratios	*ASFR (f)	ASFR (f)	Survival Ratios	*ASFR (f)
15-19	0.037	0.8398	0.0311	0.039	0.7979	0.0311	0.036	0.8398	0.0302
20-24	0.080	0.8255	0.0660	0.100	0.7811	0.0781	0.076	0.8255	0.0627
25-29	0.074	0.8087	0.0598	0.098	0.7616	0.0746	0.070	0.8087	0.0566
30-34	0.061	0.7898	0.0482	0.080	0.7398	0.0592	0.057	0.7898	0.0450
35-35	0.044	0.7688	0.0338	0.053	0.7156	0.0379	0.042	0.7688	0.0323
40-44	0.020	0.7447	0.0149	0.030	0.6886	0.0207	0.018	0.7447	0.0134
45-49	0.009	0.7179	0.0065	0.012	0.6594	0.0079	0.008	0.7179	0.0057
NRR			**1.3**			**1.5**			**1.2**

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

NRR has declined steadily over the last 20 years (Table 7.8). This implies that population has been growing, but at a declining rate. NRR has declined from 2.9 in 1980 to 2.2 in 1990 and 1.3 in 2000. The decline has occurred more in urban areas, declining by 0 .8 between 1990 and 2000, compared to a decline of 0.6 in rural areas over the same period.

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

Residence	Year of Census		
	1980	1990	2000
Total	2.9	2.2	1.3
Rural	3.0	2.4	1.5
Urban	2.9	2.1	1.2

Source: CSO, 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 45-49 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 Lusaka Province is 6.4 children per woman, with rural women having a higher CFS of 7.1 compared with their urban counterparts with 6.2 children per woman. The mean parity for the province is slightly below the national average of 6.8 children per woman.

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 completed fertility. Overall, Women age 45–49 have given birth to an average of 6.4 children. The TFR (4.6) is much lower than the CEB and this can be attributed to the observed fertility decline overtime .

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

Age Group	Total	Rural	Urban
15-19	0.2	0.3	0.2
20-24	1.1	1.4	1.1
25-29	2.2	2.7	2.1
30-34	3.5	4.0	3.4
35-39	4.7	5.2	4.6
40-44	5.9	6.5	5.8
45-49	**6.4**	**7.1**	**6.2**

Source: CSO, 2000 Census of Population and Housing

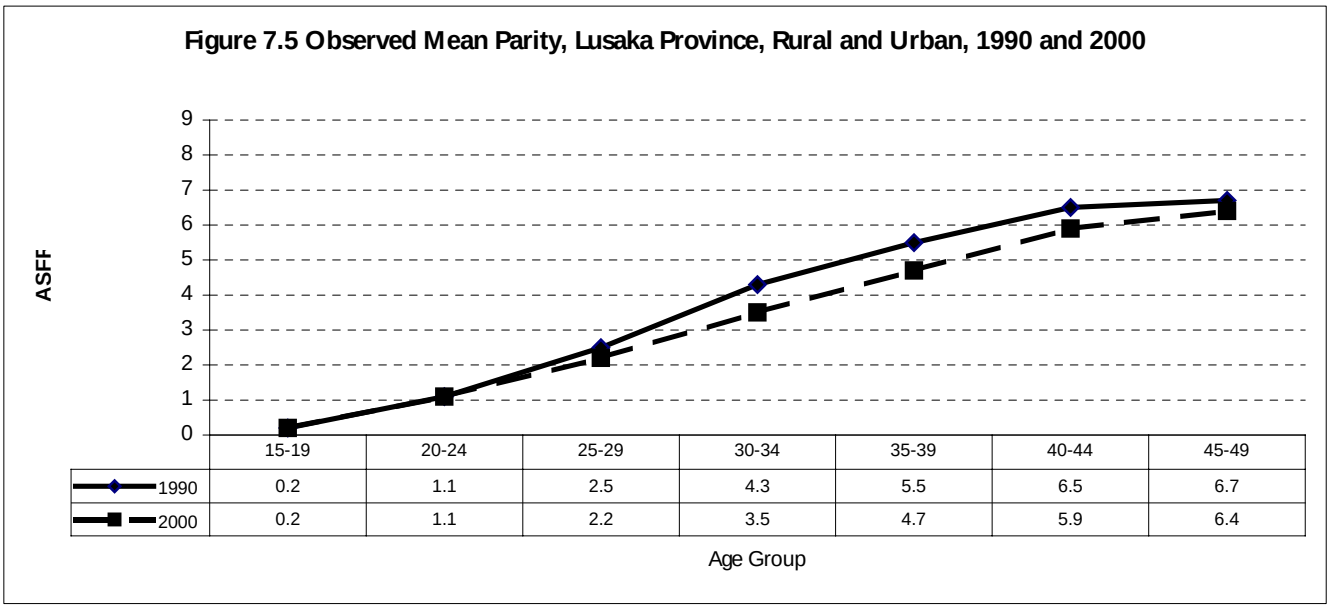
Table 7.10 and Figure 7.5 show that the mean parity or CFS for Lusaka province has declined between 1990 and 2000 from 6.7 children per woman in 1990 to 6.4 children per woman in 2000. In the young age groups of 15-24, the mean parity has remained stable while in the higher age groups, the rate has decreased between the said period.

Table 7.10: Observed Mean Parity,Lusaka Province, 1990-2000

Age Group	Mean Parity (1990)*	Mean Parity (2000)
15-19	0.2	0.2
20-24	1.1	1.1
25-29	2.5	2.2
30-34	4.3	3.5
35-39	5.5	4.7
40-44	6.5	5.9
45-49	**6.7**	**6.4**

Source: CSO, 2000 Census of Population and Housing

* **1990 estimates extracted from Analytical Report Vol. 2 of the 1990 Census of Population, Housing and Agriculture, CSO 1995.**



Source: CSO, 2000 Census of Population and Housing

7.9 Other Fertility Indicators

Table 7.11 shows a summary of fertility indicators for districts of Lusaka Province. The table shows that the Crude Birth Rate (CBR) range from 27 in Kafue to 44.7 in Luangwa. The General Fertility Rate, Child Woman Ratio and Gross Reproduction Rate are lowest in Lusaka and highest in Luangwa.

Table 7.11: Summary of Fertility Indicators by District, Lusaka Province, 2000

District	Adjusted Total Fertility Rate	Crude Birth Rate	General Fertility Rate	Child Woman Ratio	Mean Parity	Gross Reproduction Rate
Chongwe	6.0	31.8	146.8	806	7.5	2.2
Kafue	5.2	27.0	112.2	676	6.5	1.7
Luangwa	7.1	44.7	214.2	901	7.5	3.1
Lusaka	4.4	29.0	109.6	624	6.2	1.5

Source: CSO, 2000 Census of Population and Housing

7.10 Summary

Fertility levels for Lusaka Province have declined over the period 1990-2000, from 6.0 to 4.6.This decline has been attributed to the decline in urban areas in which the TFR dropped from 5.9 in 1990 to 4.4 in 2000 while that of the rural areas declined at a lower pace over the period from 6.6 to 5.8.

Child bearing is at its peak in the age group 20-24 years after which it declines steadily. Luangwa has the largest TFR (7.1) among the districts while Lusaka has the least (4.4).

Generally, fertility rates are highest in Luangwa and lowest in Lusaka. These include Crude Birth Rate, General Fertility Rate 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 dying 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 Q-Five 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

Table 8.1 shows that infant mortality rate (IMR) has decreased in Lusaka Province by about 17 percent between 1990 and 2000, from 106 to 88 death per 1000 live births. Inspite of this decline, the current IMR is still higher than that of 1980. In 1980, IMR stood at 87 deaths per 1000 live births.

Compared to the national rate of 110 deaths per 1000 live infant births in 2000, IMR in Lusaka province is significantly lower.

Table 8.1: Infant Mortality Indicators by Sex of Child, Residence and District, Lusaka Province, 2000

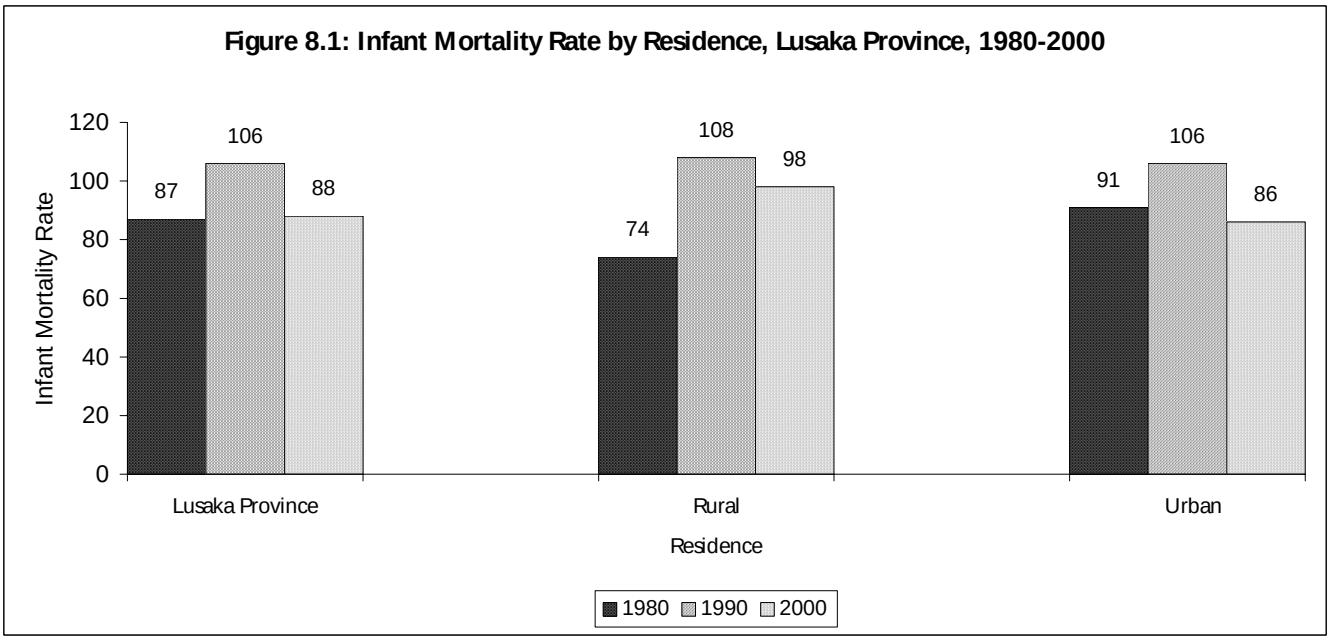
Residence, Sex and District	Infant Mortality Rate (per '000)		
	1980	1990	2000
Zambia	**99**	**124**	**110**
Lusaka Province	87	106	88
Residence			
Rural	74	108	98
Urban	91	106	86
Sex			
Male	84	111	97
Female	91	97	79
Districts (2000)	**Total (2000)**	**Rural (2000)**	**Urban (2000)**
Chongwe	101	102	62
Kafue	85	90	70
Luangwa	120	125	48
Lusaka	87	-	87

Source: 2000 Censuses of Population and Housing

Note: "-" denotes not applicable as Lusaka is a predominantly urban district.

8.3.l Infant mortality rate by Residence

Figure 8.1 shows the rural-urban differentials in IMR. The IMR for both rural and urban areas has declined between 1990 and 2000. Rural areas have a higher IMR (98) compared to urban areas (86). IMR declined from 108 to 98 deaths per 1000 live births in rural areas and from 106 to 86 deaths per 1000 live births in urban areas.

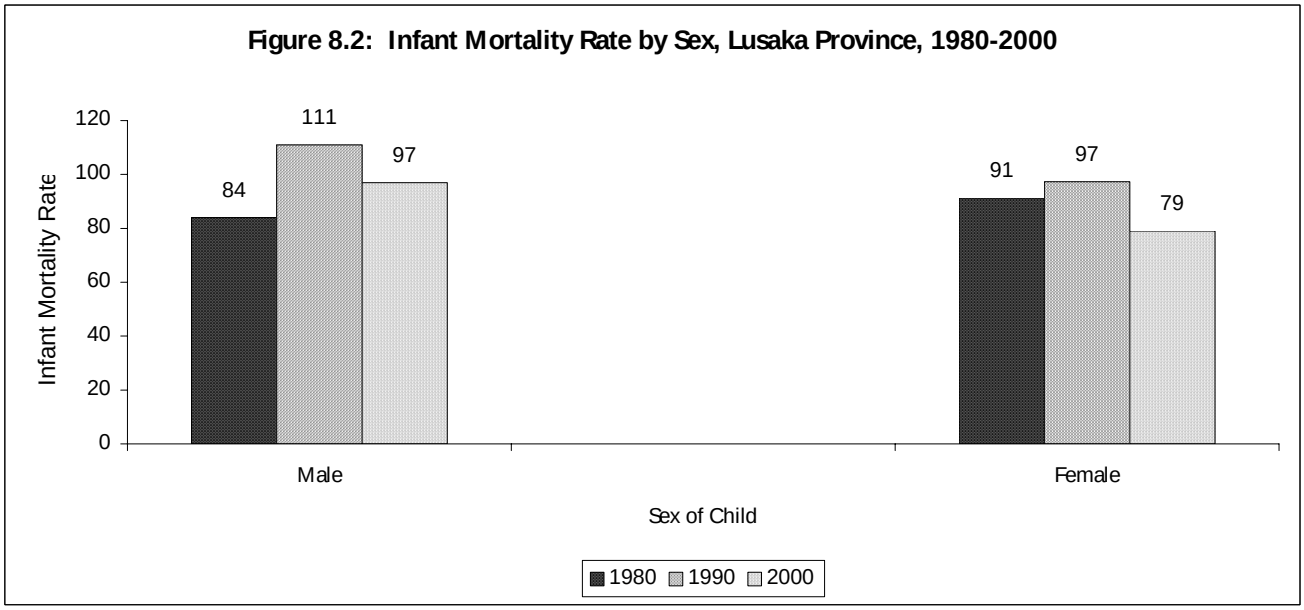


Sources: CSO, 1980, 1990 and 2000 Censuses of Population and Housing

8.3.2 Infant Mortality Rate by Sex

A disagregation of IMR by sex shows that males have a higher IMR (97) than females (79). A similar pattern is also observed in 1990 but not in 1980. In 1980, 84 male and 91 female infants died before reaching age one; and in 1990 of every 1000 live births, 111 male infants and 97 females infants died before reaching age one. In 2000, IMR for male infants is higher than the 1980 ones (see figure 8.2).

