# CHAPTER 1

# BACKGROUND

## 1.0. Introduction

Zambia is a landlocked Sub-Saharan country sharing boundaries with Malawi, Mozambique, Zimbabwe, Botswana, Namibia, Angola, Democratic Republic of the Congo and Tanzania. It has a total surface area of about 752,614 square km, thus ranking among the smaller countries in South Central Africa. It lies between 8° and 18°south latitudes and longitudes 22°and 34° east.

## 1.1. Administration

Zambia gained independence from Britain on 24th October 1964. It has experienced three major phases of governance, the multiparty system from 1964 to 1972, one party system from 1972 to 1991 and multiparty system again since 1991.

Administratively, the country is divided into nine provinces, namely Central, Copperbelt, Eastern, Luapula, Lusaka, Northern, North-Western, Southern and Western provinces. These provinces are further subdivided into a total of seventy-two (72) districts. Lusaka is the capital city of Zambia and seat of government. The government comprises of the Central and Local government.

## 1.2. Natural resources

Zambia is situated on the great plateau of Central Africa. Its vegetation is mainly made up of savannah woodlands and grassland. It has a tropical climate with three distinct seasons, the cool and dry season, the hot and dry season and the hot and wet season.

The country has abundant natural resources. It has five main rivers, namely Zambezi, Kafue, Luangwa, Luapula, and Chambeshi rivers. In addition to these rivers, the country also has major lakes such as Tanganyika, Mweru, Mweru Wa Ntipa, Bangweulu and the man-made lakes Kariba and Itezhi Tezhi. Other interesting features include the Victoria Falls, one of the Seven Wonders of the World.

Zambia has some of nature's best wildlife and game reserves affording the country with abundant tourism potential for earning foreign exchange. The magnificent Luangwa and Kafue National Parks have one of the most prolific animal populations in Africa. It is also endowed with various minerals and precious stones such as copper, emeralds, zinc, lead and cobalt.

## 1.3. Population

The population of Zambia has continued to grow. The 1980, 1990 and 2000 censuses estimated the population of Zambia to be at 5.7, 7.8 and 9.9 million respectively. However, the annual population growth rate has shown a decline from 3.1 between 1969-80, to 2.7 percent between 1980-90 and most recently 2.4 percent between 1990-2000.

Population by province ranges from 1.6 million in the Copperbelt to 0.6 million in North-western. High inter-censal population growth rates have been recorded for provinces such as Lusaka (3.4 percent), Luapula (3.2 percent) and Northern (3.1 percent). Copperbelt recorded the lowest population growth rate at less than one percent.

Zambia is one of the most urbanized countries in Sub-Sahara Africa with about 35 percent of the population living in urban areas. However, this is a decline from 39 percent in 1990. The percentage of urban population by

province ranges from 82 and 78 percent for Lusaka and Copperbelt provinces respectively, to nine percent for Eastern province.

The average population density for the country has increased from 5.4 in 1969, 7.5 in 1980, and 10.3 in 1990 to13.1 persons per square kilometre in 2000. Average density by province ranged from 64 persons per square kilometre in Lusaka province to five persons per square kilometre in North-western province.

Zambia, with a median age at about17 years has a relatively youthful population.

### 1.4. Language

English is Zambia's official language. The main vernacular languages are Bemba, Nyanja, Tonga, Lozi, Kaonde, Luvale and Lunda.

### 1.5. Economy

In 1991, Zambia adopted an open, private sector-led economy with minimal government control. Zambia's economy is based largely on copper and cobalt mining. Copper, which is the country's mainstay, accounts for approximately 80 percent of the country's export earnings. However, due to unfavourable copper prices since 1975, export earnings have been declining. This decline has partly been responsible for poor performance of the real sectors of the economy that mainly rely on imported raw materials and capital items.

The country's balance of payment status has mainly depended on the performance of the mining industry. Despite the additional foreign exchange earnings from non-traditional exports, the country still continues to pay more to the outside world than it earns from its exports; hence the poor balance of payments performance. During the recent drought years, food imports have continued to be high mainly due to the drop in domestic agricultural output.

In an attempt to address this problem, government adopted the Structural Adjustment Programme (SAP) in 1991, with the intention of creating macro-economic stability in the economy. Measures taken include liberalization of trade, prices, interest and foreign exchange rates, removal of subsidies, privatisation, reduction in public expenditure, public sector reforms and liberalization of the marketing and pricing of agricultural produce.

Structurally, Zambia's economy has changed little in spite of the above-implemented measures. Consistent high economic growth has been elusive. Over the period 1980 to 1990, the country's economic growth was the second lowest in Southern Africa Development Community (SADC) after Mozambique. Over the period 1990 to 1999, it has the least average annual growth rate in the SADC region at one percent. That was also below the Sub-Saharan Africa rate of 1.4 percent. However, between 1994 and 2002, real GDP growth showed an increase from 2.2 percent in 1999 to 3.6 percent in 2000 and 4.9 percent in 2001, before declining to 3.0 in 2002. (*Source: Zambia Poverty Reduction Strategy Paper, 2002-2004)*

### 1.6. Agriculture

The real growth rate in the agricultural sector has fluctuated significantly mainly due to the sector's high dependence to seasonal rainfall, reduced investments and the failure to strategically position the sector according to its comparative advantage. The sector's contribution to GDP averaged 18 percent over the past decade. Non-traditional, mainly agriculture-based exports increased from $46. 5 million in 1995 to $133.9 million in 1999, thus demonstrating the enormous potential the sector possesses. Some 75 percent of Zambia's Population is engaged in agriculture, largely subsistence farming, which remains vulnerable to weather fluctuations. (*Source: Zambia Poverty Reduction Strategy Paper, 2002-2004)*

## 1.7. Employment

Overall unemployment rates have declined from 15 percent in 1990 to 13 percent in 2000. However, unemployment has drastically increased in urban areas from 16 percent in 1990 to 26 percent in 2000 compared to the rural areas where it has dropped from 15 percent in 1990 to 7 percent in 2000. Overall unemployment rates are higher for males at 14 percent compared to females at 11 percent.

Youth unemployment is still very high in Zambia. The 2000 census shows that 23 and 21 percent of the youths aged between 15–19 and 20-24, respectively, were unemployed. By residence, youth unemployment was higher in the urban areas than rural areas, 55 percent compared to 12 percent in the age group 15-19 and 42 percent compared to 9 percent in the age group 20-25. Youth unemployment was slightly lower among females at 21 percent compared to 25 percent in the age group 15-19 and 18 percent compared to 23 percent in the age group 20-25.

In terms of employment, the agriculture industry was the most dominant sector, accounting for 72 percent of the Zambian workers in 2000. This is an increase from 42 percent in 1990. The rest of the sectors experienced decreases. The most significant are Mining (three percent in 1990 to one percent in 2000) and Manufacturing (five percent in 1990 to five percent in 2000). (*Source: Central Statistics Office, 2000)*

## 1.8. Education

Zambia has a three-tier education system consisting of seven-year primary education, followed by five-year secondary education. Post secondary schooling is the last stage. Poverty in education sector manifests itself in several ways, including the following: low enrolments, low progression, and high dropout rates; poor attendance because the children are engaged in income-generating activities to supplement family income, attending to the sick family members, and long distances to school; poor learning environments and lack of appropriate skills training; malnourished learners who are unable to achieve their full learning potential; de-motivated teachers .etc. There has been a slight increase in the population attending school from 25.8 percent to 26.7 percent**.** (*Source: Ministry of Education, 2003)*

## 1.9. Health

The government's commitment to the objective of improving the quality of life for Zambians is demonstrated through its efforts to improve health care delivery by reforming the health sector. In 1991, it articulated radical health care reforms characterised by a move from a strongly centralised health system in which the central structures provided support and national guidance to the peripheral structures. An important component of health policy reform is the restructured Primary Health Care.

Following the implementation of health reforms, improvements in the general health indicators in Zambia have been seen. For instance, Life expectancy at birth improved from 47 years in 1990 to 50 years in 2000. Infant Mortality rate dropped from 123 in 1990 to 110 in 2000. However, Maternal mortality has remained moderately high since 1996 (649 per 100,000 women and 729 per 100,000 women in 2002).

The number of health institutions in the country stands at 1,285. These include three Central hospitals, four Specialised hospitals, eighteen General Hospitals, forty-two District hospitals, one military hospital and eight Industrial hospitals. There are also 899 Rural Health Centres, 187 Urban Health Centres, 20 Industrial rural Health centres and 75 Industrial urban Health centres. The number of health post is nine, while the number of mission hospitals stands at nineteen**.** *(Source: Ministry of Health, 2002)*

## 1.10. HIV/AIDS Situation in Zambia

The first HIV/AIDS case was reported in Zambia in 1985. Initially, the epidemic of HIV/AIDS cases was in the urban areas, but it soon became clear that all parts of the country were affected. According to the Zambia Demographic and Health Survey (ZDHS) 2001-2002, Sixteen percent of the Zambian adult population is HIV positive. The prevalence varies by residence. The Urban HIV prevalence of about (23 percent) is twice that of the rural areas (11 percent). Provinces with prevalence levels above the national average include Lusaka (22 percent), Copperbelt (20 percent), and Southern (18 percent). The lowest prevalence levels are found in Northern province (8 percent) and North-Western province (9 percent). In terms of gender, the prevalence rates are markedly higher in women than in men in all provinces except North-Western.

## 1.11. Poverty

Poverty is a serious problem in Zambia. A series of national surveys conducted by the Central Statiatical Office – the Social Dimensions of Adjustment Priority Surveys of 1991 and 1993 and the Living Conditions Monitoring Surveys of 1996 and 1998 provide trends in the various dimensions of poverty in Zambia. Data from these surveys show that, in general, poverty in most of the critical dimensions increased during the decade. Table 1.1 below portrays the changes in selected indicators of money-metric poverty. The statistics are based on poverty lines determined by the CSO. In order to ensure comparability of results over time, these poverty lines were the same as those adopted in previous surveys in 1991, 1993 and 1996. The same basket of food has been used throughout, but the poverty lines were adjusted to 1998 prices from the 1991 prices. Similar adjustments were made for the poverty lines in 1993 and 1996, also from the 1991 prices. (*Source: Living Conditions Monitoring Survey in Zambia, 1998.)*

**Table 1.1: Overall and Extreme Poverty in Zambia by Residence, 1991-1998**

| Year | Zambia | | Rural | | Urban | |
|---|---|---|---|---|---|---|
| | Overall Poverty % | Extreme Poverty % | Overall Poverty % | Extreme Poverty % | Overall Poverty % | Extreme Poverty % |
| 1991 | 70 | 58 | 88 | 81 | 49 | 32 |
| 1993 | 74 | 61 | 92 | 84 | 45 | 24 |
| 1996 | 69 | 53 | 83 | 68 | 46 | 27 |
| 1998 | 73 | 58 | 83 | 71 | 56 | 36 |

**Source**: CSO, Living Conditions Monitoring Survey in Zambia, 1998
CSO, The Evolution of Poverty in Zambia 1990-1996

## 1.12. Distribution of Poverty

Just as all socio-economic groups do not uniformly experience poverty, it is also not uniformly spread across the country. There is greater concentration of poverty in the rural areas than in the urban areas, and in the provinces outside the country's main line of rail than in the provinces along the line of rail. There are also intra-provincial disparities. The distribution of Zambia's poor by province show that the poorest provinces are Western, Luapula, Northern, Eastern and North-western.

**Table 1.2: Overall and Extreme Poverty in Zambia by Residence, 1998**

| Province | Overall Poverty % | Extreme Poverty % | Moderate Poverty % | Not Poor % | Total % | Total Number of persons |
|---|---|---|---|---|---|---|
| All Zambia | 73 | 58 | 15 | 27 | 100 | 9,885,591 |
| Rural | 83 | 71 | 12 | 17 | 100 | 6,452,283 |
| Urban | 56 | 36 | 20 | 44 | 100 | 3,433,308 |
| Central | 77 | 63 | 14 | 23 | 100 | 1,012,257 |
| Copperbelt | 65 | 47 | 18 | 35 | 100 | 1,581,221 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Eastern | 80 | 66 | 13 | 21 | 100 | 1,306,173 |
| Luapula | 81 | 69 | 13 | 18 | 100 | 775,353 |
| Lusaka | 52 | 35 | 18 | 47 | 100 | 1,391,329 |
| Northern | 81 | 66 | 15 | 19 | 100 | 1,258,696 |
| North-western | 76 | 64 | 13 | 23 | 100 | 583,350 |
| Southern | 76 | 59 | 16 | 25 | 100 | 1,212,124 |
| Western | 89 | 78 | 11 | 11 | 100 | 765,088 |

**Source**: CSO, Living Conditions in Zambia, 1998

### 1.13. Gender Issues

Gender issues are concerned with promoting equality between the sexes and improvement in the status of both women and men in society. Gender issues are also cardinal in achieving sustainable economic growth, job creation, ensuring better food security and reducing poverty. In the 1990 and 2000 censuses no significant differences were observed in terms of occupation between males and females. However, slightly more females (79 percent) than males (65 percent) are engaged in agriculture. The other interesting observation is that women were classified as economically inactive mainly because of home making (53 percent), where as the males were classified as economically inactive mainly due to studying (65 percent).

It is further observed that though the proportion of the female employed population increased during the reference period 53 percent, there has been no significant improvement in the quality of their work. A large proportion of females compared to males are employed as unpaid family workers, 62 percent (2000) and 25 percent (2000), respectively.

The 2000 census also recorded a slight increase in the proportion of female-headed household from 17 percent in 1990 to 19 percent in 2000. This means that more females are increasingly becoming the main economic support for households. However, persons in female-headed households are more likely to be extremely poor than those in male-headed household. The 1998 Living Conditions Monitoring Survey shows that poverty associated with food security was more prevalent among female-headed households (61 percent) compared to male-headed households (52 percent).

# CHAPTER 2

# EVALUATION OF COVERAGE AND CONTENT ERRORS

## 2.0. Introduction

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

## 2.1. 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 age 0-4 years in a population to every 1000 women age 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.

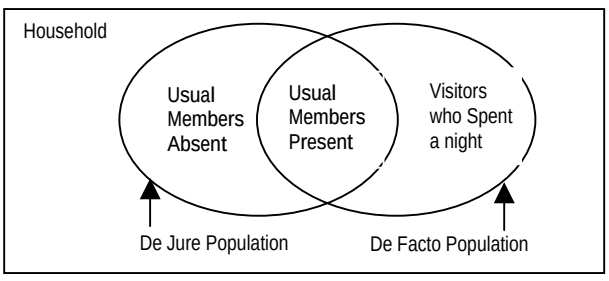
**De facto Population:** This refers to the usual household members present and visitors who spent the census night at any given household. This however excludes:

(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, boarding schools).

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



**Dependency Ratio:** Ratio of children age 0-14 and persons age 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.

### 2.2. 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.

### 2.3. Methods of Evaluation

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

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

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

#### 2.3.1. Coverage Error

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

##### 2.3.1.1. Age Composition

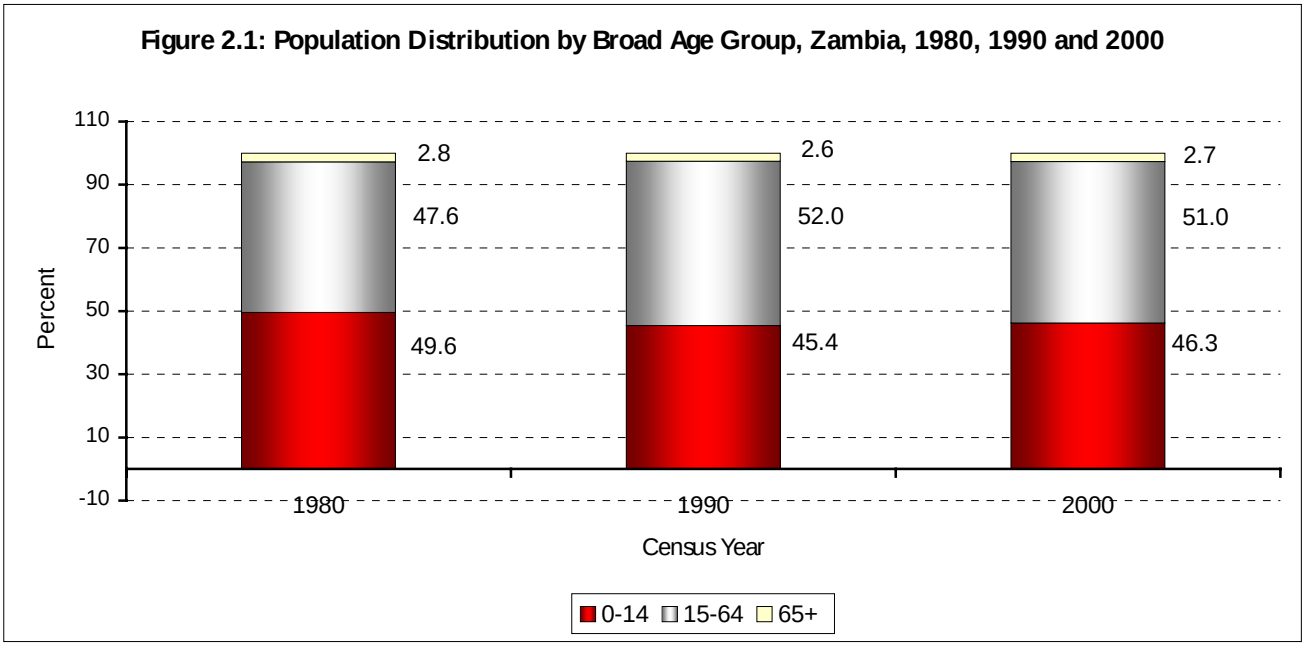
Looking at the age composition overtime can make you assess whether your census data have errors or not. Table 2.1 and Figure 2.1 show Zambia's population composition in broad age groups from 1980 to 2000.

**Table 2.1: Population Distribution by Broad Age Groups, Zambia, 1980, 1990, and 2000**

| Age Group | Population | | | | | |
|---|---|---|---|---|---|---|
| | 1980 | Percent | 1990 | Percent | 2000 | Percent |
| 0 - 14 | 2,809,268 | 49.6 | 3,349,677 | 45.4 | 4,323,448 | 46.3 |
| 15 - 64 | 2,693,225 | 47.6 | 3,842,799 | 52.0 | 4,758,697 | 51.0 |
| 65+ | 159,307 | 2.8 | 190,629 | 2.6 | 255,280 | 2.7 |
| Total | 5,661,801 | 100.0 | 7,383,105 | 100.0 | 9,337,425 | 100.0 |

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

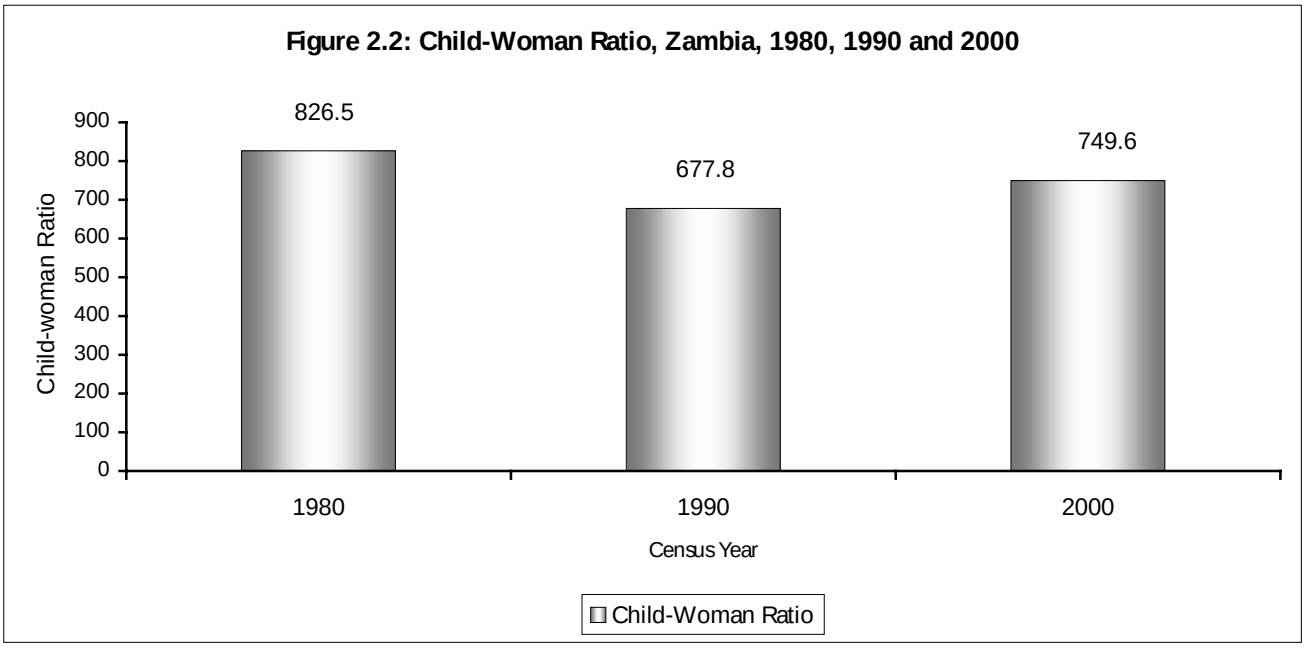
The proportion of children 0-14 years is less in 1990 than in 1980. In addition, the proportion of age 0-14 between 1990 and 2000 just made a marginal increase of one percent. These observations could be attributed to the decline in fertility and the general decrease in child mortality. Generally, the population distribution has remained stable.




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

### 2.3.1.2. Child-Woman Ratio

In 1980, the child-woman ratio was 826.5 per 1000 women age 15-49 years. It declined to 677.8 in 1990 and increased in 2000 to 749.6 per 1000 women age 15-49 years. 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 child-woman ratio between 1980 and 1990 (see Table 2.2 and Figure 2.2) could have been caused by a decline in fertility. Between the 1990 census and the 2000 census, there is a subsequent increase in the child-woman ratio and the proportion age 0-14.




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

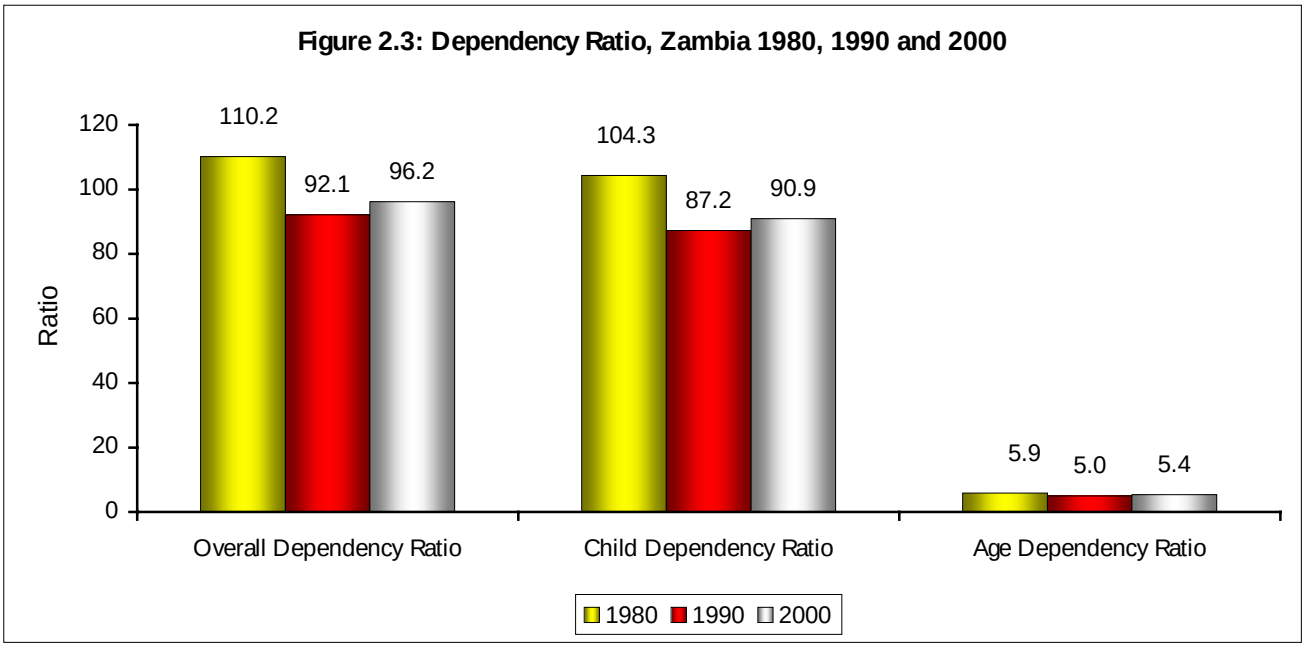
### 2.3.1.3. Dependency Ratio

The overall dependency ratio for the population of Zambia for 1980, 1990 and 2000 Censuses were 110.2, 92.1 and 96.2 persons, respectively, per 100 persons in age group 15-64 years. This means that for every 100 persons in the age range 15-64 years, there are 96.2 persons in the age groups 0-14 and 65 years or over. Child and Aged dependency ratio have followed a similar pattern. The decline in dependency ratios between 1980 and 1990 could be attributed to an increase in the proportion of population age 15-64 years, while its increase in 2000 could be attributed to a decrease in the proportion age 15-64 (See Table 2.2 and Figure 2.3).

Table 2.2: Dependency Ratio and Child-Woman Ratio, Zambia, 1980, 1990, and 2000

| Ratio | 1980 | 1990 | 2000 |
|---|---|---|---|
| Overall Dependency Ratio | 110.2 | 92.1 | 96.2 |
| Child Dependency Ratio | 104.3 | 87.2 | 90.9 |
| Aged Dependency Ratio | 5.9 | 5.0 | 5.4 |
| Child-Woman Ratio | 826.5 | 677.8 | 749.6 |

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




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

## 2.4. Content Errors

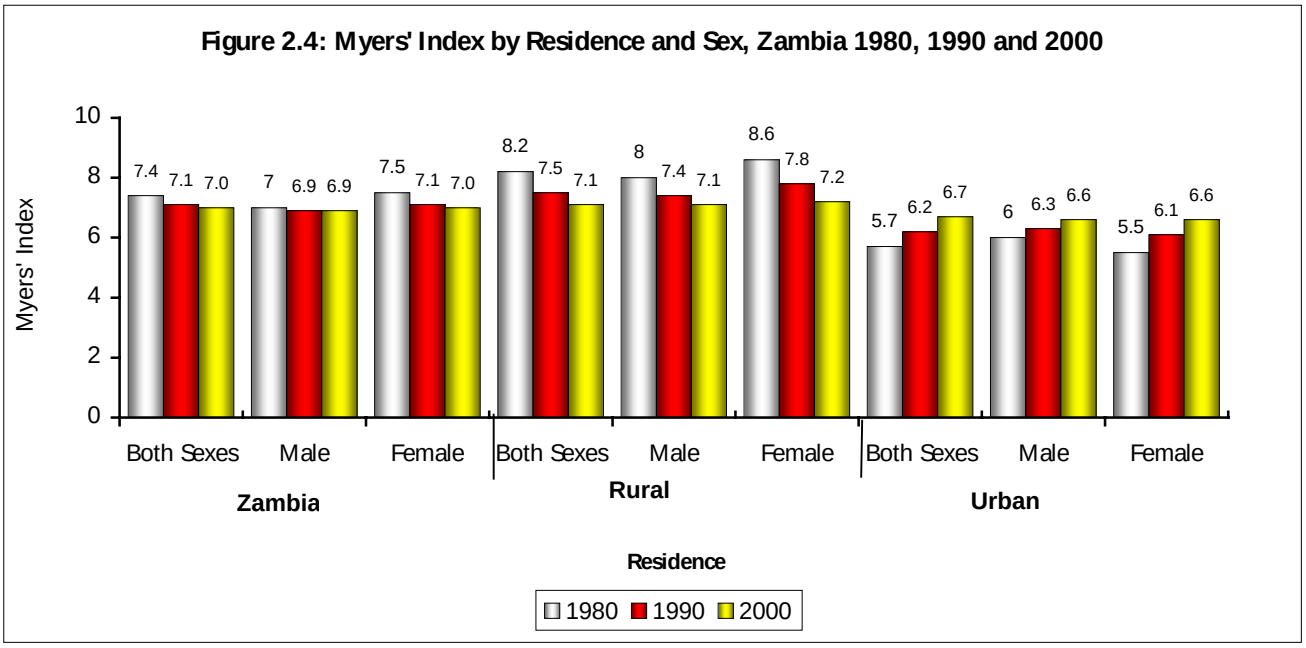
Content errors usually refer to instances where characteristics such as age, sex, marital status, economic activity, etc. of a person enumerated in a census or survey are incorrectly reported or tabulated. Content errors are caused by either a respondent giving a wrong response or by an enumerator recording an incorrect response. For instance, a question about age in a census can be solicited by asking either "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 can be estimated by the use of the Myers' Index, Sex Ratios, Age Ratios, and Survival Ratios.

### 2.4.1. Digit Preference

The tendency of respondents to report ages ending with certain digits in preference to other digits is called "digit preference". 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 misclassifications of age contribute to heaping (Shryock, et.al. 1976).

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

**ble 2.3 shows an overall marginal decrease in the index. This implies an improvement in the quality of age data. The table further shows a higher index for females than males in all the three censuses, indicating that age was more accurately reported among males than females. This trend is also observed in the rural part of Zambia. In the urban areas, the opposite was observed; there, the index has been rising with succeeding censuses, indicating deterioration in the quality of age data.**




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

Table 2.3: Summary of Myers' Index for Digit Preference in Age Data by Residence and Sex, Zambia, 1980, 1990 and 2000

| Residence | Sex | 1980 Census | 1990 Census | 2000 Census |
|---|---|---|---|---|
| Zambia | Both Sexes | 7.4 | 7.1 | 7.3 |
| | Male | 7.0 | 6.9 | 7.3 |
| | Female | 7.5 | 7.1 | 7.3 |
| Rural | Both Sexes | 8.2 | 7.5 | 7.5 |
| | Male | 8.0 | 7.4 | 7.4 |
| | Female | 8.6 | 7.8 | 7.6 |
| Urban | Both Sexes | 5.7 | 6.2 | 6.9 |
| | Male | 6.0 | 6.3 | 6.9 |
| | Female | 5.5 | 6.1 | 6.8 |

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

The urban areas further show a higher index among males than females, thus showing more accurate age reporting among females than males. Despite the deterioration in the quality of age data in the urban areas, its index is still lower than the rural one in all the three years, implying better age reporting in the former than in the latter.

Age heaping was further explored by assessing the most preferred digits presented in Table 2.4.

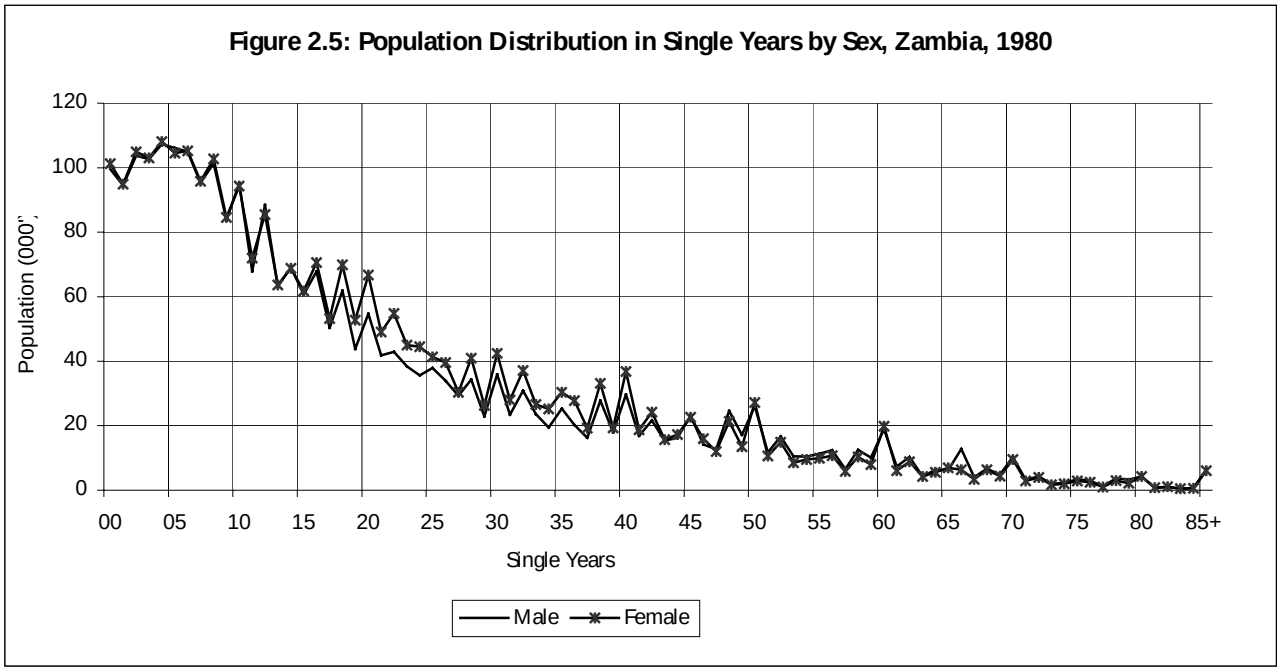
# Table 2.4: Most Preferred Digits by Residence and Sex, Zambia, 1980, 1990, and 2000

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

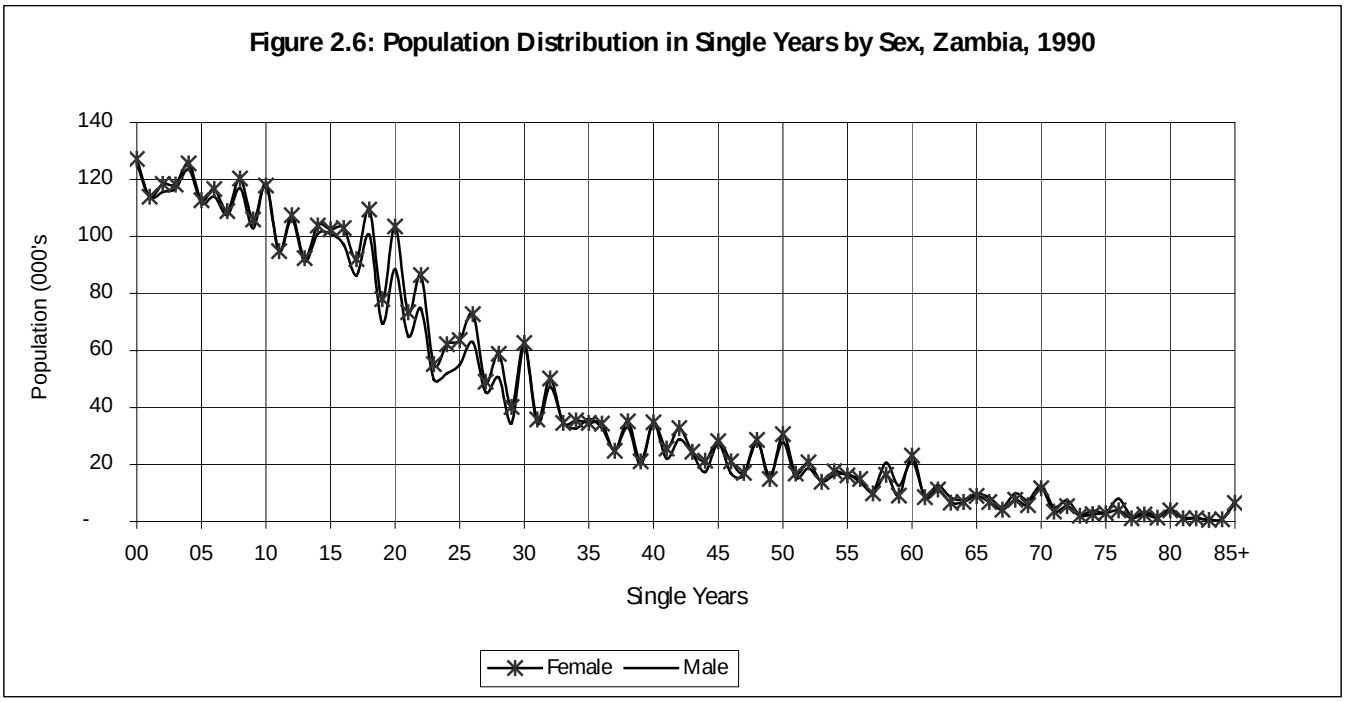
Source**: CSO, 1980, 1990 and 2000 Censuses of Population and Housing**

Table 2.4 shows that there was age heaping in all the three censuses. The table shows the most preferred digits in decreasing order of preference for the three censuses. Preference for digits 0, 8, and 2 among males and females is observed in both 1980 and 1990. In the 2000 Census, 0, 5 and 8 were the most preferred digits by males at national level and by residence as well. Females in rural areas preferred 0 and 8 while those in urban areas preferred 0, 2, and 8. The preference for these digits among males may be attributed to the greater tendency to over estimate the age, whilst for females; it may be due to underestimation of their age.

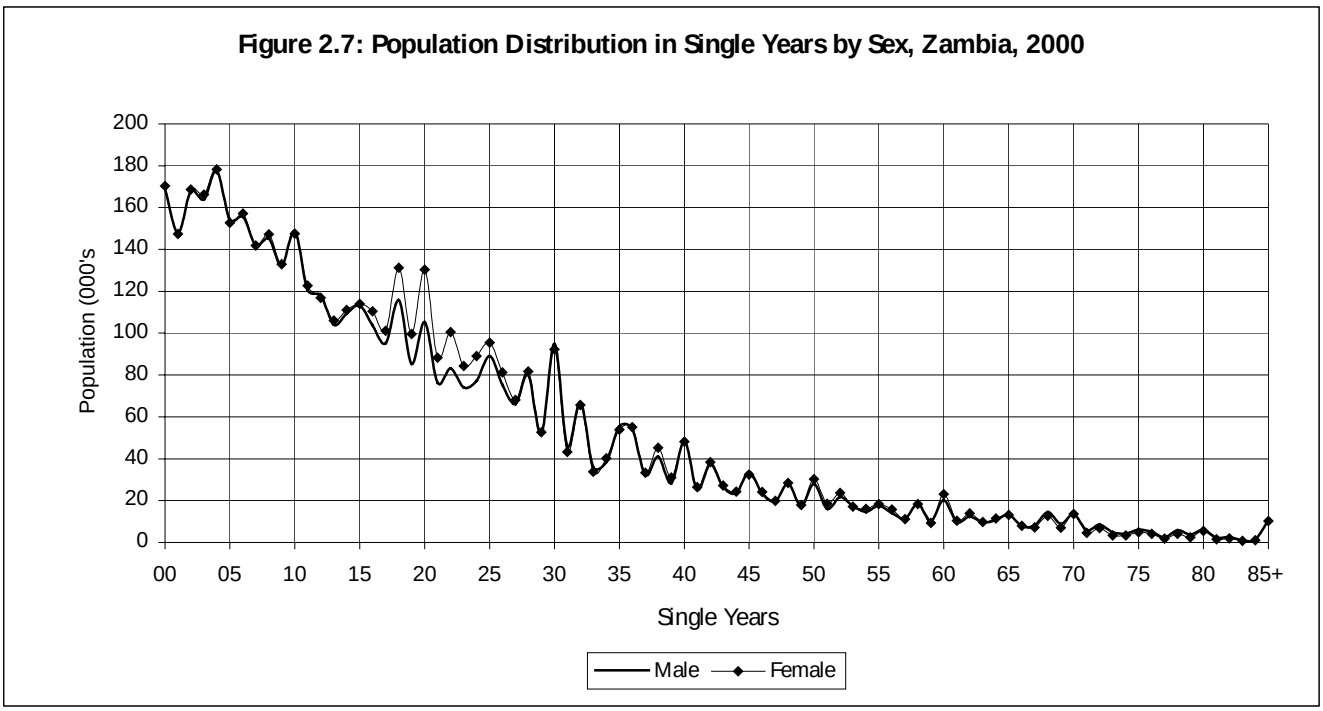
Age misreporting errors are also presented in Figures 2.5 to 2.10. The peaks on the curves indicate the most preferred ages in reporting while the troughs indicate the under reported ages. A comparison of Figures 2.5 to 2.7 shows that the peaks and troughs are higher for ages reported below 60 years in all the three censuses. There is no noticeable difference in the height of the peaks and troughs for ages reported after 60 years. This may suggest that both males and females tend to misreport their ages before age 60.




**Source**: CSO, 1980 Census of Population and Housing

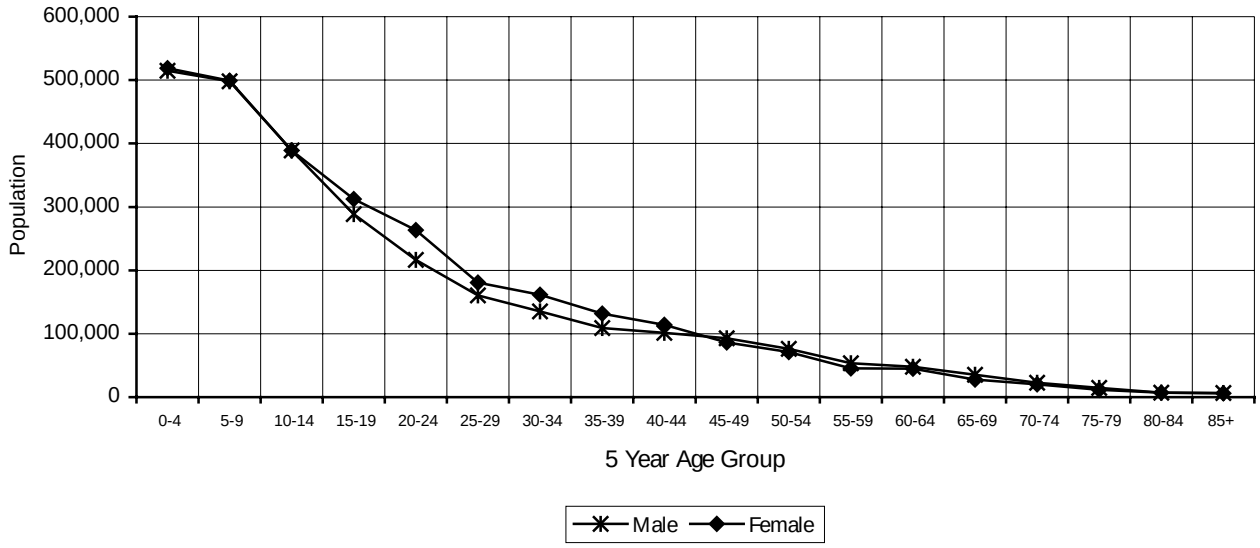



**Source**: CSO, 1990 Census of Population and Housing



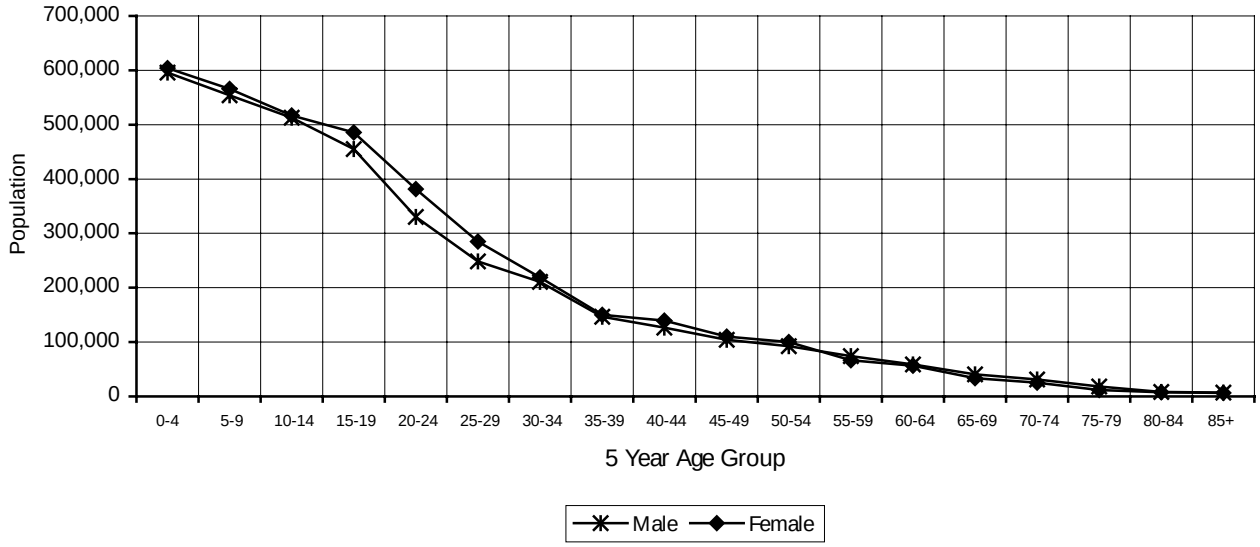

The smoothness of the curves in Figures 2.8 to 2.10 show that grouping single year age data into five-year age groups improves irregularities in age data arising from age misreporting.

**Figure 2.8: Population Distribution by 5 Year Age Group and Sex, Zambia, 1980**



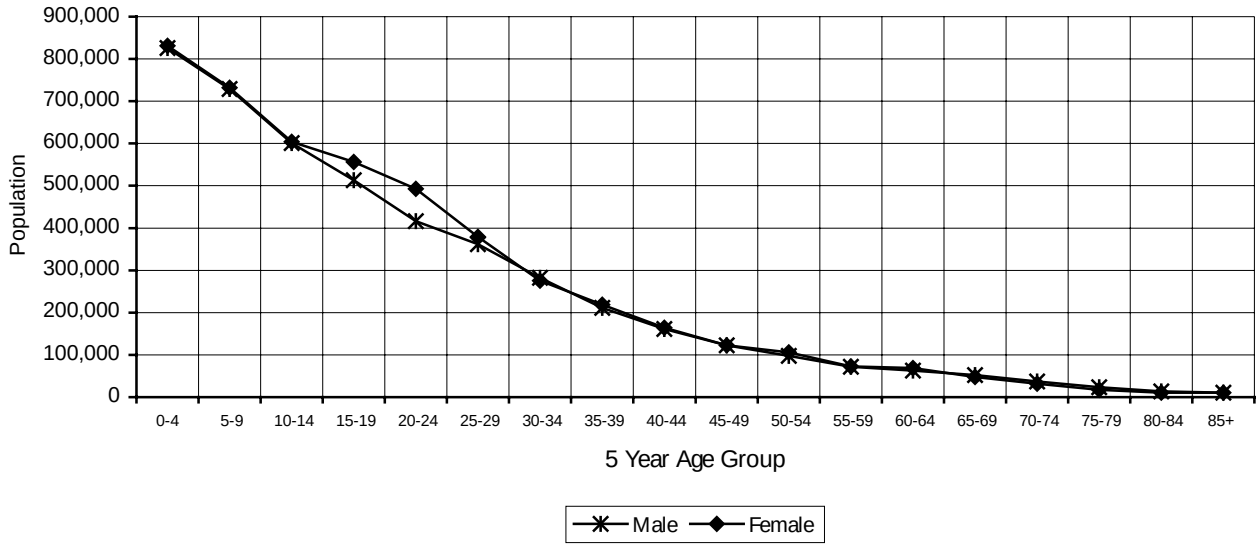

Source**: CSO, 1980 Census of Population and Housing**

**Figure 2.9: Population Distribution by 5 Year Age Group and Sex, Zambia, 1990**




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

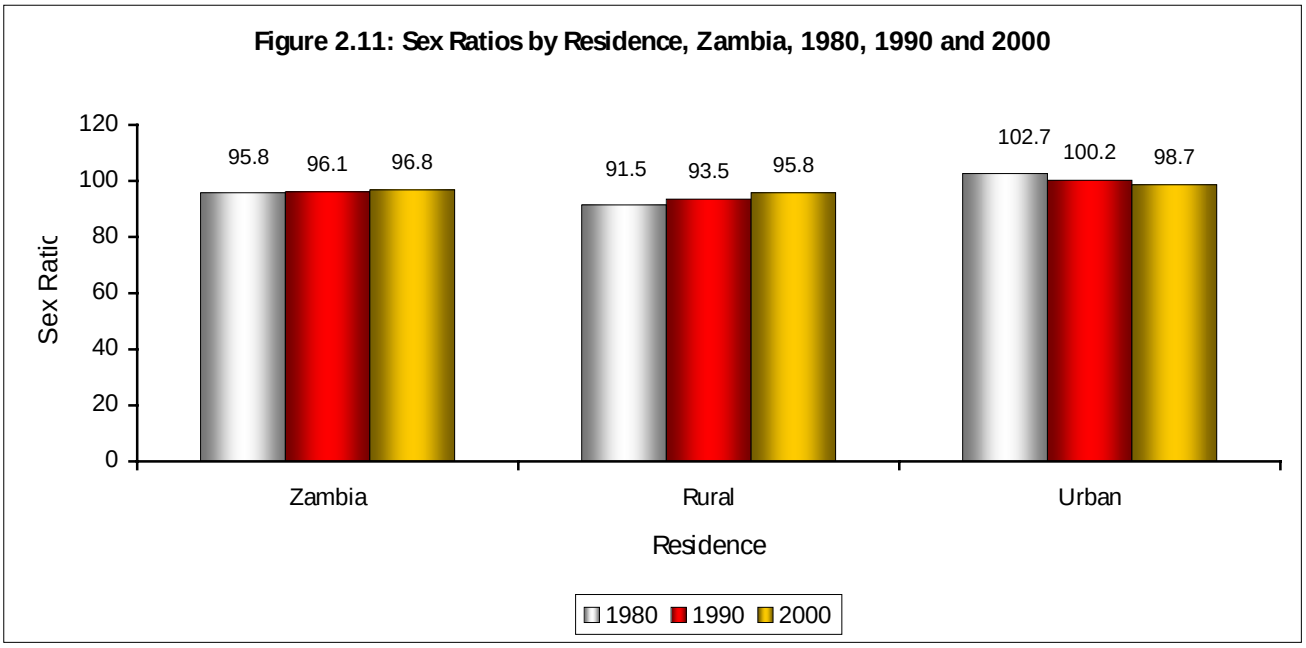
**Figure 2.10: Population Distribution by 5 Year Age Group and Sex, Zambia, 2000**




### 2.4.2. Sex Ratios

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

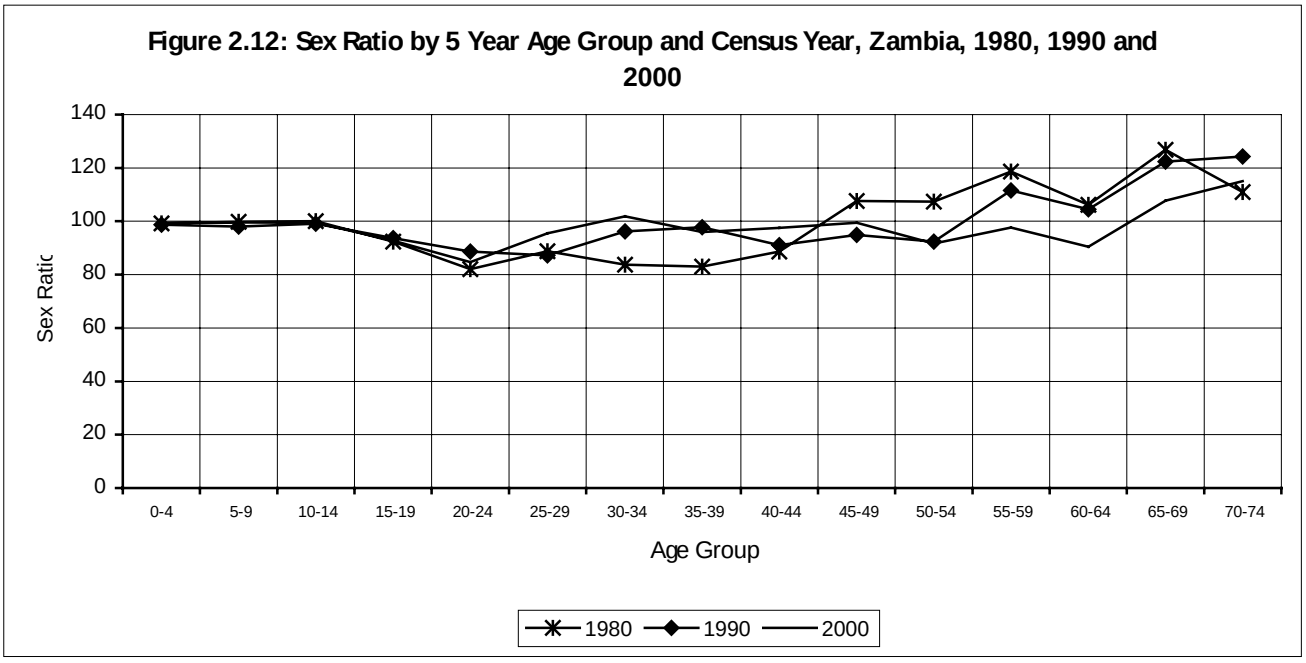
Overall, the sex ratios for Zambia are given in Figures 2.11 and 2.12 and Tables 2.5, 2.6, 2.7, and 2.8. Sex ratio in Zambia has increased slightly, from 95.8 in 1980 to 96.1 in 1990 and to 96.8 males per 100 females in 2000. In all the three censuses, the sex ratio is below 100 showing slightly more females than males in Zambia. In terms of residence, sex ratio is higher in urban areas than in rural areas for all the three censuses. This indicates a preponderance of males over females in the urban areas and the opposite in the rural areas. Further analysis also shows that the sex ratio for rural areas has been increasing whilst that for urban areas has been declining. The pattern of sex ratios cannot only be attributed to errors in the data but are also influenced by sex selective migration too. In this case, selective migration from rural areas to urban areas could have been in favour of males. This could have reduced the overall sex ratios in the rural areas and increased sex ratios in the urban areas. However, the urban-rural drift being observed in Zambia in the recent past could have reduced the overall sex ratios in the urban areas and increased sex ratios in the rural areas (Refer to the Migration and Urbanization Report, available at CSO).




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

In the absence of significant 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.

An analysis of age-specific sex ratios for 1980 reveals a deficit of males in age groups 15-44 years whereas that for 1990 reveals a deficit of males in age groups 0-54 years. Ratios for 2000 show a deficit of males in the ages 0-4, 10-29, 35-44 and 50-64. (See Figure 2.12).




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

There are many possible factors that may explain this, including high male mortality. The tendency also, by men to over estimate their age could have shifted men into older ages while the tendency by women to under-state their age could have shifted them into younger ages, hence, causing errors in age and sex data. 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.

*Table 2.5: Sex Ratio by Age and Residence, Zambia, 1980, 1990, and 2000*

| Age Group | 1980 | | | 1990 | | | 2000 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Zambia | Rural | Urban | Zambia | Rural | Urban | Zambia | Rural | Urban |
| 0 - 4 | 99 | 99 | 100 | 99 | 99 | 99 | 99 | 99 | 99 |
| 5 - 9 | 100 | 101 | 98 | 98 | 99 | 96 | 100 | 101 | 97 |
| 10-14 | 100 | 104 | 94 | 99 | 104 | 93 | 99 | 103 | 93 |
| 15-19 | 92 | 93 | 92 | 94 | 96 | 90 | 92 | 94 | 89 |
| 20-24 | 82 | 80 | 85 | 87 | 84 | 90 | 84 | 83 | 86 |
| 25-29 | 89 | 78 | 102 | 87 | 84 | 92 | 95 | 92 | 101 |
| 30-34 | 84 | 65 | 112 | 96 | 90 | 105 | 103 | 96 | 113 |
| 35-39 | 83 | 65 | 115 | 98 | 82 | 119 | 97 | 90 | 108 |
| 40-44 | 89 | 69 | 132 | 91 | 68 | 138 | 98 | 91 | 110 |
| 45-49 | 108 | 84 | 177 | 95 | 73 | 153 | 100 | 89 | 121 |
| 50-54 | 107 | 86 | 189 | 92 | 75 | 153 | 93 | 78 | 134 |
| 55-59 | 119 | 103 | 185 | 112 | 99 | 160 | 99 | 87 | 138 |
| 60-64 | 106 | 100 | 140 | 105 | 98 | 139 | 91 | 87 | 108 |
| 65-69 | 127 | 122 | 154 | 122 | 118 | 143 | 109 | 109 | 110 |
| 70-74 | 111 | 111 | 111 | 124 | 123 | 133 | 116 | 118 | 108 |
| 75-79 | 126 | 127 | 119 | 155 | 155 | 152 | 134 | 140 | 111 |
| 80-84 | 100 | 100 | 101 | 110 | 113 | 94 | 122 | 127 | 100 |
| 85+ | 106 | 105 | 117 | 111 | 114 | 93 | 104 | 109 | 78 |

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

Sex ratios higher than 100 were observed in age groups above 45 years in 1980, age groups above 55 years in 1990 and age group above 65 years in 2000. The 2000 pattern of sex ratio seems to be consistent with the 1980 and 1990 pattern because, the cohorts, which had lower sex ratios 10 years before, still have lower sex ratio 10 years later. However, the pattern of sex ratio of 1980,1990 and 2000 suggest under enumeration of children since sex ratio is supposed to be high at age groups 0-4 and 5-9.

### 2.4.3. Age Ratio

The quality of age data can also be evaluated by examining age ratios. 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). 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. Age ratios disaggregated by sex are given in Tables 2.6, 2.7, and 2.8 and Figure 2.13.

**Figure 2.13: Population Distribution of Zambia by Age Ratio and Sex, 2000**

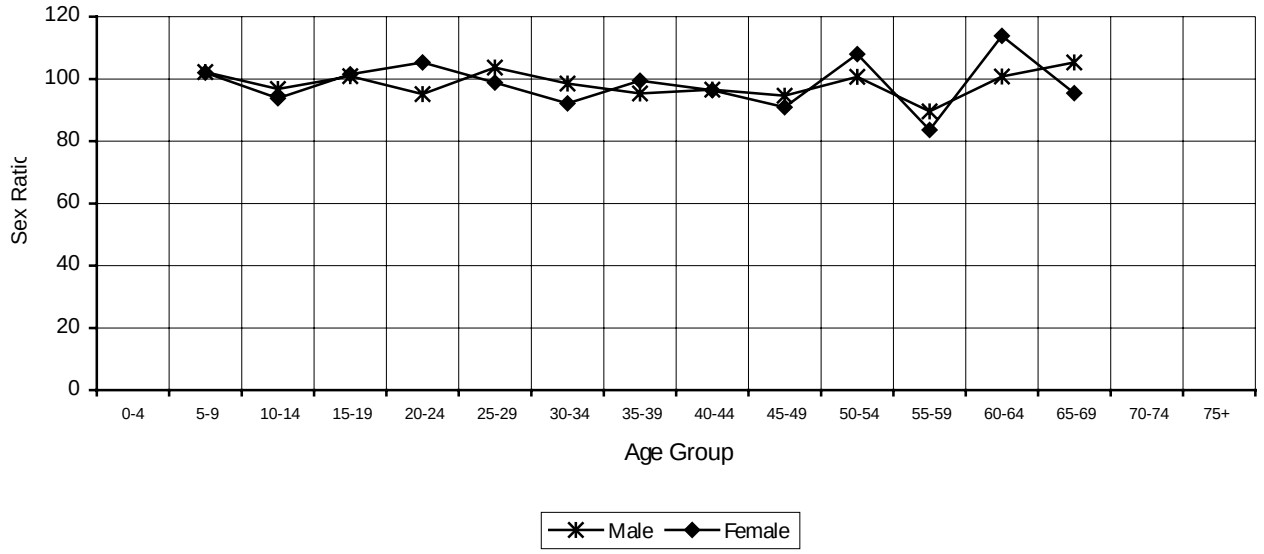



**Table 2.6: Population by Five Year Age Group, Sex, Age Ratio and the Age-Sex Accuracy Index, Zambia, 1980**

| Age Group | Population | | Age Ratio | | Deviation from 100 | | Sex Ratio | Difference |
|---|---|---|---|---|---|---|---|---|
| | Male | Female | Male | Female | Male | Female | | |
| 0 - 4 | 514,698 | 518,793 | - | - | - | - | 99.2 | - |
| 5 - 9 | 498,074 | 499,191 | 110.2 | 109.9 | 10.2 | 9.9 | 99.8 | 0.6 |
| 10-14 | 389,247 | 389,288 | 99.0 | 96.0 | -1.0 | -4.0 | 100.0 | 0.2 |
| 15-19 | 288,545 | 312,240 | 95.3 | 95.7 | -4.7 | -4.3 | 92.4 | -7.6 |
| 20-24 | 216,454 | 263,573 | 96.4 | 106.9 | -3.6 | 6.9 | 82.1 | -10.3 |
| 25-29 | 160,543 | 180,829 | 91.4 | 85.1 | -8.6 | -14.9 | 88.8 | 6.7 |
| 30-34 | 134,993 | 161,250 | 100.1 | 103.3 | 0.1 | 3.3 | 83.7 | -5.1 |
| 35-39 | 109,077 | 131,496 | 92.4 | 95.5 | -7.6 | -4.5 | 83.0 | -0.8 |
| 40-44 | 101,217 | 114,120 | 100.2 | 104.7 | 0.2 | 4.7 | 88.7 | 5.7 |
| 45-49 | 92,993 | 86,438 | 104.7 | 93.3 | 4.7 | -6.7 | 107.6 | 18.9 |
| 50-54 | 76,335 | 71,099 | 104.1 | 108.0 | 4.1 | 8.0 | 107.4 | -0.2 |
| 55-59 | 53,678 | 45,246 | 86.4 | 77.9 | -13.6 | -22.1 | 118.6 | 11.3 |
| 60-64 | 47,935 | 45,134 | 108.0 | 123.7 | 8.0 | 23.7 | 106.2 | -12.4 |
| 65-69 | 35,126 | 27,713 | 99.8 | 84.8 | -0.2 | -15.2 | 126.8 | 20.5 |
| 70-74 | 22,461 | 20,235 | - | - | - | - | 111.0 | -15.8 |
| 75+ | 28,619 | 25,161 | | | | | 113.7 | |
| Total Popn | 2,769,995 | 2,891,806 | - | - | | | | |
| Mean | - | - | - | - | 5.1 | 9.9 | - | 8.3 |

Source**: CSO, 1980 Census of Population and Housing**

*Age-Sex Accuracy Index = 3 times mean difference in sex ratios plus mean deviations of male and female age ratios.*

*= 3 x 8.3+ 5.1 + 9.9*

*= 39.9*

**Table 2.7: Population by Five Year Age Group, Sex, Age Ratio and the Age-Sex Accuracy Index, Zambia, 1990**

| Age Group | Population | | Age Ratio | | Deviation from 100 | | Sex Ratio | Difference |
|---|---|---|---|---|---|---|---|---|
| | Male | Female | Male | Female | Male | Female | | |
| 0 - 4 | 596,079 | 604,265 | - | - | - | - | 98.65 | - |
| 5 - 9 | 554,045 | 565,479 | 99.94 | 100.85 | -0.06 | 0.85 | 97.98 | -0.67 |
| 10-14 | 512,633 | 517,171 | 101.60 | 98.39 | 1.60 | -1.61 | 99.12 | 1.14 |
| 15-19 | 455,045 | 485,773 | 107.95 | 108.12 | 7.95 | 8.12 | 93.67 | -5.45 |
| 20-24 | 330,433 | 381,404 | 93.92 | 98.96 | -6.08 | -1.04 | 86.64 | -7.04 |
| 25-29 | 248,568 | 285,021 | 91.85 | 94.91 | -8.15 | -5.09 | 87.21 | 0.57 |
| 30-34 | 210,810 | 219,189 | 106.62 | 100.72 | 6.62 | 0.72 | 96.18 | 8.97 |
| 35-39 | 146,862 | 150,238 | 87.03 | 83.83 | -12.97 | -16.17 | 97.75 | 1.58 |
| 40-44 | 126,705 | 139,258 | 100.83 | 107.01 | 0.83 | 7.01 | 90.99 | -6.77 |
| 45-49 | 104,452 | 110,032 | 95.38 | 91.99 | -4.62 | -8.01 | 94.93 | 3.94 |
| 50-54 | 92,312 | 99,962 | 103.23 | 113.18 | 3.23 | 13.18 | 92.35 | -2.58 |
| 55-59 | 74,390 | 66,612 | 98.23 | 85.10 | -1.77 | -14.90 | 111.68 | 19.33 |
| 60-64 | 59,145 | 56,582 | 102.75 | 113.29 | 2.75 | 13.29 | 104.53 | -7.15 |
| 65-69 | 40,737 | 33,274 | 90.02 | 81.34 | -9.98 | -18.66 | 122.43 | 17.90 |
| 70-74 | 31,361 | 25,234 | - | - | - | - | 124.28 | 1.85 |
| 75+ | 34,000 | 26,028 | | | | | 130.63 | |
| Total Popn | 3,617,577 | 3,765,520 | - | - | | | | |
| Mean | - | - | - | - | 5.1 | 8.4 | - | 6.07 |

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

*Age-Sex Accuracy Index = 3 times mean difference in sex ratios plus mean deviations of male and female age ratios.*

*= 3 x 6.07 + 5.1 + 8.4*

*= 31.7*

**Table 2.8: Population by Five Year Age Group, Sex, Age Ratio and the Age-Sex Accuracy Index, Zambia, 2000**

| Age Group | Population | | Age Ratio | | Deviation from 100 | | Sex Ratio | Difference |
|---|---|---|---|---|---|---|---|---|
| | Male | Female | Male | Female | Male | Female | | |
| 0 - 4 | 825789 | 830931 | - | - | - | - | 99.4 | - |
| 5 - 9 | 729181 | 731901 | 102.2 | 102.0 | 2.2 | 2.0 | 99.6 | 0.2 |
| 10-14 | 601279 | 604367 | 96.8 | 93.8 | -3.2 | -6.2 | 99.5 | -0.1 |
| 15-19 | 513320 | 556676 | 100.9 | 101.5 | 0.9 | 1.5 | 92.2 | -7.3 |
| 20-24 | 416083 | 492589 | 95.1 | 105.3 | -4.9 | 5.3 | 84.5 | -7.7 |
| 25-29 | 361901 | 379247 | 103.6 | 98.8 | 3.6 | -1.2 | 95.4 | 11.0 |
| 30-34 | 282439 | 275434 | 98.5 | 92.1 | -1.5 | -7.9 | 102.5 | 7.1 |
| 35-39 | 211356 | 218631 | 95.3 | 99.4 | -4.7 | -0.6 | 96.7 | -5.9 |
| 40-44 | 161179 | 164597 | 96.6 | 96.4 | -3.4 | -3.6 | 97.9 | 1.3 |
| 45-49 | 122486 | 122834 | 94.6 | 90.9 | -5.4 | -9.1 | 99.7 | 1.8 |
| 50-54 | 97850 | 105762 | 100.7 | 108.0 | 0.7 | 8.0 | 92.5 | -7.2 |
| 55-59 | 71905 | 72933 | 89.6 | 83.6 | -10.4 | -16.4 | 98.6 | 6.1 |
| 60-64 | 62678 | 68797 | 100.8 | 113.8 | 0.8 | 13.8 | 91.1 | -7.5 |
| 65-69 | 52499 | 47994 | 105.3 | 95.4 | 5.3 | -4.6 | 109.4 | 18.3 |
| 70-74 | 37066 | 31869 | - | - | - | - | 116.3 | 6.9 |
| 75+ | 47279 | 38573 | | | | | 122.6 | |
| Total | 4,591,731 | 4,745,678 | - | - | | | | |
| Mean | - | - | - | - | 3.62 | 6.18 | - | 6.31 |

*Age-Sex Accuracy Index = 3 times mean difference in sex ratios plus mean deviations of male and female age ratios.*
*= 3 x 6.31 + 3.62 + 6.18*
*= 28.7*

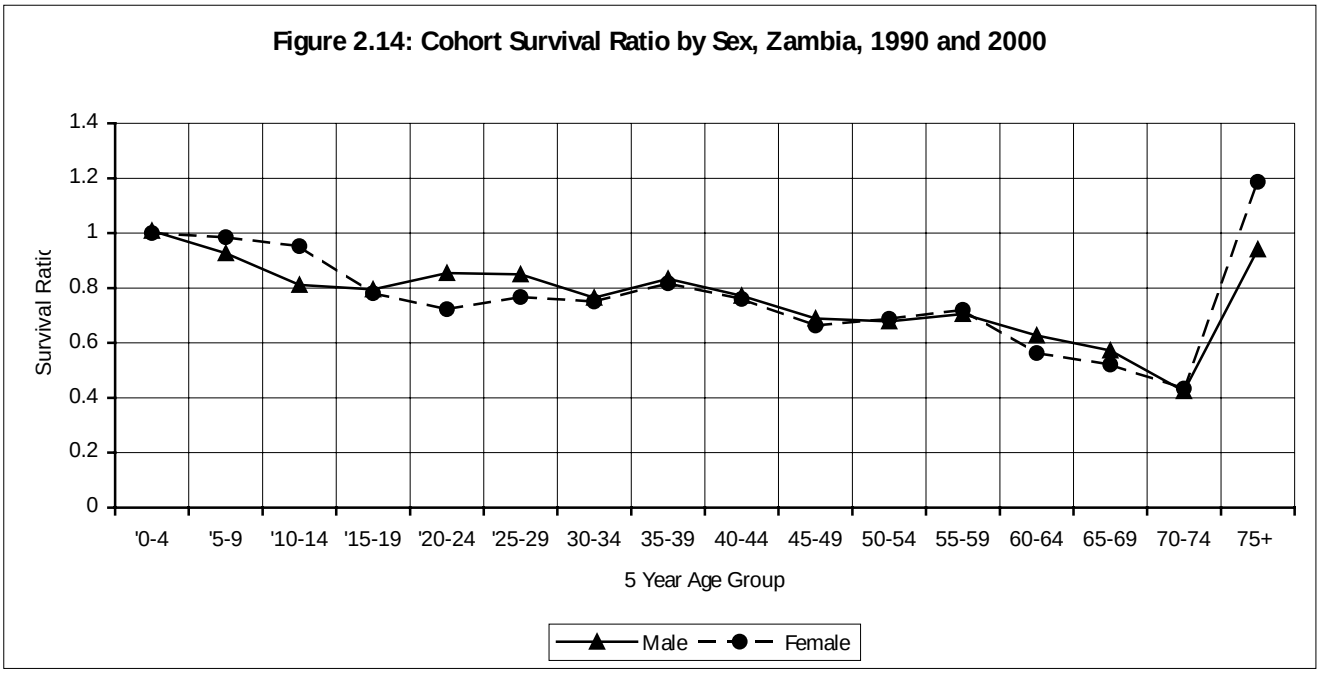
The irregular patterns of the age ratios show that data could be affected by errors from age misreporting, digit preference, omission, migration or fluctuations in births and deaths. In all the three Censuses females have higher Average Age Ratio Deviation than males. Average Age Ratio Deviation was 9.9 for females and 5.1 for males in 1980, 8.4 for females and 5.1 for males in 1990 and 6.2 for females and 3.6 for males in 2000. This shows that age reporting is better for males than for females.

It is worthy to note that over time, there has been an improvement in the quality of data depicted by the declining Age Accuracy Index. The Age Accuracy Index declined from 39.9 in 1980 to 31.7 in 1990 and to 28.7 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 2000 age data were inaccurate. However, the 2000 age data show some improvement over the 1980 and 1990 age data (Refer to Tables 2.6, 2.7, 2.8 and Figure 2.13 for details).

### *2.4.4. Survival Ratios*

Survival ratios represent the probability that individuals of the same birth cohort or group of cohorts will still be living 10 years later. Survival ratios can also be used to evaluate the quality of data. Evaluating the quality of age and sex data from two censuses is done under the assumptions that the population should be closed to migration and influence of abnormal mortality such as through wars, disasters, and diseases over a 10-year period. Cohort survival ratio refers to the survival ratio of the population in a given age group to the next age whereas overall survival ratio refers to the ratio of the population of age say 10 years and above, who will survive to 15 years and above, and so on. With respect to Zambia, one needs not to rule out the effect of high mortality caused by the Acquired Immune Deficiency Syndrome (AIDS) on the pattern of survival ratios.

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. Table 2.9 shows fluctuations rather than the expected pattern i.e. there is no systematic decline in the cohort survival ratios with the increase in age. These distortions in data could either be due to age misreporting, under enumeration or over enumeration at some age groups.




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

Female ratios should be higher than the male ratios because females normally have lower mortality compared to males. However, Figure 2.14 and Table 2.9 indicate more male survivals in the 15-34 and 60-69 age groups.

**Table 2.9: Cohort Survival Ratios By Sex, Zambia, 1990 and 2000**

| Age Group | Survival Ratios | |
|---|---|---|
| | Male | Female |
| 0 - 4 | 1.0087 | 1.0002 |
| 5 - 9 | 0.9265 | 0.9844 |
| 10-14 | 0.8117 | 0.9525 |
| 15-19 | 0.7953 | 0.7807 |
| 20-24 | 0.8548 | 0.7222 |
| 25-29 | 0.8503 | 0.7671 |
| 30-34 | 0.7646 | 0.7509 |
| 35-39 | 0.8340 | 0.8176 |
| 40-44 | 0.7723 | 0.7595 |
| 45-49 | 0.6884 | 0.6628 |
| 50-54 | 0.6790 | 0.6882 |
| 55-59 | 0.7057 | 0.7205 |
| 60-64 | 0.6267 | 0.5632 |
| 65-69 | 0.5720 | 0.5214 |
| 70-74 | 0.4244 | 0.4332 |
| 75+ | 0.9412 | 1.1865 |

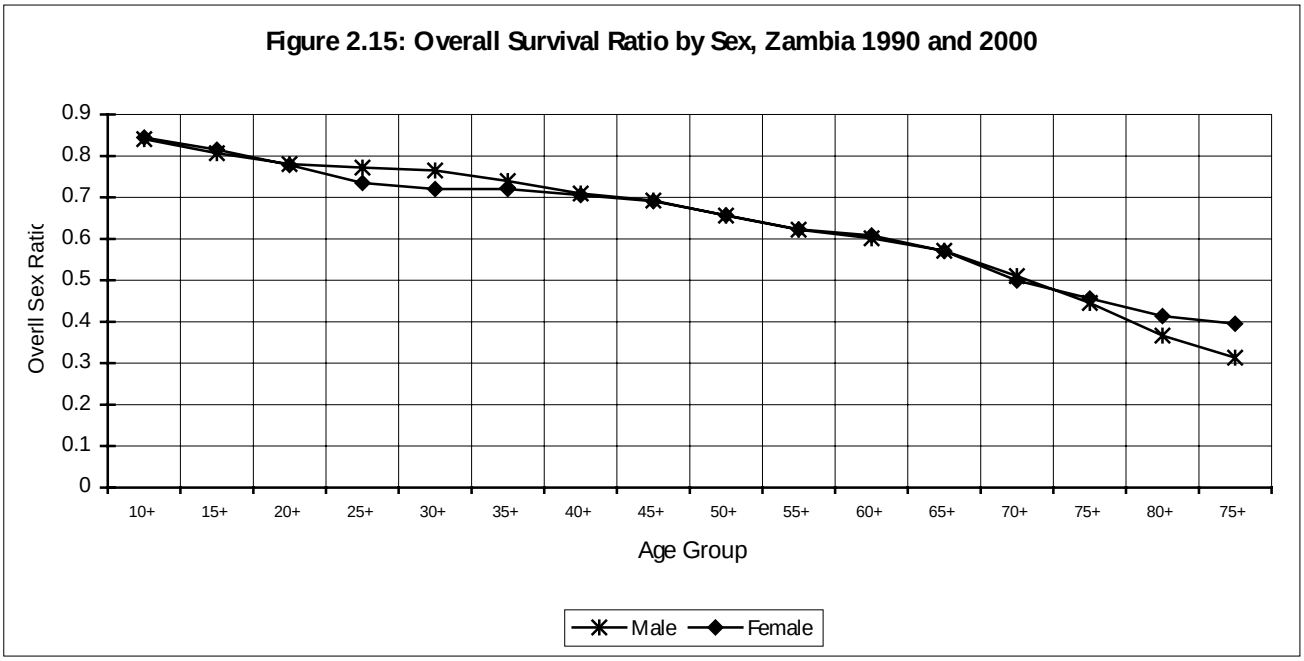
Source**: CSO, 1990 and 2000 Censuses of Population and Housing**

Overall survival ratios show the expected pattern, where the ratio declines continuously with increasing age, without any fluctuations. This suggests that the quality of age data is good. However, the pattern of having higher ratios for females than males is not true at 10+, 15+, 50+, 55+, 60+, 75+, 80+ and 85+ (Table 2.10 and Figure 2.15). This could be caused by age misreporting, under or over coverage in these age groups or high mortality.

**Table 2.10: Overall Survival Ratios by Sex, Zambia, 1990 and 2000**

| Age | Survival Ratios | |
|---|---|---|
| | Male | Female |
| 10+ | 0.8402 | 0.8446 |
| 15+ | 0.8069 | 0.8148 |
| 20+ | 0.7800 | 0.7779 |
| 25+ | 0.7718 | 0.7345 |
| 30+ | 0.7646 | 0.7204 |
| 35+ | 0.7391 | 0.7198 |
| 40+ | 0.7091 | 0.7053 |
| 45+ | 0.6927 | 0.6911 |
| 50+ | 0.6558 | 0.6567 |
| 55+ | 0.6220 | 0.6228 |
| 60+ | 0.6011 | 0.6085 |
| 65+ | 0.5711 | 0.5701 |
| 70+ | 0.5104 | 0.4992 |
| 75+ | 0.4456 | 0.4563 |
| 80+ | 0.3669 | 0.4141 |
| 85+ | 0.3137 | 0.3955 |

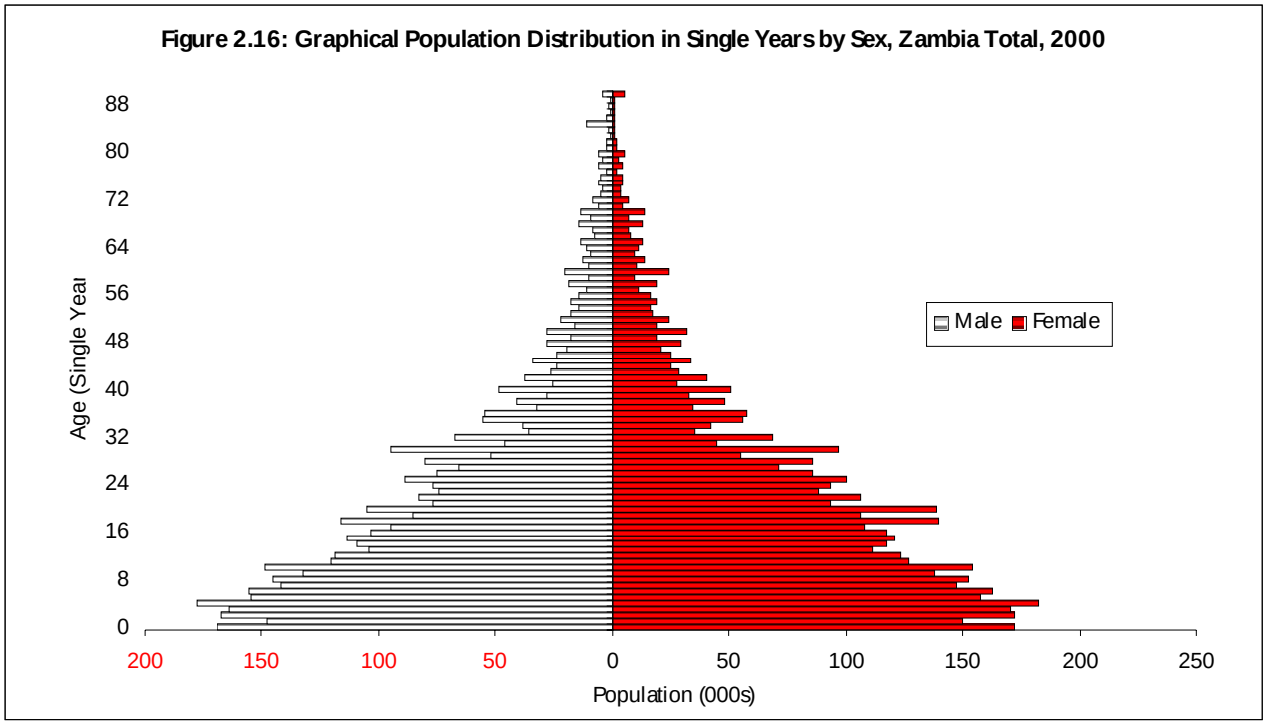
Source**: CSO, 1990 and 2000 Censuses of Population and Housing**



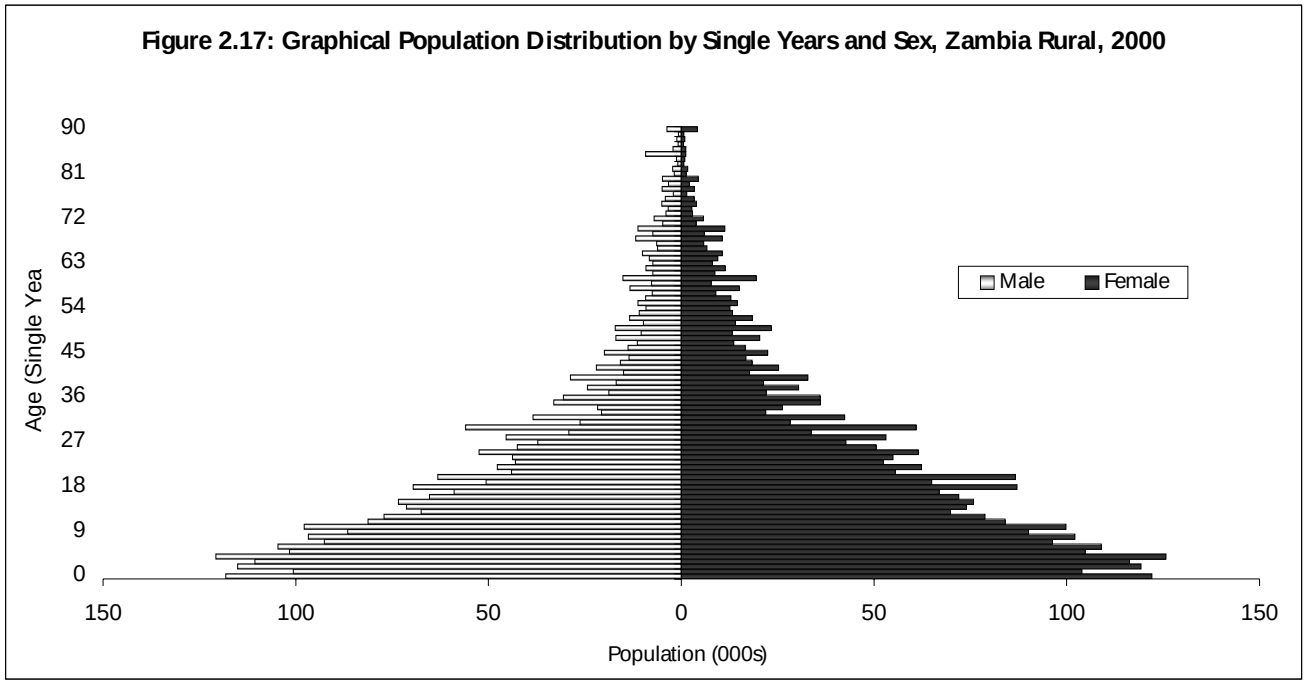

Source**: CSO, 1990 and 2000 Censuses of Population and Housing**

### 2.4.5. Population Pyramids

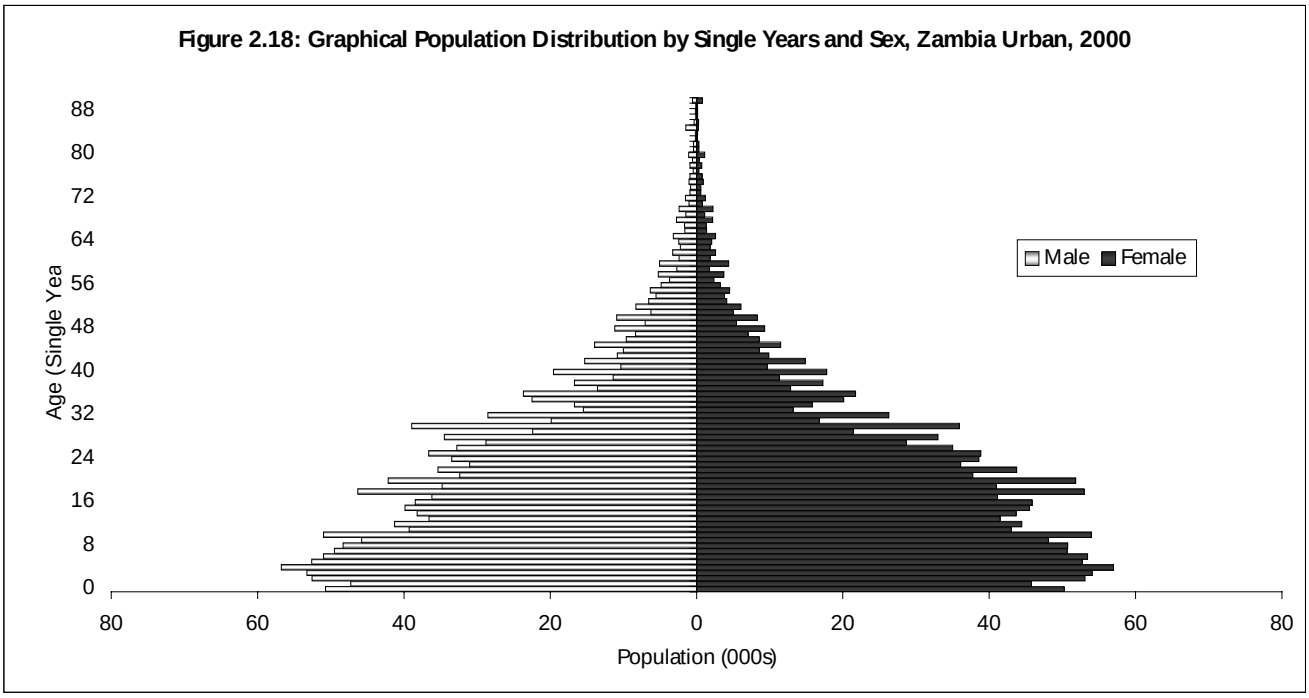
Another way of detecting irregularities in the reported age data of a survey or census is by looking at a Population Pyramid by single years of age. As already observed, when census age data is distributed in single years, one can easily spot out inaccuracies than when it is distributed in five-year age groups. Looking at the population pyramids for the 2000 Census data from Figures 2.16 to 2.18, it can be seen that age misreporting was not severe.