In 2000 the pattern of IMR by sex in Lusaka Province is similar to that of the national average; were males have a higher IMR than female. However, for both male and female infants, the IMR provincial is lower than that of the national average.

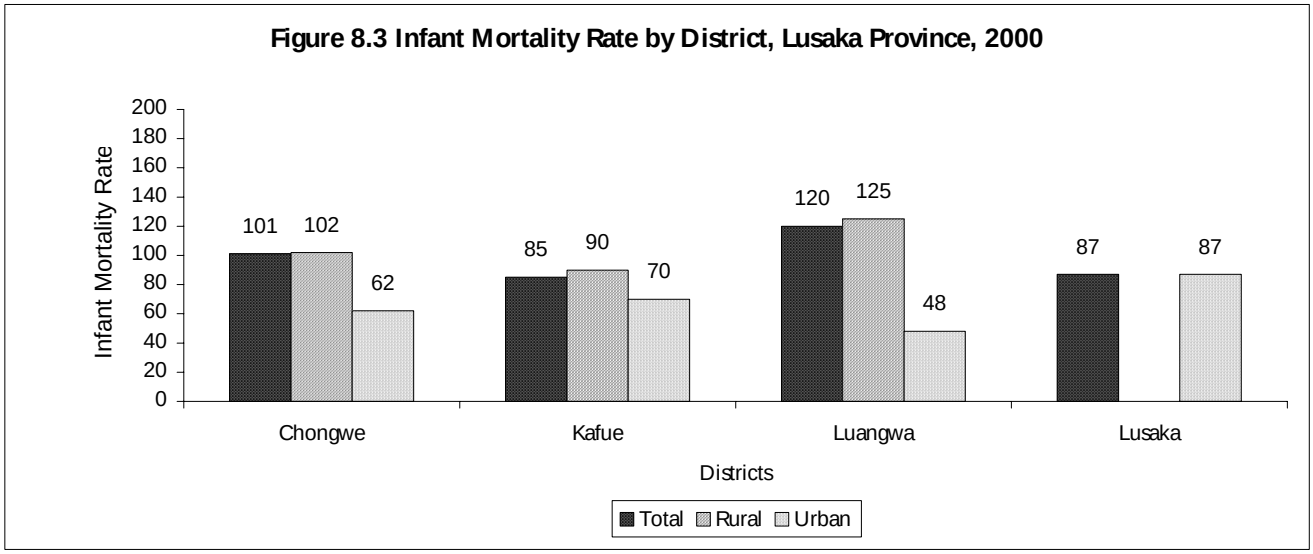


Sources: CSO, 1980, 1990 and 2000 Censuses of Population and Housing

8.3.3 Infant Mortality by District of Residence

8.3.4

Figure 8.3 shows that at the district level infant mortality is highest in Luangwa district (120) and is lowest in Kafue District rural (85). However, the IMR for Kafue is not so much different from that of Lusaka (87). Rural areas of all districts exhibit higher IMRs than urban areas.

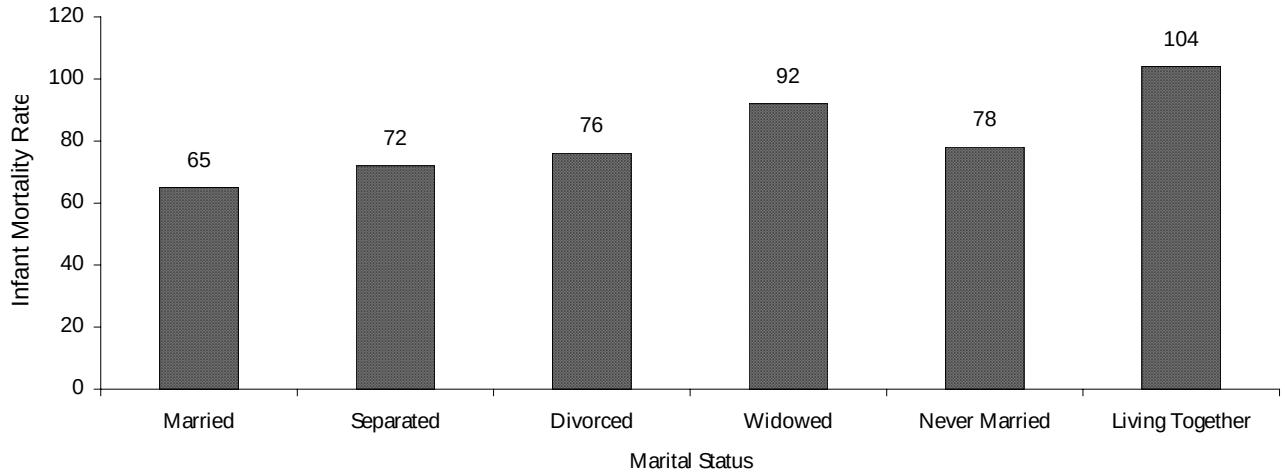


Source: CSO, 2000 Census of Population and Housing

8.3.4 Infant Mortality Rate by Marital Status of the Mother

IMR also varies with marital status of mother. The data show that children born to cohabitating mothers have the highest risk of dying before age one (almost 1 in every 10 live birth), while children born to married mothers have the lowest risks (1 in every 15 live births, (Figure 8.4 and Table 8.2).

Figure 8.4: Infant Mortality Rates by Marital Status of the mother, Lusaka Province, 2000



Source: 2000 Census of Population and Housing

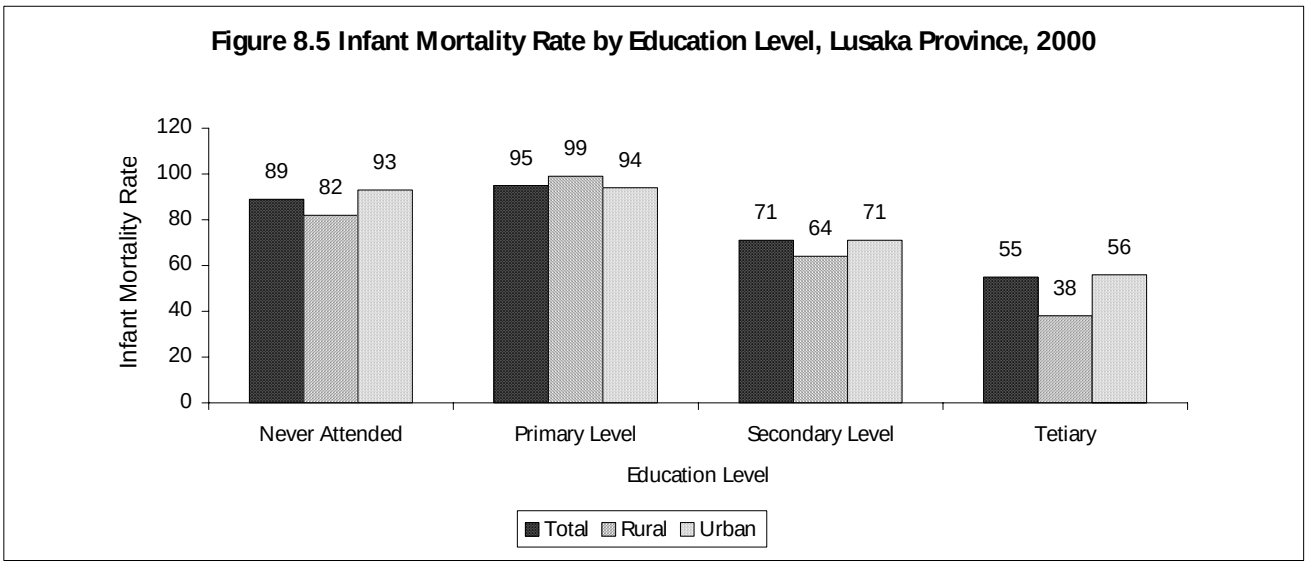
Table 8.2: Infant Mortality Rate by Marital Status and Residence, Lusaka Province, 2000

Marital Status	Infant Mortality Rate (per '000)		
	Total	Rural	Urban
Married	65	71	64
Separated	72	75	71
Divorced	76	81	75
Widowed	92	114	88
Never Married	78	86	77
Living Together	104	116	101

Source: CSO, 2000 Census of Population and Housing

8.3.5 Infant Mortality by Education Level of Mother

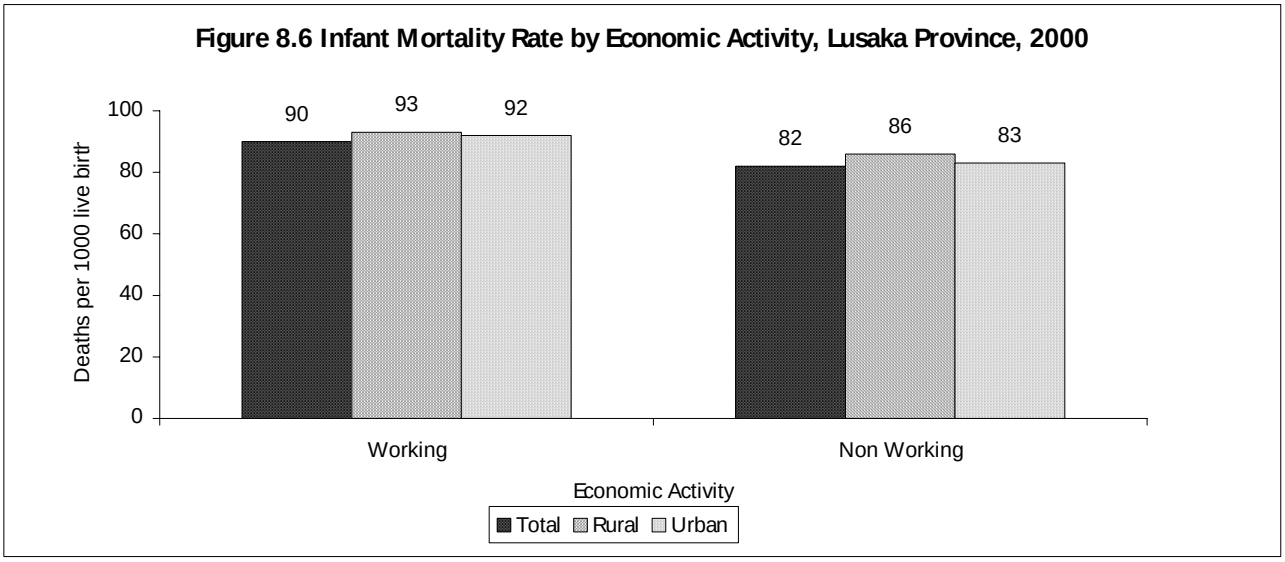
Figure 8.5 shows that IMR varies markedly with the level of education of mother. As expected, survival chances of infants increase substantially as the level of education of mothers increased. Children born to mothers with a tertiary level education had the lowest risk of dying before age one (about 1 death in every 18 live births). For the infants born to mothers with a secondary education, 1 in every 14 dies before reaching age one). Children born to mothers with only a primary level of education had the highest chances of dying before age 1 with (1 death in every 11 live birth). Overall, the higher the level of education of the mother, the less the chances of infants dying before their first birthday. However, children born to mothers who have never attended school have a higher chance of surviving to age one than those children whose mothers have attained primary education.



Source: 2000 Census of Population and Housing

8.3.6 Infant Mortality by Economic Activity of the Mother

According to the 2000 census results, children born to working mothers have fewer chances of reaching age one than those born to non-working mothers (91 versus 83 deaths per 1000 live births respectively) (see Figure 8.6).