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



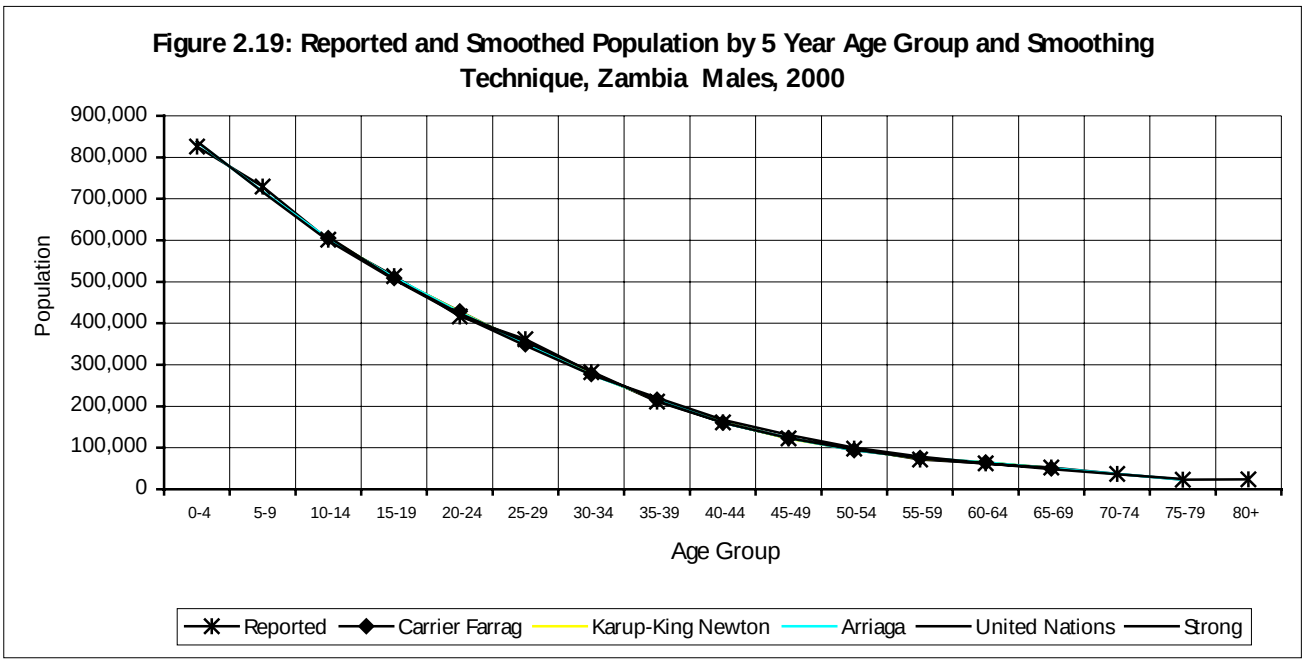

Source: **CSO, 2000 Census of Population and Housing**

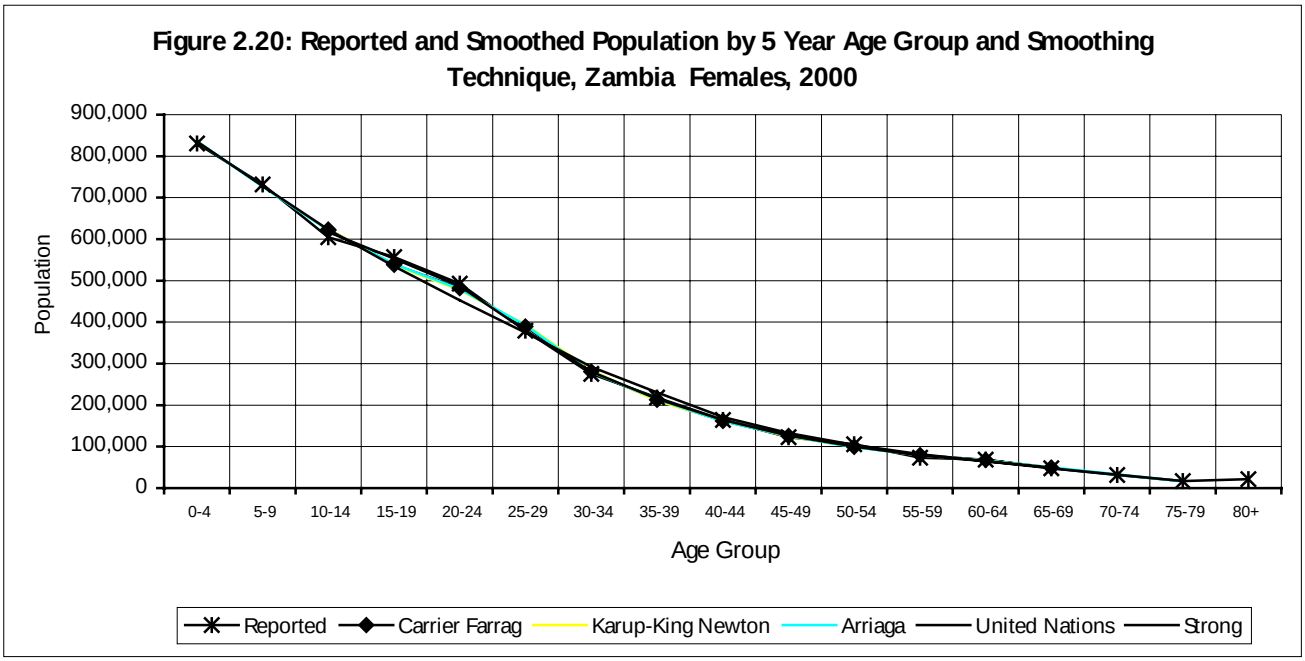



Source: CSO, 2000 Census of Population and Housing

Smoothing the age data using selected techniques for light smoothing of the population (Edwardo E. Arriaga: November 1994, pages 11-42) shows that the irregularities in the structure are not severe to warrant the smoothing of data, see Figures 2.19 and 2.20.

The smoothing of data has been done using AGESMTH software program one of the Population Analysis Spreadsheet (PAS) programmes developed by the United Nations. Selected techniques for light smoothing of the population include Carrier Farrag, Karup-King Newton, Arriaga and United Nations. The strong smoothing technique has also been incorporated.






Given that the irregularities in the reported proportions are small as can be seen by the smoothness of the curves in Figures 2.19 and 2.20, 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.

## 2.5. 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 is in line with the observed fertility and mortality declines. There was also digit preference during age reporting, the preferred digits being 0, 5, 8 and 2. Age heaping in the 2000 Census was also observed, just like in the other two previous censuses. However, the 2000 age-sex data shows an improvement over the 1990 and 1980 age-sex data as evidenced by the decline in the Age-Sex Accuracy Index from 39.9 in 1980, 31.7 in 1990 to 28.7 in 2000. In the analysis of Age-Specific Sex Ratios, under enumeration and over enumeration was identified at ages 0-4 and 5-9 year age groups. Generally, the census taking in Zambia is yielding improved data overtime.

# CHAPTER THREE

# POPULATION SIZE, GROWTH AND COMPOSITION

## 3.0. 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 and 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.

## 3.1. Concepts and Definitions Used

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

**De facto Population**

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

a) Foreign diplomatic personnel accredited to Zambia; and

b) Zambian nationals accredited to foreign embassies and their 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, boarding schools).

**Population Growth Rate**

Refers to the change in the size of the population as a proportion of the total population of an area. Estimated on a yearly basis, 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.

### 3.2. Population Size and Growth

Zambia's de jure population for the year 2000 is 9,885,591 of which 4,946,298 are males and 4,939,293 females, 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, Zambia, 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 |
| Rural | 6,458,729 | 100 | 3,220,939 | 49.9 | 3,237,790 | 50.1 |
| Urban | 3,426,862 | 100 | 1,725,359 | 50.3 | 1,701,503 | 49.7 |

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

Zambia's de facto count however, presented in Table 3.1b, is 9,337,425 of which 50.8 percent are females. The de facto population allows for detailed analysis of individuals because these are present at the time of count (*see definition above*). It can be noted that the de jure population is always larger than the de facto population.

**Table 3.1b: Population Size (De facto) and Percent Distribution by Sex and Residence, Zambia, 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 |
| Rural | 5,990,356 | 100 | 2,931,551 | 48.9 | 3,058,805 | 51.1 |
| Urban | 3,347,069 | 100 | 1,662,739 | 49.7 | 1,684,330 | 50.3 |

The 2000 provincial population sizes are displayed in absolute terms in Table 3.2. Among the provinces, the Copperbelt has the largest population size of 1.6 million followed by Lusaka (1.4 million) and Eastern (1.3 million). The least population is found in North Western Province (583,350). It should be noted that Zambia's most urbanized provinces in descending order are Copperbelt, Lusaka, Southern and Central provinces, given that in comparison to the national urban population, they hold higher proportions of urban population than other provinces (over a million persons for Copperbelt and Lusaka; and over 200 thousand persons for Southern and Central).

**Table 3.2: Population Size (De jure) by Sex, Residence and Province, Zambia, 2000**

| Residence | Total | | | Rural | | | Urban | | |
|---|---|---|---|---|---|---|---|---|---|
| | Both Sexes | Male | Female | Both Sexes | Male | Female | Both Sexes | Male | Female |
| **Zambia** | 9,885,591 | 4,946,298 | 4,939,293 | 6,458,729 | 3,220,939 | 3,237,790 | 3,426,862 | 1,725,359 | 1,701,503 |
| Central | 1,012,257 | 510,501 | 501,756 | 769,202 | 388,182 | 381,020 | 243,055 | 122,319 | 120,736 |
| Copperbelt | 1,581,221 | 799,402 | 781,819 | 350,093 | 179,616 | 170,477 | 1,231,128 | 619,786 | 611,342 |
| Eastern | 1,306,173 | 648,676 | 657,497 | 1,190,865 | 591,198 | 599,667 | 115,308 | 57,478 | 57,830 |
| Luapula | 775,353 | 387,825 | 387,528 | 674,187 | 337,330 | 336,857 | 101,166 | 50,495 | 50,671 |
| Lusaka | 1,391,329 | 705,778 | 685,551 | 252,869 | 129,695 | 123,174 | 1,138,460 | 576,083 | 562,377 |
| Northern | 1,258,696 | 629,976 | 628,720 | 1,081,599 | 541,821 | 539,778 | 177,097 | 88,155 | 88,942 |
| N/Western | 583,350 | 290,856 | 292,494 | 511,647 | 254,910 | 256,737 | 71,703 | 35,946 | 35,757 |
| Southern | 1,212,124 | 601,440 | 610,684 | 955,268 | 472,115 | 483,153 | 256,856 | 129,325 | 127,531 |
| Western | 765,088 | 371,844 | 393,244 | 672,999 | 326,072 | 346,927 | 92,089 | 45,772 | 46,317 |

The annual average growth rates between censuses of 1969, 1980, 1990 and 2000 are shown in Table 3.3. The table shows that Zambia's (de jure) population has grown from 5.7 million in 1980 to 7.8 in 1990 and to 9.9 million in 2000. The population of Zambia has continued to grow at declining rates. For instance, the annual population growth rate for the inter-censal period of 1969-1980 was 3.1 percent, decreased to 2.7 percent between 1980-1990 and to 2.4 percent between 1990-2000. Except for the period 1969-1980, when the annual average population growth rate was six percent for urban areas, rural areas have continued to exhibit higher rates of growth than urban areas.

**Table 3.3: Population Size and Annual Average Population Growth Rate by Residence and Province, Zambia, 1969-2000**

| Residence | 1969-1980 | | 1980-1990 | | 1990-2000 | |
|---|---|---|---|---|---|---|
| | Population Size 1980 | Annual Growth Rate | Population Size 1990 | Annual Growth Rate | Population Size 2000 | Annual Growth Rate (de jure) |
| **ZAMBIA-Total** | 5,661,801 | 3.1 | 7,383,097 | 2.7 | 9,885,591 | 2.4 |
| Rural | 3,403,281 | 1.6 | 4,477,814 | 2.8 | 6,458,729 | 3.0 |
| Urban | 2,258,520 | 6.0 | 2,905,283 | 2.6 | 3,426,862 | 1.5 |

| PROVINCE | | | | | | |
|---|---|---|---|---|---|---|
| Central | 511,905 | 3.3 | 720,627 | 3.5 | 1,012,257 | 2.7 |
| Copperbelt | 1,251,178 | 4.0 | 1,427,545 | 1.3 | 1,581,221 | 0.8 |
| Eastern | 650,902 | 2.3 | 965,967 | 4.0 | 1,306,173 | 2.6 |
| Luapula | 420,966 | 2.1 | 525,160 | 2.2 | 775,353 | 3.2 |
| Lusaka | 691,054 | 6.3 | 987,106 | 3.6 | 1,391,329 | 3.4 |
| Northern | 674,750 | 2.0 | 855,177 | 2.4 | 1,258,696 | 3.1 |
| North- Western | 302,668 | 2.5 | 387,552 | 2.5 | 583,350 | 2.9 |
| Southern | 671,923 | 2.8 | 907,150 | 3.0 | 1,212,124 | 2.3 |
| Western | 486,455 | 1.6 | 606,813 | 2.2 | 765,088 | 1.8 |

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

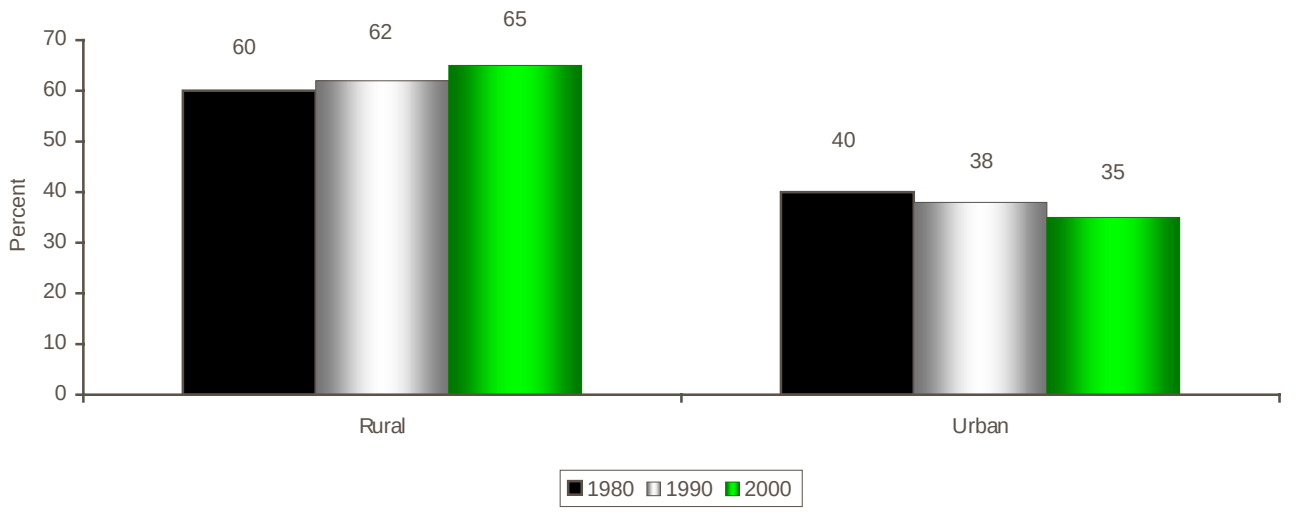
***Note**: 1969, 1980 and 1990 extracted from Analytical report, volume 10 of the 1990 Census of Population, Housing and Agriculture, CSO, 1995*

At provincial level, Luapula, Lusaka and Northern populations grew at average growth rates of over 3 percent per year during the inter-censal period of 1990-2000. Notably, the Copperbelt Province grew the least during the same period, at a rate of 0.8 percent. This is rather peculiar for a province that had one of the highest growth rates in the 1970s. This drop in growth rate may be attributed to a number of factors such as the declining economic growth in the province following the unstable copper exchange prices and the closing down of most mines in the province which has proved less attractive for economic in-migration.

### 3.3. Population Distribution

The spatial or geographical distribution of the population in Zambia is shown graphically in Figure 3.1, 3.2 and Table 3.4.

**Figure 3.1: Percent Distribution of Population by Residence, Zambia, 1980-2000**




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

Figure 3.1 illustrates that almost two thirds (65 percent) of Zambia's population are in rural areas. The proportion of rural population has steadily increased during the last three decades, from 60 percent in 1980 to 62 and 65 percent in 1990 and 2000, respectively. This implies an urban-rural migration trend, which is most significant in the most urbanized provinces of the country- Copperbelt, Lusaka, Southern and Central. These provinces have over the years been characterised by economic decline, rendering them most unattractive in economic terms *(Details on internal migration in Zambia are described in the 2000 Census Migration Report).*

The percent distribution of provincial population from 1980 to 2000 is shown in Table 3.4 and further illustrated for 2000 in Figure 3.2. Despite having the lowest growth rates in the last two decades, the Copperbelt Province, relative to the total population remains the most populated in Zambia. In 1980, the share of the Copperbelt

Province was 22 percent, declined to 19 percent in 1990 and to 16 percent in 2000 Census. Generally, population shares in the rest of the provinces have increased with Lusaka, Eastern and Northern provinces each having 13 percent and above of the national population. As noted earlier, North-Western Province has continued to have the smallest share of the Zambian population, with five percent in 1980 and about six percent in both 1990 and 2000.

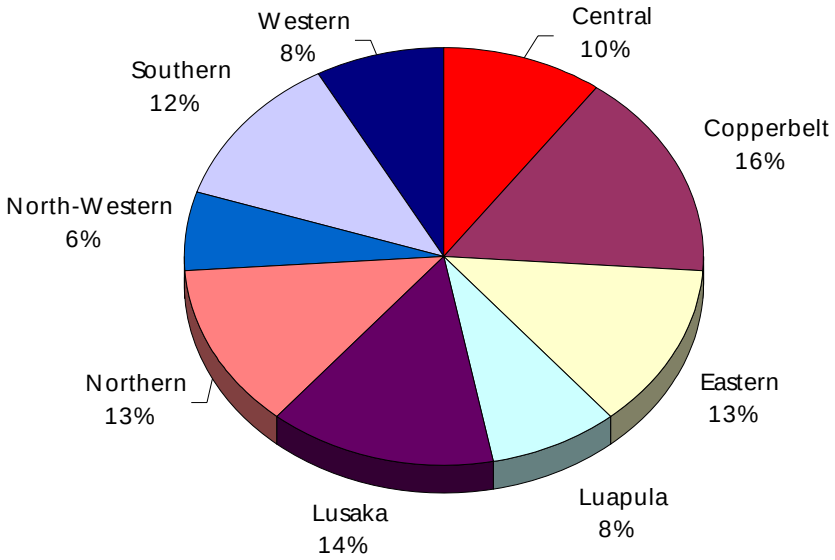
**Table 3.4: Population Distribution (De jure) by Province, Zambia, 1980, 1990 and 2000**

| Residence | 1980 | | 1990 | | 2000 | |
|---|---|---|---|---|---|---|
| | Population | Percent | Population | Percent | Population | Percent |
| **Zambia** | 5,661,801 | 100.0 | 7,759,161 | 100.0 | 9,885,591 | 100.0 |
| **Province** | | | | | | |
| Central | 511,905 | 9.0 | 771,819 | 9.9 | 1,012,257 | 10.2 |
| Copperbelt | 1,251,178 | 22.1 | 1,458,471 | 18.8 | 1,581,221 | 16.0 |
| Eastern | 650,902 | 11.5 | 1,004,691 | 12.9 | 1,306,173 | 13.2 |
| Luapula | 420,966 | 7.4 | 564,490 | 7.3 | 775,353 | 7.8 |
| Lusaka | 691,054 | 12.2 | 991,232 | 12.8 | 1,391,329 | 14.1 |
| Northern | 674,750 | 11.9 | 925,888 | 11.9 | 1,258,696 | 12.7 |
| North-Western | 302,668 | 5.3 | 438,215 | 5.6 | 583,350 | 5.9 |
| Southern | 671,923 | 11.9 | 965,593 | 12.4 | 1,212,124 | 12.3 |
| Western | 486,455 | 8.6 | 638,761 | 8.2 | 765,088 | 7.7 |

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

**Note**: *1969, 1980 and 1990 extracted from Analytical report, volume 10 of the 1990 Census of Population, Housing and Agriculture, CSO, 1995*

**Figure 3.2: Percent Population Distribution by Province, 2000**




### 3.3.1. Population Density

Table 3.5 shows Zambia's land area and population density from 1969 to 2000. 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). Generally, with an increasing population in the past decades, Zambia's population density has also been increasing, from 5.4 in 1969 to 7.5 and 10.3 in 1980 and 1990, respectively. In 2000, 13.1 persons per square km were recorded.

Table 3.5: Area and Population Density (De jure) by Province, Zambia, 1969 -2000

| Province | 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 |
| **Central** | 94,394 | 3.8 | 5.4 | 8.2 | 10.7 |
| Copperbelt | 31,328 | 26.1 | 39.9 | 46.6 | 50.5 |
| Eastern | 69,106 | 7.4 | 9.4 | 14.5 | 18.9 |
| Luapula | 50,567 | 6.6 | 8.3 | 11.2 | 15.3 |
| Lusaka | 21,896 | 16.2 | 31.6 | 45.3 | 63.5 |
| Northern | 147,826 | 3.7 | 4.6 | 6.3 | 8.5 |
| North-Western | 125,826 | 1.8 | 2.4 | 3.5 | 4.6 |
| Southern | 85,283 | 5.8 | 7.9 | 11.3 | 14.2 |
| Western | 126,386 | 3.3 | 3.9 | 5.1 | 6.1 |

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

**Note**: *1969, 1980 and 1990 extracted from Analytical report, volume 10 of the 1990 Census of Population, Housing and Agriculture, CSO, 1995*

An important feature of the country's population distribution is that Copperbelt and Lusaka Provinces, which have the smallest land area of 31,328 and 21,896 square km, respectively, exhibit the highest population density. Table 3.5 also shows that in 2000, Copperbelt province had 49 persons per sq. km while Lusaka had 61 persons per sq. km. However, during the same period Northern, North-Western and Western Provinces that take the largest share of Zambian land each had population densities less than 10 persons per sq. km. It is further noted that Lusaka's population density has had significant increases from 1969 to 2000, while that of the Copperbelt has increased at a declining level. This confirms the declining population growth rate in the Copperbelt Province reflected in Table 3.3.

### 3.4. Population Composition

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

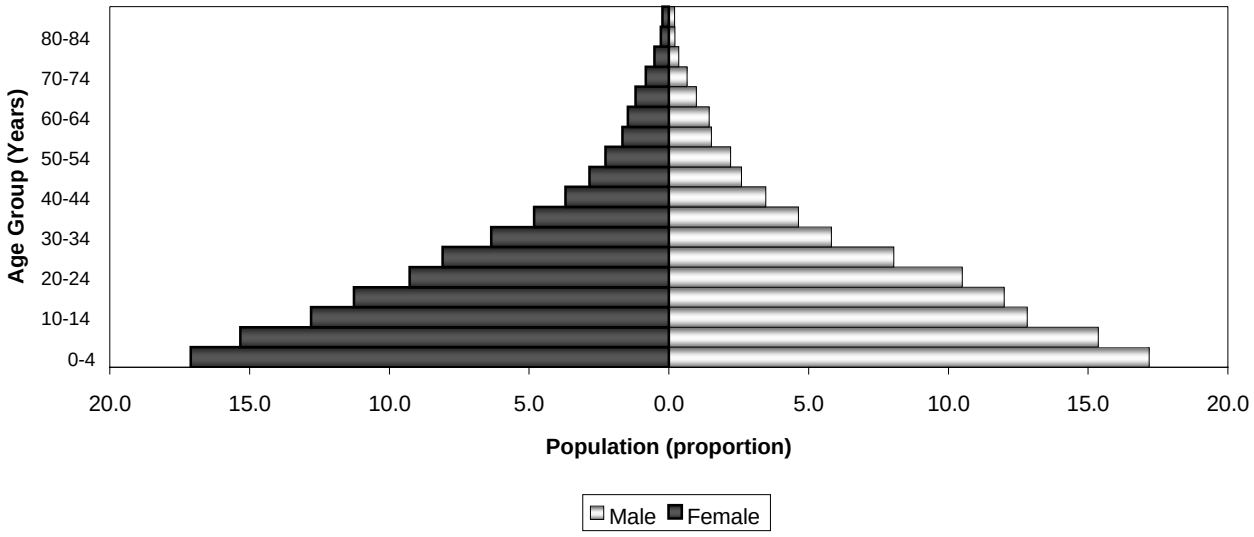
#### 3.4.1. Age and Sex Composition

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 important 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 Zambia's population is illustrated in proportion by way of population pyramids for 1990 and 2000 in Figures 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'. The population of Zambia continues to be termed as *Young* given that it continues to bear a high proportion of persons below the age of 15 years. The broad base of the pyramids is illustrative of this feature. In comparative terms, the 2000 population pyramid (Figure 3.3a) has a smoothened picture along the ages of 10-14 and mid 20s, which otherwise had a bumpy appearance in 1990 (Figure 3.3b). By comparison, this signifies population gaps from age 8 to 23 (see Figure 3.4). These population gaps could be attributed to

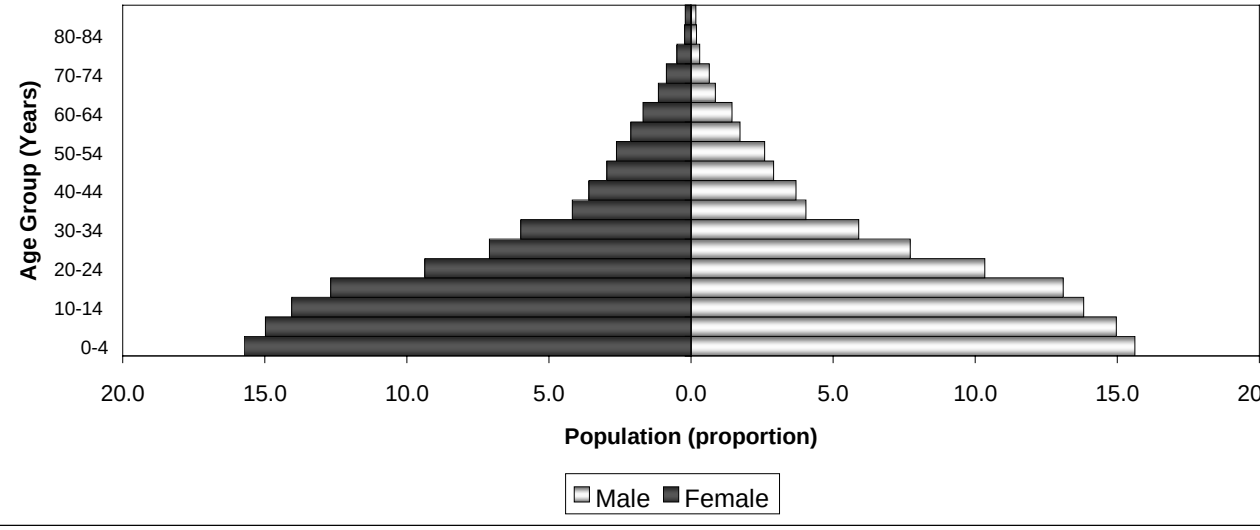
increased mortality, given the ravaging effects of HIV/AIDS pandemic coupled with odds of the declining economic situation in the country, particularly in the last decade. Supporting this likelihood of events also is the evidence that fertility has in the same period decreased (*see chapter on Fertility*).

**Figure 3.3a: Age Sex Composition, Zambia, 2000**




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

**Figure 3.3b: Age Sex Composition, Zambia, 1990**




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

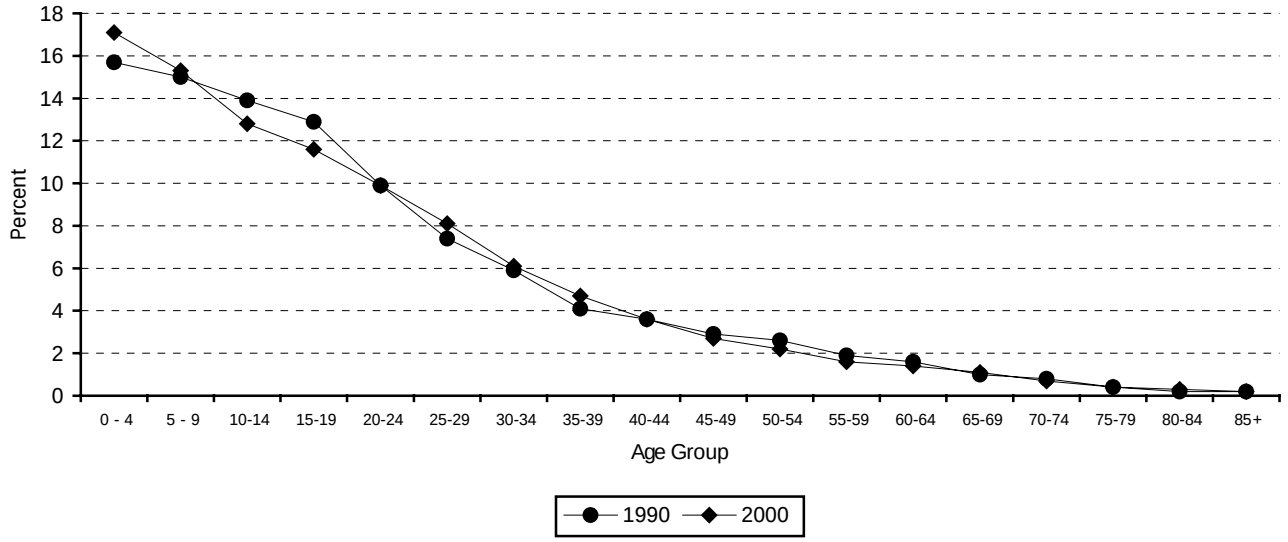
Table 3.6 presents the age-sex population distribution for Zambia, including the rural and urban areas. In 2000, children (0 - 14 years) constituted 45.3 percent of Zambia's total population. This presents no change in the proportion captured in 1990 (45.2 percent). Similarly, rural and urban areas comprise the majority of the child population, with the rural proportion being higher (46.6 percent) than that for urban areas (42.6 percent). The proportion for the rest of the population declined, pointing towards a thin aged population (of about one and less percent). As was predictive in the past decades, this scenario still holds promise for future population growth

given the potential that lies in the huge proportion of young persons expected to enter into reproductive ages (15 - 49 years).

**Table 3.6: Percentage Age-Sex Distribution of Population (De jure) by Residence, Zambia, 2000**

| Age Group | Zambia | | | Rural | | | Urban | | |
|---|---|---|---|---|---|---|---|---|---|
| | Both Sexes | Male | Female | Both Sexes | Male | Female | Both Sexes | Male | Female |
| 0-4 | 17.1 | 17.1 | 17.2 | 18.2 | 18.2 | 18.2 | 15.1 | 15.0 | 15.3 |
| 5-9 | 15.3 | 15.3 | 15.4 | 15.6 | 15.8 | 15.5 | 14.7 | 14.5 | 15.0 |
| 10-14 | 12.8 | 12.8 | 12.8 | 12.8 | 13.1 | 12.6 | 12.8 | 12.2 | 13.3 |
| 15-19 | 11.6 | 11.3 | 12.0 | 11.1 | 11.0 | 11.3 | 12.6 | 11.9 | 13.3 |
| 20-24 | 9.9 | 9.3 | 10.5 | 9.1 | 8.5 | 9.6 | 11.4 | 10.7 | 12.2 |
| 25-29 | 8.1 | 8.1 | 8.0 | 7.4 | 7.4 | 7.5 | 9.4 | 9.5 | 9.2 |
| 30-34 | 6.1 | 6.4 | 5.8 | 5.7 | 5.8 | 5.6 | 6.9 | 7.4 | 6.3 |
| 35-39 | 4.7 | 4.8 | 4.6 | 4.5 | 4.5 | 4.5 | 5.2 | 5.5 | 4.9 |
| 40-44 | 3.6 | 3.7 | 3.5 | 3.4 | 3.5 | 3.4 | 3.9 | 4.1 | 3.6 |
| 45-49 | 2.7 | 2.8 | 2.6 | 2.7 | 2.7 | 2.7 | 2.8 | 3.1 | 2.5 |
| 50-54 | 2.2 | 2.3 | 2.2 | 2.4 | 2.2 | 2.5 | 2.0 | 2.3 | 1.6 |
| 55-59 | 1.6 | 1.7 | 1.5 | 1.8 | 1.8 | 1.8 | 1.2 | 1.4 | 0.9 |
| 60-64 | 1.4 | 1.5 | 1.4 | 1.7 | 1.7 | 1.8 | 0.8 | 0.9 | 0.8 |
| 65-69 | 1.1 | 1.2 | 1.0 | 1.4 | 1.5 | 1.2 | 0.6 | 0.6 | 0.5 |
| 70-74 | 0.7 | 0.8 | 0.6 | 0.9 | 1.1 | 0.8 | 0.4 | 0.4 | 0.3 |
| 75-79 | 0.4 | 0.5 | 0.4 | 0.6 | 0.7 | 0.4 | 0.2 | 0.2 | 0.2 |
| 80-84 | 0.3 | 0.3 | 0.2 | 0.3 | 0.4 | 0.3 | 0.1 | 0.1 | 0.1 |
| 85+ | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 |
| Total Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total Pop | 9,885,591 | 4,946,298 | 4,939,293 | 6,452,283 | 3,217,284 | 3,234,999 | 3,433,308 | 1,729,074 | 1,704,234 |

**Figure 3.4: Population Distribution by Age, Zambia, 1990 and 2000**




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

### 3.4.2. Age Dependency Ratio

By definition, this 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 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. Table 3.7 shows that the overall dependency ratio of 2000 Census is 96 per 100 persons in the working age group. The table further shows that the burden of dependency on the productive population reduced in the 1980s but increased during the

1990s. For instance, *overall* and *child* dependency ratios which were 110 and 104 dependants per 100 persons (respectively) in 1980 dropped to 95 and 87 dependants in 1990 but increased to 96 and 91 dependants respectively, in 2000.

Table 3.7 also reveals that during the 1980 - 2000 period, the 'productive' persons in urban areas continued to bear a heavy burden of dependants compared to their rural counterparts, whose dependency has actually decreased. In 2000, for every 106 dependants per 100 persons in urban areas, there were only 81 dependants for every 100 persons in rural areas. Aged dependency has been increasing in urban areas compared to rural areas where the ratio has stagnated since 1990.

*Table 3.7: Dependency Ratio by Residence and Province, Zambia, 1980-2000*

| Residence | Dependency Ratio | 1980 | 1990 | 2000 |
|---|---|---|---|---|
| **Zambia** | | | | |
| | Overall Dependency Ratio | 110.2 | 95.1 | 96.2 |
| | Child Dependency Ratio | 104.3 | 87.2 | 90.9 |
| | Aged Dependency Ratio | 5.9 | 5.0 | 5.4 |
| Rural | Overall Dependency Ratio | 112.9 | 97.3 | 81.2 |
| | Child Dependency Ratio | 104.3 | 90.1 | 78.6 |
| | Aged Dependency Ratio | 8.6 | 7.1 | 2.6 |
| Urban | Overall Dependency Ratio | 106.3 | 84.7 | 105.7 |
| | Child Dependency Ratio | 104.3 | 82.9 | 98.6 |
| | Aged Dependency Ratio | 0.2 | 1.9 | 7.1 |
| **Province** | | | | |
| Central | Overall Dependency Ratio | 110.8 | 91.2 | 101.1 |
| | Child Dependency Ratio | 105.6 | 86.5 | 95.6 |
| | Aged Dependency Ratio | 5.2 | 4.7 | 5.5 |
| Copperbelt | Overall Dependency Ratio | 106.3 | 85.6 | 85.1 |
| | Child Dependency Ratio | 104.4 | 83.4 | 81.7 |
| | Aged Dependency Ratio | 1.8 | 2.2 | 3.4 |
| Eastern | Overall Dependency Ratio | 112.5 | 95.7 | 104.5 |
| | Child Dependency Ratio | 103.2 | 88.6 | 97.2 |
| | Aged Dependency Ratio | 9.2 | 7.1 | 7.3 |
| Luapula | Overall Dependency Ratio | 114.8 | 93.5 | 101.2 |
| | Child Dependency Ratio | 108.6 | 87.9 | 95.5 |
| | Aged Dependency Ratio | 6.2 | 5.6 | 5.7 |
| Lusaka | Overall Dependency Ratio | 102.1 | 82.4 | 79.3 |
| | Child Dependency Ratio | 99.9 | 80.4 | 76.7 |
| | Aged Dependency Ratio | 2.2 | 2.0 | 2.6 |
| Northern | Overall Dependency Ratio | 123.8 | 99.8 | 104.5 |
| | Child Dependency Ratio | 155.5 | 93.9 | 98.3 |
| | Aged Dependency Ratio | 8.3 | 6.0 | 6.2 |
| North-Western | Overall Dependency Ratio | 111.4 | 98.1 | 104.9 |
| | Child Dependency Ratio | 99.6 | 89.1 | 97.4 |
| | Aged Dependency Ratio | 11.7 | 9.0 | 7.5 |
| Southern | Overall Dependency Ratio | 115.6 | 99.6 | 97.8 |
| | Child Dependency Ratio | 109.9 | 94.9 | 88.6 |
| | Aged Dependency Ratio | 5.8 | 4.7 | 9.1 |
| Western | Overall Dependency Ratio | 99.6 | 94.0 | 105.4 |
| | Child Dependency Ratio | 88.5 | 84.4 | 100.2 |
| | Aged Dependency Ratio | 11.1 | 9.6 | 5.2 |

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

**Note**: *1969, 1980 and 1990 extracted from Analytical report, volume 10 of the 1990 Census of Population, Housing and Agriculture, CSO, 1995*

Table 3.7 further shows that between 1980 and 2000 census periods, both overall and child dependency ratios have increased for all provinces except for the Copperbelt, Lusaka and Southern Provinces, where only aged dependency has been on the increase. These three provinces are considered more urban than the rest and confirm the increased influx of urban dwellers into rural areas probably as a result of continued declining economic conditions in the country, which have rendered urban areas less attractive.

### 3.4.3. Household Headship

Household headship by various characteristics is presented in Table 3.8. The table shows that on a national level, one in five households are female headed. With a predominant rural population in Zambia, it is not surprising that there are almost twice as many heads of household in rural (1,241,534) than urban areas (643,207). 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).

**Table 3.8: Household Headship by Sex, Marital Status, Residence and Province, Zambia, 2000**

| Province/Residence/ Marital Status | Number of Household Heads | Total Percentage of Household heads | Sex of Head | |
|---|---|---|---|---|
| | | | Male | Female |
| **Residence** | | | | |
| Zambia | 1,884,741 | 100.0 | 81.1 | 18.9 |
| Rural | 1,241,534 | 100.0 | 80.5 | 19.5 |
| Urban | 643,207 | 100.0 | 82.4 | 17.6 |
| **Marital Status** | | | | |
| Married | 1,412,764 | 100.0 | 95.7 | 4.3 |
| Separated | 57,484 | 100.0 | 35.2 | 64.8 |
| Divorced | 102,489 | 100.0 | 28.2 | 71.8 |
| Widowed | 200,339 | 100.0 | 19.2 | 80.8 |
| Never Married | 107,839 | 100.0 | 81.1 | 18.9 |
| Living together/Cohabiting | 3,826 | 100.0 | 46.4 | 53.6 |
| **Provinces** | | | | |
| Central | 178,820 | 100.0 | 83.1 | 16.9 |
| Copperbelt | 289,647 | 100.0 | 82.9 | 17.1 |
| Eastern | 254,603 | 100.0 | 80.0 | 20.0 |
| Luapula | 164,739 | 100.0 | 79.9 | 20.1 |
| Lusaka | 272,094 | 100.0 | 83.7 | 16.3 |
| Northern | 258,887 | 100.0 | 80.3 | 19.7 |
| North-Western | 111,133 | 100.0 | 80.9 | 19.1 |
| Southern | 204,398 | 100.0 | 82.7 | 17.3 |
| Western | 150,420 | 100.0 | 73.4 | 26.6 |

Table 3.8 further shows that headship of household for a female is more likely to occur when they are separated (65 percent), divorced (72 percent) and widowed (81 percent). However, most of the male heads of households are either married (96 percent) or have never married (81 percent). Amongst the provinces, Western province exhibits the highest proportion of female heads of households with 27 percent, while Lusaka has the least (16 percent).

### 3.4.4. Marital Status

Categorisation of marital status in the 2000 Census included married, separated, divorced, widowed, never married and co-habiting which was not available in the 1990 Census. Table 3.9 presents the percentage distribution of marital status of population above 12 years by sex, residence and province. The majority of both males and females in the young age group 15-19 years have never married. However, a quarter of the females (24.9 percent) compared to 3 percent of males are married.

**Table 3.9: Population 12 years and above by Age, Marital Status, Sex and Residence, Zambia, 2000**

| Age Group | Married | | Separated | | Divorced | | Widowed | | Never Married | | Co-habiting | | Total Percent | Total Number of Cases | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | | Male | Female |
| 12-14 | 1.1 | 1.4 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 98.5 | 98.0 | 0.2 | 0.3 | 100 | 331,369 | 333,584 |
| 15- 19 | 3.4 | 24.9 | 0.2 | 1.3 | 0.1 | 1.0 | 0.2 | 0.3 | 95.8 | 71.7 | 0.3 | 0.8 | 100 | 512,590 | 555,648 |
| 20- 24 | 30.4 | 62.2 | 1.0 | 3.4 | 0.9 | 3.7 | 0.3 | 1.3 | 66.7 | 28.6 | 0.6 | 0.8 | 100 | 415,582 | 492,112 |
| 25- 29 | 63.6 | 73.4 | 1.8 | 4.0 | 1.9 | 5.7 | 0.8 | 3.3 | 31.4 | 13.0 | 0.5 | 0.5 | 100 | 360,914 | 378,653 |
| 30- 34 | 80.2 | 75.9 | 2.0 | 4.2 | 2.7 | 7.0 | 1.4 | 6.4 | 13.4 | 6.1 | 0.3 | 0.4 | 100 | 281,599 | 274,744 |
| 35- 39 | 85.3 | 76.0 | 2.0 | 4.0 | 2.8 | 7.4 | 2.0 | 8.8 | 7.7 | 3.6 | 0.2 | 0.3 | 100 | 210,610 | 217,971 |
| 40- 44 | 88.0 | 72.7 | 1.9 | 3.7 | 3.1 | 8.2 | 2.7 | 13.0 | 4.1 | 2.2 | 0.1 | 0.2 | 100 | 160,452 | 164,045 |
| 45- 49 | 88.3 | 69.2 | 1.9 | 3.7 | 3.1 | 8.7 | 3.2 | 16.5 | 3.4 | 1.8 | 0.1 | 0.2 | 100 | 121,831 | 122,343 |
| 50- 54 | 87.3 | 62.1 | 2.1 | 3.5 | 3.6 | 9.0 | 4.7 | 24.0 | 2.3 | 1.2 | 0.1 | 0.1 | 100 | 97,195 | 105,337 |
| 55+ | 81.6 | 41.1 | 2.2 | 3.0 | 4.3 | 8.8 | 10.0 | 45.8 | 1.9 | 1.2 | 0.1 | 0.1 | 100 | 270,022 | 259,224 |
| Total Pop. | 1,336,310 | 1,477,398 | 34,540 | 81,722 | 48,533 | 137,606 | 53,388 | 243,394 | 1,280,582 | 949,673 | 8,811 | 13,868 | 100 | 2,762,164 | 2,903,661 |

It is a common practice for males to marry later than females with the latter presenting higher rates of those separated, divorced and widowed than their male counterparts. Though not collected in 2000 census, the reported average age at first marriage in 1990 was 26 years for males and 21 years for females (CSO, 1995). Another common practice is that of males re-marrying more frequently than females, thus the low proportions of males in the separated, divorced and widowed categories. For instance, Table 3.9 shows that from age 30, widows outnumber widowers, by a range of 5 to 35 percentage points. In the oldest age group (55 and above), one in ten men compared to about one in two women are widowed.

### 3.4.5. Ethnicity and Citizenship

In the 2000 Census, ethnicity implied indigenous Zambian tribes while it referred to the continent of origin for non-Zambians. For purposes of this chapter, the former explanation is applicable, with the latter presented in Chapter Four. 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).

#### 3.4.5.1. Ethnicity

As might be expected, Table 3.10 shows that the Zambian population mostly constitutes of persons of African origin, 99.5 percent. The American, Asian, European and 'Other' ethnic groups make up the remaining 0.5 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 98.7 percent.

Rural and urban comparison shows a higher presence of non-African ethnic groups in urban areas, where Asians are significantly dominant (0.34 percent). Table 3.10 further shows that there are more males than females of non-African origin.

*Table 3.10: Ethnic Composition of Population by Sex and Residence, Zambia, 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** |
| | | | | | | | |
| Rural | Male | 2,921,867 | 227 | 343 | 1,036 | 8,078 | 2,931,551 |
| | Female | 3,049,023 | 160 | 270 | 825 | 8,527 | 3,058,805 |
| | Both Sexes | 5,970,890 | 387 | 613 | 1,861 | 16,605 | 5,990,356 |
| **Percent of total population** | | **99.68** | **0.01** | **0.01** | **0.03** | **0.28** | **100** |
| | | | | | | | |
| Urban | Male | 1,650,159 | 464 | 5,929 | 2,426 | 3,761 | 1,662,739 |
| | Female | 1,673,105 | 347 | 5,306 | 1,895 | 3,677 | 1,684,330 |
| | Both Sexes | 3,323,264 | 811 | 11,235 | 4,321 | 7,438 | 3,347,069 |
| **Percent of total population** | | **99.29** | **0.02** | **0.34** | **0.13** | **0.22** | **100** |

### 3.4.5.2. Citizenship

Like past censuses, the 2000 Population census included questions on citizenship. Citizenship defined as 'the legal nationality of each person', is not necessarily related to place of birth. Rather, citizenship is normally acquired through various means such as being born within a state (or elsewhere with parents of the given nationality), through naturalization or marriage (Pressant, 1985). 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 Zambia's population. There has been a significant drop in the number of foreigners between 1990 and 2000. This presents a difference of about 60,000 persons or one percentage point. The majority of foreign citizens in Zambia hail from Angola, Congo DR (former Zaire) and Zimbabwe. With Angola topping the list in both 1990 and 2000 censuses, its proportion of citizens has more than doubled from 14.6 percent in 1990 to 40.1 percent in 2000. Second to Angola is Congo DR, which moved from its fifth position of 5.6 percent in 1990 (ranked in descending order) to 20 percent in 2000. At national level, the number and proportion of foreign citizens from Zimbabwe have since declined from 14 percent in 1990 to 9.8 percent in 2000. The influx of foreigners from Angola and Congo DR could be attributed to refugees fleeing from civil strife in these countries. It is however expected that the numbers from Angola will now and in future decline given the Zambian repatriation policy being implemented following restored peace in that country. However, it was difficult to enumerate refugees living in the villages because they mostly did not like to be identified as such.

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

| Country/Region | Percent 1990 | Percent 2000 | Population 2000 |
|---|---|---|---|
| Zimbabwe | 14.2 | 9.79 | 9,059 |
| Malawi | 8.9 | 7.50 | 6,935 |
| Botswana | 0.1 | 0.12 | 109 |
| Mozambique | 12.8 | 0.59 | 545 |
| Angola | 14.6 | 40.10 | 37,097 |
| Namibia | 1.6 | 0.11 | 98 |
| South Africa | | 1.66 | 1,539 |
| Other Southern Africa | 1.4 | 0.10 | 97 |
| Ghana | | 0.18 | 162 |
| Mali | | 0.21 | 192 |
| Nigeria | | 0.15 | 138 |
| Senegal | | 0.18 | 162 |
| Other Western Africa | 1.4 | 0.65 | 603 |
| Kenya | | 0.27 | 250 |
| Tanzania | 4.1 | | - |
| Uganda | | 0.40 | 368 |
| Other Eastern Africa | 1.1 | 3.83 | 3,541 |
| Cameroun | | 0.02 | 17 |
| Congo | | 1.94 | 1,798 |
| Congo DR | 5.6 | 19.66 | 18,184 |
| Other Central Africa | 0 | 0.33 | 308 |
| Egypt | | 0.09 | 83 |
| Other Northern Africa | 0.6 | 0.28 | 258 |
| Other African Countries | | 0.04 | 35 |
| United Kingdom | | 1.12 | 1,039 |
| France | | 0.06 | 56 |
| Germany | | 0.17 | 155 |
| Other Europe | 3.8 | 1.43 | 1,325 |
| United States Of America | | 0.50 | 466 |
| Canada | | 0.17 | 157 |
| Other Americas | 0.5 | 0.21 | 190 |
| Australia | | 0.09 | 82 |
| China | | 0.18 | 166 |
| India | | 3.75 | 3,471 |
| Japan | | 0.14 | 132 |
| Other Asia & Oceania | 3.9 | 0.83 | 772 |
| Not Stated | 25.3 | 3.15 | 2,915 |
| **% Total** | **100.0** | **100.0** | |
| **Total foreign Citizens** | **152,448** | **92,504** | **92,504** |
| **% Foreign Population** | **2.1** | **1.0** | |

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

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

## 3.5. Economic Characteristics

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

**Table 3.12: Summary of Economic Characteristics by Sex and Residence, Zambia, 2000**

| Characteristics | Zambia | | | Rural | | | Urban | | |
|---|---|---|---|---|---|---|---|---|---|
| | Both Sexes | Male | Female | Both Sexes | Male | Female | Both Sexes | Male | Female |
| **Total Population (12 yrs and above)** | 5,679,998 | 2,769,964 | 2,910,034 | 3,541,919 | 1,705,121 | 1,836,798 | 2,138,079 | 1,064,843 | 1,073,236 |
| Current Labour Force Size | 3,165,151 | 1,858,482 | 1,306,669 | 2,151,776 | 1,184,467 | 967,369 | 1,013,375 | 674,075 | 339,300 |
| Current Participation Rate | 55.7 | 67.1 | 44.9 | 60.8 | 69.5 | 52.7 | 47.4 | 63.3 | 31.6 |
| Age Dependency Ratio | 96.2 | 99.6 | 93.0 | 81.2 | 112.9 | 99.3 | 105.7 | 79.9 | 82.5 |
| Economic Dependency Ratio | 79 | 49 | 123 | 65 | 44 | 90 | 111 | 58 | 216 |

Table 3.12 shows that of Zambia's total population, 5.7 million comprises those over 12 years, commonly referred to as the *productive or working age population*. Majority of these are found in rural as opposed to urban areas (3.5 million versus 2.1 million) and are mostly women. Despite dominance of females in the working age population, majority of these are considered economically inactive mostly due to their classification as full-time homemakers. In all, fifty six percent of the total working age population in Zambia are economically active or make up the labour force: 67.1 percent for males and 44.9 percent for females.

In general, Table 3.12 also shows that age and economic dependency ratios are higher for persons in urban than rural areas. The high economic dependency ratio suggests that persons in 'productive' age groups in urban areas experience more stress from people in the non-productive age groups than their rural counterparts. The economic dependency ratio is higher among females (123) than males (49).

## 3.6. Summary

Zambia's de jure or simply 'true' or resident population recorded in the 2000 census is 9,885, 591. However, the de facto population adopted for analytical purposes in this chapter and the rest of the report is 9,337,425 of which 50.8 percent are females. The population has continued to grow at a declining average annual growth rate of 3.1 percent between 1969-1980 to 2.7 percent between 1980-1990 and 2.4 percent during the last inter-censal period of 1990-2000. The proportion living in rural areas in the past decades has continued to increase, whilst the proportion of the urban population has declined from 38 percent in 1990 to 35 percent in 2000.

An Analysis of the age-sex distribution indicates that overtime Zambia has maintained a Young population. The proportion of those below the age of 15 years has not changed between 1990 and 2000, i.e., 45 percent. 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 in 2000 for adults in the 20s and 30s who may be more susceptible to terminal illnesses (e.g. AIDS) as well as complications associated with a declining economy.

Headship of households is still dominated by males, with only one in five being female household heads. In absolute terms, there are almost twice as many heads of household in rural than urban areas. The overall dependency ratio as of 2000 Census was 96 per 100 persons in the economically active group (15-64 years). It has been noted that dependency on productive persons increased during the 1990s. Summary economic characteristics of the population give a national labour force size of 3,165,151, most of which is found in rural areas.

In addition, participation rates for males are higher than females, 67 and 45 percent, respectively. Finally, the chapter indicates that in comparison to rural counterparts, the economic burden on productive persons in urban areas is higher. Amongst the provinces, this is more so in all provinces with the exception of the Copperbelt,

Lusaka and Southern, whose overall dependency ratios range between 80 and 97 persons per 100 of those in productive ages (15-64 years).

# CHAPTER 4

# LANGUAGE AND ETHNICITY

## 4.0. Introduction

Zambia is a country endowed with many languages. Officially, there are 72 ethnic groups in Zambia with each of them speaking a dialect of the seven language cluster groups. Though language is not invariably synonymous with tribe it is a fair assumption that the number of dialects of language clusters in the country is equal to the number of tribes.

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

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

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

## . Predominant Language of Communication

### .1. National Distribution

Table 4.1 shows the 22 most spoken languages in the country. The predominant spoken language of communication in Zambia in the year 2000 was the Bemba cluster with 30.1 percent of the population using it for this purpose. The reasons for this position of Bemba in Zambia as the major trans-tribe language of communication are not difficult to find. They are: the early settlement by Bemba speakers in large numbers on the Copperbelt as mine labourers thus beginning urbanization; Bemba being the most widely written language according to the records of "Northern Rhodesian Publications Bureau Annual Reports" in the 1950's and in the early 1960's; the large numbers of the speakers of Bemba covering Luapula and Northern provinces which until 1965 were one province and covering the northern districts of Central Province which together with the entire Luapula and most portions of Northern provinces were under the tutelage of Bemba Kings such as Kopa in Bisa

areas, Kankomba in Lala and Swaka areas to mention a few; the teaching of Bemba in one education curriculum of the Copperbelt, Central, Luapula and Northern provinces.

*Table 4.1: Predominant Language of Communication by Residence, Zambia, 2000*

| **Predominant Language of Communication** | Zambia | Rural | Urban |
|---|---|---|---|
| Bemba | 30.1 | 19.7 | 48.5 |
| Lala | 2.0 | 2.8 | 0.5 |
| Bisa | 1.0 | 1.5 | 0.2 |
| Lamba | 1.9 | 2.6 | 0.5 |
| Tonga | 10.6 | 14.1 | 4.3 |
| Lenje | 1.4 | 2.0 | 0.3 |
| Ila | 0.8 | 1.1 | 0.2 |
| Luvale | 1.7 | 2.2 | 0.8 |
| Lunda (N/West) | 2.2 | 2.9 | 0.9 |
| Kaonde | 2.0 | 2.5 | 1.2 |
| Lozi | 5.7 | 6.8 | 3.9 |
| Chewa | 4.9 | 6.7 | 1.8 |
| Nsenga | 3.4 | 4.4 | 1.7 |
| Ngoni | 1.2 | 1.3 | 1.0 |
| Nyanja | 10.7 | 4.4 | 21.8 |
| Lungu | 0.6 | 0.8 | 0.2 |
| Mambwe | 1.2 | 1.6 | 0.7 |
| Namwanga | 1.3 | 1.6 | 0.7 |
| Tumbuka | 2.5 | 3.4 | 0.9 |
| Senga | 0.6 | 0.9 | 0.2 |
| English | 1.7 | 0.3 | 4.2 |
| **Total Percent** | 100.0 | 100.0 | 100.0 |
| **Total Population** | 8,702,932 | 5,551,338 | 3,151,594 |

The next most spoken languages in the country are Nyanja (10.7 percent) and Tonga (10.6 percent). Lozi is spoken by 5.7 percent of the population while 4.9 percent speak Chewa as their predominant language. In descending order of magnitude therefore, the first seven widely spoken languages in Zambia are, Bemba (30.1 percent), Nyanja (10.7 percent), Tonga (10.6 percent), Lozi (5.7 percent), Chewa (4.9 percent), Nsenga (3.4 percent) and Tumbuka (2.5 percent). These seven languages are spoken by 63.9 percent of the population as compared with 67.7 percent of the population speaking the same languages in 1990. The last three North-Western Province languages are collectively spoken by 5.4 percent of the population (1.7 percent (Luvale), 2.0 percent (Lunda-N/Western) and 1.8 percent (Kaonde). From the foregoing language statistics, it is absolutely necessary to exercise great caution in applying outdated assumptions behind the idea of seven official languages. These assumptions may not be in tandem with facts on the ground. The concern here is for accuracy in the vital national undertaking of census activities.

*Table 4.2: Predominant Language of Communication by Province, Zambia, 2000*

| Predominant Language of Communication | Total | Central | Copperbelt | Eastern | Luapula | Lusaka | Northern | North-Western | Southern | Western |
|---|---|---|---|---|---|---|---|---|---|---|
| Bemba | 30.1 | 25.4 | 69.4 | 1.1 | 56.6 | 14.5 | 55.3 | 2.0 | 2.8 | 0.4 |
| Lala | 2.0 | 17.1 | 0.8 | 0.0 | 0.1 | 0.2 | 0.4 | 0.0 | 0.0 | 0.0 |
| Bisa B Bisa | 1.0 | 0.2 | 0.2 | 0.9 | 0.1 | 0.1 | 6.6 | 0.0 | 0.0 | 0.0 |
| Lamba | 1.9 | 2.5 | 8.9 | 0.0 | 0.0 | 0.2 | 0.0 | 2.0 | 0.0 | 0.0 |
| Tonga | 10.6 | 12.0 | 1.1 | 0.1 | 0.0 | 4.6 | 0.1 | 0.3 | 69.8 | 0.3 |
| Lenje | 1.4 | 11.7 | 0.2 | 0.0 | 0.0 | 0.8 | 0.0 | 0.0 | 0.2 | 0.0 |
| Ila | 0.8 | 2.9 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 3.8 | 0.0 |
| Luvale | 1.7 | 0.2 | 0.7 | 0.0 | 0.0 | 0.2 | 0.0 | 19.3 | 0.6 | 4.4 |
| Lunda (N/Western) | 2.2 | 0.1 | 0.9 | 0.0 | 0.0 | 0.2 | 0.0 | 33.9 | 0.1 | 0.4 |
| Kaonde | 2.0 | 1.0 | 1.3 | 0.0 | 0.0 | 0.4 | 0.0 | 27.1 | 0.1 | 0.4 |
| Lozi | 5.7 | 1.0 | 0.7 | 0.1 | 0.0 | 1.8 | 0.1 | 0.7 | 5.0 | 60.0 |
| Chewa | 4.9 | 0.6 | 0.4 | 33.8 | 0.0 | 2.4 | 0.0 | 0.1 | 0.4 | 0.1 |
| Nsenga | 3.4 | 0.9 | 0.6 | 20.6 | 0.0 | 3.1 | 0.0 | 0.1 | 0.4 | 0.0 |
| Ngoni | 1.2 | 0.5 | 0.3 | 6.6 | 0.0 | 1.0 | 0.0 | 0.0 | 0.5 | 0.0 |
| Nyanja | 10.7 | 8.6 | 1.1 | 9.6 | 0.1 | 52.8 | 0.2 | 0.3 | 5.5 | 0.4 |
| Lungu | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.6 | 0.0 | 0.0 | 0.0 |
| Mambwe | 1.2 | 0.3 | 0.3 | 0.0 | 0.0 | 0.6 | 8.5 | 0.0 | 0.1 | 0.0 |
| Namwanga | 1.3 | 0.4 | 0.5 | 0.1 | 0.0 | 0.4 | 8.8 | 0.0 | 0.1 | 0.0 |
| Tumbuka | 2.5 | 0.3 | 0.7 | 14.8 | 0.0 | 0.9 | 2.4 | 0.0 | 0.2 | 0.0 |
| Senga | 0.6 | 0.1 | 0.1 | 4.6 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| English | 1.7 | 0.9 | 2.5 | 0.2 | 0.1 | 6.6 | 0.2 | 0.3 | 0.8 | 0.2 |
| Others | 12.6 | 13.4 | 9.4 | 7.2 | 42.7 | 8.8 | 12.7 | 13.9 | 9.5 | 33.4 |
| **Total Percent** | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| **Total Population** | 8,702,932 | 890,370 | 1,439,298 | 1,134,948 | 674,049 | 1,259,258 | 1,088,565 | 500,939 | 1,051,663 | 663,842 |

### *4.1.2. Provincial Distribution*

The predominant language of communication in Copperbelt, Luapula and Northern provinces is Bemba with more than 50 percent of the population speaking it. It is worth noting here that historically, the indigenous languages in these provinces belong to the larger Bemba language group. In Central province a little more than a quarter of the population use Bemba as their predominant language of communication. After Bemba, Lamba is the second most significant language spoken by 8.4 percent of the population on the Copperbelt province. This is followed by English (2.5 percent). Lala, Lenje and Tonga are spoken by between 10 and 20 percent of the population in Central province besides Bemba. In the Eastern province, over 33 percent of the people use Chewa as their predominant language of communication while the same proportion of the population of North-Western Province speak Lunda (North-Western) for the same purpose. More than 90 percent of the people of Luapula Province speak Bemba or a language in the Bemba speaking group as the predominant language of communication. Each of the other languages are spoken by less than one percent of the population.

Unlike other provinces, Lusaka Province has the most diverse range of languages spoken within its confines because they are not all indigenous to the province. This is manifested by the fact that more than half of the population in the province speaks Nyanja (a lingua franca chiefly based on Chewa and Nsenga) as the predominant language with 15.5 percent speaking Bemba. Tonga is spoken by over 4.6 percent of the population in the province. In Southern Province, 69.8 percent of the population speak Tonga. In Western province 60 percent of the population speak Lozi while over 5.6 percent speak Luvale, Lunda (North-Western) and Kaonde.

**Predominant Language Groups**

re than 38 percent of all languages spoken in Zambia are in the Bemba language group. In addition, 31.7 percent of the rural and 50.5 percent of the urban population speak a language in this group. The next most widely spoken languages are in the Nyanja group (20.6 percent), Tonga group (13.9 percent) and North-Western (7.7 percent). More than three quarters of the urban population speaks a language in the Bemba or Nyanja language groups while in the rural areas of the country these two language groups account for about half of the languages spoken. The Bemba and Nyanja language groups are more principally prevalent in urban than rural areas. The Tonga language group is at least three times more dominant in rural than in urban areas (18.9 percent versus 5.2 percent). With the exception of English, languages belonging to the other language groups of North-Western, Barotse, Mambwe and Tumbuka are more predominantly spoken in rural than in urban areas of Zambia.

### . Language Groups and Gender

e chapter on language and ethnicity also covers the issue of gender. The following are analysed in detail in the rest of the chapter: the first is that of the relationship between predominant language groups gender and residence; the second one deals with the second language, which also covers the matter of residence; lastly the area of gender is discussed vis-à-vis ethnicity.

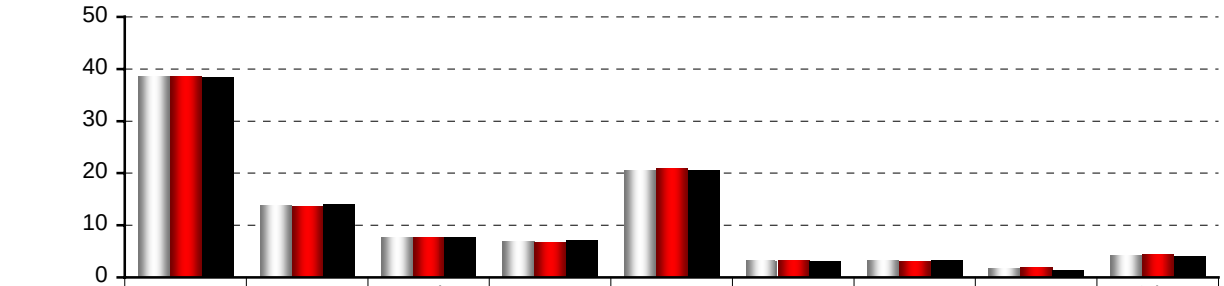
| Predominant Language of communication | Zambia | | | Rural | | | Urban | | |
|---|---|---|---|---|---|---|---|---|---|
| | Both Sexes | Male | Female | Both Sexes | Male | Female | Both Sexes | Male | Female |
| Bemba | 38.5 | 38.6 | 38.4 | 31.7 | 31.9 | 31.5 | 50.5 | 50.3 | 50.8 |
| Tonga | 13.9 | 13.7 | 14.1 | 18.9 | 18.7 | 19.0 | 5.2 | 5.0 | 5.4 |
| North-Western | 7.7 | 7.6 | 7.7 | 10.1 | 10.1 | 10.2 | 3.3 | 3.3 | 3.3 |
| Barotse | 6.9 | 6.7 | 7.1 | 8.6 | 8.3 | 8.8 | 4.0 | 3.9 | 4.0 |
| Nyanja | 20.6 | 20.8 | 20.5 | 17.4 | 17.5 | 17.3 | 26.4 | 26.5 | 26.3 |
| Mambwe | 3.2 | 3.2 | 3.2 | 4.1 | 4.1 | 4.1 | 1.6 | 1.6 | 1.6 |
| Tumbuka | 3.2 | 3.1 | 3.3 | 4.4 | 4.3 | 4.4 | 1.1 | 1.1 | 1.1 |
| English | 1.7 | 1.9 | 1.4 | 0.3 | 0.3 | 0.2 | 4.2 | 4.6 | 3.7 |
| Other Languages | 4.3 | 4.4 | 4.2 | 4.6 | 4.7 | 4.6 | 3.7 | 3.7 | 3.7 |
| **Total Percent** | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| **Total Population** | 8,702,932 | 4,277,534 | 4,425,398 | 5,551,338 | 2712762 | 2,838,576 | 3,151,594 | 1,564,772 | 1,684,330 |

**Table 4.3: Predominant Language Groups by Sex and Residence, Zambia, 2000**

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

urban areas, Bemba, Nyanja and English are spoken by more men than women. Figure 4.1 shows that there are more females who speak the languages in the Tonga, North-Western, Tumbuka and Barotse groups while the converse is true for the remainder of the language groups save for Mambwe for which the male-female distribution is equal.

**Figure 4.1: Predominant Language Group by Sex, Zambia,2000**




| | Bemba | Tonga | North-Western | Barotse | Nyanja | Mambwe | Tumbuka | English | Other Languages |
|---|---|---|---|---|---|---|---|---|---|
| Both Sexes | 38.5 | 13.9 | 7.7 | 6.9 | 20.6 | 3.2 | 3.2 | 1.7 | 4.3 |
| Male | 38.6 | 13.7 | 7.6 | 6.7 | 20.8 | 3.2 | 3.1 | 1.9 | 4.4 |
| Female | 38.5 | 14.1 | 7.7 | 7.1 | 20.5 | 3.2 | 3.3 | 1.4 | 4.2 |

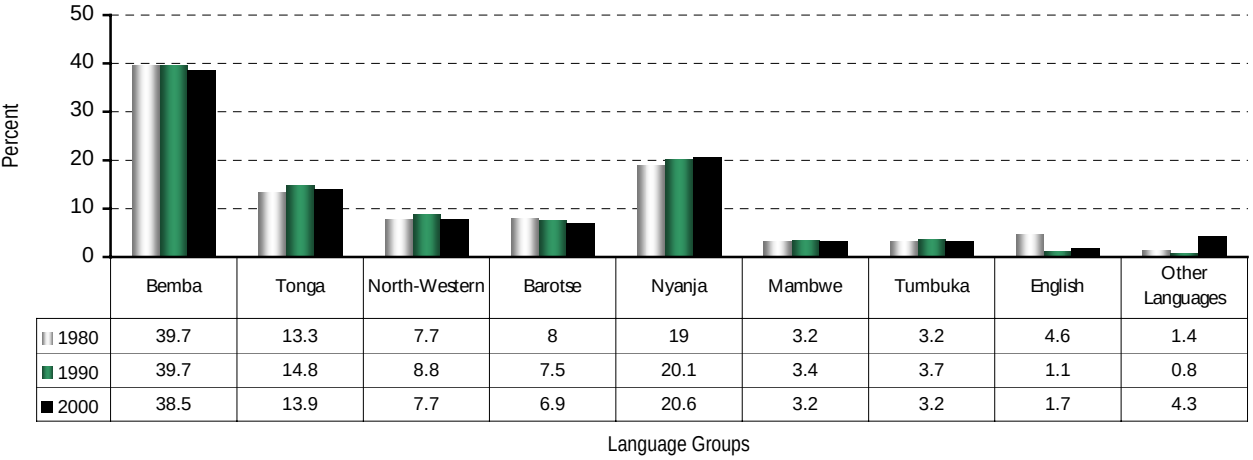
Language Group

## . Trends in language groups' distribution, 1980 - 2000

ure 4.2 shows trends in the percentage share of each language group for the period 1980 to 2000. The Bemba group has remained the most dominant throughout the last 30 years followed by Nyanja and Tonga groups.

all the language groups, only English recorded an increase in usage as the predominant language with an increase of 0.6 percentage points between 1990 and 2000. The Bemba group though has shown the largest drop in usage with a magnitude of 1.2 percentage points followed by the North-Western group (1.1 percent).

**Figure 4.2: Predominant Language Groups by Census Year, Zambia, 1980 - 2000**




| | Bemba | Tonga | North-Western | Barotse | Nyanja | Mambwe | Tumbuka | English | Other Languages |
|---|---|---|---|---|---|---|---|---|---|
| 1980 | 39.7 | 13.3 | 7.7 | 8 | 19 | 3.2 | 3.2 | 4.6 | 1.4 |
| 1990 | 39.7 | 14.8 | 8.8 | 7.5 | 20.1 | 3.4 | 3.7 | 1.1 | 0.8 |
| 2000 | 38.5 | 13.9 | 7.7 | 6.9 | 20.6 | 3.2 | 3.2 | 1.7 | 4.3 |

Language Groups

**rce**: CSO, 1980, 1990 and 2000 Censuses of Population and Housing

The distribution of the languages spoken over the last three decades indicates a continued predominance of languages spoken belonging to the Barotse language group. During the same period, a constant rise has been recorded in the Nyanja group. The other language groups show irregular trends in the periods between the three censuses of population.

**Table 4.4: Predominant Language Groups by Census year, Zambia, 1980 – 2000**

| Language group | Percentage of Total Population | | |
|---|---|---|---|
| | 1980 | 1990 | 2000 |
| Bemba | 39.7 | 39.7 | 38.5 |
| Tonga | 13.3 | 14.8 | 13.9 |
| North-Western | 7.7 | 8.8 | 7.7 |
| Barotse | 8.0 | 7.5 | 6.9 |
| Nyanja | 19.0 | 20.1 | 20.6 |
| Mambwe | 3.2 | 3.4 | 3.2 |
| Tumbuka | 3.2 | 3.7 | 3.2 |
| English | 4.6 | 1.1 | 1.7 |
| Other | 1.4 | 0.8 | 4.3 |
| **Total Percent** | **100.0** | **100.0** | **100.0** |
| **Total Population** | **5,226,895** | **7,001,936** | **8,702,932** |

**rce**: CSO, 1980, 1990 and 2000 Censuses of Population and Housing

## 4.5. Second Language of Communication

For each respondent, the census collected information on not only the predominant language of communication but also their second language of communication. From Table 4.5 it is noted that only 34 percent or 3.19 million people in the country spoke a second language. Thus, a fairly large proportion of the people speak more than one language.

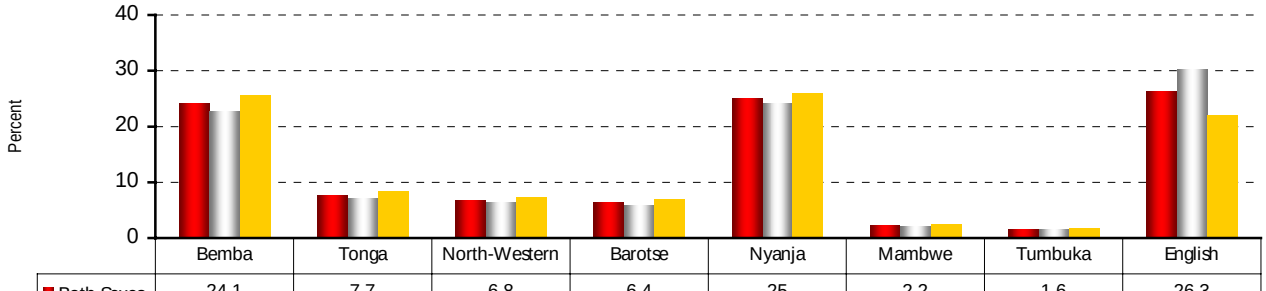
The distribution of the second language of communication is similar to that of predominant language of communication with the exception of the Nyanja speaking group. Most notable, however is the fact that the most spoken second language of communication is English with a percentage share of 26.3 percent. Other widely spoken second languages are Bemba (20.2 percent) and Nyanja (19.5 percent). This implies that two-thirds of the population in Zambia speaks English, Bemba and Nyanja as a second language.

*Table 4.5: Percent Distribution of Population by Second Language and Residence, Zambia, 2000*

| Predominant Language of | Zambia | Rural | Urban |
|---|---|---|---|
| Bemba | 20.2 | 23.1 | 17.3 |
| Lala | 1.0 | 1.2 | 0.9 |
| Bisa | 0.4 | 0.5 | 0.2 |
| Lamba | 1.4 | 1.9 | 0.9 |
| Tonga | 4.4 | 4.8 | 3.9 |
| Lenje | 1.5 | 2.3 | 0.7 |
| Ila | 0.8 | 1.3 | 0.3 |
| Luvale | 1.9 | 3.0 | 0.8 |
| Lunda (North-Western) | 1.3 | 1.6 | 0.9 |
| Kaonde | 1.8 | 2.0 | 1.6 |
| Lozi | 5.2 | 7.9 | 2.4 |
| Chewa | 2.3 | 3.1 | 1.5 |
| Nsenga | 1.6 | 1.5 | 1.7 |
| Ngoni | 1.2 | 1.3 | 1.0 |
| Nyanja | 19.5 | 18.3 | 20.8 |
| Lungu | 0.4 | 0.5 | 0.2 |
| Mambwe | 0.9 | 0.9 | 0.9 |
| Namwanga | 0.8 | 0.7 | 1.0 |
| Tumbuka | 1.3 | 1.2 | 1.4 |
| Senga | 0.2 | 0.2 | 0.2 |
| English | 26.3 | 14.0 | 38.7 |
| Other | 5.6 | 8.7 | 2.5 |
| Total Percent | 100.0 | 100.0 | 100.0 |
| Total Population | 3,385,745 | 1,699,863 | 1,685,882 |

The distribution of the second language groups and residence is further disaggregated by sex and is presented in Table 4.6. Disaggregated by sex and residence, the language groups present a picture much the same as that for predominant languages with the exception of the proportion of the population using English, which is significantly higher. 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.

**Figure 4.3: Percent Distribution of Second Language of Communication by Sex, Zambia, 2000**




| | Bemba | Tonga | North-Western | Barotse | Nyanja | Mambwe | Tumbuka | English |
|---|---|---|---|---|---|---|---|---|
| Both Sexes | 24.1 | 7.7 | 6.8 | 6.4 | 25 | 2.2 | 1.6 | 26.3 |
| Male | 22.7 | 7.2 | 6.3 | 5.9 | 24.1 | 2 | 1.5 | 30.3 |
| Female | 25.5 | 8.3 | 7.3 | 7 | 25.9 | 2.4 | 1.7 | 22 |

Language group

The other language groups showing dominance in magnitude are Nyanja (25 percent) and Bemba (24.1 percent). These two language groups account for half of the population, speaking them as second languages (56.8 percent). It must be noted that English is spoken as the second language of communication by nearly two-fifths (38.7 percent) of the population in urban areas compared with less than one-fifth (14 percent) in rural areas. There is a significant difference between women in urban and rural areas who speak English. In rural areas, Bemba remains the most widely spoken language at 28 percent. Nyanja is the next most widely spoken second language at 24.5 percent closely followed by Lozi at 9.9 percent.

**Table 4.6: Percent Distribution of Population by Second Language, Sex and Residence, Zambia, 2000**

| Language Group | Zambia | | | Rural | | | Urban | | |
|---|---|---|---|---|---|---|---|---|---|
| | Both Sexes | Male | Female | Both Sexes | Male | Female | Both Sexes | Male | Female |
| Bemba | 24.1 | 22.7 | 25.5 | 28.0 | 26.5 | 29.8 | 20.0 | 18.8 | 21.4 |
| Tonga | 7.7 | 7.2 | 8.3 | 9.9 | 9.4 | 10.6 | 5.5 | 5.0 | 6.0 |
| North-Western | 6.8 | 6.3 | 7.3 | 9.7 | 8.9 | 10.5 | 3.9 | 3.6 | 4.2 |
| Barotse | 6.4 | 5.9 | 7.0 | 10.1 | 9.2 | 11.2 | 2.6 | 2.5 | 2.8 |
| Nyanja | 25.0 | 24.1 | 25.9 | 24.5 | 24.2 | 24.9 | 25.4 | 24.1 | 26.8 |
| Mambwe | 2.2 | 2.0 | 2.4 | 2.2 | 1.9 | 2.4 | 2.2 | 2.0 | 2.4 |
| Tumbuka | 1.6 | 1.5 | 1.7 | 1.5 | 1.4 | 1.6 | 1.6 | 1.6 | 1.7 |
| English | 26.3 | 30.3 | 22.0 | 14.0 | 18.5 | 9.0 | 38.7 | 42.5 | 34.7 |
| Total Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total Population | 3,385,745 | 1,753,113 | 1,632,632 | 1,699,863 | 888,398 | 811,465 | 1,685,882 | 864,715 | 821,167 |

In urban areas, the most widely spoken languages of communication are Bemba and Nyanja as opposed to Tonga, Lozi and Chewa which are mostly spoken in rural areas.

## 4.6. Ethnicity

he 2000 Census of Population and Housing, seven broad ethnic groups were identified. These are: Bemba, Tonga, North-Western, Barotse, Nyanja or Eastern, Mambwe and the Tumbuka groups. The groups are such that all the tribes in Zambia belong to one of these broad tribal groupings. The Bemba group includes all tribes of Luapula province, some tribes in Central, Copperbelt and Northern provinces. The Tonga group consists of all the tribes of Southern province including Lenje in Central Province, Soli and Gowa tribes in Lusaka Province. The North-Western and

Barotse groups consist of all the tribes of the North-Western and Western Provinces respectively. The Nyanja group (getting its name from the lingua franca from the languages spoken by the people in its group) consists of some tribes of the Eastern Province including the Chikunda of Lusaka Province. Lungu, Mambwe, Namwanga, Wina and Tambo make up the Mambwe group while the Tumbuka group is made up of Tumbuka, Senga and the Yombe on the northern part of Eastern Province bordering the Northern Province.

The 25 most predominant ethnic groups in Zambia are shown in Table 4.7. In descending order, the 10 largest ethnic groups are Bemba (18.1 percent), Tonga (12.7 percent), Chewa (7.2 percent), Lozi (5.6 percent), Nsenga (5.5 percent), Tumbuka (4.2 percent), Ngoni (4.0 percent), Lala (3.3 percent) Kaonde (3.0 percent) and Lunda (North-Western) at 2.5 percent of the total population.

These groups, representing only five of the nation's nine provinces, account for two-thirds of the ethnic groups in the country. It is worth noting that four of the 10 largest ethnic groups are from the Eastern Province. These four ethnic groups are Chewa, Nsenga, Tumbuka and Ngoni accounting for 20.9 percent of all ethnic groups countrywide.