Source: 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 between 1990 and 2000 by about 23 percent, from 77 to 59 deaths per 1000 children. Despite this decline the 2000 levels are almost the same as the 1980 levels.

In comparison with the national average of 82, Lusaka province has a significantly lower child mortality rate.

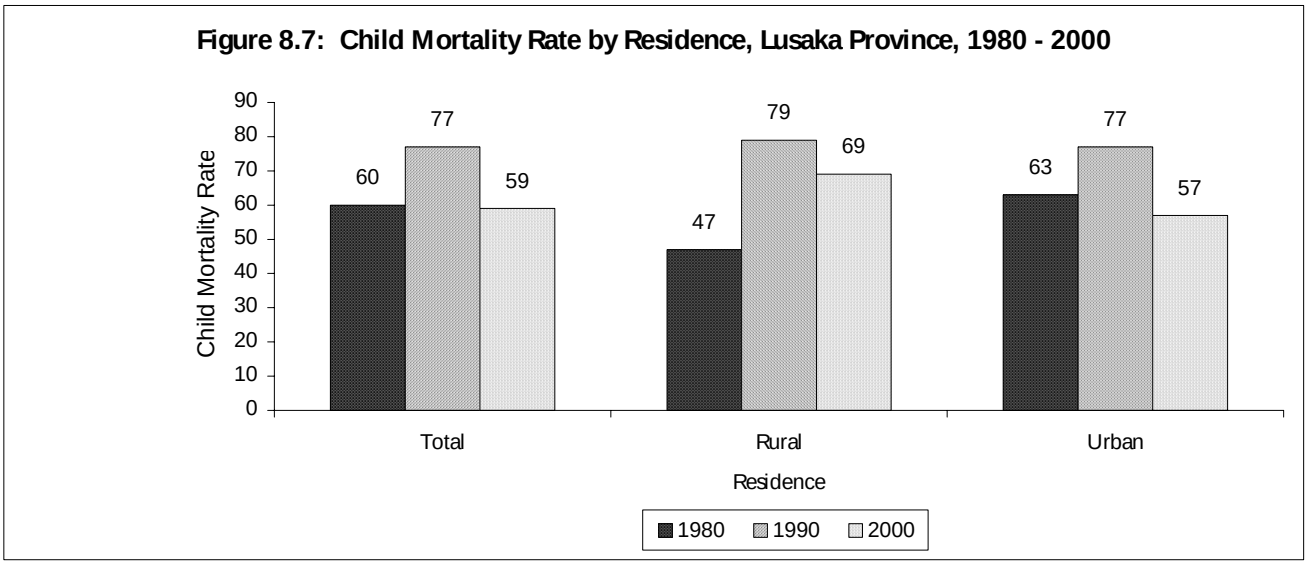
Table 8.3: Child Mortality Indicators by Sex of Child, Residence and District, Lusaka Province, 2000

Residence, Sex and District	Child Mortality Rate (per '000)		
	1980	1990	2000
Zambia	**71**	**96**	**82**
Lusaka Province	60	77	59
Residence			
Rural	47	79	69
Urban	63	77	57
Sex			
Male	57	76	63
Female	63	75	51
Districts (2000)	**Total (2000)**	**Rural (2000)**	**Urban (2000)**
Chongwe	72	73	35
Kafue	57	61	42
Luangwa	93	98	24
Lusaka	58	-	58

8.4.1 Child Mortality Rate by Residence

Figure 8.7 shows the rural-urban differentials in CMR. Children born to mothers residing in rural areas have a higher risk of dying between age one and five (69 compared to 57 deaths per 1000 children) than those in urban areas.

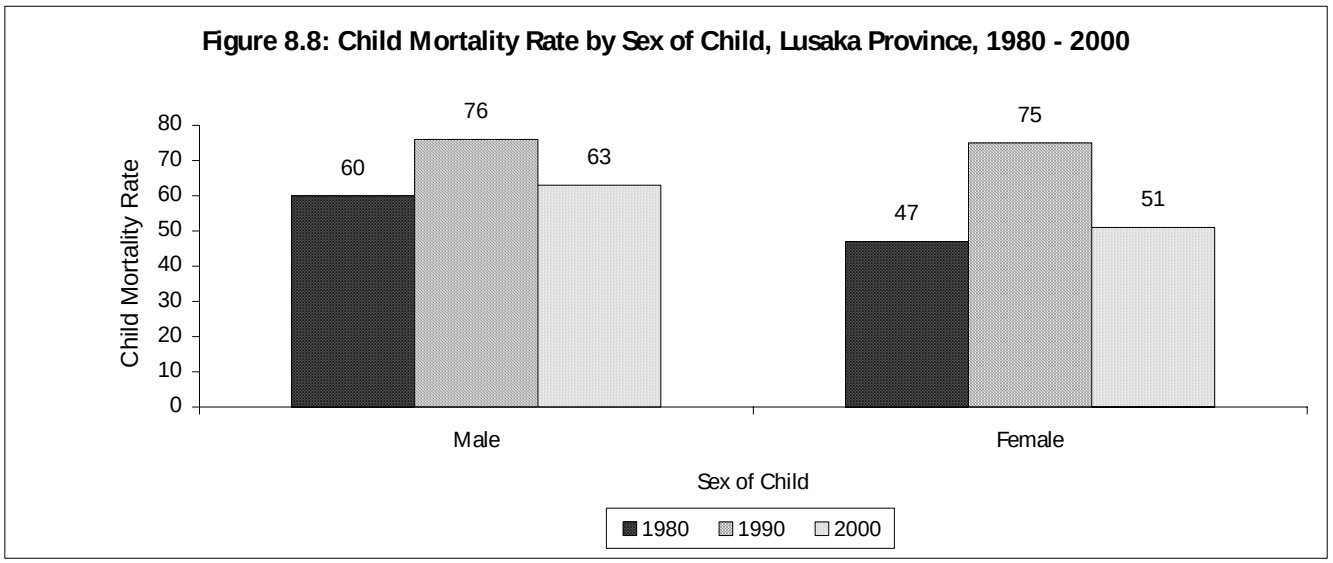
In rural areas, CMR has declined from 79 to 69 infant deaths per 1000 live births whereas in urban areas it declined form 77 to 57 infant deaths per 1000 children.



Source: 2000 Census of Population and Housing

8.4.2 Child Mortality Rate by Sex

Figure 8.8 shows that CMR among male children (63 deaths per 1000 children) is higher than that of females at 51 deaths per 1000 children. A similar pattern was also observed in 1990 in which 76 males and 75 females died between age one and five (of every 1000 live births). In 1980 however, the CMR for female children was higher than that of males (63 deaths for females compared to 57 deaths per 1000 live births for males).

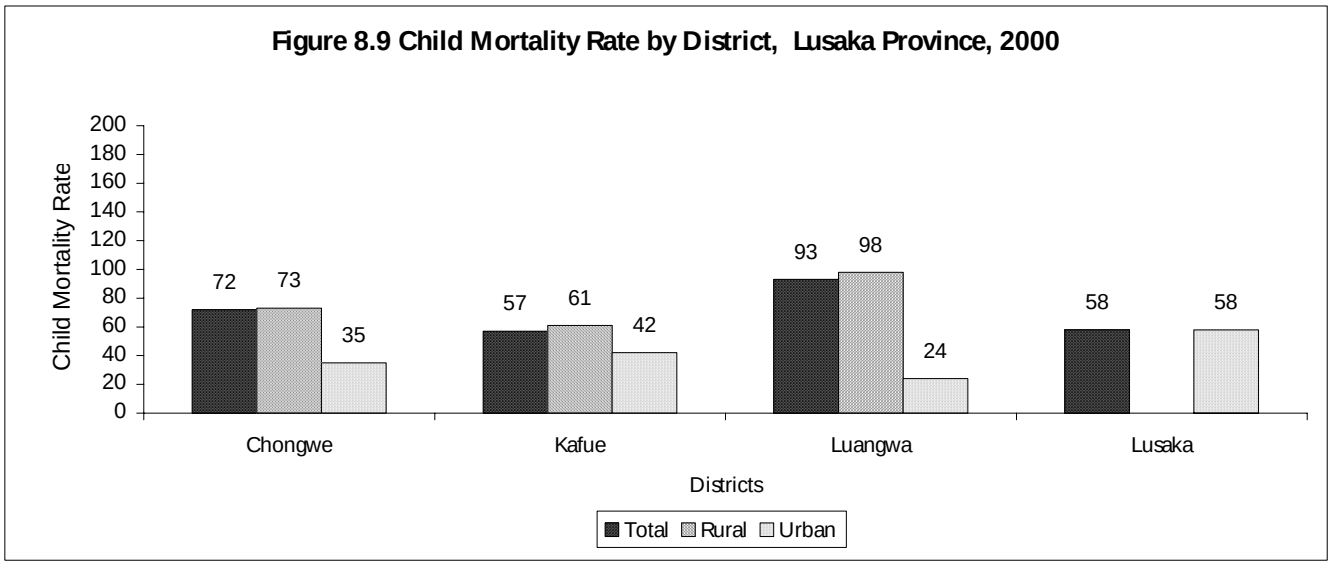


Source: 2000 Census of Population and Housing

8.4.3 Child Mortality Rate by District

A district comparison shows that, the CMR is highest in Luangwa District (93deaths per 1000 live births) and lowest in Kafue district (57).

It is evident that children in urban areas of all the districts, (with the exception of Lusaka district, since Lusaka district has no rural area), have higher chances of surviving between age one and five than their rural counterparts. The difference is significantly high in Luangwa and Chongwe districts.



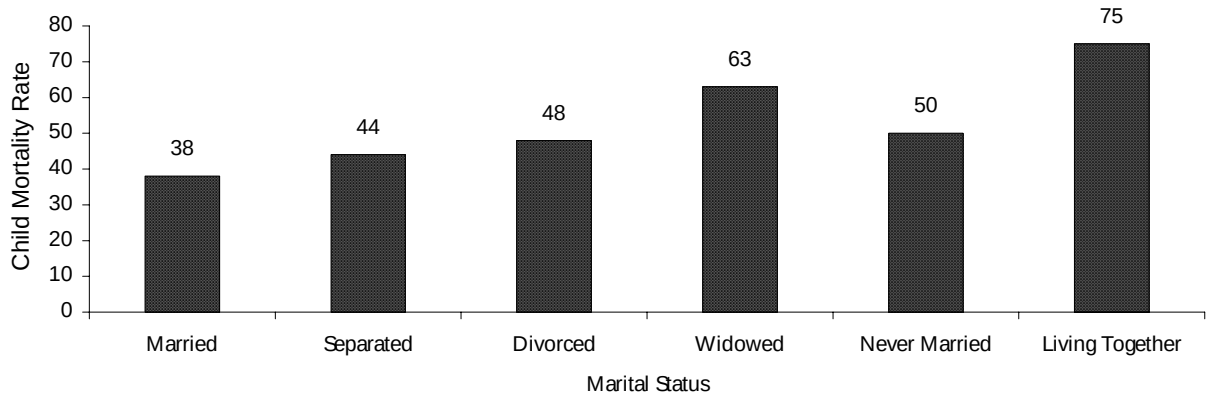
Source: 2000 Census

# of Population and Housing

8.4.4 Child Mortality Rate by Marital Status of Mother

Figure 8.10 and Table 8.4 show the CMR differentials by marital status of mother. Data show that children born to Cohabiting (Living together) mothers have the highest chance of dying between age one and five (almost 1 in every 13) while children born to married mothers have the lowest chance of dying (1 in every 26).

Figure 8.10 Child Mortality Rate by Marital Status, Lusaka Province, 2000



Source: 2000 Census of Population and Housing

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

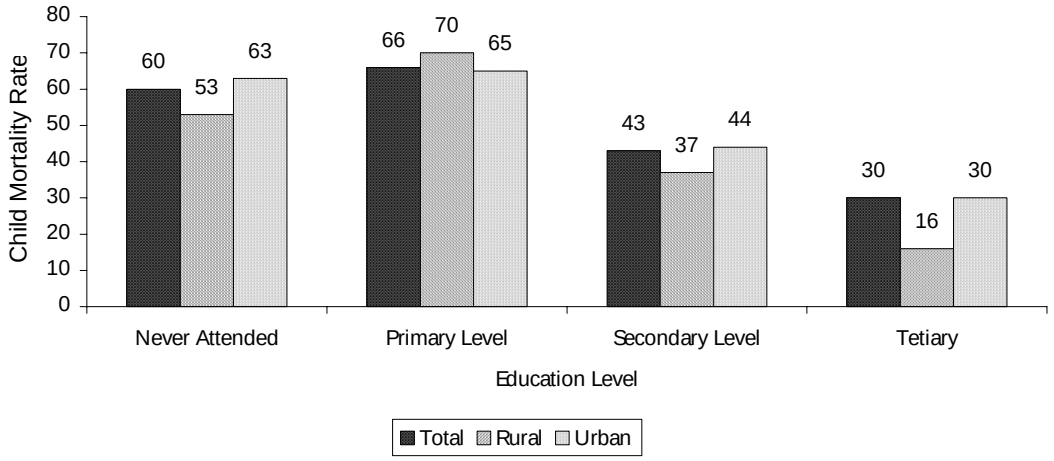
Marital Status	Child Mortality Rate (per '000)		
	Total	Rural	Urban
Married	38	44	37
Separated	44	47	43
Divorced	48	52	47
Widowed	63	86	59
Never Married	50	57	49
Living Together	75	88	73

Source: CSO, 2000 Census of Population and Housing

8.4.5 Child Mortality Rate by Education Level of the Mother

Figure 8.11shows that CMR vary markedly according to the level of education of mother. Children born to mothers with primary education have the highest chance of dying between age one and five (almost 1 in every 15) while children born to mothers with tertiary level have the least chance (1 in every 33). As expected, survival chances of children increase substantially as the level of education of mothers increase. Overall, the higher the level of education of the mother, the less the chances of infants dying before their first birthday.