Bemba, Kaonde and Mambwe ethnic groups are more prevalent in urban areas. Similarly, Chewa, Nsenga, Tumbuka and Ngoni are more prevalent in urban than in rural areas of the country. There are twice as many Bemba people in urban (27 percent) than in rural areas (13.1 percent). Tribes such as the Tonga (Southern), Mbunda (Western), Lungu (Northen), Nsenga (Eastern) and the Chishinga (Luapula) are double their numbers in the rural than urban areas.

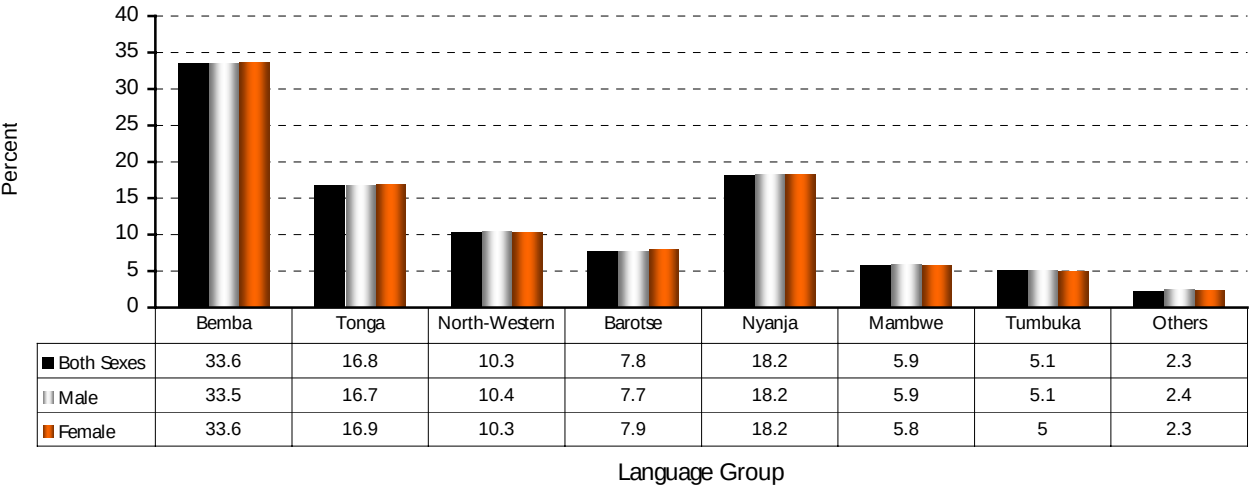
*Table 4.7: Ethnic Groups by Residence, Zambia, 2000*

| Ethnic group | Zambia | Rural | Urban |
|---|---|---|---|
| Bemba | 18.1 | 13.1 | 27.0 |
| Lunda (Luapula) | 1.4 | 1.5 | 1.3 |
| Lala | 3.3 | 3.3 | 3.2 |
| Bisa | 1.8 | 2.0 | 1.4 |
| Ushi | 2.4 | 2.4 | 2.2 |
| Chishinga | 0.9 | 1.1 | 0.4 |
| Ng'umbo | 0.9 | 1.0 | 0.7 |
| Lamba | 2.2 | 2.3 | 1.9 |
| Tonga | 12.7 | 15.5 | 7.7 |
| Lenje | 1.7 | 1.8 | 1.3 |
| Ila | 0.8 | 1.0 | 0.6 |
| Luvale | 2.1 | 2.2 | 1.9 |
| Lunda (N/West) | 2.8 | 3.1 | 2.1 |
| Mbunda | 1.4 | 1.9 | 0.6 |
| Kaonde | 3.0 | 2.9 | 3.1 |
| Lozi | 5.6 | 5.7 | 5.6 |
| Chewa | 7.2 | 7.7 | 6.3 |
| Nsenga | 5.5 | 4.8 | 6.7 |
| Ngoni | 4.0 | 3.1 | 5.4 |
| Lungu | 0.9 | 1.0 | 0.5 |
| Mambwe | 2.3 | 2.0 | 2.9 |
| Namwanga | 2.7 | 2.2 | 3.5 |
| Tumbuka | 4.2 | 3.8 | 5.0 |
| Senga | 0.8 | 1.0 | 0.5 |
| African | 1.9 | 2.1 | 1.6 |
| **Other Zambian** | **9.7** | **11.5** | **6.6** |
| **Total Percent** | **100.0** | **100.0** | **100.0** |
| **Total Population** | **9,337,425** | **5,990,356** | **3,347,069** |

## Broad Ethnic Groups

e distribution of broad ethnic groups by residence and sex is shown in Table 4.8. Tribes in the Bemba ethnic group account for more than two-thirds of all tribes in Zambia. Additionally, 30.5 percent and 39.1percent of the people belonging to the Bemba tribal group reside in rural and urban areas, respectively. The distribution of the people of the Bemba group by sex shows very insignificant variations.

**Figure 4.4: Broad Ethnic Groups by Sex, Zambia, 2000**




| | Bemba | Tonga | North-Western | Barotse | Nyanja | Mambwe | Tumbuka | Others |
|---|---|---|---|---|---|---|---|---|
| Both Sexes | 33.6 | 16.8 | 10.3 | 7.8 | 18.2 | 5.9 | 5.1 | 2.3 |
| Male | 33.5 | 16.7 | 10.4 | 7.7 | 18.2 | 5.9 | 5.1 | 2.4 |
| Female | 33.6 | 16.9 | 10.3 | 7.9 | 18.2 | 5.8 | 5 | 2.3 |

ure 4.4 further reveals that in order of size, the Nyanja or Eastern Group is the next largest of the tribal groups (18.2 percent) of the whole population, followed by Tonga (16.8 percent). The others are North-Western group (10.3), Barotse (7.8) and Mambwe (5.9 percent) and Tumbuka (5.1 percent). Other categories, which include non-Zambian tribes/ethnic groups accounted for 2.3 percent.

**Table 4.8: Broad Ethnic Groups by Sex and Residence, Zambia, 2000**

| Ethnicity | Zambia | | | Rural | | | Urban | | |
|---|---|---|---|---|---|---|---|---|---|
| | Both Sexes | Male | Female | Both Sexes | Male | Female | Both Sexes | Male | Female |
| Bemba | 33.6 | 33.5 | 33.6 | 30.5 | 30.5 | 30.5 | 39.1 | 38.8 | 39.3 |
| Tonga | 16.8 | 16.7 | 16.9 | 20.0 | 20.0 | 20.1 | 11.0 | 10.8 | 11.1 |
| North-Western | 10.3 | 10.4 | 10.3 | 11.3 | 11.4 | 11.3 | 8.6 | 8.7 | 8.4 |
| Barotse Language | 7.8 | 7.7 | 7.9 | 8.8 | 8.6 | 8.9 | 6.1 | 6.2 | 6.1 |
| Eastern | 18.2 | 18.2 | 18.2 | 16.9 | 16.9 | 16.9 | 20.5 | 20.4 | 20.5 |
| Mambwe | 5.9 | 5.9 | 5.8 | 5.3 | 5.4 | 5.3 | 7.0 | 7.0 | 6.9 |
| Tumbuka | 5.1 | 5.1 | 5.0 | 4.8 | 4.8 | 4.8 | 5.6 | 5.7 | 5.4 |
| Others | 2.3 | 2.4 | 2.3 | 2.4 | 2.4 | 2.3 | 2.3 | 2.4 | 2.2 |
| Total Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total Population | 9,337,425 | 4,594,290 | 4,743,135 | 5,990,356 | 2,931,551 | 3,058,805 | 3,347,069 | 1,662,739 | 1,684,330 |

national level, more than half the population belongs to the Bemba tribal group. The second largest is the Eastern Province group and accounts for 18.2 percent. The Tonga ethnic group is the third with a population of 16.8 percent.

CHAPTER 5

# EDUCATION CHARACTERISTICS

## 5.0. Introduction

Education plays a fundamental role in the overall development of a nation. 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 education plays 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, education and health sectors, 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.

## 5.1. Census undertaking and Education

There are four main sources of education statistics in Zambia:

- Annual school censuses (sometimes supplemented by school surveys) conducted by the Ministry of Education
- 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 even at the smallest administrative unit in the country such as districts and constituencies. 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 Education attainment, and
- Fields of Study

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

## 5.2. 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, by 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
- 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 formal education system in Zambia. According to the 1996 education policy, the government of Zambia intends to abolish grade 7 examinations by 2015 in order to achieve universal education up to grade 9.

In addition to primary and secondary education, the last two decades saw the mushrooming of community schools and institutions offering early childhood education such as pre-schools, mainly in urban areas. Some of the pre-schools have since started enrolling 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 the less privileged or vulnerable children including school dropouts 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). However, efforts are under way towards the establishment of a sector–wide Education Management Information System (EMIS), which will comprehensively cover all institutions of learning including privately run ones.

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

### School Attendance

School attendance in population censuses is 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 to 9 correspond to pupils aged 14 to 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 or late entries in 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 above 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, while those who cannot read or write in any language are considered illiterate.

## 5.3. Literacy

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. Conversely, Youth Literacy Rate is in this case defined as the proportion of the population aged 15 to 24 years who are literate.

### 5.3.1. Literacy Levels for the Population Aged 5 years and Above

It is a well-known fact that a literate nation is more likely to develop than an illiterate one since the former is much more knowledgeable about realities of life. Table 5.1 shows that in the year 2000 the literacy rate for the population aged 5 years and above still remained at the 1990 level of 55.3 percent. Results further show that the

problem of illiteracy has still remained more common among females than males since 1990. The table reveals that one in every two females (49.8 percent) was illiterate compared to almost two in every five males (39 percent).

The problem of illiteracy was more pervasive among the rural population, particularly among the females than the urban population. In rural areas, the proportion of the population that could read and write in any language stagnated at about 45 percent between 1990 and 2000. More than half of the rural population aged 5 years and above were illiterate compared to only a third of the urban population. Whilst there was no improvement in literacy levels in rural areas, the urban population registered a slight increase from 71 percent in 1990 to 73 percent in 2000.
Regional analysis of literacy rates reveals that Eastern province still has the lowest literacy rate followed by North-western province since 1990. The highest rates have been observed in Copperbelt and Lusaka provinces. Only four provinces namely, Copperbelt, Lusaka, North-western and Western provinces have revealed slight increases in the proportions of the literate population between 1990 and 2000. With the exception of Luapula province, which has shown a slight decline, the remaining provinces have more or less stagnated in terms of literacy levels since 1990 (Refer to Table 5.1).

### 5.3.2. Literacy Levels for the Population Aged 15 - 24 years (Youth Literacy)

Youth literacy rate declined from 74.9 percent in 1990 to 70.1 percent in 2000. The drop in the proportion of the population aged 15 to 24 years was more drastic among females than the males. In 2000, only one quarter of the male as opposed to one third of the female population aged 15 to 24 years were illiterate. Therefore the problem of youth illiteracy is more likely to be high among female than male population.

The problem of youth illiteracy is still more of a rural than urban phenomenon. For instance in 2000, 41 percent of the youths in rural areas compared to 14 percent in urban areas were illiterate. In rural areas, about 47 percent of the female youths were illiterate compared to only 16 percent of female youths in urban areas. The youth literacy rate in rural areas declined from 64.7 percent to 59.5 percent between 1990 and 2000. The rate also dropped in urban areas by almost 3-percentage points, from 88.7 percent in 1990 to 86.3 percent in 2000.

During the 1990 and 2000 intercensal period, Eastern province still had the lowest youth literacy rate followed by North-western, Luapula and Northern province. The provinces with the highest proportion of literate youths were Copperbelt and Lusaka provinces. In 1990, youth literacy rates ranged from 54.2 percent in Eastern province to 88.2 percent in Copperbelt province. In 2000, the rate varied from 49.9 percent in Eastern province to 84.6 in Copperbelt province. However, all the 9 provinces registered declines in youth literacy rate between 1990 and 2000 (Refer to table 5.1).

5.3.3. Literacy Levels for the Population Aged 15 years and above (Adult literacy rates)

Adult literacy rate slightly increased from 66.0 percent to 67.2 percent between 1990 and 2000. The proportion of female adults who were literate increased by 2 percentage points, from 56.3 to 58.3 percent while the male rate marginally increased by less than 1 percentage point, from 76.2 to 76.6 percent. In rural and urban areas, the rates increased by about 3 and 1 percentage points over the 1990 levels of 54.4 and 83.6 percent respectively. By 2000, more than half of the female adults in rural areas were illiterate compared to about 1 fifth of the females in urban areas.

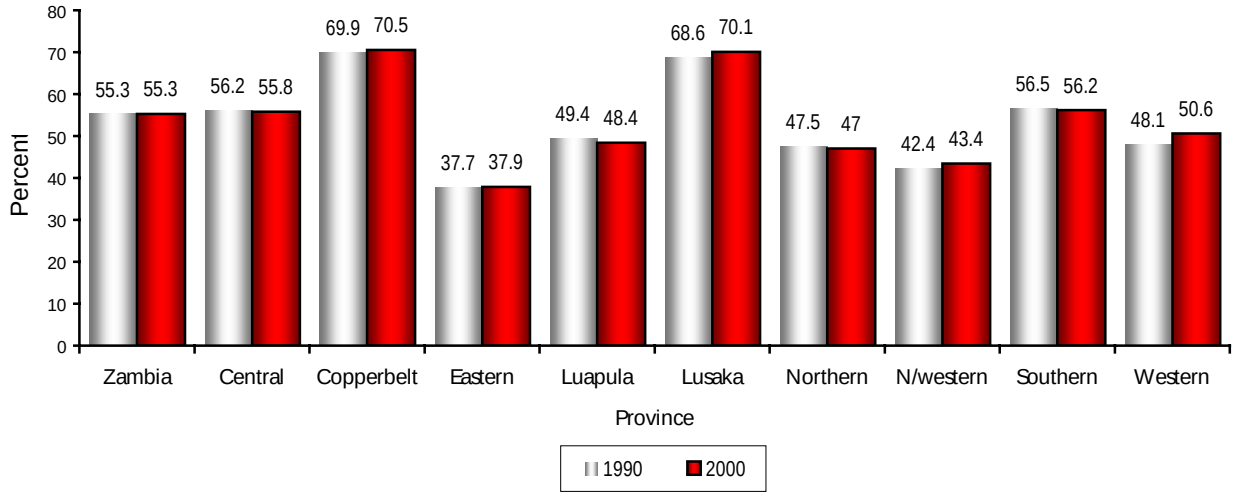
Copperbelt and Lusaka provinces had the highest rates of adult literacy of more than 80 percent, while Eastern followed by North-western provinces had the lowest rates of 47.6 and 53.4 percent by 2000, respectively. All provinces recorded slight increases in adult literacy rates except for Luapula province (Refer to Table5.1).

**Table 5.1: Literacy Rate by Age Group, Sex, Residence and Province, 1990 and 2000**

| *Residence* | 1990 | | | | 2000 | | | |
|---|---|---|---|---|---|---|---|---|
| | **5+** | **15 – 24** | **15+** | **Population** | **5+** | **15 – 24** | **15+** | **Population** |
| *Zambia - Total* | | | | | | | | |
| Both Sexes | 55.3 | 74.9 | 66.0 | 6,181,285 | 55.3 | 70.1 | 67.2 | 7,680,705 |
| Male | 61.6 | 78.9 | 76.2 | 3,020,157 | 61.1 | 75.4 | 76.6 | 3,768,501 |
| Female | 49.2 | 71.2 | 56.3 | 3,161,128 | 49.8 | 65.5 | 58.3 | 3,912,204 |
| *Rural* | | | | | | | | |
| Both Sexes | 44.7 | 64.7 | 54.4 | 3,735,912 | 45.0 | 59.5 | 56.7 | 4,889,359 |
| Male | 52.0 | 70.3 | 66.7 | 1,795,668 | 51.7 | 66.5 | 68.1 | 2,382,948 |
| **Female** | 38.0 | 59.6 | 43.7 | 1,940,244 | 38.5 | 53.3 | 46.4 | 2,506,411 |
| Urban | | | | | | | | |
| Both Sexes | 71.5 | 88.7 | 83.6 | 2,445,373 | 73.5 | 86.3 | 84.8 | 2,791,346 |
| Male | 75.7 | 90.7 | 89.7 | 1,224,684 | 77.2 | 89.1 | 90.3 | 1,385,553 |
| Female | 67.3 | 86.9 | 77.5 | 1,220,689 | 69.8 | 83.9 | 79.3 | 1,405,793 |
| *Province* | | | | | | | | |
| Central | 56.2 | 74.8 | 66.4 | 605,237 | 55.8 | 71.1 | 68.5 | 785,123 |
| Copperbelt | 69.9 | 88.2 | 82.1 | 1,206,682 | 70.5 | 84.6 | 82.4 | 1,287,161 |
| Eastern | 37.7 | 54.2 | 46.4 | 806,940 | 37.9 | 49.9 | 47.6 | 994,607 |
| Luapula | 49.4 | 69.5 | 61.6 | 439,397 | 48.4 | 62.3 | 61.5 | 590,464 |
| Lusaka | 68.6 | 85.5 | 80.7 | 827,425 | 70.1 | 82.0 | 81.1 | 1,125,985 |
| Northern | 47.5 | 68.0 | 59.1 | 707,424 | 47.0 | 62.3 | 60.1 | 952,185 |
| N/western | 42.4 | 64.5 | 49.2 | 324,605 | 43.4 | 59.3 | 53.4 | 436,354 |
| Southern | 56.5 | 77.1 | 68.6 | 748,779 | 56.2 | 73.4 | 70.2 | 921,109 |
| Western | 48.1 | 70.4 | 54.9 | 514,796 | 50.6 | 66.8 | 59.6 | 587,717 |

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

**Figure 5.1: Literacy Rates of the population aged 5 years and above by Province, 1990 and 2000**




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

## 5.4. 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. Overall, the proportion of the population presently attending school slightly increased from 25.8 percent in 1990 to 26.7 percent in 2000. Since 1990, there have been proportionately more males attending school than females. However, the percentage of

both males and females attending school marginally increased between 1990 and 2000 from 28.1 and 23.6 percent to 28.7 and 24.9 percent, respectively.

During the same period under review, there was an increase in the proportion of children aged 5 to 14 years presently attending school between 1990 and 2000. This population cohort almost befits the official primary school age population. Marginal declines were recorded for the secondary and tertiary school age population (15 – 29 years).

**Table 5.2: Percentage of the Population age 5 years and above Presently Attending School by Sex and Age Group, Zambia, 1990 and 2000**

| Age | 1990 | | | | 2000 | | | |
|---|---|---|---|---|---|---|---|---|
| | Both Sexes | Male | Female | Population | Both Sexes | Male | Female | Population |
| Zambia - Total | 25.8 | 28.1 | 23.6 | 6,181,285 | 26.7 | 28.7 | 24.9 | 7,680,705 |
| 5 – 9 | 28.8 | 27.9 | 29.6 | 1,119,610 | 35.7 | 34.7 | 36.7 | 1,461,082 |
| 10 – 14 | 66.4 | 66.8 | 66.0 | 1,029,829 | 71.7 | 72.0 | 70.6 | 1,205,646 |
| 15 – 19 | 47.3 | 56.3 | 38.8 | 940,741 | 46.1 | 54.9 | 37.9 | 1,069,996 |
| 20 – 24 | 13.3 | 19.4 | 8.1 | 711,462 | 10.8 | 15.1 | 7.1 | 908,672 |
| 25 – 29 | 4.0 | 5.1 | 3.0 | 533,240 | 3.8 | 4.6 | 3.1 | 741,148 |
| 30 – 44 | 2.4 | 2.9 | 1.8 | 992,521 | 2.9 | 3.5 | 2.2 | 1,313,636 |
| 45+ | 1.0 | 1.2 | 1.0 | 853,883 | 1.6 | 2.2 | 1.0 | 980,525 |

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

The 1990 and 2000 census results further reveals that almost one in every five persons in rural areas of Zambia was attending school, as opposed to one in every three in urban parts of the country. However, there was some increase in the proportion of the rural population attending school from 20.9 percent in 1990 to 22.6 percent by 2000. In urban areas, school attendance remained more or less at the 1990 levels.

**Table 5.3: Percentage of the Population age 5 years and above Presently Attending School by Residence and Age Group, 1990 and 2000**

| Age | 1990 | | | | 2000 | | | |
|---|---|---|---|---|---|---|---|---|
| | Total | Rural | Urban | Population | Total | Rural | Urban | Population |
| Zambia - Total | 25.8 | 20.9 | 33.3 | 6,181,285 | 26.7 | 22.6 | 33.9 | 7,680,705 |
| 5 – 9 | 28.8 | 21.0 | 41.1 | 1,119,610 | 35.7 | 27.1 | 52.4 | 1,461,082 |
| 10 – 14 | 66.4 | 56.0 | 82.0 | 1,029,829 | 71.7 | 64.6 | 83.5 | 1,205,646 |
| 15 – 19 | 47.3 | 39.7 | 58.1 | 940,741 | 46.1 | 39.1 | 57.2 | 1,069,996 |
| 20 – 24 | 13.3 | 11.2 | 16.1 | 711,462 | 10.8 | 7.6 | 15.2 | 908,672 |
| 25 – 29 | 4.0 | 3.6 | 4.4 | 533,240 | 3.8 | 2.8 | 5.3 | 741,148 |
| 30 – 44 | 2.4 | 2.4 | 2.4 | 992,521 | 2.9 | 2.4 | 3.6 | 1,313,636 |
| 45+ | 1.0 | 1.0 | 1.0 | 853,883 | 1.6 | 1.4 | 2.1 | 980,525 |

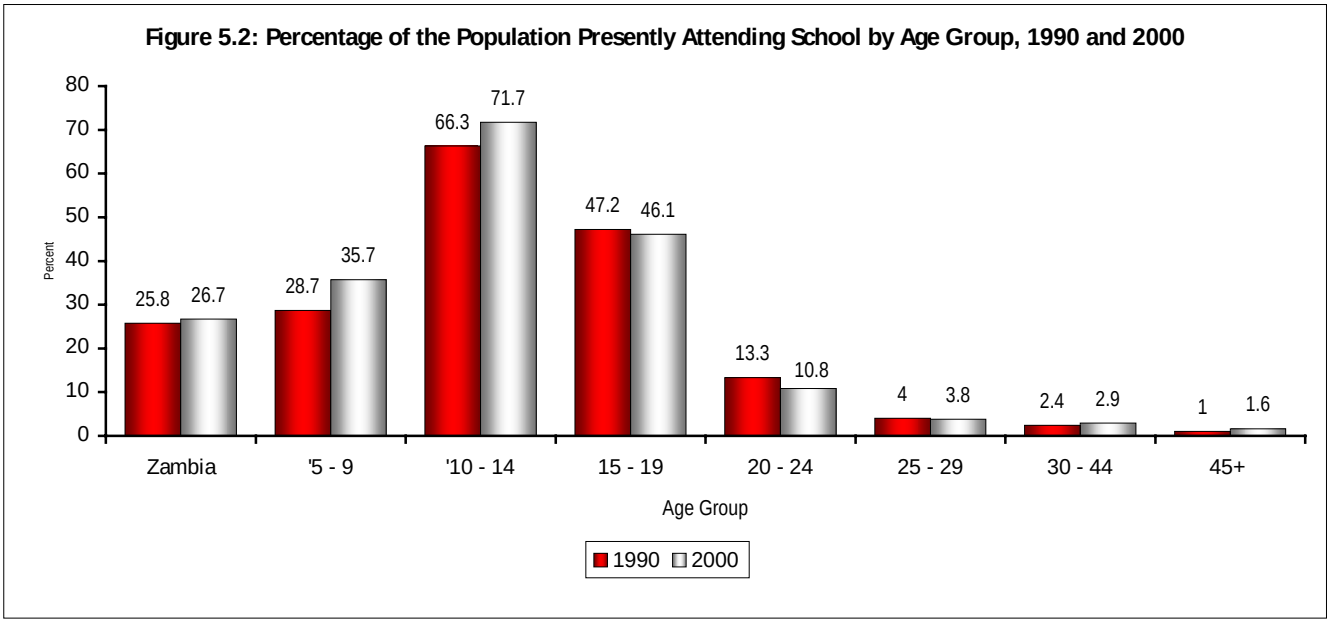
**Source**: CSO, 1990 and 2000 Census of Population and Housing

Furthermore, variations in the proportion of the population presently attending school in all the nine provinces have been observed. Almost one in every three persons aged five years and above attended school in Copperbelt and Lusaka provinces compared to one in every five in Eastern, Luapula and Western provinces. With the exception of Copperbelt province, the rest of the provinces recorded some increase in the proportion of the population attending school (Refer to table 5.4).

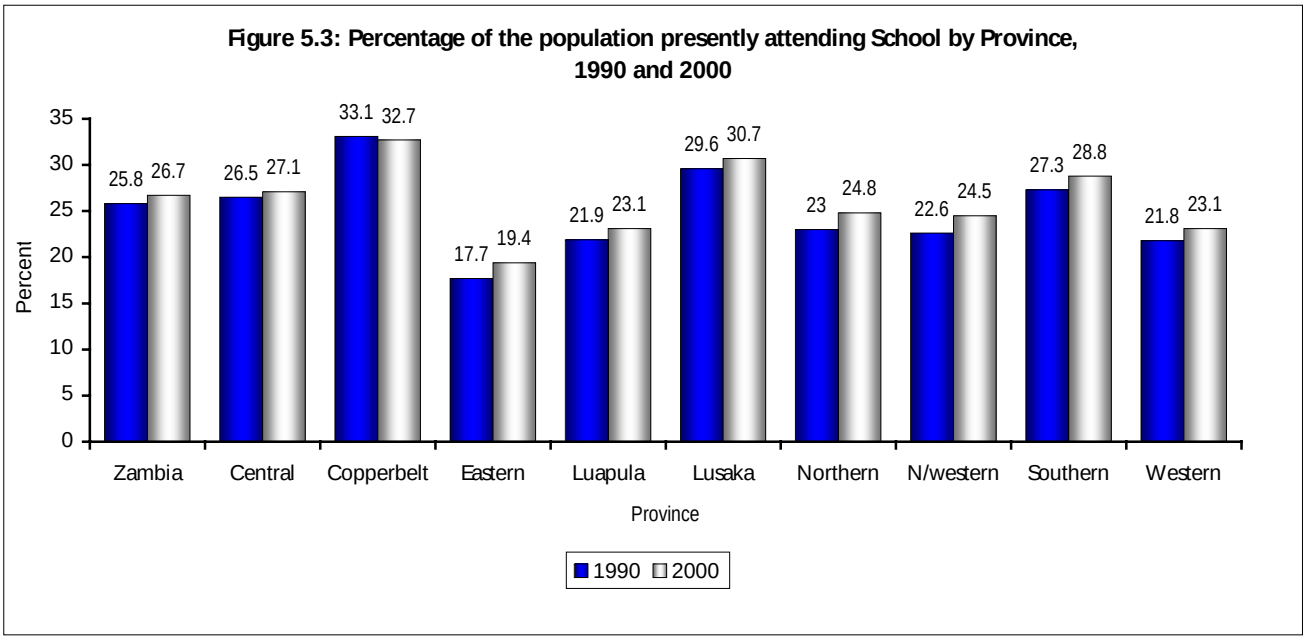
**Table 5.4: Percentage of the Population age 5 years and above Presently Attending School by Sex, Residence and Province, 1990 and 2000**

| Residence and Province | School Attendance Rates | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1990 | | | | 2000 | | | |
| | Both Sexes | Male | Female | Population | Both Boxes | Male | Female | Population |
| Zambia - Total | 25.8 | 28.1 | 23.6 | 6,181,285 | 26.7 | 28.7 | 24.9 | 7,680,705 |
| Rural | 20.9 | 23.8 | 18.2 | 3,735,912 | 22.6 | 25.2 | 20.3 | 4,856,170 |
| Urban | 33.3 | 34.3 | 32.3 | 2,445,373 | 33.7 | 34.7 | 33.1 | 2,824,535 |
| **Province** | | | | | | | | |
| Central | 26.5 | 28.2 | 24.7 | 605,237 | 27.1 | 28.7 | 25.5 | 785,123 |
| Copperbelt | 33.1 | 34.0 | 32.3 | 1,206,682 | 32.7 | 33.5 | 32.0 | 1,287,161 |
| Eastern | 17.7 | 20.7 | 15.0 | 806,940 | 19.4 | 21.9 | 17.1 | 994,607 |
| Luapula | 21.9 | 25.0 | 19.0 | 439,397 | 23.1 | 26.1 | 20.2 | 590,464 |
| Lusaka | 29.6 | 30.6 | 28.6 | 827,425 | 30.7 | 31.1 | 30.3 | 1,125,985 |
| Northern | 23.0 | 26.5 | 19.6 | 707,424 | 24.8 | 28.2 | 21.5 | 952,185 |
| North-Western | 22.6 | 25.9 | 19.6 | 324,605 | 24.5 | 27.3 | 21.7 | 436,354 |
| Southern | 27.3 | 29.4 | 25.2 | 748,779 | 28.8 | 30.7 | 27.0 | 921,109 |
| Western | 21.8 | 24.7 | 19.3 | 514,796 | 23.1 | 25.5 | 21.0 | 587,717 |

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




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




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

## 5.5. School Attendance by the Primary School Age Population (7 – 13 Years)

Analysis of school attendance becomes more meaningful when the data relates to the official school age population. In Zambia the official primary school age range is 7 to 13 years. This population cohort constitutes the target population for offering primary education. However, some of the members of this cohort may not be attending exact primary grades (Grades 1 to 7). Table 5.5 shows that school attendance by the population aged 7 to 13 years had increased from 55.8 percent in 1990 to 62.2 percent in 2000. Both the male and female attendance rates reflected in 2000 increased by more than 5 percentage points over the 1990 levels, which were at 55.4 and 56.2 percent, respectively. For this age cohort, females were more likely to be attending school than their male counterpart (Refer to figure 4).

Table 5.5 further shows that in 1990, 44.8 percent of the children aged 7 to 13 years were attending school in rural areas, compared to 72.8 percent in urban areas. The school attendance rates increased to 53.7 and 77.9 percent for rural and urban areas by 2000, respectively. School attendance among rural girls rose by 9 percentage points from about 45 percent in 1990 to 54 percent by 2000. In urban areas, female school attendance rate increased by 5 percent from 73 percent to 78 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.

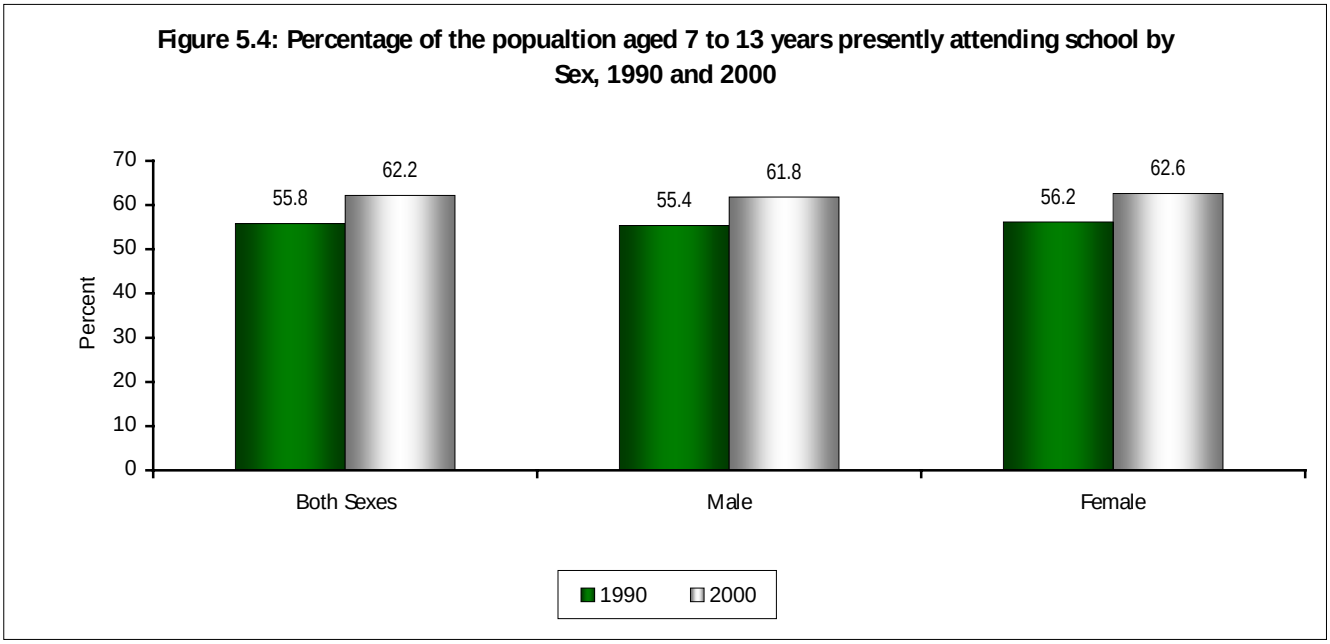
Table 5.5 further reveals that in 1990, Eastern Province (36.1 percent) followed by Northern (46.9 percent) and North-Western Provinces (47.7 percent) recorded the lowest school attendance rates. Copperbelt and Lusaka had the highest rates of 72.3 and 67.5 percent, respectively. By the year 2000, Eastern Province (44.7 percent) followed by North-Western Province (52.3 percent) still registered the least in terms of school attendance of the primary school age children. Conversely, Copperbelt (75.4 percent) and Lusaka Provinces (75.1 percent) recorded the highest rates in 2000. There were increases in school attendance rates in all the nine provinces, with the predominantly rural ones recording significant improvements. In Zambia, all the provinces except Lusaka and the Copperbelt Provinces are predominantly rural. Southern, Northern, Lusaka and Western Provinces revealed significant increases in school attendance between 1990 and 2000. No major sex differences were observed during the 1990-2000 intercensal period, although girls were more likely to be attending school than boys with the exception of Luapula and Northern Provinces. (Refer to Table 5.5 and Figure 5.5).

**Table 5.5: Percentage of the Population aged 7 to 13 years Presently Attending School by Sex and Province, 1990 and 2000**

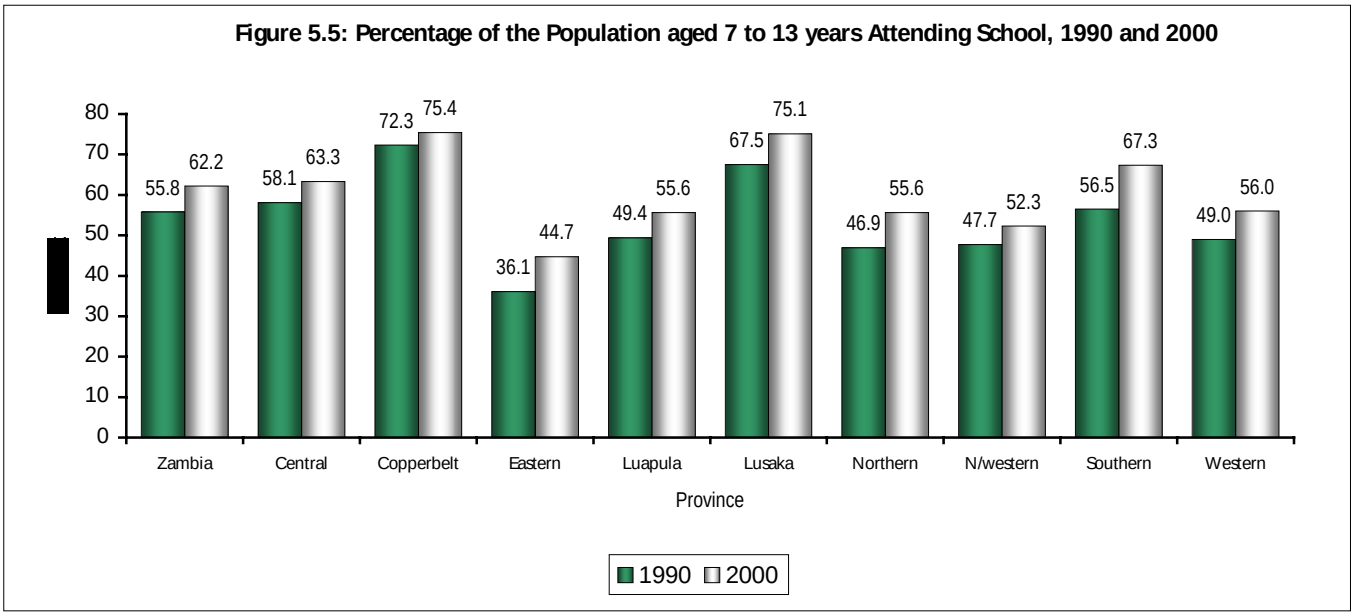
| Residence and Province | School Attendance Rates | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1990 | | | | 2000 | | | |
| | Both Sexes | Male | Female | Population | Both Sexes | Male | Female | Population |
| Zambia - Total | 55.8 | 55.4 | 56.2 | 1,486,062 | 62.2 | 61.8 | 62.6 | 1,826,590 |
| Rural | 44.8 | 44.5 | 45.0 | 900,311 | 53.8 | 53.6 | 54.0 | 1,186,964 |
| Urban | 72.8 | 72.8 | 72.8 | 585,751 | 78.0 | 77.9 | 78.2 | 639,626 |
| **Province** | | | | | | | | |
| Central | 58.1 | 57.4 | 58.8 | 146,430 | 63.3 | 62.6 | 63.9 | 194,108 |
| Copperbelt | 72.3 | 72.0 | 72.5 | 292,138 | 75.4 | 74.8 | 75.9 | 298,762 |
| Eastern | 36.1 | 35.8 | 36.4 | 193,337 | 44.7 | 44.1 | 45.3 | 239,682 |
| Luapula | 49.4 | 50.0 | 48.8 | 104,867 | 55.6 | 56.3 | 54.8 | 141,123 |
| Lusaka | 67.5 | 67.8 | 67.3 | 190,154 | 75.1 | 74.9 | 75.3 | 244,665 |
| Northern | 46.9 | 47.4 | 46.3 | 174,679 | 55.6 | 56.8 | 54.5 | 234,802 |
| North-Western | 47.7 | 47.3 | 48.1 | 76,741 | 52.3 | 52.2 | 52.5 | 103,855 |
| Southern | 56.5 | 55.7 | 57.3 | 189,069 | 67.3 | 66.2 | 68.3 | 233,378 |
| Western | 49.0 | 47.8 | 50.1 | 118,647 | 56.0 | 54.9 | 57.2 | 136,215 |

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

**Figure 5.4: Percentage of the popualtion aged 7 to 13 years presently attending school by Sex, 1990 and 2000**




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




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

## 5.6. 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 exact primary grades to the school age population for that level. Due to school enrolment and attendance of under and over aged children in primary schools, the ratio is sometimes more than 100 percent. Table 5.6 shows a decline in gross primary school attendance ratio from 82.3 percent in 1990 to 79.1 percent in 2000. The decline was more pronounced among boys, from 85.7 to 81.4 percent, than among girls from 78.9 to 76.8 percent, respectively. Since 1990, children in urban parts of Zambia are more likely to be attending primary school than their rural counterpart. In rural areas, the gross rate barely increased from 70.6 to 71.8 percent between 1990 and 2000. The rate for boys in rural areas stagnated at the 1990 level of about 75 percent, whereas the rate for girls slightly increased from 66.4 percent to 68.7 percent during the same intercensal period. In urban areas, the ratio declined from 100.3 to 92.7 percent between 1990 and 2000. The drop in gross school attendance rate was more pronounced among boys (9.3 percent) than girls (5.8 percent). Since 1990 there has been greater participation in primary education among boys than girls. In 1990 the ratio for boys was much higher than that of girls, 85.7 percent compared to 78.9 percent. This scenario persisted into 2000 with males recording the highest gross ratio of 81.4 compared to 76.8 percent for females. The Gender Parity Index (GPI) based on gross rates increased from 0.92 in 1990 to 0.94 in 2000, an indication of diminishing inequality in terms of participation of girls and boys in primary education.

By the year 2000, the Gross Primary Attendance ratios for urban population remained above those obtaining in rural areas. The GPI for 2000 results show gross inequality in rural (0.92) than in urban areas, 0.97. Therefore, gender equality in terms of education participation is more attainable in urban than in rural parts of Zambia.

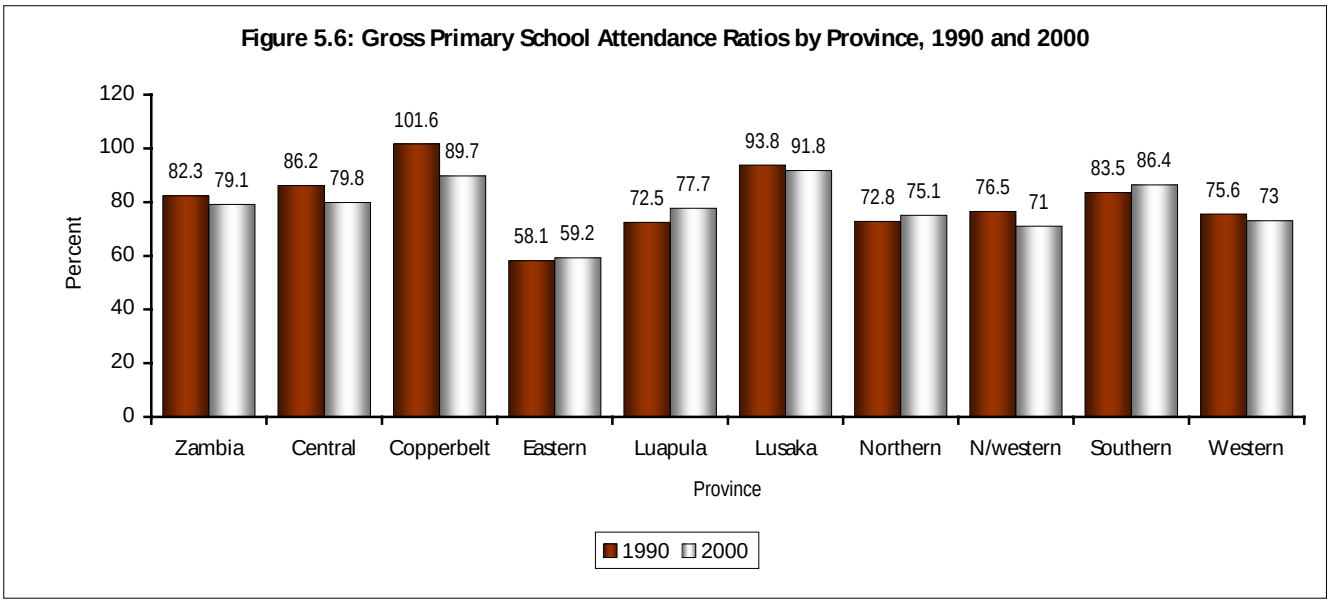
Provincial analysis of gross primary school attendance rates reveals that Eastern province had the lowest ratios of 58.1 and 59.2 percent in 1990 and 2000 respectively. On the other hand, Copperbelt and Lusaka provinces had the highest ratios of 101.6 and 93.8 percent in 1990 and, 89.8 and 91.8 percent in 2000, respectively. Southern and Central provinces equally recorded high rates, which were above the 1990 and 2000 national average of 82.3 and 79.1 percent. During the 1990-2000 intercensal period, only Eastern, Luapula, Northern and Southern provinces recorded some increases in gross primary attendance rates while the rest of the provinces, particularly the urbanized ones, revealed declines in the rates. Since 1990, there have been major sex-differences in gross attendance rates between boys and girls especially in remote provinces such as Northern and Eastern provinces. By the year 2000, the gross primary school attendance rates still remained higher for boys than girls.

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

| Residence and Province | Gross Primary School Attendance Rates | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1990 | | | | 2000 | | | |
| | Both Sexes | Male | Female | Population Size | Both Sexes | Male | Female | Population Size |
| *Zambia - Total* | 82.3 | 85.7 | 78.9 | 1,486,062 | 79.1 | 81.4 | 76.8 | 1,826,590 |
| Rural | 70.6 | 74.6 | 66.4 | 900,311 | 71.8 | 74.9 | 68.7 | 1,186,964 |
| Urban | 100.3 | 103.5 | 97.3 | 585,751 | 92.7 | 94.2 | 91.5 | 639,626 |
| *Province* | | | | | | | | |
| Central | 86.2 | 89.8 | 82.7 | 146,430 | 79.8 | 81.8 | 77.9 | 194,108 |
| Copperbelt | 101.6 | 104.7 | 98.6 | 292,138 | 89.7 | 90.9 | 88.5 | 298,762 |
| Eastern | 58.1 | 62.1 | 53.9 | 193,337 | 59.2 | 61.7 | 56.7 | 239,682 |
| Luapula | 72.5 | 77.0 | 68.1 | 104,867 | 73.8 | 77.7 | 69.8 | 141,123 |
| Lusaka | 93.8 | 97.4 | 90.4 | 190,154 | 91.8 | 93.3 | 90.3 | 244,665 |
| Northern | 72.8 | 77.9 | 67.5 | 174,679 | 75.1 | 80.1 | 70.0 | 234,802 |
| North-Western | 76.5 | 80.9 | 72.2 | 76,741 | 71.0 | 73.9 | 68.0 | 103,855 |
| Southern | 83.5 | 86.4 | 80.6 | 189,069 | 86.4 | 88.6 | 84.2 | 233,378 |
| Western | 75.6 | 77.8 | 73.4 | 118,647 | 73.0 | 74.4 | 71.7 | 136,215 |

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

**Figure 5.6: Gross Primary School Attendance Ratios by Province, 1990 and 2000**




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

## 5.7. 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, from 55 percent in 1990 to 60 percent in 2000. The proportions of boys and girls attending primary education increased from 54.6 and 55.3 percent to 59.8 and 60.2 percent respectively. Since 1990, no major sex differences were revealed in terms of net school attendance rates between boys and girls although the percentages of girls were slightly higher than those of boys. In 2000, there was near equality in primary education participation by both boys and girls of the official age. During the 1990-2000 intercensal period, the percentage of eligible primary school age children not in school declined from 45 to 40 percent.

Since 1990, net primary school attendance rates have been higher in urban than in rural areas, clearly indicating a higher likelihood of more urban children to be in school then their rural counterpart. In 1990, more than half of

the rural children aged 7 to 13 years were not attending primary education, compared to nearly one third of their urban counterpart. By 2000, the proportion of children attending school in rural areas increased by about 8 percentage points, from 44.3 to 52.6 percent. These results imply that at least 5 out of every 10 children aged 7 to 13 years in rural areas were attending primary education in 2000 as opposed to almost 4 in every 10 children in 1990. In urban areas, net school attendance rate barely increased by about 3 percentage points, from 71.3 percent in 1990 to 73.9 percent in 2000. Results of the 2000 census show that nearly a quarter of urban children were out of primary school compared to almost half of the rural children. No major sex differences were noticed in both the rural and urban areas since 1990, an indication of near gender parity in net school attendance at primary level.

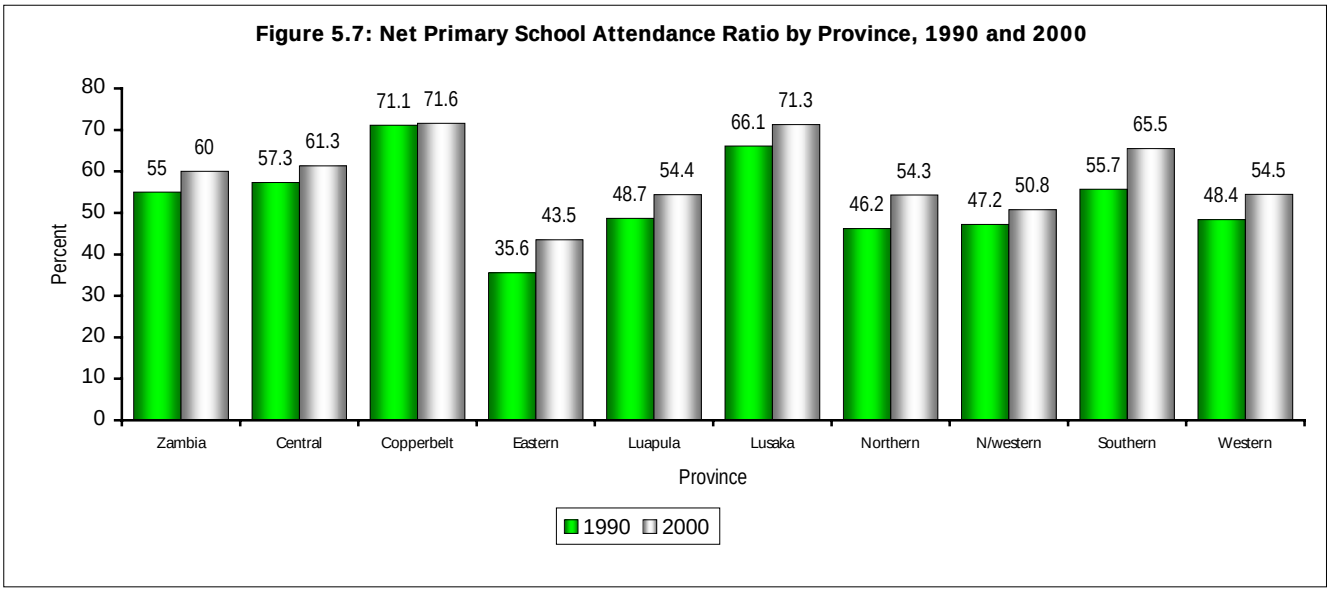
The urban-rural differences are mainly as a result of existing disparities in resource allocation and availability of accessible amenities such as schools, health facilities, recreational facilities and pre-schools. The Living Conditions Monitoring Surveys have shown that long distance to schools inhibits school attendance particularly for younger children who may not safely walk alone to school (CSO, LCMS Reports, 1996 and 1998).

Regional analysis of net primary school attendance rates reveals huge differences in primary school education participation rates by the eligible children aged 7 to 13 years. In 1990, school attendance rates for the primary school age children ranged from 71.1 and 66.1 percent in Copperbelt and Lusaka provinces to as low as 35.6 and 46.2 percent in Eastern and Northern provinces. By the year 2000, all provinces had recorded some increases in net school attendance rates at primary level. However, there were still provincial disparities in the proportions of the eligible children attending school. Besides having the lowest attendance rates, education participation by the primary school age children in Eastern, followed by North-Western, Northern, Luapula and Western provinces remained below the national rate of 60 percent. For instance, in Eastern province more than 50 percent of the eligible children were not attending school. Alternatively, Copperbelt and Lusaka provinces had the highest rates of 71.6 and 71.3 percent respectively. With the exception of Luapula and Northern provinces, girls were more likely to be attending school than boys, though the sex differences were insignificant.

**Table 5.7: Net Primary School Attendance Rates by Sex, Residence and Province, 1990 and 2000**

| Residence and Province | Net Primary School Attendance Rates | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1990 | | | | 2000 | | | |
| | Both Sexes | Male | Female | Population Size | Both Sexes | Male | Female | Population Size |
| Zambia - Total | 55.0 | 54.6 | 55.3 | 1,486,062 | 60.0 | 59.8 | 60.2 | 1,826,590 |
| Rural | 44.3 | 44.1 | 44.6 | 900,311 | 52.6 | 52.5 | 52.8 | 1,186,964 |
| Urban | 71.3 | 71.4 | 71.1 | 585,751 | 73.9 | 74.0 | 73.7 | 639,626 |
| *Province* | | | | | | | | |
| Central | 57.3 | 56.6 | 57.9 | 146,430 | 61.3 | 60.8 | 61.7 | 194,108 |
| Copperbelt | 71.1 | 70.9 | 71.2 | 292,138 | 71.6 | 71.4 | 71.7 | 298,762 |
| Eastern | 35.6 | 35.3 | 35.9 | 193,337 | 43.5 | 43.0 | 44.0 | 239,682 |
| Luapula | 48.7 | 49.4 | 48.1 | 104,867 | 54.4 | 55.1 | 53.6 | 141,123 |
| Lusaka | 66.1 | 66.4 | 65.7 | 190,154 | 71.3 | 71.4 | 71.2 | 244,665 |
| Northern | 46.2 | 46.8 | 45.6 | 174,679 | 54.3 | 55.5 | 53.1 | 234,802 |
| North-Western | 47.2 | 46.7 | 47.6 | 76,741 | 50.8 | 50.7 | 50.9 | 103,855 |
| Southern | 55.7 | 54.9 | 56.5 | 189,069 | 65.5 | 64.7 | 66.3 | 233,378 |
| Western | 48.4 | 47.3 | 49.4 | 118,647 | 54.5 | 53.5 | 55.5 | 136,215 |

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




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

## 5.8. School Attendance by the Secondary School Age Population (14 to 18 years)

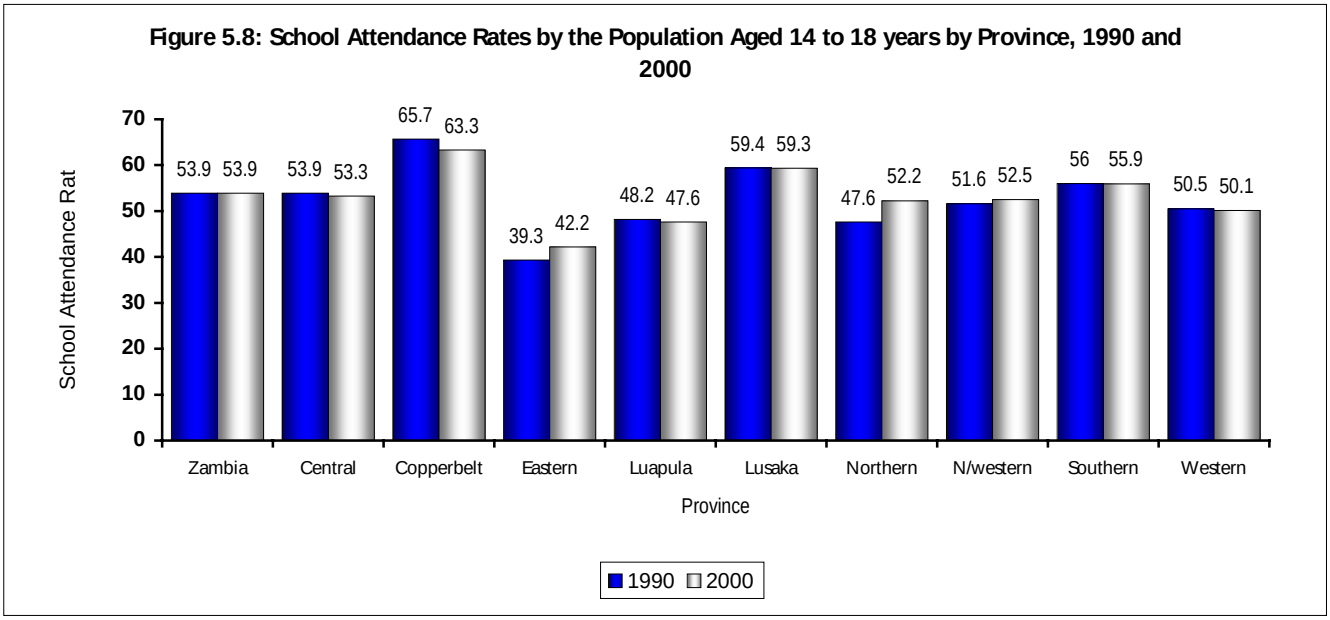
Table 5.8 shows the proportion of children aged 14 to 18 attending school. Overall, the percentage of children attending school remained static at about 54 percent between 1990 and 2000. Since 1990, there were proportionately more boys (61 percent) than girls (47 percent) attending school. A slight increase was observed in the rate of school attendance in rural areas from 45.6 to 47.2 percent, whereas in urban areas the rate declined from 65.9 to 65 percent by 2000. Once again, the proportions of boys attending school remained higher than those of girls in both rural and urban areas of Zambia during the 1990 and 2000 intercensal period. In rural areas, more than half of the girls aged 14 to 18 years were not attending school compared to about a third of their urban counterpart. These results clearly indicate that the problem of the girl child in education is more pervasive among older (14 to 18 years) than younger children (7 to 13 years), particularly among rural females. At primary level there is normally near equality in terms of school attendance between boys and girls.

Regional differences in school attendance by eligible secondary school age population have been in existence since 1990. In 1990 the lowest rate of school attendance was recorded in Eastern province (39.3 percent), followed by Northern (47.6 percent) and Luapula provinces (48.2 percent). The most urbanized provinces, Copperbelt (65.7 percent) and Lusaka provinces (59.4 percent), exhibited high rates of school attendance. This pattern was replicated during the year 2000 when the rate ranged from 42.2 percent in Eastern province to 63.3 percent in the Copperbelt province. Apart from Copperbelt, Central, Luapula and western provinces, which recorded minor declines in school attendance rates, the remaining provinces either recorded marginal increases in school attendance rates or remained at 1990 levels (Refer to Table 5.8 and Figure 5.6).

**Table 5.8: Percentage of the Population aged 14 to 18 years Presently Attending School by Sex, Residence and Province, 1990 and 2000**

| Residence and Province | Secondary School Attendance Rates | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1990 | | | | 2000 | | | |
| | Both Sexes | Male | Female | Population | Both Sexes | Male | Female | Population |
| Zambia - Total | 53.9 | 61.1 | 47.1 | 996,450 | 53.9 | 61.3 | 47.0 | 1,105,484 |
| Rural | 45.6 | 53.2 | 38.0 | 588,411 | 47.2 | 55.9 | 38.8 | 684,012 |
| Urban | 65.9 | 72.9 | 59.5 | 408,039 | 65.0 | 70.6 | 60.0 | 421,472 |
| *Province* | | | | | | | | |
| Central | 53.9 | 60.3 | 47.6 | 99,320 | 53.3 | 60.2 | 46.5 | 114,930 |
| Copperbelt | 65.7 | 72.3 | 59.5 | 202,268 | 63.3 | 68.5 | 58.5 | 189,300 |
| Eastern | 39.3 | 46.2 | 32.2 | 125,684 | 42.2 | 50.2 | 34.3 | 135,231 |
| Luapula | 48.2 | 57.3 | 39.7 | 68,723 | 47.6 | 57.3 | 38.5 | 86,036 |
| Lusaka | 59.4 | 67.3 | 52.4 | 130,919 | 59.3 | 65.8 | 53.7 | 153,236 |
| Northern | 47.6 | 57.7 | 38.1 | 117,626 | 52.2 | 63.1 | 41.8 | 142,785 |
| North-Western | 51.6 | 59.7 | 43.5 | 50,823 | 52.5 | 61.2 | 44.2 | 62,724 |
| Southern | 56.0 | 61.9 | 50.2 | 122,313 | 55.9 | 62.5 | 49.4 | 135,684 |
| Western | 50.5 | 56.0 | 45.2 | 78,774 | 50.1 | 55.9 | 44.6 | 85,558 |

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




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

## 5.9. Gross Secondary School Attendance Rates

Table 5.9 shows gross secondary school attendance rates as crude measures of participation in secondary education. Results in the table reveal that sizeable proportions of children particularly those of secondary school age have had no access to secondary education since 1990. At national level, the proportion of children attending secondary education expressed as a percentage of the eligible secondary school age population increased from 34.6 percent in 1990 to 44.5 percent by 2000. Both the male and female rates increased by 10 percentage points over and above the 1990 levels of 40.4 and 39.1 percent respectively.

However, participation at secondary school level remained dominated by the male than female population. Since 1990, there have been proportionately more boys than girls attending secondary education, a difference of about 10 percentage points. The gross ratios, as measures of education participation, have remained higher in urban than in rural areas. By 2000, the ratio for urban areas (69.6 percent) was more than twice the ratio obtaining in

rural areas, at only 29.3 percent. Whilst the ratio in rural areas increased only by about 5 percent from about 24 percent to 29 percent between 1990 and 2000, it rose by 20 percent in urban areas, from 50 to about 70 percent during the same period. This development illuminates the growing imbalance in secondary education provision between the rural and urban areas.

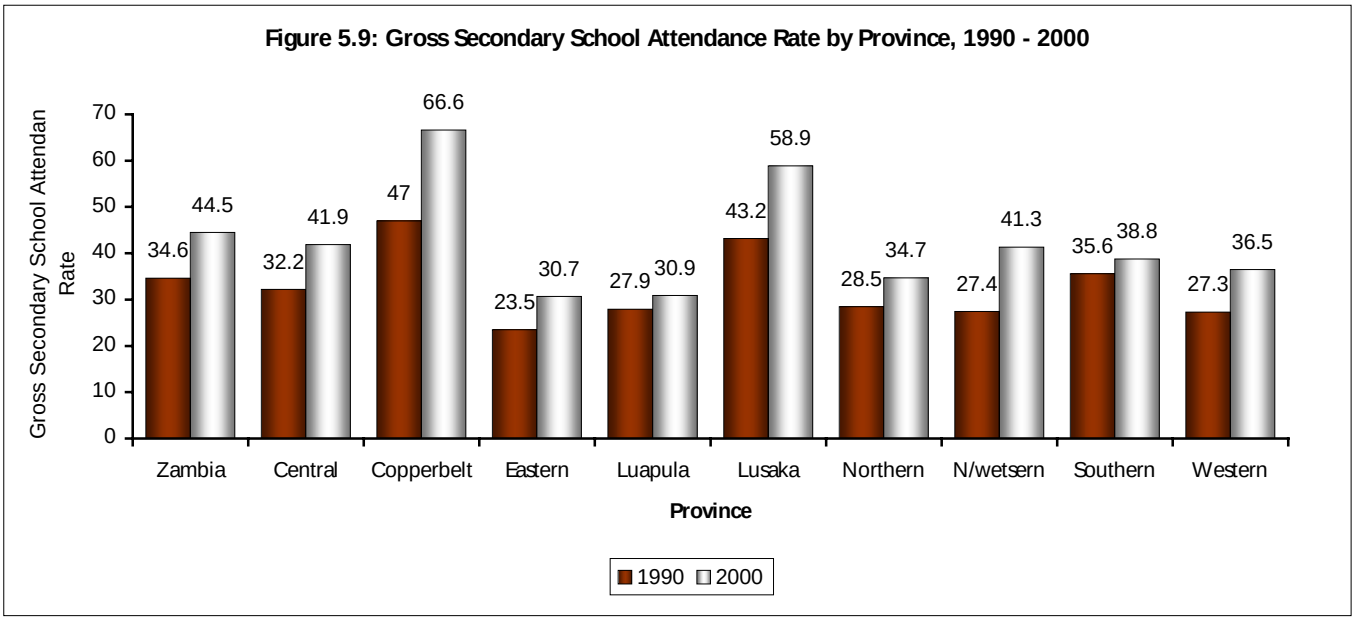
Regional analysis of the 1990 gross secondary school attendance rates reveals that the gross secondary school ratio was lowest in Eastern province, at 23.5 percent and highest in Copperbelt province, at 47 percent. Nearly all the remote provinces namely Eastern, North-Western, Western, Luapula, northern and central provinces had gross attendance rates below the national average of 34.6 percent in 1990. On the other hand the urbanized provinces including Copperbelt and Lusaka recorded ratios in excess of 40 percent. By 2000, Eastern and Luapula province had the least ratios of about 31 percent, while Copperbelt and Lusaka provinces recorded the highest ratios about 67 and 59 percent respectively. All the provinces particularly those along the line of rail, registered considerable increases in secondary school attendance in gross terms between 1990 and 2000.

These results explicitly indicate the inaccessibility of secondary education to the majority of the school going population in rural parts of Zambia. The observed low level of participation in secondary education among the rural populace could be attributed to inadequate facilities and the prevailing high levels of poverty in these areas. The increase in the number of private secondary schools in addition to the existing government schools in urban areas may account for more degree of participation in secondary education.

**Table 5.9: Gross Secondary School Attendance Rates by Sex, Residence and Province, 1990 and 2000**

| Residence and Province | Gross Secondary School Attendance Rates | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1990 | | | | 2000 | | | |
| | Both Sexes | Male | Female | Population | Both Sexes | Male | Female | Population |
| Zambia - Total | 34.6 | 40.4 | 29.0 | 996,450 | 44.5 | 50.2 | 39.1 | 1,105,484 |
| Rural | 23.8 | 29.0 | 18.7 | 588,411 | 29.3 | 35.0 | 23.8 | 685,535 |
| Urban | 50.2 | 57.8 | 43.3 | 408,039 | 69.6 | 76.5 | 63.4 | 416,949 |
| | | | | | | | | |
| Province | | | | | | | | |
| Central | 32.2 | 37.0 | 27.4 | 99,320 | 41.9 | 46.9 | 37.1 | 114,930 |
| Copperbelt | 47.0 | 54.0 | 40.5 | 202,268 | 66.6 | 72.2 | 61.5 | 189,300 |
| Eastern | 23.5 | 28.7 | 18.3 | 125,684 | 30.7 | 37.0 | 24.5 | 135,231 |
| Luapula | 27.9 | 34.5 | 21.9 | 68,723 | 30.9 | 37.7 | 24.6 | 86,036 |
| Lusaka | 43.2 | 50.8 | 36.5 | 130,919 | 58.9 | 65.3 | 53.3 | 153,236 |
| Northern | 28.5 | 35.4 | 22.0 | 117,626 | 34.7 | 42.3 | 27.5 | 142,785 |
| North-Western | 27.4 | 33.5 | 21.5 | 50,823 | 41.3 | 49.2 | 33.7 | 62,724 |
| Southern | 35.6 | 40.1 | 31.2 | 122,313 | 38.8 | 42.7 | 35.0 | 135,684 |
| Western | 27.3 | 31.1 | 23.7 | 78,774 | 36.5 | 40.6 | 32.6 | 85,558 |

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




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

## 5.10. Net Secondary School Attendance Rates by Children aged 14 to 18 Years

Table 5.10 shows the percentage of the eligible children attending secondary education. Results in table 5.10 indicate that a significant proportion of the secondary school age population has no access to education. In 1990, only about one fifth of the children aged 14 to 18 years (21.4 percent) were attending secondary education. This proportion increased to approximately 31 percent in 2000. Since 1990 there were proportionately more boys than girls attending secondary school. In 1990 and 2000, the net secondary school rates for males were about 3 and 4 percent higher than the female rates.

Notable differences in net secondary school attendance rates have existed between rural and urban areas since 1990. In 1990, the proportion of urban eligible children attending secondary education (32.7 percent) was almost three times that of their rural counterpart (13.4 percent). However, net secondary school attendance rate for rural areas nearly doubled from about 14 percent in 1990 to 20.0 percent in 2000. In urban areas, the proportion of eligible children attending secondary education rose from about 33 to 49 percent during the same period. By 2000, secondary school participation by urban eligible children (48.6 percent) was more than twice that of their rural counterpart (20.0 percent). Major gender differences in net secondary school attendance remained notable by 2000 with more than half of the boys (51.6 percent) attending school compared to only 46 percent of the girls.

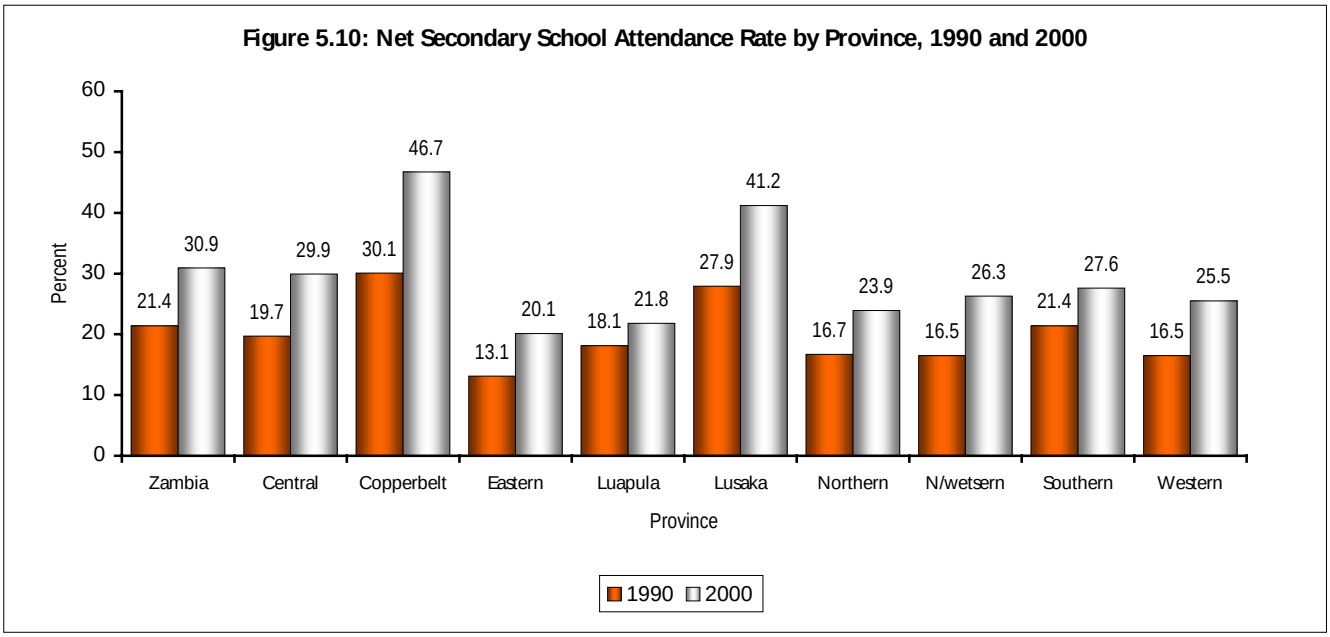
Analysis of 1990 census results by provinces shows that Eastern province had the least net secondary school rate of 13.1 percent, followed by Western and Northwestern (16.5 percent each), Northern (16.7 percent) and Luapula province (18.1 percent). During the same year, Copperbelt and Lusaka provinces recorded the highest rates of 30.1 and 27.9 percent respectively. The school attendance rates were equally high in Southern (21.4 percent) and Central province (19.7 percent). By 2000, all the provinces recorded marked increases in school attendance of the eligible children more so in urbanized provinces. However, eastern province followed by Luapula province had the lowest rates while Copperbelt and Lusaka provinces had more children participating in secondary education by 2000.

The high increase in secondary school attendance in all the regions could be attributed to the increase in basic schools, which have provided additional school space for grades 8 and 9 pupils. As for urban areas there have 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. Despite the improvements in secondary school rates during the period under review, female participation still remains low relative to that of their male counterpart.

**Table 5.10: Net Secondary School Attendance Rate by Sex, Residence and Province, 1990 and 2000**

| Residence and Province | Secondary School Net Attendance Rates | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1990 | | | | 2000 | | | |
| | Both Sexes | Male | Female | Population | Both Sexes | Male | Female | Population |
| Zambia - Total | 21.4 | 22.8 | 20.0 | 996,450 | 30.9 | 33.3 | 28.7 | 1,105,484 |
| Rural | 13.5 | 14.9 | 12.2 | 588,411 | 20.0 | 22.6 | 17.6 | 684,012 |
| Urban | 32.7 | 34.9 | 30.7 | 408,039 | 48.6 | 51.6 | 46.0 | 421,472 |
| | | | | | | | | |
| Province | | | | | | | | |
| Central | 19.7 | 20.5 | 18.9 | 99,320 | 29.9 | 32.1 | 27.7 | 114,930 |
| Copperbelt | 30.1 | 31.9 | 28.4 | 202,268 | 46.7 | 48.9 | 44.8 | 189,300 |
| Eastern | 13.1 | 14.1 | 12.1 | 125,684 | 20.1 | 22.5 | 17.8 | 135,231 |
| Luapula | 18.1 | 20.2 | 16.0 | 68,723 | 21.8 | 25.2 | 18.6 | 86,036 |
| Lusaka | 27.9 | 30.5 | 25.7 | 130,919 | 41.2 | 44.4 | 38.5 | 153,236 |
| Northern | 16.7 | 19.0 | 14.6 | 117,626 | 23.9 | 27.4 | 20.5 | 142,785 |
| North-Western | 16.5 | 18.5 | 14.4 | 50,823 | 26.3 | 29.5 | 23.2 | 62,724 |
| Southern | 21.4 | 22.0 | 20.8 | 122,313 | 27.6 | 29.0 | 26.4 | 135,684 |
| Western | 16.5 | 17.2 | 15.8 | 78,774 | 25.5 | 27.1 | 24.0 | 85,558 |

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




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

## 5.11. Population Distribution by Fields of Study

Table 5.11 shows the distribution of the population by some selected fields of study and sex. The table only includes those fields of study, which had at least 1 thousand observations. The table reveals that the most popular fields of study in 1990 was Teacher training (24.5 percent), followed by Accountancy (9.2 percent), mechanics and mechanical engineering (7.6 percent), Nursing (6.8 percent), Business administration (5.3 percent), Secretarial training (5.1 percent and Agricultural and forestry related fields at 5 percent. During the year 2000, teacher training still accounted for the larger share of the population at 21.4 percent, followed by nursing (16.4 percent). Accountancy, Mechanics/engineering, Business Administration and Secretarial training accounted for 10.4, 7.1, 5.6 and 5.3 percent respectively.

Notable from table 5.11 is the decline in the proportion of the population specializing in engineering programmes, particularly among females. The percentage of the population in engineering and sciences declined from about 24 to 18 percent between 1990 and 2000. The percentage of females specializing in engineering programmes dropped from about 9 to 3 percent during the same period.

The results also clearly indicate that males have had a wider variety of fields of specialization than their female counterpart. Further examination of the results in table 5.11 highlights the fact that very few females have been attempting more technically oriented fields of study such as engineering and other technical programmes since 1990. 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 at primary level in 1994.

**Table 5.11: Percentage distribution of the Population by Sex and Selected Fields of Study, 1990 and 2000**

| Fields of Study | 1990 | | | 2000 | | |
|---|---|---|---|---|---|---|
| | Both Sexes | Male | Female | Both Sexes | Male | Female |
| All Fields | 155,338 | 107,202 | 48,136 | 239,192 | 157,535 | 81,657 |
| Percent Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Natural science | 1.8 | 2.0 | 1.5 | 0.9 | 1.1 | 0.5 |
| Civil engineering | 1.3 | 1.8 | 0.2 | 1.1 | 1.5 | 0.2 |
| Electrical/electronics | 4.2 | 5.8 | 0.5 | 4.5 | 6.4 | 0.9 |
| Mechanical engineering | 7.6 | 10.8 | 0.4 | 7.1 | 10.5 | 0.6 |
| Mining engineering | 1.4 | 1.9 | 0.2 | 1.1 | 1.6 | 0.0 |
| Industrial engineering | 2.4 | 2.4 | 2.5 | 0.6 | 0.7 | 0.2 |
| Metallurgical Engineering | 1.3 | 1.2 | 1.5 | 0.4 | 0.6 | 0.0 |
| Architectural/Town Planning | 1.2 | 1.3 | 1.0 | 0.4 | 0.6 | 0.1 |
| Other Engineering | 2.5 | 3.3 | 0.8 | 1.4 | 2.1 | 0.1 |
| Medicine and surgery | 1.6 | 2.0 | 0.9 | 1.0 | 1.2 | 0.6 |
| Pharmacy | 1.5 | 1.7 | 1.2 | 0.6 | 0.6 | 0.4 |
| Nursing | 6.8 | 1.0 | 19.8 | 16.4 | 13.6 | 21.8 |
| Medical technology | 1.4 | 1.8 | 0.7 | 1.2 | 1.5 | 0.5 |
| Computer science | 0.7 | 0.7 | 0.7 | 2.6 | 2.0 | 3.6 |
| Economics | 1.4 | 1.2 | 2.0 | 1.2 | 1.3 | 1.2 |
| Accountancy | 9.2 | 11.1 | 5.1 | 10.4 | 12.1 | 7.1 |
| Teacher training | 24.5 | 21.5 | 31.3 | 21.4 | 17.6 | 28.6 |
| Law and jurisprudence | 2.0 | 2.6 | 0.7 | 1.7 | 2.3 | 0.7 |
| Fine arts | 0.7 | 0.8 | 0.5 | 0.7 | 0.8 | 0.4 |
| Social welfare | 1.1 | 1.1 | 1.3 | 0.8 | 0.8 | 0.8 |
| Criminology | 1.8 | 2.5 | 0.3 | 1.6 | 2.3 | 0.4 |
| Business administration | 5.3 | 6.5 | 2.6 | 5.6 | 6.4 | 4.1 |
| Secretarial training | 5.1 | 0.5 | 15.4 | 5.3 | 0.8 | 13.9 |
| Operating of office machines | 1.1 | 1.2 | 0.7 | 0.5 | 0.7 | 0.3 |
| Service trade (e.g. cooking,) | 1.6 | 1.3 | 2.3 | 2.0 | 1.3 | 3.3 |
| Agriculture/Forestry/Fishery | 4.8 | 6.4 | 1.5 | 3.7 | 4.8 | 1.5 |
| Wood working | 3.2 | 4.5 | 0.3 | 2.6 | 3.8 | 0.2 |
| Textile trades | 2.2 | 1.2 | 4.5 | 3.2 | 1.0 | 7.6 |

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

Table 5.12a and 5.12b show the distribution of the population by various fields of study and education level completed in 1990 and 2000. The table reveals the type of restrictions education attainment imposes on fields of study. Results clearly indicate that the minimum education level required for most of the fields of study is grades 10 – 12. This is more of the case for those in the fields 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 (see Table 5.12a and 5.12b).

**Table 5.12a: Education level completed by Field of Study (Percent), Zambia, 2000**

| Field of Study | Population Size | Total Percent | Level of Education Completed | | | | |
|---|---|---|---|---|---|---|---|
| | | | 1-7 | 8-9 | 10-12 | 'A' Level | Degree |
| Natural Science | 2,201 | 100 | 2.4 | 1.5 | 44.9 | 1.6 | 49.5 |
| Civil Engineering | 2,543 | 100 | 5.6 | 4.8 | 50.2 | 1.4 | 38.0 |
| Electronics/Engineering | 10,830 | 100 | 4.4 | 4.2 | 52.7 | 2.5 | 36.1 |
| Mechanics/Engineering | 17,030 | 100 | 5.1 | 6.8 | 53.5 | 2.1 | 32.5 |
| Chemical Engineering | 803 | 100 | 5.2 | 4.5 | 48.9 | 1.9 | 39.5 |
| Mining Engineering | 2,590 | 100 | 11.3 | 5.6 | 58.1 | 1.5 | 23.5 |
| Industrial Engineering | 1,330 | 100 | 18.1 | 13.8 | 41.8 | 1.5 | 24.8 |
| Metallurgical Engineering | 906 | 100 | 3.9 | 4.9 | 59.3 | 1.2 | 30.8 |
| Architecture | 1,009 | 100 | 8 | 12.8 | 38.5 | 1.1 | 39.6 |
| Other Engineering | 3,365 | 100 | 5.9 | 5.9 | 49.7 | 1.1 | 37.4 |
| Medicine/Surgery | 2,362 | 100 | 3 | 2.4 | 43.5 | 1.6 | 49.5 |
| Pharmacy | 1,340 | 100 | 4.2 | 4.3 | 59.4 | 1.6 | 30.4 |
| Dentistry | 1,043 | 100 | 5.2 | 5.6 | 60.8 | 4 | 24.4 |
| Nursing | 39,268 | 100 | 9.7 | 9.3 | 60 | 1.4 | 19.6 |
| Medical Technology | 2,803 | 100 | 3.2 | 2.9 | 61.4 | 1.8 | 30.7 |
| Veterinary | 1,005 | 100 | 8.5 | 6.7 | 56.9 | 1.7 | 26.3 |
| Computer Science | 6,159 | 100 | 1.2 | 1.2 | 39.9 | 3.2 | 54.5 |
| Economics | 2,977 | 100 | 5.4 | 5.2 | 34.6 | 1.5 | 53.3 |
| Accountancy | 24,830 | 100 | 1.3 | 1.8 | 45.3 | 2 | 49.5 |
| Teacher Training | 51,087 | 100 | 3.2 | 4.4 | 60.3 | 1.9 | 30.2 |
| Law/jurisprudence | 4,138 | 100 | 4.4 | 4.4 | 40.1 | 1.3 | 49.8 |
| Journalism | 1,677 | 100 | 2 | 1.8 | 37.7 | 2.5 | 55.9 |
| Fine arts | 1,686 | 100 | 8.8 | 10.1 | 42.9 | 2 | 36.2 |
| Social Welfare | 1,971 | 100 | 8.3 | 10.6 | 47.3 | 1.1 | 32.7 |
| Criminology | 3,873 | 100 | 5.7 | 7.4 | 55.4 | 0.8 | 30.7 |
| Business Administration | 13,392 | 100 | 1.8 | 2.3 | 41.4 | 2.3 | 52.2 |
| Secretarial Training | 12,613 | 100 | 1.5 | 3.7 | 46.2 | 2.5 | 46.1 |
| Shorthand Typing | 3,800 | 100 | 5.3 | 13.7 | 49.2 | 1.8 | 30 |
| Clerical typing | 4,296 | 100 | 5.5 | 15.4 | 49 | 1.4 | 28.7 |
| Office Machine | 1,305 | 100 | 8.4 | 9.5 | 46.9 | 1.5 | 33.7 |
| Service Trade | 4,795 | 100 | 15.2 | 14.7 | 34.8 | 1.4 | 34 |
| Agriculture/Forestry/Fisheries | 8,866 | 100 | 8.3 | 8.1 | 53.2 | 1.7 | 28.7 |
| Food/Drink Production | 1,951 | 100 | 9.5 | 11.4 | 37.6 | 2.2 | 39.4 |
| Wood Working | 6,215 | 100 | 21.3 | 20.3 | 38.4 | 0.8 | 19.2 |
| Textile Trade | 7,678 | 100 | 14.8 | 27.5 | 30.9 | 1.6 | 25.2 |

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

**Table 5.12b: Education level completed by Field of Study (Percent), Zambia, 1990**

| Field of Study | Population Size | Total Percent | Level of Education Completed | | | | |
|---|---|---|---|---|---|---|---|
| | | | 1-7 | 8-9 | 10-12 | 'A' Level | Degree |
| Natural Science | 2,849 | 100 | 13.7 | 8.2 | 58.1 | 6.6 | 13.4 |
| Civil Engineering | 2,020 | 100 | 18.5 | 5.9 | 62.3 | 4.1 | 9.2 |
| Electronics/Engineering | 6,509 | 100 | 14.1 | 6.1 | 73.6 | 2.0 | 4.2 |
| Mechanics/Engineering+ | 11,728 | 100 | 17.9 | 8.5 | 68.1 | 1.8 | 3.6 |
| | 738 | 100 | 25.9 | 4.6 | 53.4 | 5.1 | 11.0 |
| Chemical Engineering | 2,155 | 100 | 31.4 | 5.4 | 52.2 | 3.4 | 7.7 |
| Mining Engineering | 3,796 | 100 | 60.8 | 13.2 | 21.2 | 0.7 | 4.2 |
| Industrial Engineering | 2,009 | 100 | 30.7 | 12 | 27.4 | 1.8 | 28.1 |
| Metallurgical Engineering | 1,882 | 100 | 10.9 | 41.8 | 37.1 | 2.4 | 7.8 |
| Architecture | 3,887 | 100 | 11.9 | 5.5 | 75.5 | 2.2 | 4.8 |
| Other Engineering | 2,544 | 100 | 13.6 | 6.1 | 63.8 | 6.0 | 10.5 |
| Medicine/Surgery | 2,381 | 100 | 6.6 | 2.6 | 84.7 | 1.2 | 4.9 |
| Pharmacy | 729 | 100 | 11.4 | 4.7 | 70.0 | 8.9 | 5.1 |
| Dentistry | 10,574 | 100 | 8.1 | 8.0 | 79.9 | 1.6 | 2.3 |
| Nursing | 2,211 | 100 | 12.3 | 7.2 | 71.6 | 2.8 | 6.1 |
| Medical Technology | 845 | 100 | 20.5 | 10.9 | 62.5 | 2.1 | 4.0 |
| Veterinary | 1,114 | 100 | 4.0 | 3.1 | 81.5 | 4.6 | 6.8 |
| Computer Science | 2,241 | 100 | 13.2 | 8.3 | 60.2 | 6.6 | 11.7 |
| Economics | 14,346 | 100 | 5.9 | 4.7 | 83.7 | 2.7 | 3.0 |
| Accountancy | 38,111 | 100 | 10.5 | 11.4 | 73.8 | 1.7 | 2.7 |
| Teacher Training | 3,068 | 100 | 17.4 | 9.2 | 63.2 | 4.7 | 5.4 |
| Law/jurisprudence | 859 | 100 | 6.4 | 3.5 | 81.4 | 4.9 | 3.8 |
| Journalism | 1,097 | 100 | 19.8 | 6.0 | 60.7 | 4.8 | 8.7 |
| Fine arts | 1,785 | 100 | 21.6 | 12.0 | 57.0 | 3.0 | 6.4 |
| Social Welfare | 2,814 | 100 | 23.7 | 13.7 | 60.3 | 0.3 | 2.0 |
| Criminology | 8,262 | 100 | 10.4 | 7.3 | 74.1 | 3.8 | 4.3 |
| Business Administration | 7,995 | 100 | 4.1 | 6.7 | 86.2 | 1.2 | 1.8 |
| Secretarial Training | 5,897 | 100 | 10.0 | 13.1 | 74.7 | 0.6 | 1.6 |
| Shorthand Typing | 6,596 | 100 | 10.6 | 16.1 | 71.8 | 0.2 | 1.4 |
| Clerical typing | 1,674 | 100 | 21.1 | 10.3 | 65.0 | 0.4 | 3.1 |
| Office Machine | 2,433 | 100 | 38.2 | 12.8 | 44.5 | 0.9 | 3.6 |
| Service Trade | 7,511 | 100 | 20.5 | 10.0 | 63.3 | 2.3 | 3.9 |
| Agriculture/Forestry/Fisheries | 1,010 | 100 | 32.6 | 11.8 | 51.1 | 1.2 | 3.4 |
| Food/Drink Production | 4,934 | 100 | 47.8 | 13.1 | 35.0 | 0.2 | 3.8 |
| Wood Working | 3,409 | 100 | 29.6 | 19.8 | 46.8 | 0.7 | 3.1 |
| Textile Trade | | | | | | | |

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

## 5.12. Certificate and Diploma Holders by Level of Education Completed

Table 5.13 shows the education level completed by certificate and diploma holders. It is important to note that certification referred to here relates to the one conferred after grade 12 and A-level of education. Overall, the number of certificate holders rose by 23.4 percent between 1990 and 2000 from 178,824 to 220,594. The percent increase was more pronounced amongst females (41.4 percent) than their male counterpart (14.4 percent). The proportion of persons with certificates who had attained grades 1 to 7 declined from 23.4 percent in 1990 to 11.3 percent in 2000, whilst the proportions attaining higher grades increased drastically. In 1990, 63 percent of the certificate holders as opposed to 72 percent in the year 2000 had completed not less than grades 10 to 12.