Figure 8.11 Child Mortality Rate by Education Level, Lusaka Province, 2000

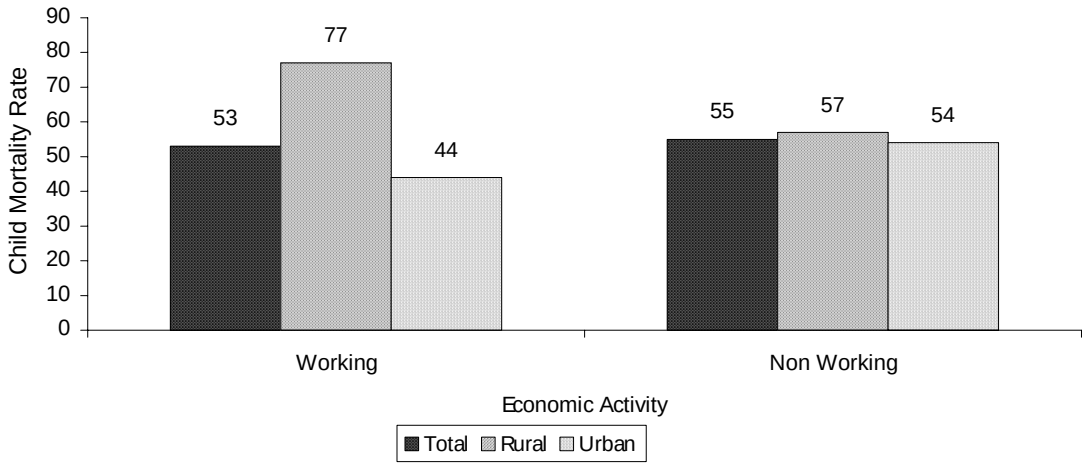


Source: 2000 Census of Population and Housing

8.4.6 Child Mortality Rate by Economic Activity of Mother

Children born to non-working mothers have higher chances of dying between age one and five than those born to working mothers (53 versus 55 deaths per 1000 live births – Figure 8.12).

Figure 8.12 Child Mortality Rate by Economic Activity, Lusaka Province,2000



Source: 2000 Census of Population and Housing

8.5. Under-Five Mortality Levels, Trends and Differentials

Under-five Mortality Rate (UMR) in Lusaka Province has declined in the past 10 years 1990-2000. It has fallen by about 19 percent, from 175 to 142 deaths per 1000 live births in the respective years. In 1980, UMR stood at 106 deaths per 1000 live births, representing about 34 percent increase between 1980 and 2000.

Table 8.5: Under-Five Mortality Indicators by Sex of Child, Residence and District, Lusaka Province, 2000

Back ground Characteristics	Under-five Mortality Rate (per '000)		
	1980	1990	2000
Zambia	**121**	**208**	**183**
Lusaka Province	106	175	142
Residence			
Rural	88	179	161
Urban	111	174	138
Sex of Child			
Male	105	179	154

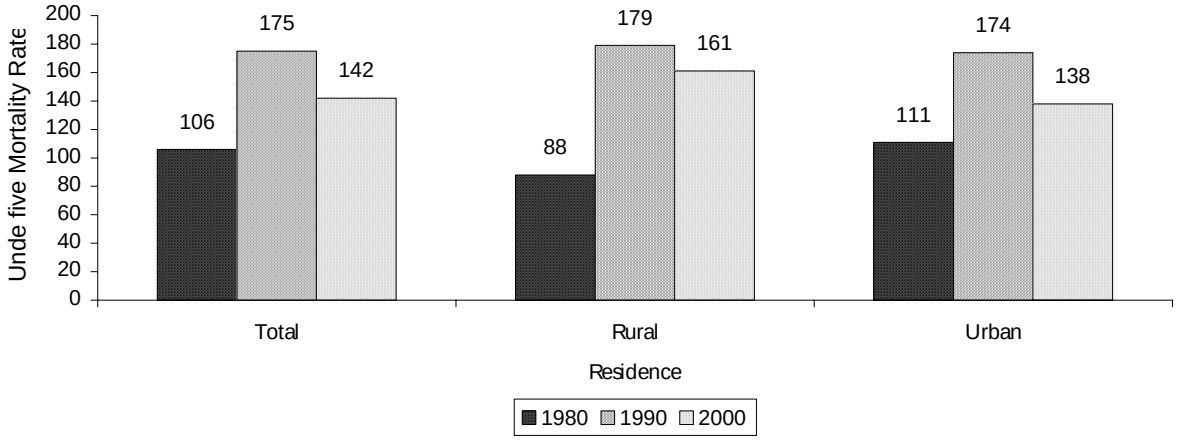
Female	109	165	130
Districts (200)	**Total (200)**	**Rural (200)**	**Urban (200)**
Chongwe	165	168	95
Kafue	137	146	109
Luangwa	202	211	71
Lusaka	139	-	139

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

8.5.1 **Under-Five Mortality rate by Residence**

Figure 8.13 shows that overall, children born to mothers residing in rural areas have higher risks of dying between birth and age five than those in urban areas (161compared to 138 deaths per 1000 live births). In 1990, the pattern was similar to that of 2000. In 1980, however, UMR was higher in urban areas that rural areas.

Figure 8.13: Under-Five Mortality Rate by Residence, Lusaka Province, 1980 - 2000

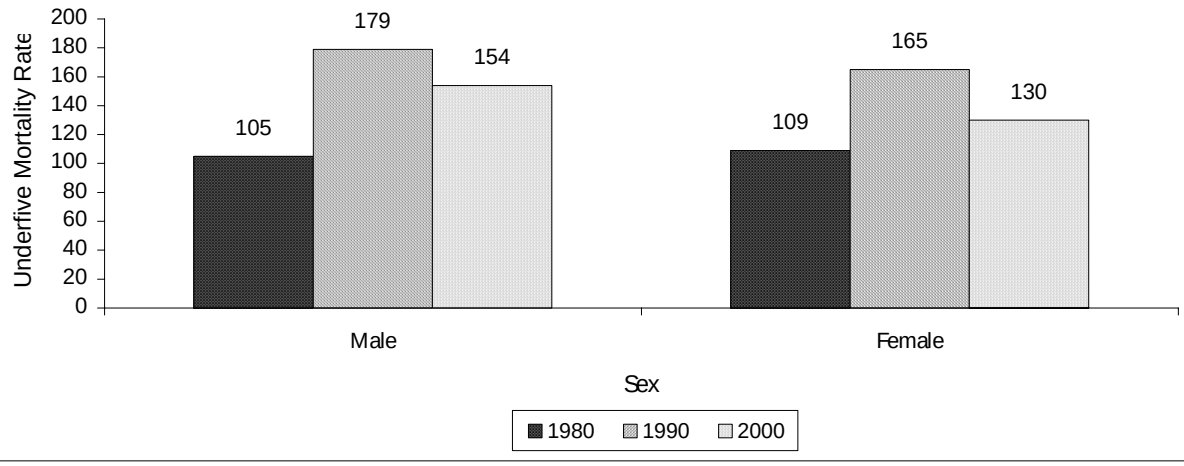


Source: 2000 Census of Population and Housing

8.5.2 Under-Five Mortality Rate by Sex

Variations of UMR by sex are also observed. Figure 8.14 shows that males have a higher chance of dying before age five than females, 154 versus 130 deaths per 1000 live births. A similar pattern is also observed in 1990. In 1980,however, females had higher risk of dying than males (105 male versus 109 females).

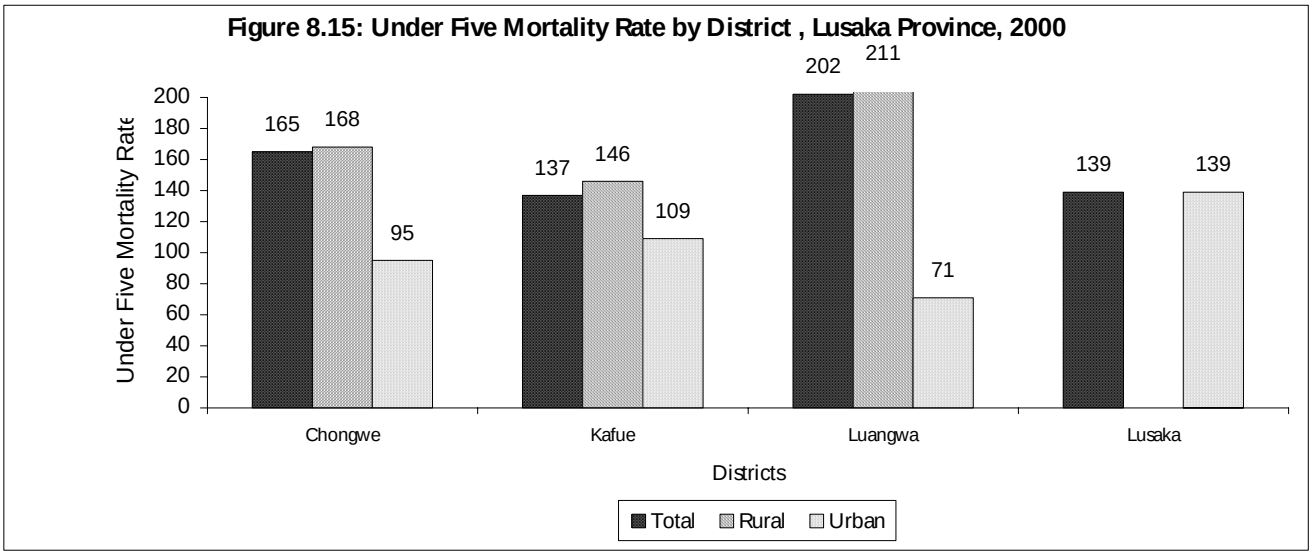
Figure 8.14: Under-Five Mortality Rate by Sex, Lusaka Province, 1980 - 2000



Source: 2000 Census of Population and Housing

8.5.3 Under-Five Mortality rate by District

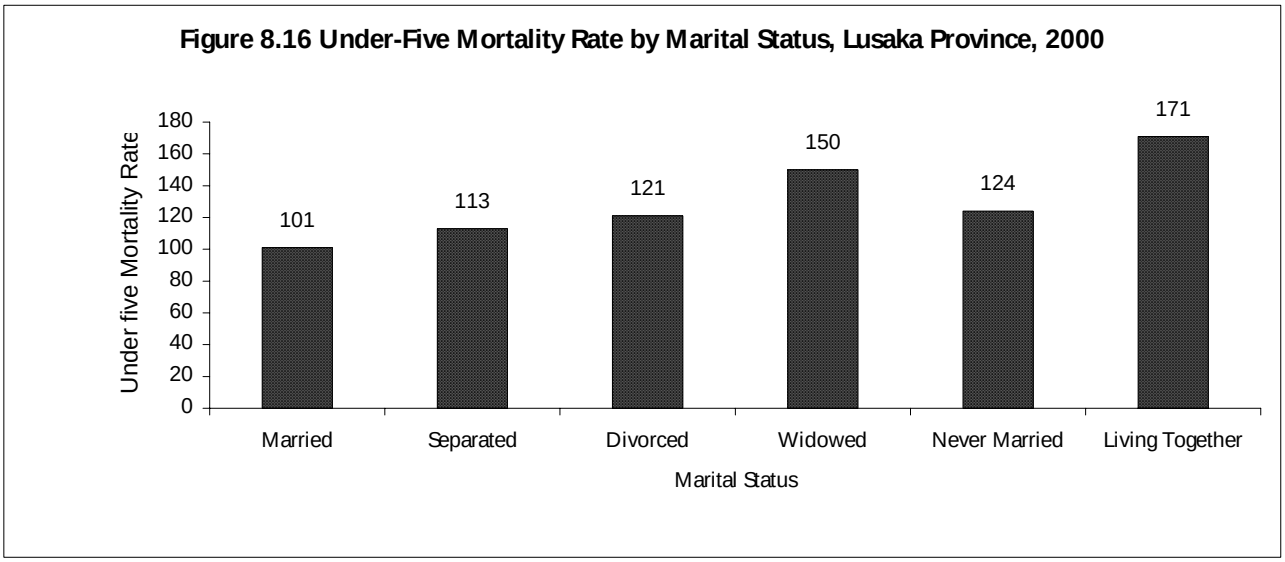
Figure 8.15 shows a district comparison of UMR. UMR is highest in Luangwa District (202) and lowest in Kafue District (137). Rural areas of all districts exhibit higher UMRs than urban areas.