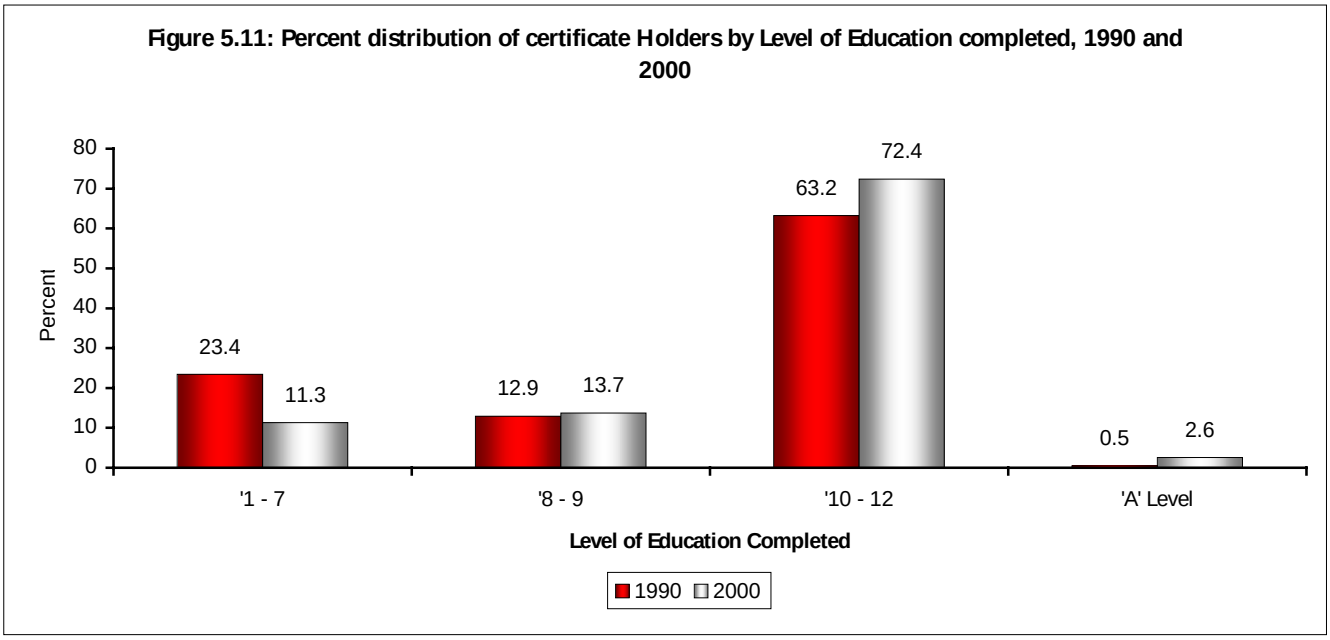
These findings explicitly demonstrate how difficult it has become to get certification with limited education background especially among the female population. The number of diploma holders increased by 25.4 percent from 42,755 in 1990 to 53,607 in 2000. Further analysis of diploma holders by level of education completed shows diminishing chances of getting a diploma for persons with very basic education between 1990 and 2000. Once again there was a decline in the proportions of diploma holders with up to grade 7 and 9 education from 5.1 and 3.6 percent to 2.7 and 2.7 percent respectively. No major sex-differences have existed since 1990 although females with middle basic and upper secondary education attainment are less likely to get diplomas

than their male counterpart. Specifically, the percentage of both male and female diploma holders significantly rose from about 84 percent to 92 percent during the intercensal period under review (Refer to Table 5.13).

**Table 5.13: Percentage Distribution of Certificates and Diplomas by Level of Education and Sex, 1990 and2000**

| Certificates | Population Size | Education Level Completed | | | | |
|---|---|---|---|---|---|---|
| | | 1-7 | 8-9 | 10-12 | 'A' Level | Total Percent |
| Certificates | | | | | | |
| Zambia 1990 | | | | | | |
| Both Sexes | 178,824 | 23.4 | 12.9 | 63.2 | 0.5 | 100 |
| Male | 119,361 | 26.6 | 12.4 | 60.5 | 0.5 | 100 |
| Female | 59,463 | 16.8 | 14.0 | 68.7 | 0.5 | 100 |
| Zambia 2000 | | | | | | |
| Both Sexes | 220,594 | 11.3 | 13.7 | 72.4 | 2.6 | 100 |
| Male | 136,529 | 12.3 | 12.5 | 73.0 | 2.2 | 100 |
| Female | 84,065 | 9.5 | 16.0 | 71.3 | 3.2 | 100 |
| Diploma | | | | | | |
| Zambia 1990 | | | | | | |
| Both Sexes | 42,749 | 5.1 | 3.6 | 83.5 | 7.8 | 100 |
| Male | 34,283 | 5.3 | 3.6 | 83.5 | 7.5 | 100 |
| Female | 8,466 | 4.0 | 3.9 | 83.5 | 8.7 | 100 |
| Zambia 2000 | | | | | | |
| Both Sexes | 53,625 | 2.8 | 2.7 | 91.6 | 2.9 | 100 |
| Male | 40,674 | 2.9 | 2.6 | 91.9 | 2.5 | 100 |
| Female | 12,951 | 2.1 | 2.9 | 90.6 | 4.3 | 100 |

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




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

## 5.13. Summary

A large segment of the Zambian Population remains uneducated and illiterate. Since 1990, 45 percent of the population aged 5 years and above remained illiterate. The level of illiteracy remained higher among female than male population. The problem of illiteracy is more common in rural than in urban parts of Zambia. More than half of the rural population aged 5 years and above has been identified with illiteracy since 1990. Provincial analysis of literacy rates show that Eastern Province has the highest proportion of illiterate population aged 5 years and above, while Copperbelt and Lusaka have the lowest. Nearly all provinces registered very marginal changes in the

proportion of the population that can read and write in any language between 1990 and 2000. In general, the problem of illiteracy was more associated to remote provinces than highly urbanized provinces.

On the other hand, the proportion of youths who could read and write in any language declined from about 75 percent in 1990 to 70 percent by 2000. Female youths are more likely to be illiterate than their male counterpart. It is noted that the problem of illiteracy among the youths has been more pronounced in rural than urban areas since 1990. Eastern Province had the highest proportion of illiterate youths since 1990 while Copperbelt had the lowest. All the provinces recorded declines in youth literacy rates. However adult literacy rate increased marginally from 66 percent to 67 percent between 1990 and 2000. The problem of adult illiteracy remained much more marked among females than males since 1990. Despite marginal increases in adult literacy levels, nearly half of the rural adults could still not read and write since 1990.

School attendance among the population aged 5 years and above marginally increased from about 26 to 27 percent between 1990 and 2000. There were proportionately more males than females attending school since 1990. Since 1990 the young population is more likely to be attending school than the older one. During the period 1990 to 2000 almost one in every 5 persons in rural areas of Zambia was attending school compared to 1 in every 3 in urban areas. There were proportionately more males than females attending school, especially in rural areas of Zambia. Eastern Province recorded the lowest proportion of the population attending school since 1990 whilst Copperbelt and Lusaka had the highest.

The proportion of the primary school-age population (7 to 13 years) attending school increased drastically from 56 percent in 1990 to 62 percent by 2000. No major sex differences were observed in school attendance rates by the population aged 7 to 13 years. Children in urban areas are more likely to attend school than their rural counterpart. The rate of attendance has been poorer in remote provinces, namely Eastern province and superior in predominantly urban provinces such as Copperbelt and Lusaka Provinces since 1990. All provinces recorded increases in the proportions of the population aged 7 to 13 attending school.

The gross primary school attendance rates declined from 82.3 to 79.1 percent between 1990 and 2000. By 2000, the rates remained higher among boys (74.9) than girls (68.7 percent). The rates also indicate a high likelihood of urban children aged 7 to 13 years to be attending primary education compared to their rural counterpart. Once again, Eastern Province recorded the lowest rate of primary school attendance in gross terms, while Copperbelt and Lusaka Provinces registered the highest rates. Net primary school attendance rates increased from 55 percent to 60 percent between 1990 and 2000. By 2000, the rate remained higher in urban (73.9 percent) than in rural areas of Zambia (52.6 percent). During the year 2000, Eastern and North-Western Provinces recorded the lowest net primary school attendance rates of 43.5 and 50.7 percent respectively. Copperbelt and Lusaka Provinces had the highest rates of about 72 and 71 percent, respectively.

During the 1990-2000 intercensal period, school attendance by the secondary school-age population (14 to 18 years) stagnated at the 1990 level of about 54 percent. More males than females of the same age cohort have had access to education since 1990. Children in urban areas are more likely to attend school, particularly at the secondary level, than those in rural areas. With the exception of Eastern and Northern Provinces, which recorded some increases, the rest of the provinces either experienced minor declines in the rate of attendance or stagnated at the 1990 level.

Crude measures of participation in secondary education reveal marked improvements in secondary school attendance especially in urban areas. The gross secondary school attendance rate increased from about 35 to 45 percent between 1990 and 2000. However, gross school attendance rates for rural areas show low levels of education participation compared to urban areas. Net secondary school attendance rate equally increased from about 21 percent in 1990 to 31 percent by 2000. In fact the net secondary school attendance rates clearly show that by 2000, almost two thirds of the eligible children had no access to secondary school education. The

problem of inaccessibility to secondary education has been more pervasive in rural than urban areas, where only one fifth of children had access to school.

Teacher training, Secretarial training, accountancy, nursing and Mechanics have remained among the most popular fields of study in Zambia. However, more males than females have had varied occupational fields of study since independence. Analysis of fields of study by level of education completed explicitly illuminates the restrictions education background imposes on the choice of the field of study. Secondary education has of late become the minimum requirement for most of the fields of study. Indeed certification at any level has become heavily dependant on the level of education that an individual has completed. It has now become much more difficult to obtain a certificate than it was ten years ago.

# CHAPTER 6

# ECONOMIC CHARATERISTICS

## 6.0. 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 because 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 were collected. The main topics covered were:

- Labour force participation
- Economic Dependency
- Employment and unemployment
- Employment status
- Occupation
- Industry and
- Educational attainment

The methodology of analysis employed is exploratory data analysis using the 1990 and 2000 population censuses.

## 6.1. Working-Age Population

In the 1990 and 2000 Population and Housing Censuses, the working-age population is defined as all persons aged 12 years and over.

*Figure 6.1: Working Age Population 12 years and above*

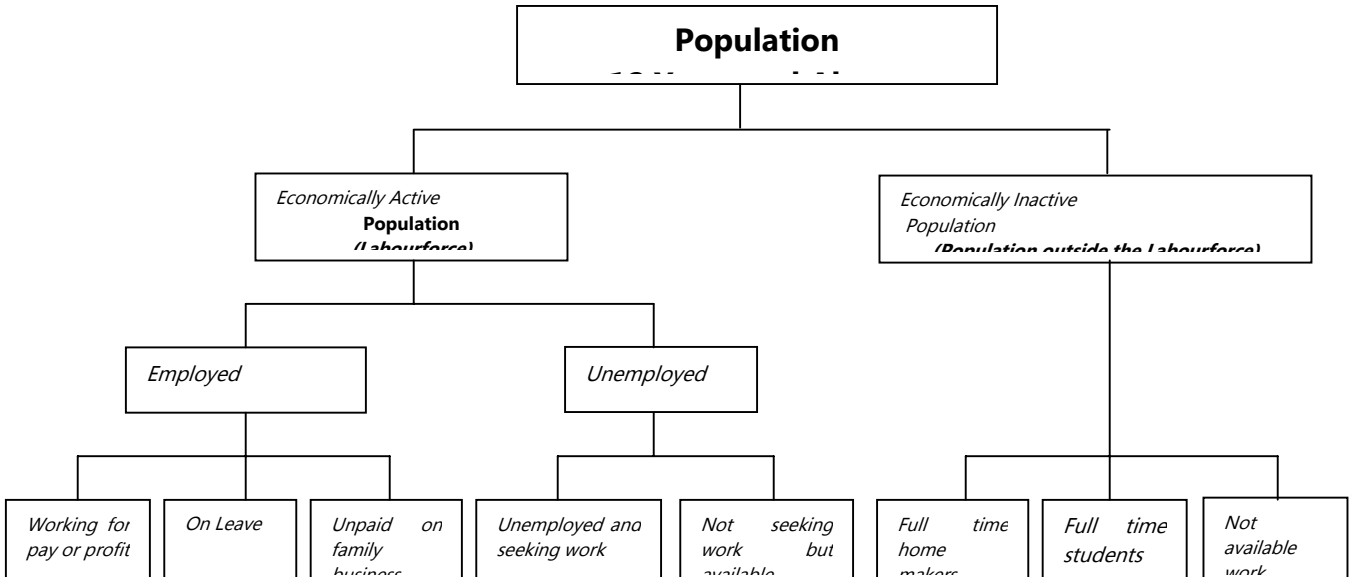
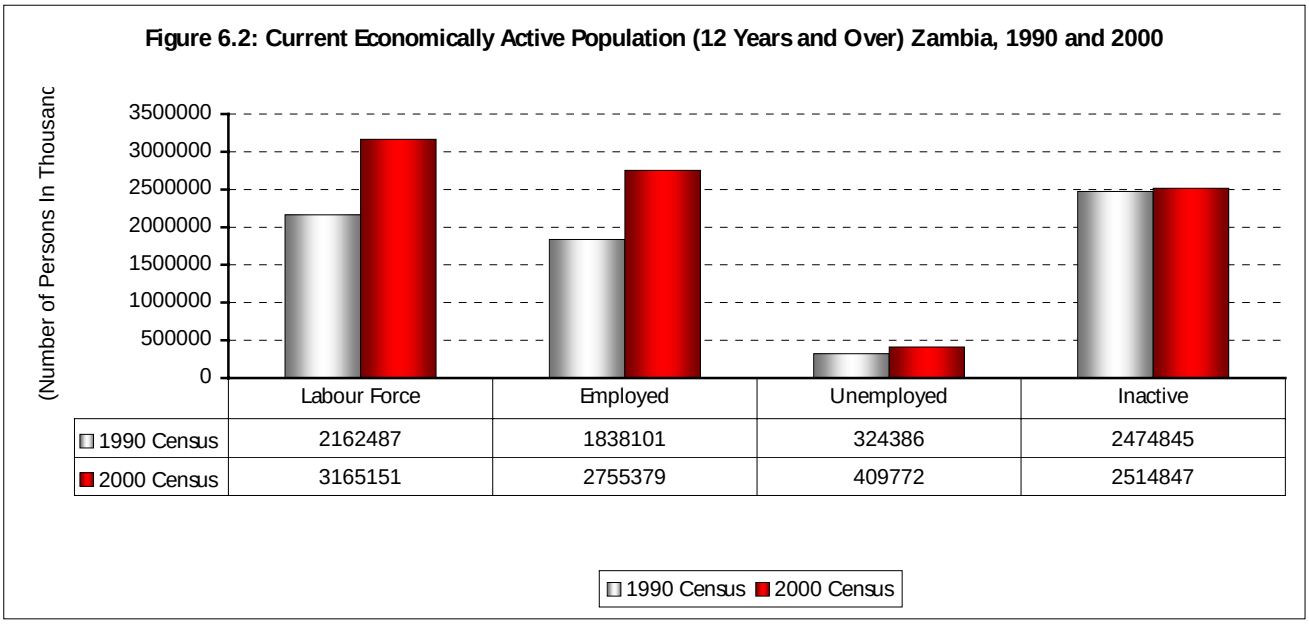


Figure 6.1 is a diagrammatic presentation of the various categories of the population of working age. Table 6.1 presents the population 12 years and over by age group, residence and sex for 1990 and 2000. The table shows that the working-age population in Zambia has increased by 22.4 percent. The increase of the male working-age population of 22.8 percent is just marginally higher than the female working-age population of 22.0 percent. In rural areas, the working-age population has increased by 26.9 percent, while in urban areas it has increased by only 15.7 percent. The increase of 29 percent for the male working-age population in rural areas is more than the increase of 25.0 percent for the female working-age population; In urban areas, on the other hand, the increase of 14.0 percent in the male working-age population is slightly less than the increase in the female working-age population of 14.6 percent.

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

| Residence and Sex | Year | Population Size | Total Percent | 12-19 | 20-24 | 25-29 | 30-59 | 60+ | Not Stated |
|---|---|---|---|---|---|---|---|---|---|
| **Zambia Total** | | | | | | | | | |
| Both Sexes | 1990 | 4,640,427 | 100.0 | 33.2 | 15.3 | 11.5 | 33.2 | 6.6 | 0.2 |
| | 2000 | 5,679,998 | 100.0 | 30.6 | 16.0 | 13.0 | 33.6 | 6.8 | 0.0 |
| Percent increase | | 22.4 | | | | | | | |
| Male | 1990 | 2,255,686 | 100.0 | 33.4 | 14.6 | 11.0 | 33.4 | 7.3 | 0.3 |
| | 2000 | 2,769,964 | 100.0 | 30.5 | 15.0 | 13.1 | 34.2 | 7.2 | 0.0 |
| Percent increase | | 22.8 | | | | | | | |
| Female | 1990 | 2,384,741 | 100.0 | 33.1 | 16.0 | 11.9 | 32.9 | 5.9 | 0.2 |
| | 2000 | 2,910,034 | 100.0 | 30.6 | 16.9 | 13.0 | 33.0 | 6.4 | 0.0 |
| Percent increase | | 22.0 | | | | | | | |
| **Rural** | | | | | | | | | |
| Both Sexes | 1990 | 2,791,707 | 100.0 | 32.5 | 14.3 | 10.6 | 33.2 | 9.1 | 0.3 |
| | 2000 | 3,541,919 | 100.0 | 30.4 | 15.0 | 12.2 | 33.6 | 8.7 | 0.0 |
| Percent increase | | 26.9 | | | | | | | |
| Male | 1990 | 1,321,860 | 100.0 | 34.2 | 13.8 | 10.2 | 31.3 | 10.2 | 0.3 |
| | 2000 | 1,705,121 | 100.0 | 31.3 | 14.2 | 12.1 | 33.0 | 9.4 | 0.0 |
| Percent increase | | 29.0 | | | | | | | |
| Female | 1990 | 1,469,847 | 100.0 | 31.0 | 14.7 | 11.0 | 34.9 | 8.1 | 0.3 |
| | 2000 | 1,836,798 | 100.0 | 29.6 | 15.8 | 12.3 | 34.1 | 8.2 | 0.0 |
| Percent increase | | 25.0 | | | | | | | |
| **Urban** | | | | | | | | | |
| Both Sexes | 1990 | 1,848,720 | 100.0 | 34.3 | 16.8 | 12.8 | 33.1 | 2.8 | 0.2 |
| | 2000 | 2,138,079 | 100.0 | 30.8 | 17.6 | 14.4 | 33.5 | 3.6 | 0.0 |
| Percent increase | | 15.7 | | | | | | | |
| Male | 1990 | 933,826 | 100.0 | 32.2 | 15.8 | 12.1 | 36.5 | 3.2 | 0.2 |
| | 2000 | 1,064,843 | 100.0 | 29.3 | 16.4 | 14.6 | 36.0 | 3.8 | 0.0 |
| Percent increase | | 14.0 | | | | | | | |
| Female | 1990 | 936,356 | 100.0 | 36.4 | 18.5 | 13.4 | 29.6 | 2.4 | 0.2 |
| | 2000 | 1,073,236 | 100.0 | 32.3 | 18.9 | 14.3 | 31.1 | 3.5 | 0.0 |
| Percent increase | | 14.6 | | | | | | | |

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




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

## 6.2. The 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. Table 6.2 shows the current economically inactive population by reason of activity, residence and sex in 2000. Almost two thirds (64 percent) of the inactive population is female, while about a third (36 percent) are male. About 55 percent are in the rural areas while 45 percent are in the urban areas. Studying (42.6 percent) is the most important reason for inactivity, followed by homemaking (36.3) 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 country. However, it can be noted that there are slightly more home makers in the urban areas (37.1 percent) than in the rural areas (35.7 percent); slightly more students in the urban areas (44.1 percent) than in the rural areas (41.3 percent); and there are more economically inactive people for other reasons in rural areas (23.0 percent) compared to urban areas (18.8 percent).

In 2000, males are economically inactive mainly because of studying (64.9 percent) while females are inactive primarily because of home making (53.4 percent).

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

| Residence and Sex | Reason For Inactivity | | | | |
|---|---|---|---|---|---|
| | Total Number | Total | Home Maker | Student | Other |
| Zambia - Total | 2,514847 | 100.0 | 36.3 | 42.6 | 21.1 |
| Rural | 1,390,143 | 100.0 | 35.7 | 41.3 | 23.0 |
| Urban | 1,124,704 | 100.0 | 37.1 | 44.1 | 18.8 |
| **Sex** | | | | | |
| Male | 911,482 | 100.0 | 6.4 | 64.9 | 28.7 |
| Female | 1,603,365 | 100.0 | 53.4 | 29.9 | 16.8 |

## 6.3. Economically Active Population (Labour force)

Figure 6.1 gives an illustration of the economically active population and economically inactive population. The economically active population or the Labour force is defined as all persons aged 12 years and above of either sex whose main economic activity status is to supply their labour for the production of ***economic*** goods and services. It is composed of the employed and unemployed persons. 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. The economically active population by residence and sex are given in Table 6.3. According to this table, the labour force increased by 68 percent, from 2,162,487 in 1990 to 3,165,151 in 2000 in absolute terms. However, the average annual growth rate was 3.8 percent. The increase of 85.0 percent in the female labour force is more than the increase of 30 percent in the male labour force. A big proportion of the labour force (60.2 percent in 1990 and 62.4 percent in 2000) is in rural areas, as compared to the labour force in urban areas (38.8 percent in 1990 and 37.6 percent in 2000).

**Table 6.3: Trends in the Labour force and the Average Annual Growth Rate of the Labour force by Province, Zambia, 1990 and 2000**

| Province | 1990 | 2000 | Growth Rate |
|---|---|---|---|
| Zambia - Total | 2,162,487 | 3,165,151 | 3.8 |
| Central | 215,899 | 317,676 | 3.9 |
| Copperbelt | 387,843 | 492,644 | 2.4 |
| Eastern | 347,838 | 471,741 | 3.0 |
| Luapula | 152,475 | 267,726 | 5.6 |
| Lusaka | 287,071 | 404,672 | 3.4 |
| Northern | 242,133 | 403,365 | 5.1 |
| North-Western | 106,324 | 182,761 | 5.4 |
| Southern | 247,883 | 319,198 | 2.5 |
| Western | 175,021 | 305,368 | 5.5 |

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

The labour force in 2000 indicates that Copperbelt Province has the highest proportion (15.6 percent), followed by Eastern, Lusaka and Northern Provinces with 14.9 percent, 12.8 percent and 12.7 percent respectively. North-Western, Luapula and Western Provinces have the least with 5.8 percent, 8.5 percent and 9.6 percent, respectively. (See Table 6.3). Luapula, Western, North-Western and Northern Provinces recorded the highest average annual growth rates in the Labourforce between 1990 and 2000 of 5.6 percent, 5.5 percent, 5.4 percent and 5.1 percent respectively. Copperbelt Province recorded the lowest average annual growth rate of 2.4 percent followed by Southern Province with 2.5 percent. The other provinces to register an average annual growth rate in the labourforce below the national level were Eastern Province (3.0 percent) and Lusaka Province (3.4 percent).

**Table 6.4: Percentage Distribution of the Labourforce by Province, Zambia, 2000**

| Province | Both Sexes | Male | Female |
|---|---|---|---|

| | | | |
|---|---|---|---|
| Zambia - Total | 100.0 | 100.0 | 100.0 |
| Central | 10.0 | 10.3 | 9.7 |
| Copperbelt | 15.6 | 17.3 | 13.0 |
| Eastern | 14.9 | 13.7 | 16.6 |
| Luapula | 8.5 | 7.8 | 9.4 |
| Lusaka | 12.8 | 15.1 | 9.5 |
| Northern | 12.7 | 11.9 | 13.9 |
| Northwestern | 5.8 | 5.3 | 6.4 |
| Southern | 10.1 | 10.8 | 9.1 |
| Western | 9.6 | 7.8 | 12.3 |

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

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. Of the 3,165,151 total labour force in Zambia in 2000, 2,755,379 or 87 percent are employed. The employed population increased by 50 percent from 1,838,101 in 1990 to 2,755,379 in 2000. The proportion of the employed population residing in rural areas has increased from 64.4 percent in 1990 to 69.8 percent in 2000 while the proportion of the employed labour force residing in urban areas has decreased from 35.6 percent in 1990 to 32.0 percent in 2000.

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

According to Table 6.5 the unemployed population has increased by 26.3 percent from 324,386 in 1990 to 409,772 in 2000. The increase of 33 percent in the male unemployed population is more than the increase in the female unemployed population of 16 percent.

In 1990 there were more unemployed people in the rural areas (56.9 percent for total; 54.9 percent for males and 57 percent for females) than in the urban areas (43.7 percent for total; 55.1 percent for males and 43 percent for females). The liberalization of the economy starting in the early 1990s led to massive loss of jobs especially in the urban areas. This could be the reason why the proportion of the unemployed increased in 2000 compared to 1990. In 2000 there are more unemployed people residing in the urban areas (66.3 percent for total; 66.9 percent for males and 67.0 percent for females).

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

| Activity and Sex | 1990 | | | | 2000 | | | |
|---|---|---|---|---|---|---|---|---|
| | Total Population | Total Percent | Rural | Urban | Total Population | Total Percent | Rural | Urban |
| Both Sexes | 4,637,332 | 100.0 | 61.7 | 38.3 | 5,679,998 | 100 | 62.4 | 37.6 |
| Male | 2,253,508 | 100.0 | 59.2 | 40.8 | 2,769,964 | 100 | 61.6 | 38.4 |
| Female | 2,383,824 | 100.0 | 53.2 | 46.8 | 2,910,034 | 100 | 63.1 | 36.9 |
| **Labour Force** | | | | | | | | |
| Both Sexes | 2,162,487 | 100.0 | 64.4 | 35.6 | 3,165,151 | 100 | 69.8 | 30.2 |
| Male | 1,401,776 | 100.0 | 60.7 | 39.3 | 1,858,482 | 100 | 64.5 | 35.5 |
| Female | 760,711 | 100.0 | 71.1 | 28.9 | 1,306,699 | 100 | 76.6 | 23.4 |
| **Employed** | | | | | | | | |
| Both Sexes | 1,838,101 | 100.0 | 88.8 | 11.2 | 2,755,379 | 100 | 75.2 | 24.8 |
| Male | 1,204,759 | 100.0 | 60.9 | 39.1 | 1,596,435 | 100 | 69.8 | 30.2 |

| Activity and Sex | 1990 | | | | 2000 | | | |
|---|---|---|---|---|---|---|---|---|
| | Total Population | Total Percent | Rural | Urban | Total Population | Total Percent | Rural | Urban |
| Female | 633,342 | 100.0 | 74.0 | 26.0 | 1,158,944 | 100 | 81.8 | 18.2 |
| **Unemployed** | | | | | | | | |
| Both Sexes | 324,386 | 100.0 | 56.9 | 43.1 | 409,772 | 100 | 33.7 | 66.3 |
| Male | 197,017 | 100.0 | 59.2 | 40.8 | 262,047 | 100 | 34.1 | 65.9 |
| Female | 127,369 | 100.0 | 53.2 | 46.8 | 147,725 | 100 | 33.0 | 67.0 |
| **Inactive** | | | | | | | | |
| Both Sexes | 2,474,845 | 100.0 | 56.3 | 43.7 | 2,514,847 | 100 | 52.6 | 47.4 |
| Male | 851,732 | 100.0 | 54.9 | 55.1 | 911,482 | 100 | 55.8 | 44.2 |
| Female | 1,623,113 | 100.0 | 57.0 | 43.0 | 1,603,365 | 100 | 50.5 | 49.5 |
| **Not Stated** | | | | | | | | |
| Both Sexes | 95,693 | 100.0 | 49.5 | 50.5 | - | - | - | 0 |
| Male | 46,431 | 100.0 | 50.1 | 49.9 | - | - | - | 0 |
| Female | 49,262 | 100.0 | 48.9 | 51.1 | - | - | - | 0 |

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

The economically inactive population comprises all persons 12 years and over who are classified neither as employed nor 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 Labourforce of 3,165,151, 2,514,379 were classified as being economically inactive. The economically inactive population has increased slightly by 1.6 percent from 2,474,845 in 1990 to 2,514,847 in 2000. Economic inactivity in males has increased by 7.0 percent from 851,732 in 1990 to 911,482 in 2000. In contrast, female economic inactivity has declined by 1.2 percent from 1,623,113 in 1990 to 1,603,365 in 2000. In 2000 there are more economically inactive persons in the rural areas than in the urban areas though the differences are not significant. The same situation pertained for 1990 except for the male economically inactive population where there were slightly more persons in the urban areas than in the rural areas.

**Table 6.6 shows the economically active and economically inactive population by age, sex and nature of current economic activity.**

**For the labourforce and the employed, the peak age-group is 35-54 years (27.4 percent for total;28.4 percent for males and 26.0 percent for females and 29.3 percent for total;30.3 percent for males and 28.0 percent for females, respectively).**

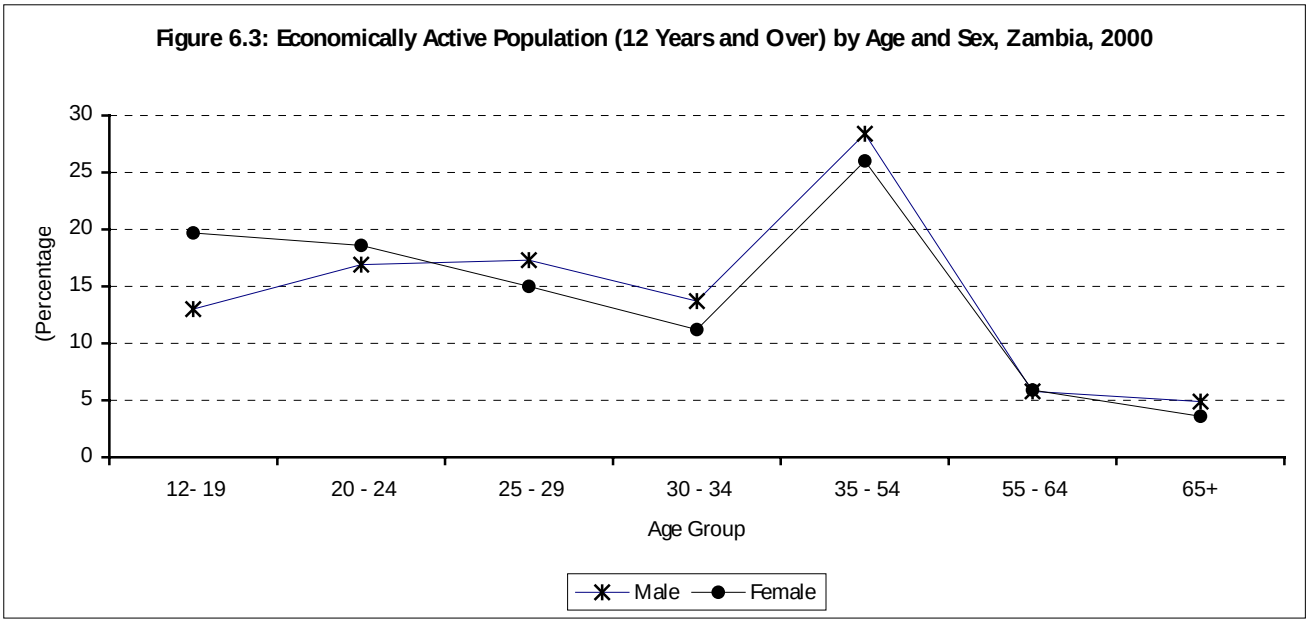
**For the unemployed population, the peak is in the age-groups 12-19 (26.8 percent for total, 21.6 percent for males and 36.1 percent for females) and 20-24 (28.3 percent for total, 27.4 percent for males and 29.9 percent for females, respectively).**

**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 Over) by Age, Sex, and Nature of current Economic Activity, Zambia, 2000

| Activity and Sex | Total Population | Total Percent | Age Group | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 12-19 | 20-24 | 25-29 | 30-34 | 35-54 | 55-64 | 65+ | Not Stated |
| **Labour Force** | | | | | | | | | | |
| Both Sexes | 3,165,151 | 100.0 | 15.8 | 17.6 | 16.3 | 12.7 | 27.4 | 5.8 | 4.4 | 0.0 |
| Male | 1,858,482 | 100.0 | 13.0 | 16.9 | 17.3 | 13.7 | 28.4 | 5.8 | 4.9 | 0.0 |
| Female | 1,306,669 | 100.0 | 19.7 | 18.6 | 15.0 | 11.2 | 26.0 | 5.9 | 3.6 | 0.0 |
| **Employed** | | | | | | | | | | |
| Both Sexes | 2,755,379 | 100.0 | 14.1 | 16.0 | 16.1 | 13.2 | 29.3 | 6.4 | 4.8 | 0.0 |
| Male | 1,596,435 | 100.0 | 11.6 | 15.2 | 17.0 | 14.2 | 30.3 | 6.3 | 5.4 | 0.0 |
| Female | 1,158,944 | 100.0 | 17.6 | 17.2 | 15.0 | 11.7 | 28.0 | 6.5 | 4.0 | 0.0 |
| **Unemployed** | | | | | | | | | | |
| Both Sexes | 409,772 | 100.0 | 26.8 | 28.3 | 17.5 | 9.5 | 14.7 | 2.0 | 1.1 | 0.0 |
| Male | 262,047 | 100.0 | 21.6 | 27.4 | 19.1 | 10.9 | 17.3 | 2.5 | 1.3 | 0.0 |
| Female | 147,725 | 100.0 | 36.1 | 29.9 | 14.9 | 7.1 | 10.1 | 1.3 | 0.7 | 0.0 |
| **Inactive** | | | | | | | | | | |
| Both Sexes | 2,514,847 | 100.0 | 49.2 | 14.0 | 8.9 | 6.2 | 13.4 | 3.7 | 4.7 | 0.0 |
| Male | 911,482 | 100.0 | 66.2 | 11.2 | 4.5 | 3.0 | 7.1 | 3.0 | 5.1 | 0.0 |
| Female | 1,603,365 | 100.0 | 39.5 | 15.5 | 11.4 | 8.1 | 17.0 | 4.0 | 4.4 | 0.0 |




## 6.4. Economic Dependency Ratios

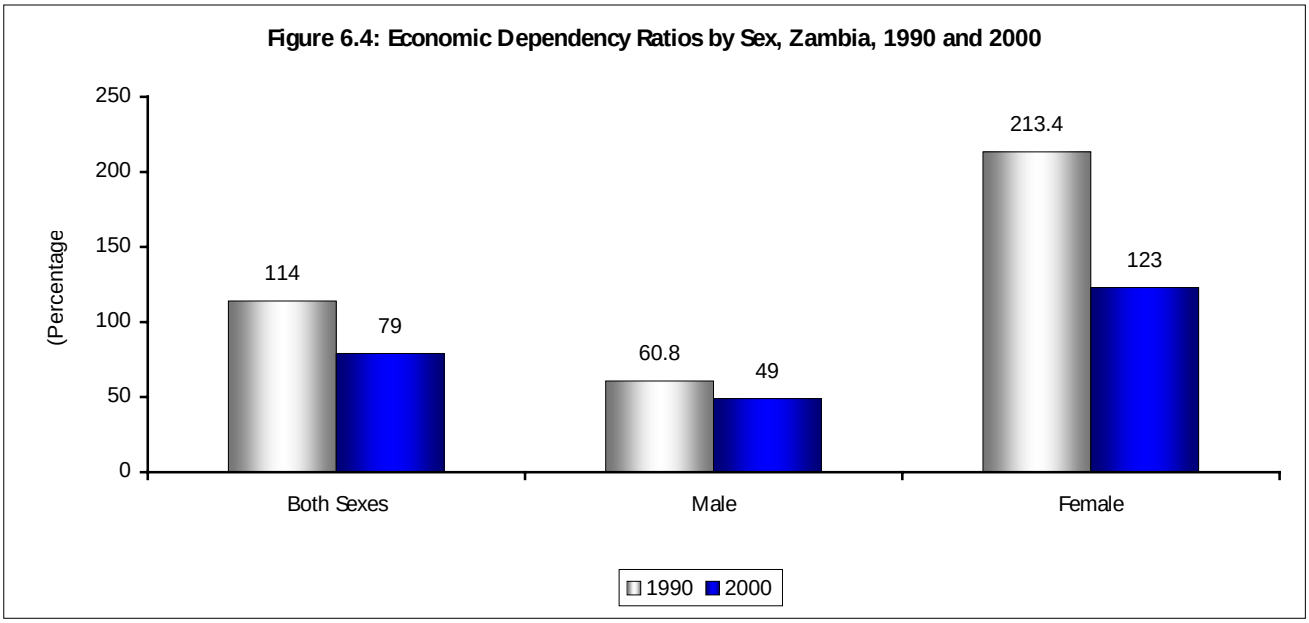
Economic dependency is a concept, which measures the extent to which the economically inactive population is dependent on the economically active population. Therefore the economic dependency ratio is the ratio of the economically inactive population divided by the economically active population.

Table 6.7 shows the current economically active population and economic dependency ratios by sex and residence. The table shows that the ratios have decreased for all the categories. The decreases are mostly for the females (213.4 percent in 1990 to 123 percent in 2000) and in rural areas (100.5 percent in 1990 to 65 percent in 2000). A diagrammatic illustration of the decreases are indicated in figure 6.4.

**Table 6.7: Current Economically active Population and Economic Dependency Ratios by Sex and Residence, Zambia, 1990 and 2000**

| Labourforce | 1990 | 2000 |
|---|---|---|
| Total Zambia | 2,162,487 | 3,165,151 |
| Male | 1,401,776 | 1,858,482 |
| Female | 760,711 | 1,306,669 |
| Rural | 1,392,348 | 2,151,776 |
| Urban | 770,139 | 1,013,375 |
| **Economic dependency ratios (Percentage)** | | |
| Total Zambia | 114 | 79 |
| Male | 60.8 | 49 |
| Female | 213.4 | 123 |
| Rural | 100.5 | 65 |
| Urban | 139.7 | 111 |

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




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

## 6.5. Current Labour Force Participation Rates

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

There was an increase in the working-age population involved in economic activities between the two Censuses. In 1990 the Labour Force Participation Rate was 46.6 percent as compared to 56 percent in 2000. The increase in the female labour force from 37.3 percent to 52.7 is more than the increase for males from 62.2 percent to 67.1 percent.