Source: 2000 Census of Population and Housing

8.5.4 Under-Five Mortality rate by Marital Status of the Mother

Figure 8.16 and Table 8.6 show the differentials in UMR by marital status of mother. Children born to living together mothers (cohabiting) have the highest chances of dying before ages 5 (almost 1 in every 6), while children born to married mothers have the lowest chances of dying (almost 1 in every 10 dies before age five).



Source: 2000 Census of Population and Housing

Table 8.6: Under-five Mortality Rate by Marital Status and Residence, Lusaka Province, 2000

	Under-Five Mortality Rate (per '000)		
Marital Status	Total	Rural	Urban

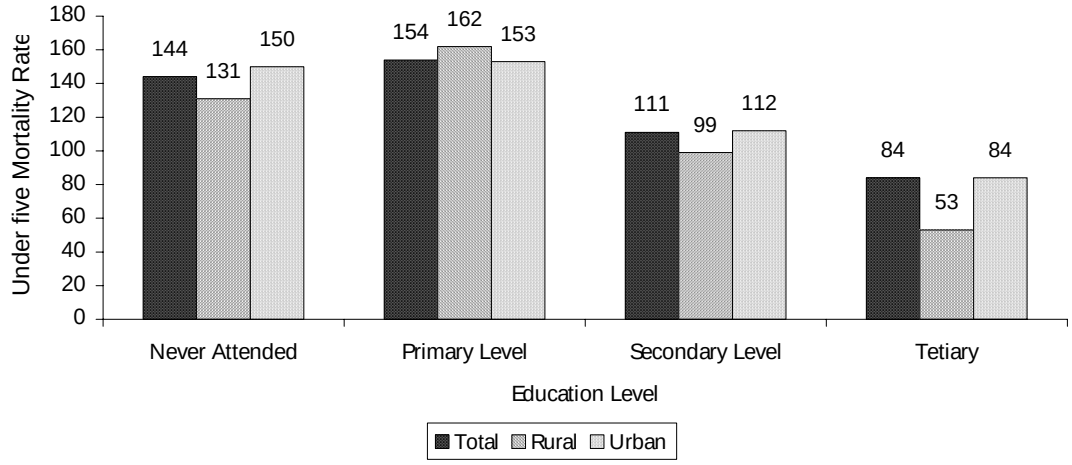
Married			
Separated	101	112	98
Divorced	113	119	112
Widowed	121	129	119
Never Married	150	190	142
Living Together	124	139	122
	171	194	167

Source: CSO, 2000 Census of Population and Housing

8.5.5 Under-Five Mortality rate by Education Level of Mother

UMRs vary markedly according to the level of education of mother. Figure 8.7 shows that children born to mothers with primary or less formal education are at the greater risk of dying before their fifth birthday than those born to mothers with secondary or tertiary education.

Figure 8.17: Under-Five Mortality Rate by Education Level, Lusaka Province, 2000

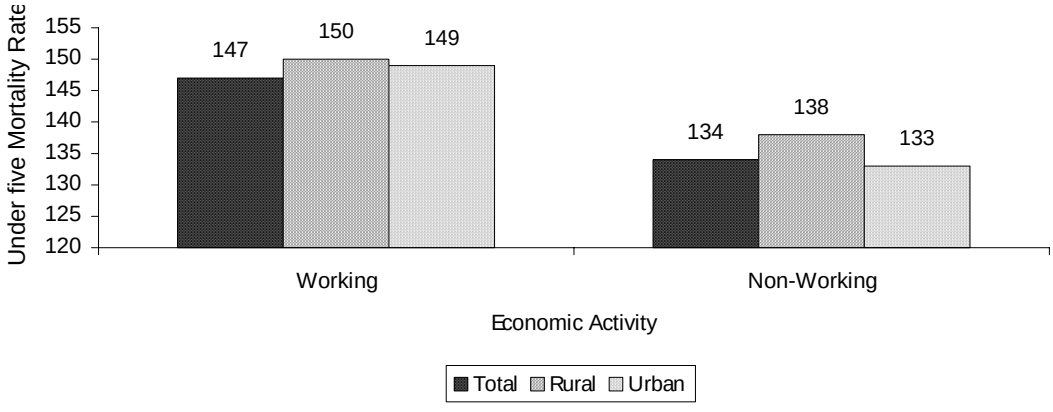


Source: 2000 Census of Population and Housing

8.5.6 Under-Five Mortality rate by Economic Activity of Mother

Figure 8.18 shows that children born to working mothers have higher risks of dying before age five compared to those born to non-working mothers (147 versus 134). This pattern is the same in both rural and urban areas.

Figure 8.18: Under-Five Mortality Rate by Economic Activity, Lusaka Province, 2000



Source: 2000 Census of Population and Housing

8.6. Life Expectancy at Birth, Levels, Trends and Differentials

Table 8.7 shows the life expectancy at birth for Lusaka Province. Between 1980 and 1990, life expectancy decreased from 55 to 50 years, then increased to 54 in 2000. When disaggregated by sex, a similar trend is observed. It is also observed that female babies experience higher expectation of life at birth at 54, 53 and 58 years, compared to males whose life expectancy is estimated at 55, 50 and 53 years in 1980, 1990 and 2000, respectively. When compared with the national rate, Lusaka Province has a higher life expectancy by 4 years i.e. 54 years compared to 50 years.

Table 8.7: Life Expectancy at Birth Indicators by Sex of Child, Residence and District, Lusaka Province, 2000

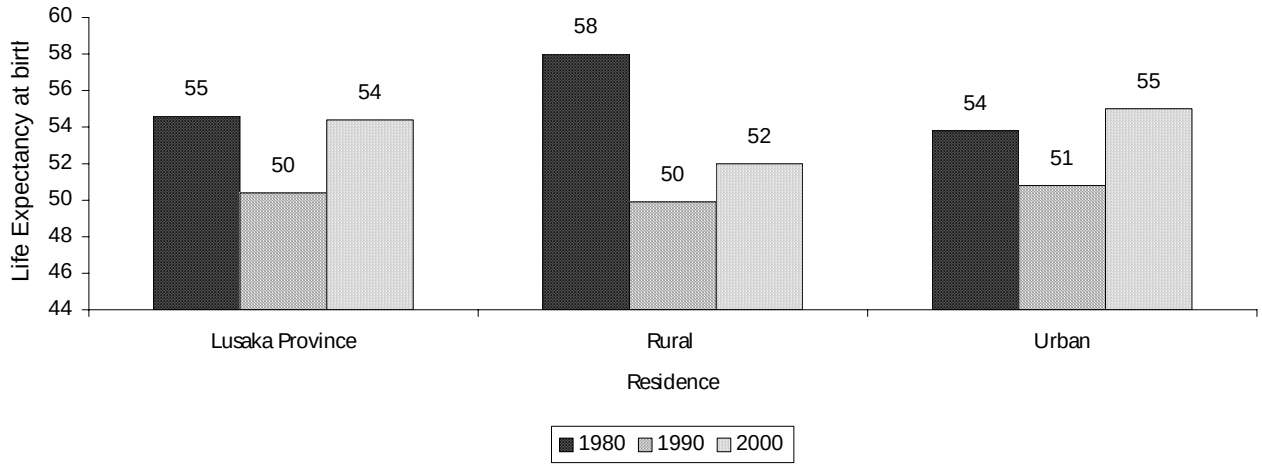
Back ground Characteristics	Life Expectancy at birth (years)		
	1980	1990	2000
Zambia	**52**	**47**	**50**
Lusaka Province	55	50	54
Residence			
Rural	58	50	52
Urban	54	50	55
Sex of Child			
Male	55	49	52
Female	54	52	57
Districts (2000)	**Total (2000)**	**Rural (2000)**	**Urban (2000)**
Chongwe	53	53	61
Kafue	56	56	57
Luangwa	54	53	59
Lusaka	55	-	55

Source: 2000 Census of Population and Housing

8.6.1 Life Expectancy at Birth by Residence of Mother

Figure 8.19 shows the rural-urban differentials of life expectancy. It is observed that newly born babies in urban areas have a higher expectation of life at birth than their rural counterparts (in the urban areas life expectancy was 54, 51 and 55 while the rural areas it was 58, 50 and 52 in 1980, 1990 and 2000, respectively. In rural areas, the 2000 life expectancy is still below that of 1980 while the opposite holds true for urban areas.

Figure 8.19: Trends in Life Expectancy at Birth by Residence, Lusaka Province, 1980-2000

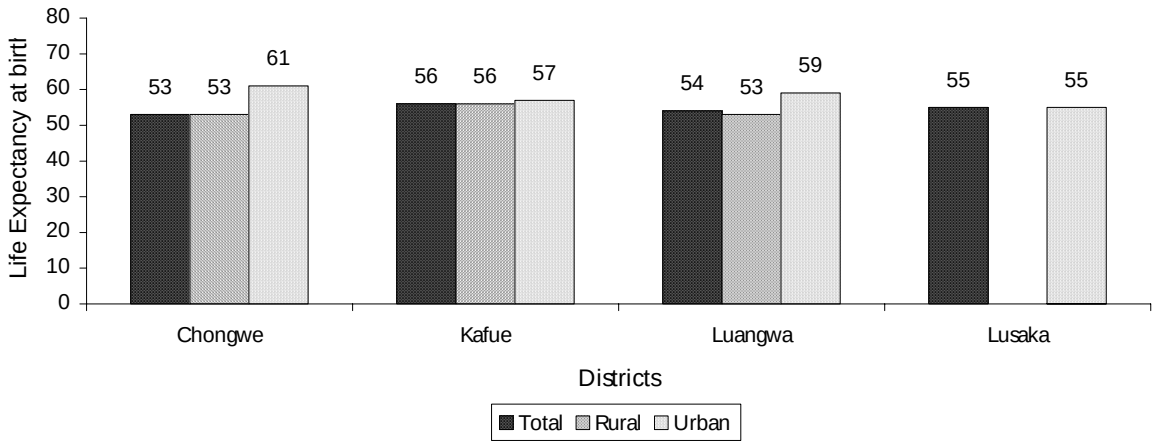


Source: 2000 Census of Population and Housing

8.6.2 Life Expectancy at Birth by District of Mother

Figure 8.20 shows that at district level, Life Expectancy at Birth is highest in Kafue (56) and lowest in Chongwe (53).

Figure 8.20: Life Expectancy at Birth by District and Residence, Lusaka Province, 2000

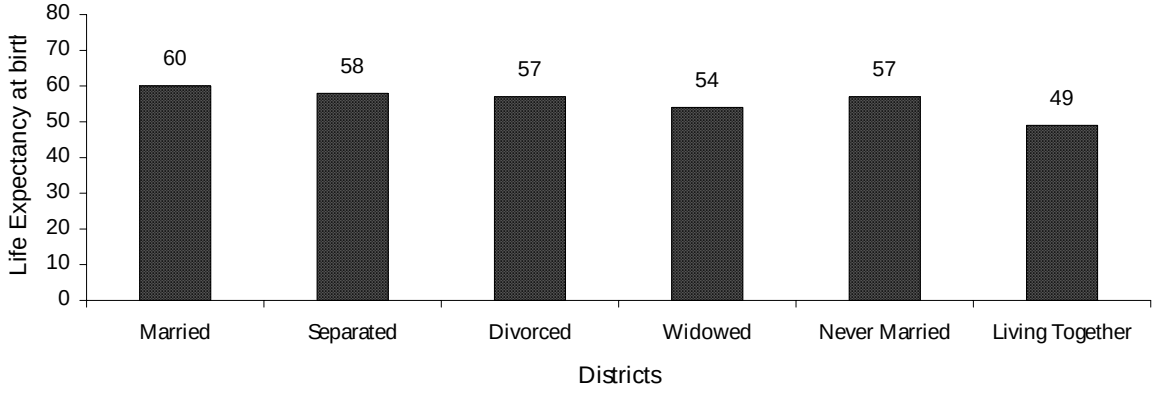


Source: 2000 Census of Population and Housing

8.6.3 Life Expectancy at Birth by Marital Status of the Mother

Life Expectancy at Birth differs with marital status of mother. Figure 8.21 and Table 8.8 show that babies born to mothers who are married have the highest life expectancy of 60 while those born to women who are cohabiting have the lowest life expectancy of 49 years.

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



Source: 2000 Census of Population and Housing

Table 8.8: Life Expectance at Birth by Marital Status and Residence, Lusaka Province, 2000

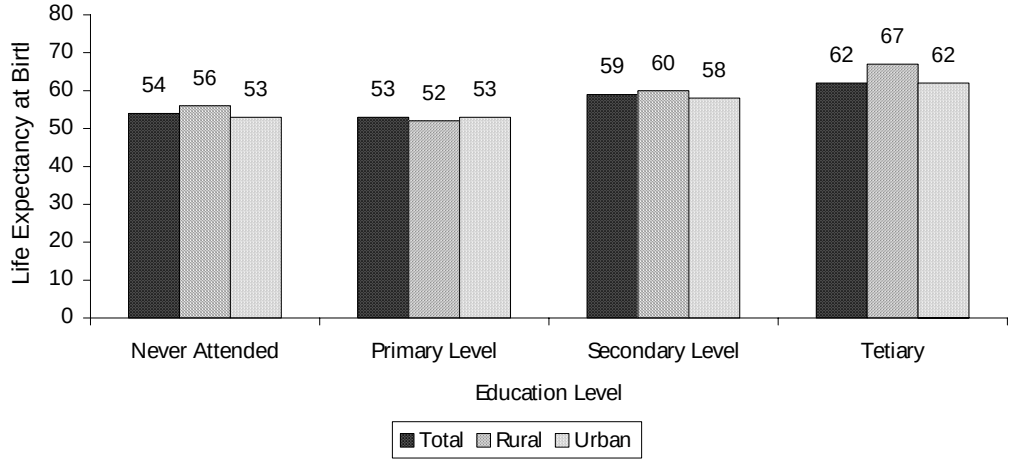
Marital Status	Life Expectancy at Birth (per '000)		
	Total	Rural	Urban
Married	60	59	61
Separated	58	57	58
Divorced	57	56	58
Widowed	54	49	55
Never Married	57	55	57
Living Together	49	48	51

Source: CSO, 2000 Census of Population and Housing

8.6.4 Life Expectancy at Birth by Education Level of Mother

Figure 8.22 shows that Life Expectancy at Birth varies with level of education of mother. As expected, children born to mothers with tertiary education have the highest life expectancy of 62 years. Meanwhile, children born to mothers who have never attended school have a slightly higher expectancy of life at birth than children born to mothers with primary education 54 years versus 53 years. The two groups have the lowest life expectancy.

Figure 8.22: Life Expectancy at Birth by Education Level of the Mother, Lusaka Province, 2000

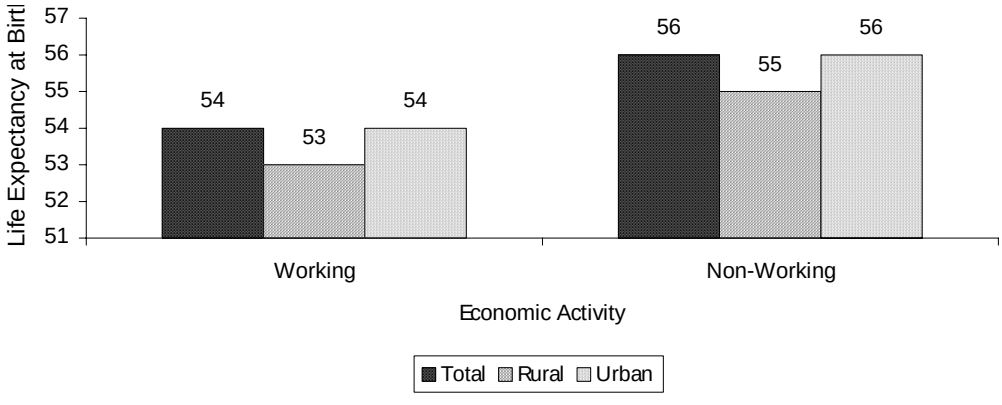


Source: 2000 Census of Population and Housing

8.6.5 Life Expectancy at Birth by Economic Activity of Mother

Children born to non-working mothers have a higher expectation of life at birth than those born to working mothers. The difference, however, is not so significant (56 years versus 54 years, respectively) (Figure 8.23).

Figure 8.23: Life xpectancy at Birt by Economic Activity of the Mother, Lusaka Province, 2000

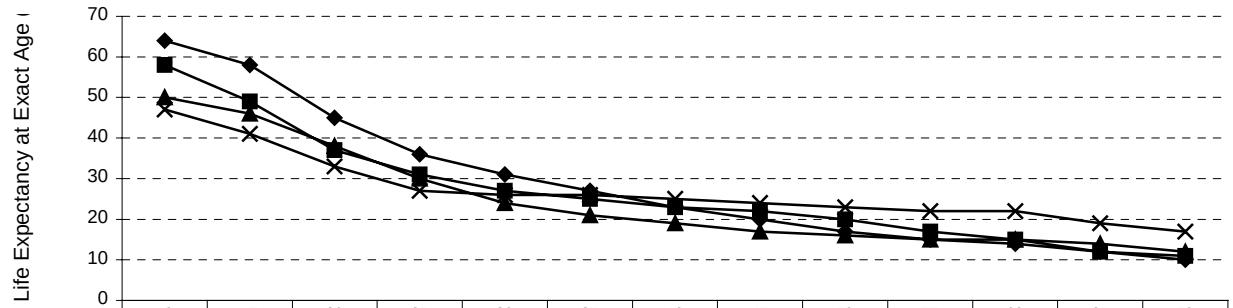


Source: 2000 Census of Population and Housing

8.7 Adult Mortality: Life Expectancy Levels, Trends and Differentials

Figure 8.4 shows that adult life expectancy level in Lusaka Province decreased at exact ages 10-50 for males and 10-30 for females between 1990 and 2000. At the older age groups, life expectancy increased for both males and females.

Figure 8.24: Adult Life Expectancy Levels (at Exact Ages 10-70 Years), Lusaka Province, 1990-2000



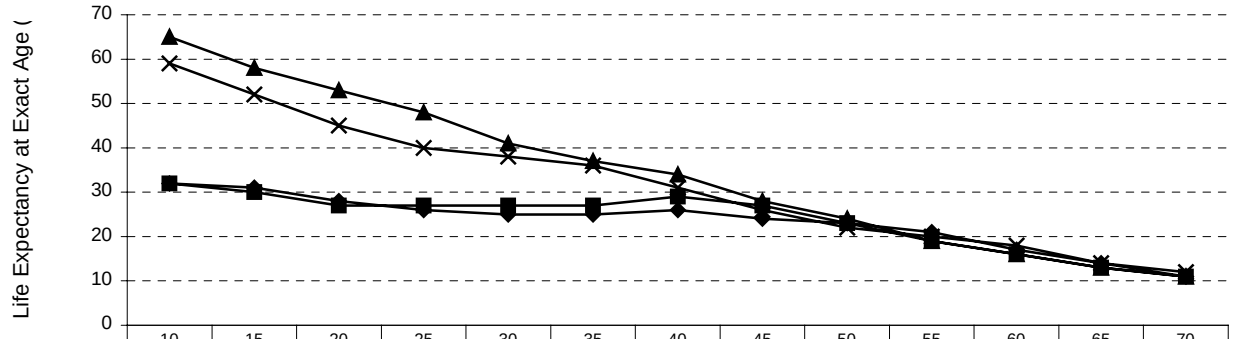
	10	15	20	25	30	35	40	45	50	55	60	65	70
Male 1990	64	58	45	36	31	27	23	20	17	15	14	12	10
Female 1990	58	49	37	31	27	25	23	22	20	17	15	12	11
Male 2000	50	46	38	30	24	21	19	17	16	15	15	14	12
Female 2000	47	41	33	27	26	26	25	24	23	22	22	19	17

Exact Age (X)

Source: 2000 Census of Population and Housing

Differentials by residence in Figures 8.25 and 8.26 show that adults in urban areas had higher chances of surviving to older ages in 1990 than in rural areas. However, in 2000 the opposite of this scenario is true. In rural areas female adults have higher life expectancies than those in urban areas. The figures also show that males have a higher life expectancy than females at ages 10-55 in rural areas and 10-30 in urban areas. At older ages, females have a higher life expectancy than males.

Figure 8.25: Adult Life Expectancy Levels (at Exact Ages 10-70 Years), Lusaka Province, Rural, 1990-2000

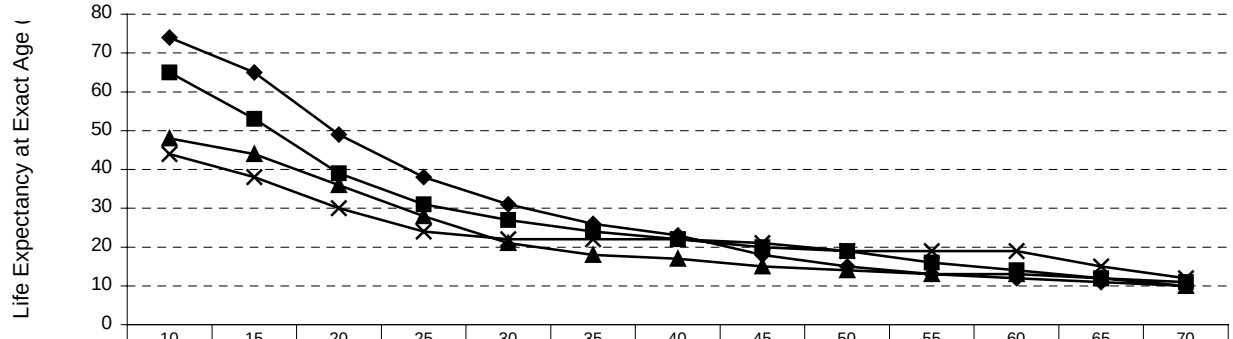


	10	15	20	25	30	35	40	45	50	55	60	65	70
Male 1990	32	31	28	26	25	25	26	24	23	21	17	14	11
Female 1990	32	30	27	27	27	27	29	27	23	19	16	13	11
Male 2000	65	58	53	48	41	37	34	28	24	19	16	13	11
Female 2000	59	52	45	40	38	36	31	26	22	20	18	14	12

Exact Age (X)

Source: 1990 and 2000 Census of Population and Housing

Figure 8.26: Adult Life Expectancy Levels (at Exact Ages 10-70 Years), Lusaka Province, Urban, 1990-2000



	10	15	20	25	30	35	40	45	50	55	60	65	70
Male 1990	74	65	49	38	31	26	23	18	15	13	12	11	10
Female 1990	65	53	39	31	27	24	22	20	19	16	14	12	11
Male 2000	48	44	36	28	21	18	17	15	14	13	13	12	10
Female 2000	44	38	30	24	22	22	22	21	19	19	19	15	12

Exact Age (X)

Source: 1990 and 2000 Census of Population and Housing

8.8 Summary

Overall, infant mortality rate has declined in Lusaka Province by about 17 percent. Despite the decrease, currently, 1 in 11 infants die before their first birthday compared to 1 in 9 previously. At districts level, Chongwe and Luangwa districts registered the highest infant deaths and Kafue has the least. In Luangwa district 1 in 8 infants do not survive to their first birthday compared to 1 in 12 in Kafue district. Higher Infant mortality risks are associated with mothers who live in rural areas, with low level of education (primary or less), co-habiting and working.

There was a 23.1 percent decline in Child Mortality Rate (CMR) between 1990 and 2000, from 77 to 59. However, the 2000 level is the slightly below the 1980 one (60 deaths per 1000 live births)). At district level CMR was highest in Luangwa (93) and Chongwe (72) districts and lowest in Kafue (57). Higher incidents of dying among children aged between exact age 1 and 5 were observed in those born to rural mothers, widowed and co-habiting mothers, mothers with a low level of education (primary or less) and working mothers.

Under five mortality rate has declined in Lusaka between 1990 and 2000 by about 19 percent. In 2000, 1 in 6 under-five children die before their fifth birthday compared to 1 in 7 in 1990. At district level, Lusaka district recorded the least under-five deaths and Luangwa district recorded the highest

Under-five children in Luangwa district are more likely to die than those in Lusaka district. Greater numbers of children dying before their fifth birthday were associated with mothers from rural areas, with a low level education, mothers who co-habiting and non-working mothers.

The expected number of years of life at birth in Lusaka province improved by about 4 years in 2000 compared to 1990, which increased from 50 to 54 years. At district level, Chongwe District registered the lowest life expectancy at birth of 53 years, compared with the highest, Kafue district 56 years. Life Expectancy at Birth is lower for children born to rural mothers than urban mothers. Children born to mothers with primary education and working mothers also have a low life expectancy.

Adult life expectancy levels have decreased between 1990-2000 at various ages. Males have higher life expectancies at ages 10-25 than females. At older ages, females have higher life expectancies than males.

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.

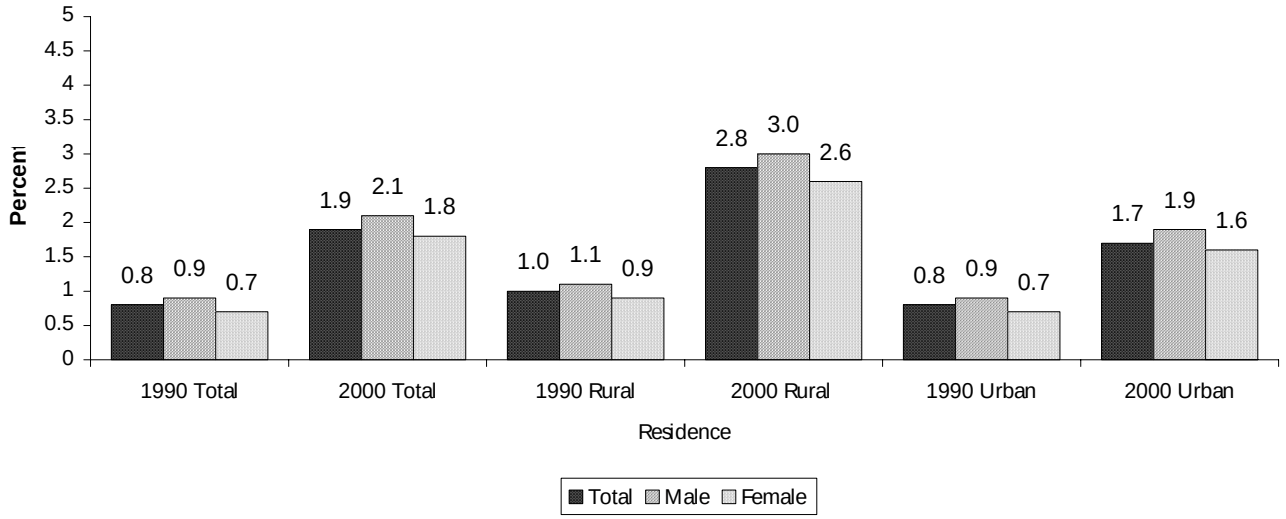
The categories employed in the current census, however, do not take into account the international definitions of disabilities, which include variations in the intensity of disability, such as the loss of feelings in fingers (UN, 1996).

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 1,341,167; 25,963 reported to be disabled; a proportion of 1.9 percent of the total population. This is lower than the national one at 2.7 percent. This proportion (1.9 percent) was an increase over 1990 census when only 0.8 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).

Figure 9.1: Proportion of Disabled Persons by Sex, Lusaka Province, 1990 and 2000



Source: CSO, 2000 Census of Population and Housing

Table 9.2: Proportion of disabled persons by Sex and Residence, Lusaka 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
Lusaka Total	987,106	156,868	830,238	0.8	1.0	0.8

Male	494,884	78,810	416,074	0.9	1.1	0.9
Female	492,222	78,058	414,164	0.7	0.9	0.7
2000						
Zambia Total	9,337,425	5,990,356	3,347,069	2.7	3.2	0.2
Lusaka Total	1,341,167	238,483	1,102,684	1.9	2.8	1.7
Male	672,087	120,679	551,408	2.1	3.0	1.9
Female	669,080	117,804	551,276	1.8	2.6	1.6

Source: CSO, 2000 Census of Population and Housing

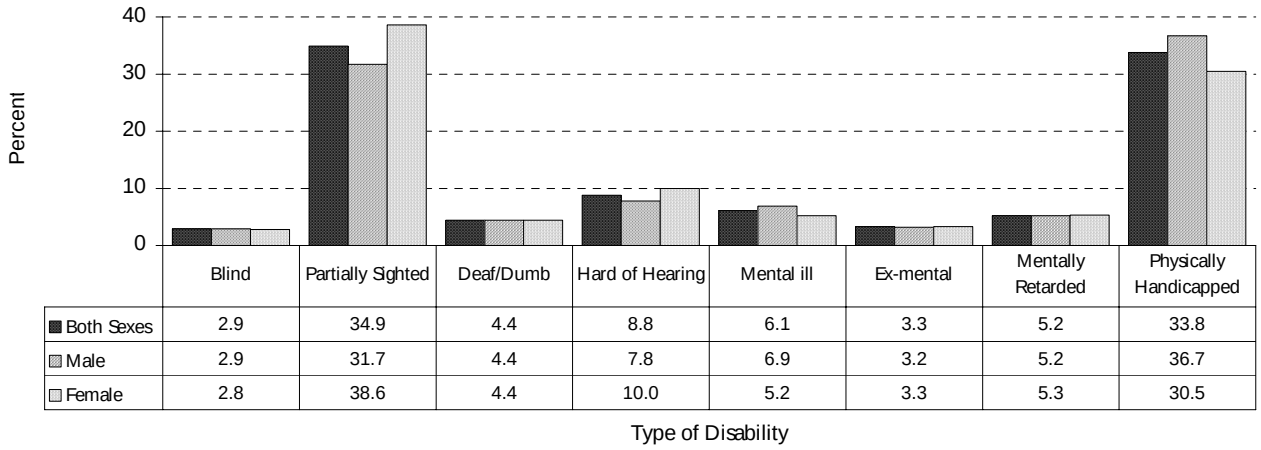
A comparison between rural and urban areas show that rural areas have a larger proportion of persons with disabilities. About 3 percent of the population of rural areas is disabled compared to 2 percent in urban areas.

9.5 Types of Disability

The distribution of disabled persons by type of disability in Lusaka province shows that out of a total of 25,963 disabled persons, 54 percent are male and 46 percent are female.

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. Table 9.3 and Figure 9.2 show that the Partially sighted form the largest proportion of the disabled persons for Lusaka Province. These form 35 percent of the 25,963 disabled persons. The second most common disability is physically handicapped, which was reported by 34 percent of the disabled population. Some disability categories such as blindness (2.9 percent), ex-mental (3.3 percent), deaf/dumbness (4.4 percent), mentally retarded (5.4 percent) and hard of hearing (8.8 percent) are less common.

Figure 9.2: Distribution of the Disabled Persons by Type of Disability, Lusaka Province, 2000



	Blind	Partially Sighted	Deaf/Dumb	Hard of Hearing	Mental ill	Ex-mental	Mentally Retarded	Physically Handicapped
Both Sexes	2.9	34.9	4.4	8.8	6.1	3.3	5.2	33.8
Male	2.9	31.7	4.4	7.8	6.9	3.2	5.2	36.7
Female	2.8	38.6	4.4	10.0	5.2	3.3	5.3	30.5

Source: CSO, 2000 Census of Population and Housing

The table also shows that there were more male than female persons who reported a disability; (13,928 against 12,035). The pattern of the disabled regarding the more common and less common disabilities for the male and female is similar to that of the total disabled persons. However, for the males, the difference in proportion between the partially sighted and physically handicapped is minimal. Also, the proportion of the physically handicapped is higher than that of the physically handicapped in Chongwe and Luangwa districts. This pattern is similar across districts although proportions vary slightly. For instance, Lusaka (2.5 percent), and Luangwa (2.8 percent) have lower proportions of the blind compared to districts such as Kafue (3.3 percent)

and Chongwe (4.3 percent). Partial sightedness is most common in Kafue (42.6 percent) and least in Luangwa (22.4 percent). The proportion of the deaf and dumb ranges from 3.3 percent in Luangwa to 7.3 percent in Chongwe while that of the hard of hearing ranges from 7.7 percent in Lusaka to 12.0 percent in Kafue. A comparison of the districts as regards the physically disabled shows that it is most common in Luangwa (51.7 percent) and least in Kafue with 27.7 percent.

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

Type of Disability	Zambia Total	Lusaka Province	Chongwe	Kafue	Luangwa	Lusaka
Total	256,690	25,963	3,571	3,228	813	18,351
Blind	5.3	2.9	4.3	3.3	2.8	2.5
Partially sighted	30.2	34.9	31.4	42.6	22.4	34.8
Deaf/dumb	6.2	4.4	7.3	5.5	3.3	3.7
Hard of hearing	12.4	8.8	11.1	12	10.6	7.7
Mentally ill	8.1	6.1	7.3	7	7.6	5.7
Ex-mental	3.6	3.3	2.6	2.9	2.5	3.5
Mentally retarded	5.4	5.2	4.9	4.3	5	5.4
Physically handicapped	38.8	33.8	35.4	27.7	51.7	33.8
Male	135,613	13,928	1,883	1,762	442	9,841
Blind	5	2.9	3.5	3.6	2	2.7
Partially sighted	27.7	31.7	28.9	39.6	18.6	31.4
Deaf/dumb	6.2	4.4	7.1	5.4	3.8	3.8
Hard of hearing	11.5	7.8	9.5	10.4	8.6	7
Mentally ill	8.8	6.9	9	7.2	9	6.4
Ex-mental	3.7	3.2	3	3.5	3.4	3.2
Mentally retarded	5.6	5.2	5	4.3	5.2	5.3
Physically handicapped	40.7	36.7	37.8	29.9	54.1	36.9
Female	121,077	12,035	1,688	1,466	371	8,510
Blind	5.6	2.8	5.2	2.9	3.8	2.3
Partially sighted	33	38.6	34.2	46.2	27	38.6
Deaf/dumb	6.2	4.4	7.5	5.7	2.7	3.6
Hard of hearing	13.3	10	13	13.8	12.9	8.6
Mentally ill	7.3	5.2	5.5	6.7	5.9	4.9
Ex-mental	3.6	3.3	2.3	2	1.3	3.9
Mentally retarded	5.3	5.3	4.8	4.2	4.9	5.6
Physically handicapped	36.7	30.5	32.7	25	48.8	30.2

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

9.6 Age Structure of the Disabled

The age structure of the disabled is shown in Table 9.4. Data show that the number of the disabled increases with increasing age up to age group 10-14 at which it reaches the peak. After this age group, the numbers fluctuate. Across age groups 0-4 to 35-39, 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 partially sighted.

Table 9.4: Percent Distribution of the Disabled by Type of Disability and Age, Lusaka 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	1,538	1.2	16.4	7.6	5.6	4.5	4.2	7.9	41.4
5-9	1,911	1.6	25.2	10.5	11.9	6.7	3.9	8.3	28.7
10-14	2,180	1.2	19.9	8.3	11.4	7.0	3.1	8.6	29.2
15 - 19	1,969	1.7	29.2	6.1	8.7	8.2	2.9	8.6	31.8
20 - 24	2,636	1.1	24.8	4.5	7.4	8.3	3.7	7.1	36.0
25 - 29	2,503	1.3	29.3	4.0	7.2	8.9	6.9	6.2	35.8
30 - 34	2,135	3.0	30.0	3.4	6.9	6.9	4.1	4.9	40.2
35 - 39	1,765	2.2	36.3	2.5	7.6	7.0	3.5	4.2	37.2
40 - 44	1,686	3.0	42.8	2.8	8.2	6.0	2.7	2.8	33.7
45 - 49	1,576	2.5	50.7	2.1	5.9	5.7	2.1	2.9	29.6
50 - 54	1,398	3.1	52.4	1.3	7.0	2.9	2.1	1.7	31.5
55 - 59	1,025	4.0	48.9	2.0	10.0	4.2	1.3	1.9	31.6
60 - 64	1,024	3.4	51.5	1.5	10.7	2.3	1.8	1.9	34.4
65 - 69	796	6.0	49.9	1.0	10.4	3.3	1.1	1.8	34.5
70 - 74	677	6.4	52.4	2.4	9.9	1.9	0.7	1.2	32.1
75+	1,144	14.5	53.8	3.0	17.8	2.2	1.0	1.7	28.7
Total	25,963	2.9	34.9	4.4	8.8	6.1	3.3	5.2	33.8

Source: CSO, 2000 Census of Population and Housing

9.7 Causes of Disability

The various causes of disability were categorized as congenital/prenatal, disease/illness, injury, accident/trauma and other. Of these, the most common cause is disease, which was reported by 30.8 percent of the disabled population. Disease was also cited as the most common cause of disability at national level, reported by 38.9 percent of the disabled population. Prenatal causes in the province were reported by 12.6 percent, injury by 16.5 percent, and other causes by 12.8 percent while 23.6 percent reported that they did not know the cause of their disability (see Table 9.5).

Some causes of disability affect females more than they do males. These include disease and other causes. Injuries are more common among males than females while proportions of males and females reporting prenatal causes are the same. This pattern holds true for the districts as well. Among the districts, Luangwa has the largest proportion of 39.2 percent while Lusaka has the least proportion with 29.1 percent reporting disease as a cause of disability.

Table 9.5: Percent Distribution of the Disabled by District and Cause, Lusaka Province, 2000

Cause of Disability	Zambia Total	Lusaka Province	Chongwe	Kafue	Luangwa	Lusaka
Total	256,690	25,963	3,571	3,228	813	18,351
Congenital/pre-natal	13.7	12.6	11.8	11.6	14.1	12.9
Disease/illness	38.9	30.8	35.6	32.7	39.2	29.1
Injury/accident/trauma	17.2	16.5	16.5	12.8	19.1	17.1
Other	9.3	12.8	7.4	10.5	8.7	14.4
Unknown	20.2	23.6	25.9	29.3	18.3	22.3
Male	135,613	13,928	1,883	1,762	442	9,841
Congenital/pre-natal	13.7	12.6	11.9	12.1	13.8	12.8
Disease/illness	36.3	29.4	33.5	31.6	33.5	28.1
Injury/accident/trauma	20.7	20.3	20.2	15.8	24.2	20.9
Other	8.9	12.5	7.3	8.8	10	14.2
Unknown	19.4	22	24.9	28.5	18.3	20.4
Female	121,077	12,035	1,688	1,466	371	8,510
Congenital/pre-natal	13.7	12.7	11.6	10.9	14.6	13.1
Disease/illness	41.9	32.4	38.1	34.1	46.1	30.4
Injury/accident/trauma	13.2	12.2	12.5	9.3	12.9	12.6
Other	9.7	13.1	7.5	12.6	7.3	14.5
Unknown	21	25.4	27	30.2	18.3	24.5

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.

Source: CSO, 2000 Census of Population and Housing

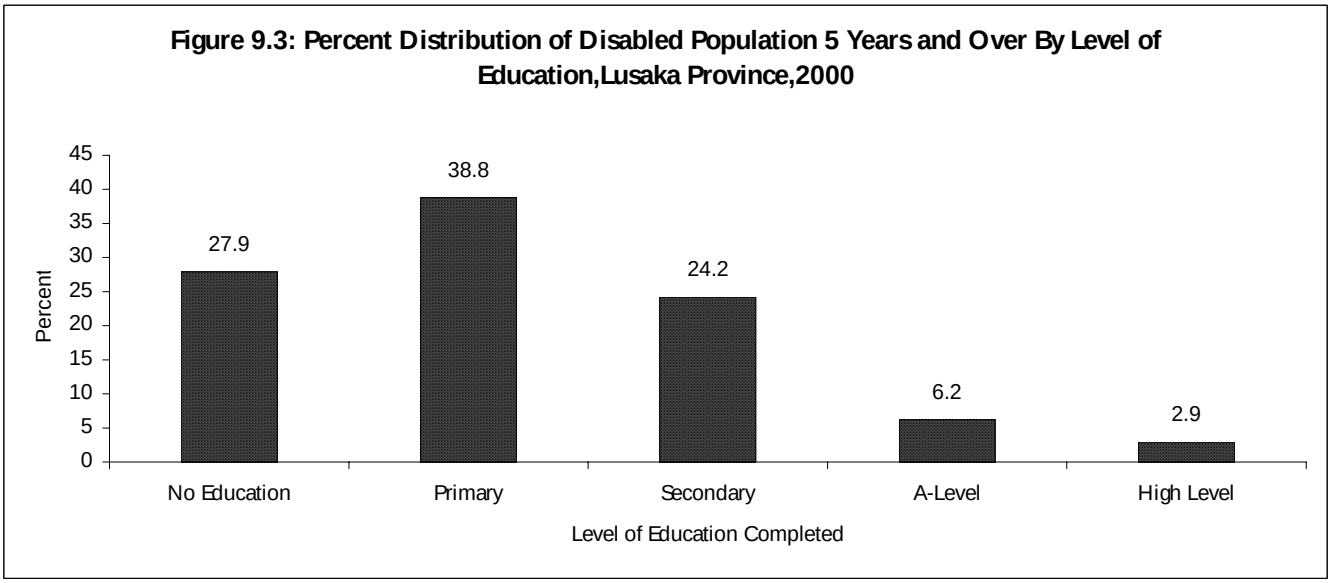
Education Levels of the Disabled

le 9.6 and Figure 9.3 show completed levels of education by disabled persons. The proportion of those who have never attended school is highest among the deaf/dumb (53.1 percent). The proportions of completed levels of education decrease with increasing level among the disabled. About one quarter have had no education and another one third have only completed primary education. Only 2.9 percent have completed post secondary education. The highest proportion of those who completed higher education was among the partially sighted followed by the physically handicapped.

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

Type of Disability	Level of Education Completed						
	Total Number	Percentage Total	No Education	Primary	Secondary	A Levels	Higher Level
Total	27,742	100.0	27.9	38.8	24.2	6.2	2.9
Blind	1,759	100.0	48.5	27.2	17.7	4.8	1.7
Partially Sighted	7,831	100.0	22.1	35.9	26.4	10.6	5.1
Deaf/Dumb	1,898	100.0	53.1	27.7	16.5	1.7	1.0
Hard of Hearing	3,162	100.0	35.9	41.8	17.3	3.4	1.6
Mentally Ill	2,362	100.0	44.5	33.0	19.2	2.0	1.4
Ex-Mental	873	100.0	25.1	49.3	23.3	1.5	0.8
Mentally Retarded	1,363	100.0	41.7	39.9	16.1	1.2	1.1
Physically Handicapped	11,966	100.0	27.4	41.3	24.7	4.7	2.0

Source: CSO, 2000 Census of Population and Housing



Source: CSO, 2000 Census of Population and Housing

9.9 Economic Activity of the Disabled

le 9.7 and Figure 9.4 show the economic activities of the disabled persons. Forty-three percent of the disabled persons are working and about one third are students. It is 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.

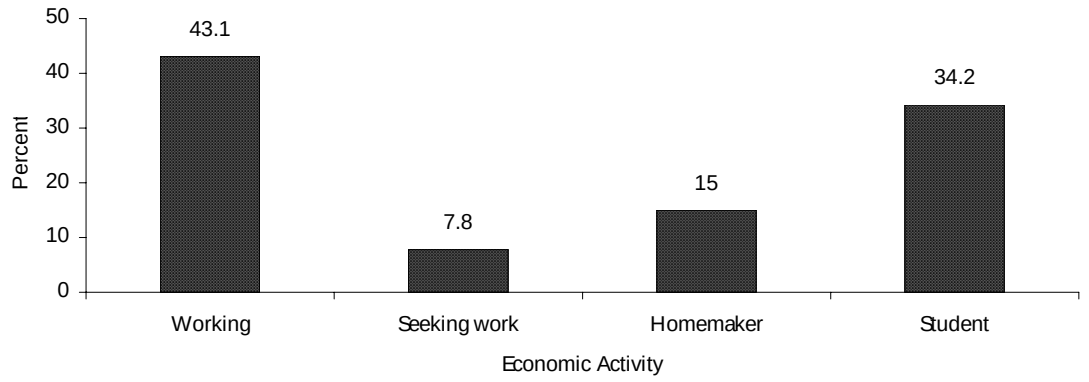
Table 9.7: Percent Distribution of the Disabled Persons, 12 Years and Older, by Type of Disability and Economic Activity, Lusaka Province

Usual Economic Activity	Zambia Total	Type of Disability								
		Total	Blind	Partially Sighted	Deaf/Dumb	Hard of Hearing	Mentally ill	Ex Mental	Mentally Retarded	Physically Handicapped

Working	55.5	43.1	20.9	49.4	27.1	42.4	16.6	45.3	24.3	44.4
Seeking work	2.6	7.8	4.8	7.5	4.2	5.9	6.3	9.1	6	7.3
Homemaker	8.8	15	6.2	15	23	16.1	9.1	11.5	19.5	12.9
Student	33.1	34.2	68	28.1	45.7	35.6	68	34.1	50.1	35.5
Percentage Total	100	100	100	100	100	100	100	100	100	100
Total Number	194039	17,388	578	6,420	661	1,476	1,152	548	830	6,002

Source: CSO, 2000 Census of Population and Housing

Figure 9.4: Percent Distribution of the Disabled Persons, 5 years and older by Economic Activity,Lusaka Province,2000



Source: CSO, 2000 Census of Population and Housing

9.10 Occupation of the Disabled

a on occupation of the disabled persons was also collected during the 2000 census and is shown in Table 9.8 and Figure 9.5. The most common occupation among the disabled is agriculture. Sales, production/transportation and professional/technical are also fairly common occupations.

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

Type of Disability	Occupation									
	Total No.	Percent Total	Prof & Tech	Admin & manag. Workers	Clerical & Related Workers	Sales Workers	Service Workers	Agric.	Production and Transport	Unclass.
Blind	110	100.0	10.9	0.9	19.1	12.7	7.3	39.1	8.2	1.8
Partially Sighted	2,951	100.0	22.0	3.6	5.2	17.8	10.4	24.7	15.5	0.8
Deaf/Dumb	164	100.0	4.3	0.0	3.0	17.1	9.8	50.0	15.9	0.0
Hard Hearing	581	100.0	6.9	0.3	4.1	17.0	14.8	37.5	18.9	0.3
Mentally ill	172	100.0	5.8	0.0	1.2	9.9	8.1	55.2	19.8	0.0
Ex Mental	231	100.0	3.9	0.0	2.6	48.5	11.3	18.2	15.2	0.4
Mentally Retarded	186	100.0	7.5	0.0	3.2	17.1	12.8	41.2	17.6	0.5
Physically Handicapped	2,508	100.0	11.2	1.0	4.1	19.0	11.7	31.9	20.7	0.3
Total	6,904	100.0	14.8	2.0	4.6	18.9	11.2	30.2	17.7	0.6

Source: CSO, 2000 Census of Population and Housing

Figure 9.5, Percent Distribution of the Usually Working Disabled Person by Occupation, Lusaka Province,2000

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

9.11 Employment Status of the Disabled

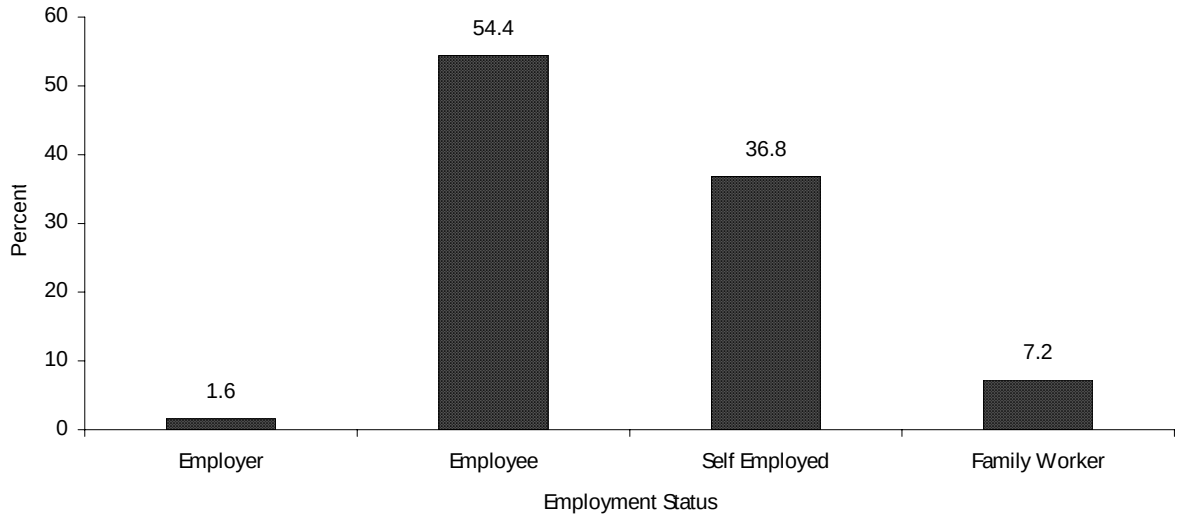
The employment status of disabled persons is shown in Table 9.9 and Figure 9.6. The largest proportions of the disabled are employees. The least proportion is among the employers. There are however, some variations between the different disability categories.

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

Type of Disability	Employment status					
	Total Number	Percentage Total	Employer	Employee	Self Employed	Family Worker
Blind	88	100.0	1.7	58.7	33.6	6.0
Partially Sighted	2,285	100.0	1.1	37.1	49.8	11.9
Deaf/Dumb	81	100.0	3.7	43.2	33.3	19.8
Hard of Hearing	352	100.0	1.4	52.6	37.8	8.2
Mentally Ill	73	100.0	0.0	39.7	45.2	15.1
Ex-Mental	207	100.0	0.0	39.7	45.2	15.1
Mentally Retarded	92	100.0	0.0	44.6	41.3	14.1
Physically Handicapped	1,747	100.0	0.7	52.1	40.6	6.5
Total	4,929	100.0	1.6	54.4	36.8	7.2

Source: CSO, 2000 Census of Population and Housing

Figure 9.6 Percent Distribution of the Disabled Headhold Heads by Employment Status,Lusaka Province,2000



Source: CSO, 2000 Census of Population and Housing

9.12. Summary

Out of the total population of Lusaka, 1.9 percent is disabled. The proportion of the disabled persons is higher in rural than urban areas. Among the districts, Lusaka has the largest proportion of the disabled (70.7 percent) while Luangwa has the least with 3.1 percent. There are more disabled male (2.1 percent) than female (1.8
Percent).

Partially-sighted is the most common type of disability affecting about 34.9 percent of the disabled population while the blind persons make up the smallest proportion of 2.9 percent.

Disease is the most common cause of disability reported by about 30.8 percent of the disabled population. Prenatal causes were reported by 12.6 percent, injury by 16.5 percent, and other by 12.8 percent while 23.8 percent reported that they did not know the cause of their disability. Injury as a cause of disability is more commonly reported by males than females while disease is more common among females than males. Among the districts, Luangwa reported the largest proportion of the disabled citing disease as a cause of their disability with 39.2 percent while Lusaka has the least with 29.1 percent.

About one-quarter of the disabled have never been to school and about one-third have completed primary education. Amongst all categories of disability, the largest proportions of the disabled persons are the employees. The least proportion is among the employers. The most common occupation among the disabled is agriculture, which takes up about 30.2 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

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