The increase in the rural Labour Force Participation Rate from 49.9 percent to 60.8 percent is greater than the increase in the urban areas from 41.7 percent in 1990 to 47.4 percent in 2000 (refer to Table 6.9).

The increase in Labour Force Participation Rates is greater for females than for males in both rural and urban areas. In the rural areas, the female participation rate increased from 37.3 percent in 1990 to 52.7 percent in 2000, while the male participation rate increased from 63.9 percent in 1990 to 69.5 percent in 2000. In the urban areas, the female Labour Force Participation Rate has increased from 23.2 percent in 1990 to 31.6 percent in 2000. Similarly the Participation Rate of males has increased from 59.8 percent in 1990 to 63.3 percent in 2000.

The Labourforce Participation Rates have increased most in Western Province (45 percent in 1990 to 69 percent in 2000) and lowest in Lusaka Province (46 percent in 1990 to 47 percent in 2000).

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

| Province | 1990 | | | 2000 | | |
|---|---|---|---|---|---|---|
| | Both Sexes | Male | Female | Both Sexe | Male | Female |
| **Zambia** | **46.6** | **62.2** | **31.9** | **56** | **67** | **45** |
| Central | 47.4 | 63.2 | 31.8 | 55 | 67 | 44 |
| Copperbelt | 42.7 | 61 | 23.6 | 51 | 66 | 36 |
| Eastern | 57.7 | 69.4 | 47.2 | 65 | 73 | 57 |
| Luapula | 46.2 | 62.9 | 31.4 | 62 | 70 | 54 |
| Lusaka | 45.6 | 63.7 | 26.9 | 47 | 65 | 29 |
| Northern | 46.2 | 60.4 | 33.6 | 58 | 66 | 50 |
| Northwestern | 43.5 | 55.5 | 33.1 | 57 | 64 | 51 |
| Southern | 45 | 61.2 | 29.8 | 48 | 62 | 35 |
| Western | 44.7 | 57.6 | 34.3 | 69 | 71 | 68 |

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

An examination of the labour force participation rates by age reveals that they were lowest (16.7 percent) in the age-group 12-14 years, rose with the increase in ages to reach a peak of 72.8 percent for the age-group 40-44 years, and then start to decline until it reaches 42.1 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 are 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 45-49 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, Zambia, 1990 and 2000**

| Age-Group | Current Participation Rate | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Zambia - Total | | | Rural | | | Urban | | |
| | Both Sexes | Male | Female | Both Sexes | Male | Female | Both Sexes | Male | Female |
| 1990 | 46.6 | 62.2 | 31.9 | 49.9 | 63.9 | 37.3 | 41.7 | 59.8 | 23.2 |
| 2000 | 55.7 | 67.1 | 44.9 | 60.8 | 69.5 | 52.7 | 47.4 | 63.3 | 31.6 |
| **2000 Census Age Group** | | | | | | | | | |
| Total | 55.7 | 67.1 | 44.9 | 60.8 | 69.5 | 52.7 | 47.4 | 63.3 | 31.6 |
| 12 – 14 | 16.7 | 16.6 | 16.7 | 21.6 | 21.2 | 22.0 | 8.0 | 8.1 | 8.0 |
| 15 – 19 | 36.3 | 36.4 | 36.2 | 44.5 | 42.8 | 46.1 | 23.3 | 25.9 | 21.0 |
| 20 – 24 | 61.4 | 75.6 | 49.4 | 68.3 | 80.4 | 58.3 | 51.5 | 68.9 | 36.6 |
| 25 – 29 | 69.7 | 88.6 | 51.7 | 73.9 | 89.7 | 59.4 | 63.8 | 87.2 | 40.3 |
| 30 – 34 | 72.0 | 90.4 | 53.1 | 74.9 | 90.2 | 60.2 | 67.6 | 90.5 | 41.9 |
| 35 – 39 | 72.0 | 90.5 | 54.1 | 74.8 | 90.3 | 60.9 | 67.6 | 90.8 | 42.5 |
| 40 – 44 | 72.8 | 90.3 | 55.7 | 75.9 | 90.4 | 62.7 | 68.0 | 90.1 | 43.6 |
| 45 – 49 | 72.7 | 88.5 | 56.9 | 75.9 | 89.7 | 63.7 | 67.2 | 86.9 | 43.4 |
| 50 – 54 | 70.1 | 84.8 | 56.5 | 73.9 | 87.7 | 63.2 | 62.1 | 80.2 | 37.9 |
| 55 – 59 | 68.6 | 81.6 | 55.8 | 73.4 | 86.1 | 62.3 | 55.7 | 71.8 | 33.5 |
| 60 – 64 | 64.8 | 78.2 | 52.5 | 70.3 | 82.9 | 59.4 | 45.5 | 63.7 | 25.8 |
| 65 – 69 | 63.4 | 76.0 | 49.6 | 68.9 | 80.7 | 56.2 | 41.4 | 57.9 | 23.3 |
| 70 – 74 | 55.0 | 67.4 | 40.5 | 60.2 | 72.0 | 46.2 | 32.1 | 46.6 | 16.5 |
| 75+ | 42.1 | 53.4 | 28.2 | 46.5 | 57.5 | 32.4 | 21.4 | 31.8 | 11.1 |

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

**Figure 6.5: Current Labour Force Participation Rates by Age and Sex, Zambia Rural, 2000**

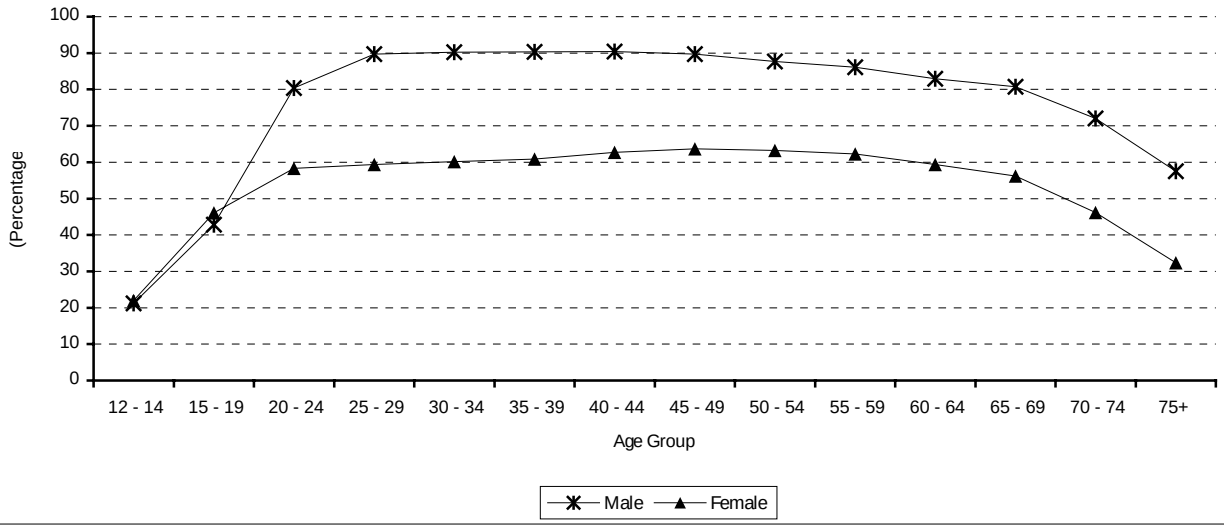
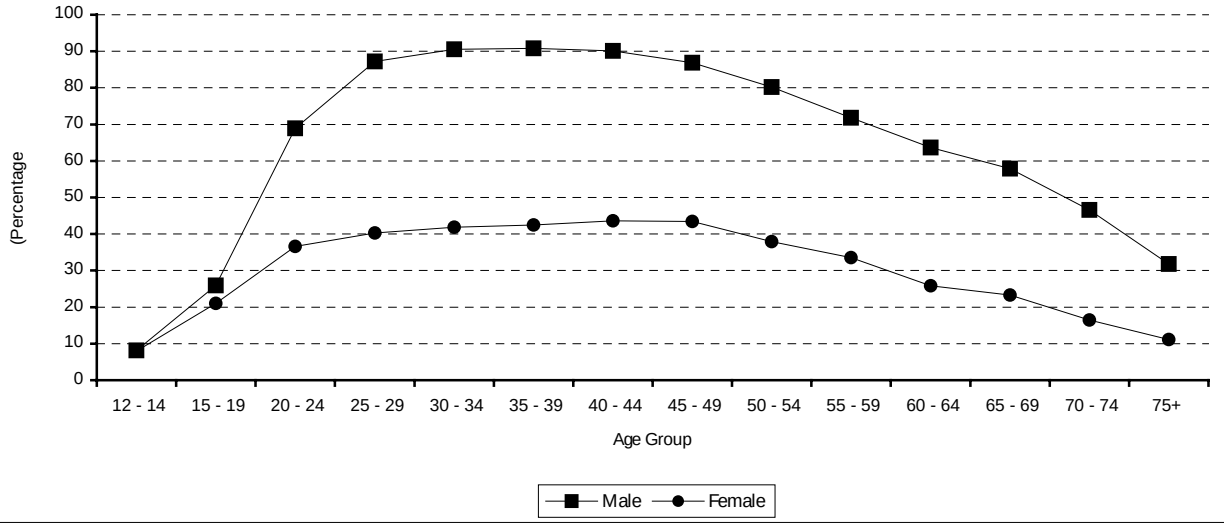



**Figure 6.6: Current Labour Force Participation Rates by Age and Sex, Zambia Urban, 2000**




## 6.6. Employment Status, Occupation And Industrial Classification

The occupational and industrial structure and employment status of a country's workforce reflect the level of its economic development and the efficiency with which it uses and allocates its resources. If economic progress is experienced in a country, this will easily be reflected in the increased division and specialization of its labour force. In an economy where economic progress is negligible, it is typical to find the majority of the workforce employed in it's primary industries. The work force are found in various forms of self-employment activities and unskilled. These activities are in the Agricultural sector and other occupations characterised by low skill requirements.

### 6.6.1 Employment Status

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

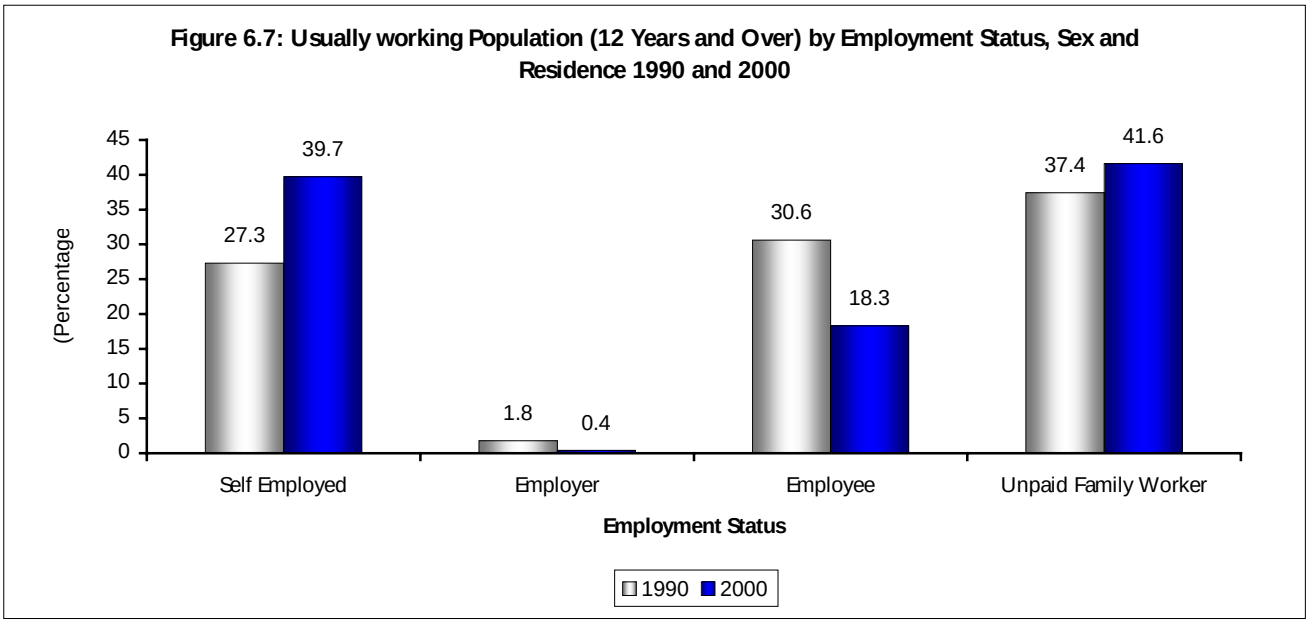
Table 6.10 shows that the usually working population increased by 52.9 percent between 1990 and 2000 from 1,838,409 in 1990 to 2,812,428 in 2000.

In terms of employment status, the total self-employed persons as a proportion of the total usually working population increased from 27.3 percent in 1990 to 39.7 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 28.4 percent in 1990 to 48.4 percent in 2000) is more than the increase in the female self-employed persons (from 25.2 percent in 1990 to 29.0 percent in 2000). With regard to residence, a similar pattern is observed where the proportion of the male self-employed population increased by a bigger percentage from 36.4 percent in 1990 to 56.2 percent for the rural areas and from 16.6 percent to 30.4 percent for the urban areas than the female self-employed population which increased from 23.2 percent in 1990 to 27.2 percent in 2000 for the rural areas and from 31.2 percent in 1990 to 36.9 percent in 2000.

There was a decrease in the proportion of the workforce classified as employers. From a proportion of 1.8 percent in 1990 , it dropped to 0.4 percent in 2000. A similar trend by sex and residence is observed.

The proportion of the total population classified as employees decreased from 30.6 percent in 1990 to 18.3 percent in 2000. The decrease in the female employees (from 14.7 percent in 1990 to 9.0 percent in 2000) is more than the decrease in the male employees (from 39.0 percent in 1990 to 25.7 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 37.4 percent in 1990 to 41.6 percent in 2000. There were larger increases in the proportion of the urban unpaid family workers especially for females who increased from 14.7 percent in 1990 to 22.6 percent in 2000. There was a decrease in the proportion of the unpaid family workers in the rural areas except for the female unpaid family workers. The biggest decrease is in the male unpaid family workers from 44.1 percent in 1990 to 33.4 percent in 2000.




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

**Table 6.10: Usually Working Population (12 Years and Over) by Employment Status, Sex and Residence, Zambia, 1990 and 2000**

| Employment status and sex | Residence and Year | | | | | |
|---|---|---|---|---|---|---|
| | Zambia - Total | | Rural | | Urban | |
| | 1990 | 2000 | 1990 | 2000 | 1990 | 2000 |
| **Total Population** | | | | | | |
| Both Sexes | 1,838,409 | 2,812,428 | 1,192,033 | 2,114,364 | 646,376 | 698,064 |
| Male | 1,204,938 | 1,556,610 | 719,011 | 1,086,649 | 485,927 | 469,961 |
| Female | 633,471 | 1,255,818 | 473,022 | 1,027,715 | 160,449 | 228,103 |
| **Total percentage** | | | | | | |
| Both Sexes | 100 | 100 | 100 | 100 | 100 | 100 |
| Male | 100 | 100 | 100 | 100 | 100 | 100 |
| Female | 100 | 100 | 100 | 100 | 100 | 100 |
| **Self-employed** | | | | | | |
| Both Sexes | 27.3 | 39.7 | 31.2 | 42.1 | 20.2 | 32.5 |
| Male | 28.4 | 48.4 | 36.4 | 56.2 | 16.6 | 30.4 |
| Female | 25.2 | 29.0 | 23.2 | 27.2 | 31.2 | 36.9 |
| **Employer** | | | | | | |
| Both Sexes | 1.8 | 0.4 | 1.0 | 0.2 | 3.2 | 0.9 |
| Male | 2.2 | 0.6 | 1.3 | 0.3 | 3.6 | 1.1 |
| Female | 0.8 | 0.2 | 0.4 | 0.1 | 2.0 | 0.6 |
| **Employee** | | | | | | |
| Both Sexes | 30.6 | 18.3 | 11.3 | 6.3 | 66.2 | 54.5 |
| Male | 39.0 | 25.7 | 16.0 | 10.1 | 72.9 | 61.7 |
| Female | 14.7 | 9.0 | 4.2 | 2.2 | 46.0 | 39.9 |
| **Unpaid family worker** | | | | | | |
| Both Sexes | 37.4 | 41.6 | 54.3 | 51.4 | 6.4 | 12.0 |
| Male | 27.8 | 25.4 | 44.1 | 33.4 | 3.6 | 6.9 |
| Female | 55.9 | 61.8 | 69.8 | 70.5 | 14.7 | 22.6 |
| **Not stated** | | | | | | |
| Both Sexes | 2.9 | 0.0 | 2.2 | 0.0 | 4.0 | 0.0 |
| Male | 2.6 | 0.0 | 2.2 | 0.0 | 3.3 | 0.0 |
| Female | 3.4 | 0.0 | 2.4 | 0.0 | 6.1 | 0.0 |

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

### 6.6.2. Working population by occupation

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

The distribution of male and female workers among occupations show some similarities. The three most important occupations for males are Agriculture (45.0 percent in 1990 and 65.4 percent in 2000), Production and related workers (11.5 percent in 1990 and 10.7 percent in 2000), and Professional, Technical and related occupations (7.1 percent in 1990 and 5.6 percent in 2000).

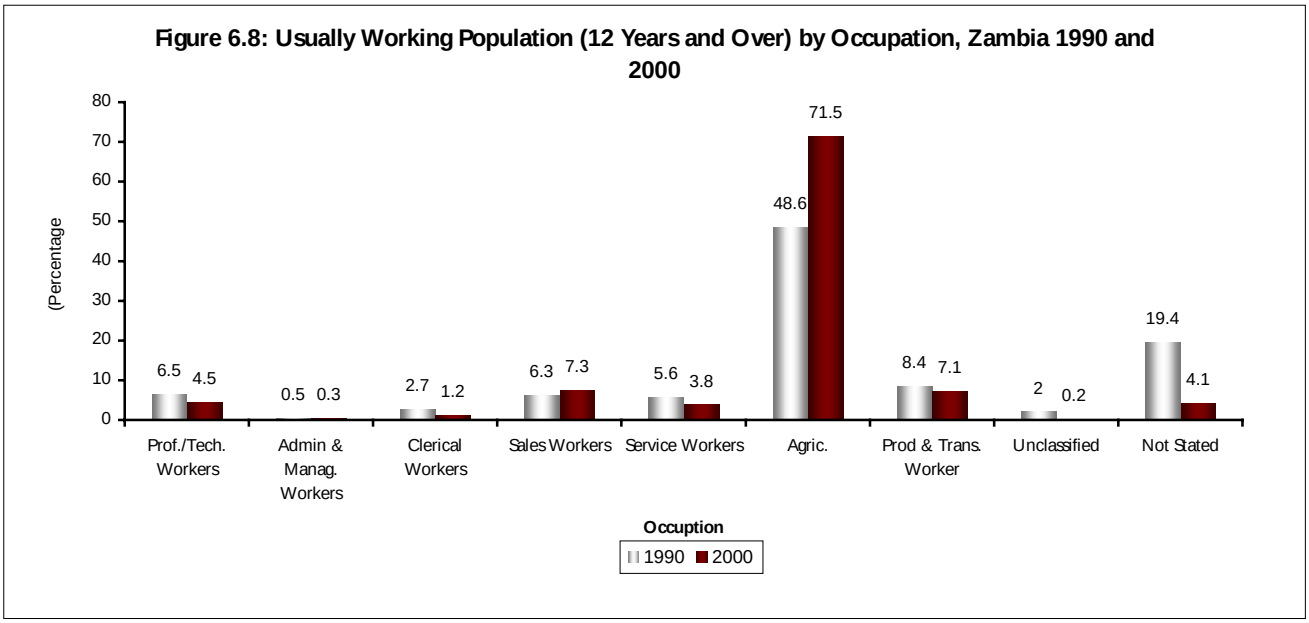
The three most important occupations for females are Agriculture (55.3 percent in 1990 and 79.0 percent in 2000), Sales workers (7.9 percent in 1990 and 7.2 percent in 2000) and Professional, Technical and related occupations (5.5 in 1990 and 3.2 percent in 2000).

In rural areas, the distribution of workers among the various occupations is similar to the one for total Zambia, 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 for both the total and that of the rural areas. In urban areas, workers are more widely distributed over many occupations, and not concentrated in few occupations. The four most important occupations in urban areas are Sales workers (23.3 percent in 2000), Production and related workers (21.1 percent in 2000), Service workers (12.9 percent) and Professional, technical and related workers (13.6 percent).

**Table 6.11: Usually Working Population By Occupation, Sex and Residence, Zambia, 1990 and 2000**

| Occupation | Year | Percentage of Working Population | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Zambia - Total | | | Rural | | | Urban | | |
| | | Both Sexes | Male | Female | Both Sexes | Male | Female | Both Sexes | Male | Female |
| Total Number of Workers | 1990 | 1,838,409 | 1,204,938 | 633,471 | 1,192,033 | 719,011 | 473,022 | 646,376 | 485,927 | 160,449 |
| | 2000 | 2,812,428 | 1,556,610 | 1,255,818 | 2,114,364 | 1,086,649 | 1,027,715 | 698,064 | 469,961 | 228,103 |
| Total Percent | 1990 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| | 2000 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Prof.Tech Workers | 1990 | 6.5 | 7.1 | 5.5 | 7.2 | 3.3 | 1.9 | 13.6 | 12.7 | 16.2 |
| | 2000 | 4.5 | 5.6 | 3.2 | 1.5 | 2.1 | 0.8 | 13.6 | 13.6 | 13.7 |
| Admin & Manag. Workers | 1990 | 0.5 | 0.7 | 0.2 | 0.1 | 0.1 | 0.0 | 1.4 | 1.6 | 0.7 |
| | 2000 | 0.3 | 0.4 | 0.1 | 0.0 | 0.1 | 0.0 | 1.1 | 1.3 | 0.6 |
| Clerical Workers | 1990 | 2.7 | 2.4 | 3.1 | 0.4 | 0.5 | 0.3 | 6.9 | 5.3 | 11.8 |
| | 2000 | 1.2 | 1.4 | 1.0 | 0.2 | 0.2 | 0.1 | 4.5 | 4.2 | 5.2 |
| Sales Workers | 1990 | 6.3 | 5.5 | 7.9 | 1.8 | 1.8 | 1.8 | 14.5 | 10.8 | 25.7 |
| | 2000 | 7.3 | 7.4 | 7.2 | 2.1 | 2.1 | 2.0 | 23.3 | 19.8 | 30.5 |
| Service Workers | 1990 | 5.6 | 6.9 | 3.1 | 1.7 | 2.1 | 1.2 | 12.6 | 13.9 | 8.7 |
| | 2000 | 3.8 | 4.6 | 2.8 | 0.8 | 1.1 | 0.5 | 12.9 | 12.8 | 12.9 |
| Agric. | 1990 | 48.6 | 45.0 | 55.3 | 71.2 | 70.7 | 71.8 | 6.9 | 7.0 | 6.7 |
| | 2000 | 71.5 | 65.4 | 79.0 | 89.5 | 87.6 | 91.5 | 16.9 | 14.2 | 22.5 |
| Prod. Trans. & worker | 1990 | 8.4 | 11.5 | 2.7 | 2.6 | 3.3 | 1.4 | 19.3 | 23.5 | 6.5 |
| | 2000 | 7.1 | 10.7 | 2.6 | 2.5 | 3.4 | 1.5 | 21.1 | 27.6 | 7.5 |
| Unclassified | 1990 | 2.0 | 2.0 | 2.0 | 1.4 | 1.4 | 1.4 | 3.2 | 3.1 | 3.6 |
| | 2000 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.4 | 0.4 |
| Not stated | 1990 | 19.4 | 18.9 | 20.2 | 18.1 | 16.8 | 20.2 | 21.6 | 22.1 | 20.1 |
| | 2000 | 4.1 | 4.2 | 4.0 | 3.4 | 3.4 | 3.4 | 6.3 | 6.1 | 6.7 |

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




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

### 6.6.3 Working population by Industry

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

The industrial structure in Zambia continues to be dominated by the Agricultural industry. In 2000, the Agricultural industry employed 71.6 percent of the workers, the Mining industry employed 1.3 percent, secondary activities together employed 4.5 percent, while tertiary industries together employed 17.2 percent (refer to Table 6.12). In comparison to 1990, Agriculture is the only sector, which recorded an increase from 49.8 percent in 1990 to 71.6 in 2000. The rest of the sectors have shown decreases. The most significant are Mining (3.4 percent in 1990 to 1.3 percent in 2000) and Manufacturing (5.1 percent in 1990 to 2.8 percent in 2000). A study of the mobility of workers from one industry to another shows that all non-agricultural industries experienced manpower losses during the 1990's, while the Agricultural industry is the only industry which gained manpower. This suggests that the majority of the retrenches, retirees and those who are fired, have taken up agricultural activities. The industrial distribution of workers by employment status revealed that the unpaid family workers (71.4 percent in 1990 and 91.4 percent in 2000) and the self-employed (65.1 percent in 1990 and 76.7 percent in 2000) were in the Agricultural sector. Employees were more widely distributed over the industries than other employment status. Employers were more predominant in Agriculture (24.2 percent in 1990 and 31.3 percent in 2000) and Community and Personal Services (23.8 percent in 1990 and 18.7 percent in 2000).

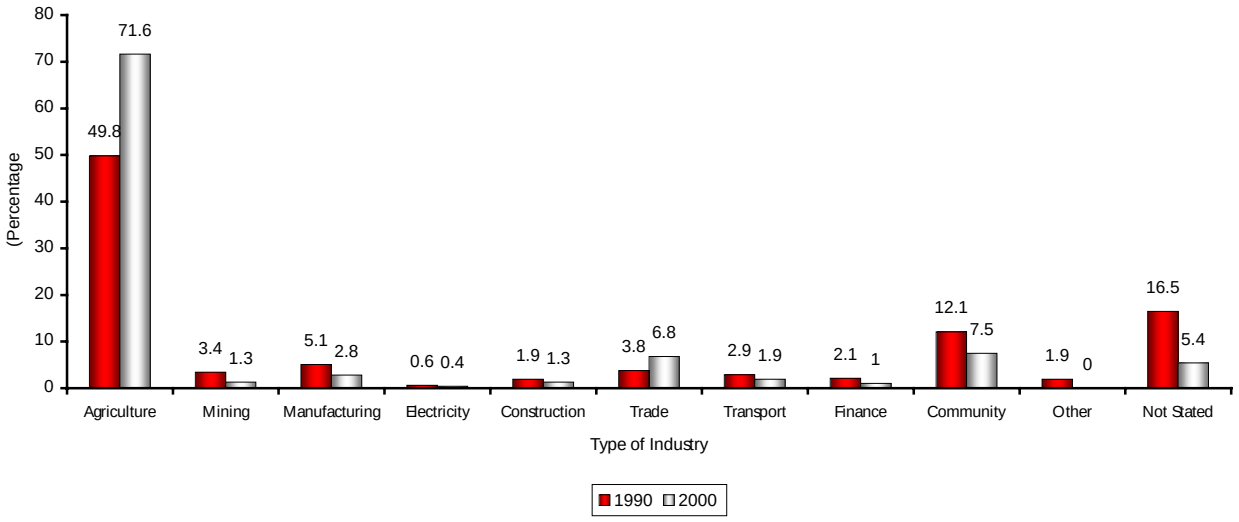
**Table 6.12: Usually Working Population (12 Years and Over) by Employment Status and Industry, Zambia, 1990 and 2000**

| Industry and Year | | Total Number Working | Self-employed | Employee | Employer | Unpaid Family Worker | Not stated |
|---|---|---|---|---|---|---|---|
| Total Number | 1990 | 1,838,409 | 502,501 | 562,791 | 32,276 | 688,151 | 52,691 |
| | 2000 | 2,812,428 | 1,117,217 | 513,512 | 10,670 | 1,171,029 | - |
| Total Percentage | 1990 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| | 2000 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Agriculture | 1990 | 49.8 | 65.1 | 14.1 | 24.2 | 71.4 | 19.9 |
| | 2000 | 71.6 | 76.7 | 16.3 | 31.3 | 91.4 | 0.0 |
| Mining | 1990 | 3.4 | 0.1 | 10.2 | 6.2 | 0.0 | 0.6 |
| | 2000 | 1.3 | 0.1 | 6.8 | 2.5 | 0.0 | 0.0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Manufacturing | 1990 | 5.1 | 4.6 | 11.0 | 9.4 | 0.5 | 4.3 |
| | 2000 | 2.8 | 2.8 | 7.7 | 7.9 | 0.5 | 0.0 |
| Electricity | 1990 | 0.6 | 0.1 | 1.7 | 1.4 | 0.0 | 0.4 |
| | 2000 | 0.4 | 0.1 | 1.9 | 0.9 | 0.0 | 0.0 |
| Construction | 1990 | 1.9 | 1.0 | 4.6 | 3.8 | 0.2 | 1.5 |
| | 2000 | 1.3 | 1.0 | 4.6 | 4.0 | 0.1 | 0.0 |
| Trade | 1990 | 3.8 | 7.4 | 4.7 | 5.9 | 0.54 | 3.3 |
| | 2000 | 6.8 | 10.4 | 8.8 | 13.4 | 2.4 | 0.0 |
| Transport | 1990 | 2.9 | 0.7 | 8.0 | 6.7 | 0.1 | 2.2 |
| | 2000 | 1.9 | 0.5 | 9.1 | 6.9 | 0.1 | 0.0 |
| Finance | 1990 | 2.1 | 0.7 | 3.4 | 4.0 | 0.2 | 0.3 |
| | 2000 | 1.0 | 0.8 | 3.5 | 4.0 | 0.1 | 0.0 |
| Community | 1990 | 12.1 | 7.6 | 28.5 | 23.8 | 1.7 | 8.6 |
| | 2000 | 7.5 | 2.8 | 33.0 | 18.7 | 0.8 | 0.0 |
| Other | 1990 | 1.9 | 1.4 | 2.3 | 2.1 | 1.7 | 6.3 |
| | 2000 | | | | | | |
| Not Stated | 1990 | 16.5 | 9.8 | 8.5 | 8.8 | 4.7 | 15.5 |
| | 2000 | 5.4 | 4.9 | 8.5 | 10.4 | 4.5 | 0.0 |

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

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




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

The distribution of the usually working population by employment status in each industry is shown in Table 6.13. Unpaid family workers (37.4 percent in 1990 and 41.6 percent in 2000) are the most predominant status for all industries. The Employees are prominent in all industries, except those of Agriculture and Trade in both 1990 and 2000. The employment status of employer is not very predominant in any industry in both Censuses. Self-employed is prominent in the Trading and Agricultural industries in 2000 (60.9 percent in Trade and 42.5 percent in Agriculture). Unpaid family workers are dominant in the Agricultural industry in both Censuses.

**Table 6.13: Usually Working Population (12 Years and Over) by Employment Status and Industry, Zambia, 1990 and 2000**

| Industrial and Year | | Total Number Working | Total Percent | Self Employed | Employee | Employer | Unpaid Family | Not stated |
|---|---|---|---|---|---|---|---|---|
| Total Number | 1990 | 1,838,409 | 100 | 27.3 | 30.6 | 1.8 | 37.4 | 2.9 |
| | 2000 | 2,812,428 | 100 | 39.7 | 18.3 | 0.4 | 41.6 | 0.0 |
| Total Percentage | 1990 | 1,838,409 | 100 | 27.3 | 30.6 | 1.8 | 37.4 | 2.9 |
| | 2000 | 2,812,428 | 100 | 39.7 | 18.3 | 0.4 | 41.6 | 0.0 |
| Agriculture | 1990 | 916,084 | 100 | 35.7 | 8.6 | 0.9 | 43.6 | 1.2 |
| | 2000 | 2,014,028 | 100 | 42.5 | 4.1 | 0.2 | 53.2 | 0.0 |
| Mining | 1990 | 61,540 | 100 | 1.0 | 93.2 | 3.3 | 0.3 | 2.1 |
| | 2000 | 36,463 | 100 | 3.3 | 95.4 | 0.7 | 0.6 | 0.0 |
| Manufacturing | 1990 | 94,218 | 100 | 24.7 | 65.7 | 3.2 | 4.0 | 2.4 |
| | 2000 | 77,515 | 100 | 40.3 | 50.8 | 1.1 | 7.8 | 0.0 |
| Electricity | 1990 | 10,551 | 100 | 4.0 | 89.2 | 4.2 | 0.4 | 2.2 |
| | 2000 | 11,016 | 100 | 8.7 | 88.8 | 0.9 | 1.6 | 0.0 |
| Construction | 1990 | 34,352 | 100 | 15.0 | 75.8 | 3.6 | 3.3 | 2.3 |
| | 2000 | 36,790 | 100 | 31.4 | 64.0 | 1.2 | 3.4 | 0.0 |
| Trade | 1990 | 70,310 | 100 | 52.9 | 37.3 | 2.7 | 4.6 | 2.5 |
| | 2000 | 190,354 | 100 | 60.9 | 23.6 | 0.8 | 14.7 | 0.0 |
| Transport | 1990 | 52,423 | 100 | 6.3 | 86.5 | 4.1 | 0.8 | 2.3 |
| | 2000 | 53,736 | 100 | 9.4 | 87.4 | 1.4 | 1.8 | 0.0 |
| Finance | 1990 | 37,399 | 100 | 29.6 | 61.2 | 3.1 | 3.9 | 2.2 |
| | 2000 | 29,151 | 100 | 32.2 | 60.9 | 1.5 | 5.4 | 0.0 |
| Community | 1990 | 222,639 | 100 | 17.2 | 72.1 | 3.4 | 5.3 | 2.0 |
| | 2000 | 212,280 | 100 | 14.7 | 79.8 | 0.9 | 4.6 | 0.0 |
| Other | 1990 | 35,498 | 19 | 36.7 | 1.9 | 33.0 | 9.4 | 0.0 |
| | 2000 | | | | | | | |
| Not Stated | 1990 | 303,395 | 100 | 16.2 | 20.0 | 1.4 | 53.8 | 8.6 |
| | 2000 | 151,095 | 100 | 35.9 | 28.8 | 0.7 | 34.6 | 0.0 |

*Source:* ***CSO, 1990 and 2000 Censuses 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 Agricultural sector (72 percent) followed by the Community and Personal Services sector with 13 percent. By residence, the rural areas employ 90 percent in the Agricultural industry. The Community and Personal Services and the Trade, Restaurants and Hotels account for 32 percent and 22 percent respectively.

**Table 6.14 Percentage Distribution of Usually Working Population by Industry, Residence and Sex, Zambia, 2000**

| Industry | Total Number | Rural | Urban | Male | Female |
|---|---|---|---|---|---|
| Total Number | 2,812,428 | 2,114,364 | 698,064 | 1,556,610 | 1,255,818 |
| Total Percentage | 100 | 100 | 100 | 100 | 100 |
| Agriculture | 72 | 90 | 17 | 66 | 79 |
| Mining & Quarrying | 1 | 0 | 5 | 2 | 0 |
| Manufacturing | 3 | 1 | 8 | 4 | 2 |
| Electricity, Gas and Water | 0 | 0 | 1 | 1 | 0 |
| Construction | 1 | 0 | 4 | 2 | 0 |
| Trade, Restaurant and Hotels | 7 | 2 | 22 | 7 | 7 |
| Transport and Communication | 2 | 0 | 7 | 3 | 0 |
| Finance and Real Estates | 1 | 0 | 4 | 1 | 1 |
| Community and Personal Services | 13 | 6 | 32 | 14 | 11 |

Disaggregated by Gender, 79 percent of the total usually working population of females are in the Agricultural sector while 11 percent are in the Community and Personal Services sector.

**Table 6.15 Usually Working Population by Industry, Residence and Sex, Zambia, 2000**

| Industry | Total Number | Total % | Male % | Female % | Rural Number | Total % | Male % | Female % | Urban Number | Total % | Male | Female |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Number | 2,812,428 | 100 | 55 | 45 | 2,114,364 | 100 | 51 | 49 | 698,064 | 100 | 67 | 33 |
| Agriculture | 2,014,028 | 100 | 51 | 49 | 1,894,774 | 100 | 50 | 50 | 119254 | 100 | 56 | 44 |
| Mining & Quarrying | 36,463 | 100 | 95 | 5 | 3,159 | 100 | 98 | 2 | 33,304 | 100 | 95 | 5 |
| Manufacturing | 77,515 | 100 | 73 | 27 | 19,623 | 100 | 57 | 43 | 57,892 | 100 | 79 | 21 |
| Electricity, Gas and Water | 11,016 | 100 | 90 | 10 | 1,139 | 100 | 94 | 6 | 9,877 | 100 | 90 | 10 |
| Construction | 36,790 | 100 | 96 | 4 | 10,200 | 100 | 97 | 3 | 26,590 | 100 | 95 | 5 |
| Trade, Restaurant and Hotels | 190,354 | 100 | 56 | 44 | 39,463 | 100 | 52 | 48 | 150,891 | 100 | 57 | 43 |
| Transport and Communication | 53,736 | 100 | 93 | 7 | 5,100 | 100 | 98 | 2 | 48,636 | 100 | 92 | 8 |
| Finance and Real Estates | 29,151 | 100 | 68 | 32 | 3,941 | 100 | 65 | 35 | 25,210 | 100 | 69 | 31 |
| Community and Personal Services | 363,375 | 100 | 63 | 37 | 136,965 | 100 | 67 | 33 | 226,410 | 100 | 62 | 38 |

For the males 66 percent are in the Agricultural sector while 14 percent are in the Community and Personal services sector.

From the total working population by industry sex and residence, 55 percent were males and 45 percent were females. The Mining, Electricity, Construction and Transport sectors account for the majority of the male working population of 95 percent, 90 percent, 96 percent and 93 percent, respectively. The distribution by rural and urban does not differ much from the total distribution.

## 6.7. 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 Country 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, 92.1 percent of the country's workforce have absolutely no professional /vocational education while only 7.9 percent have such education. The distribution among the various occupations, shows that about four fifths of those in the Professional, Technical and related occupations have professional education, while a fifth do not have. About 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 (56.7 with no professional education while 43.3 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.

An examination of the levels of training of those who are reported to have professional education shows that almost three quarters (73.4 percent) are trained at Certificate level, almost a fifth (18.9 percent) are trained up to Diploma level and only 7.6 percent are trained up to Degree level. Except for the Administrative and Managerial workers (29.2 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 (37.2 percent); Professional and technical (24.0 percent) and Sales workers (23.4 percent). The majority (ranging from 33.6 percent to 90 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.

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

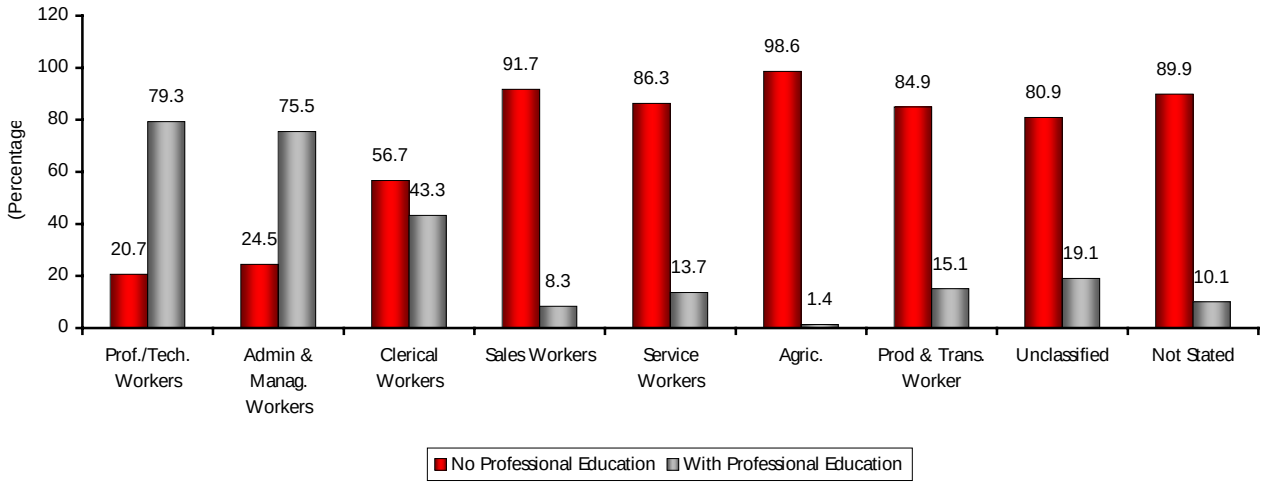


Table 6.16: Usually Working Population 12 Years and over by Professional/Vocational Training; Occupation and Sex (Percent), Zambia, 2000

| 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 | 2,812,428 | 100 | 92.1 | 7.9 | 222,968 | 100 | 73.4 | 18.9 | 7.6 |
| Prof/Tech | 126,456 | 100 | 20.7 | 79.3 | 100,235 | 100 | 65.4 | 24.0 | 10.5 |
| Admin. Managerial | 8,185 | 100 | 24.5 | 75.5 | 6,179 | 100 | 33.6 | 37.2 | 29.2 |
| Clerical & Related | 34,702 | 100 | 56.7 | 43.3 | 15,025 | 100 | 81.8 | 15.3 | 2.9 |
| Sales workers | 205,991 | 100 | 91.7 | 8.3 | 17,013 | 100 | 70.3 | 23.4 | 6.2 |
| Service workers | 107,089 | 100 | 86.3 | 13.7 | 14,679 | 100 | 88.2 | 9.3 | 2.5 |
| Agric. | 2,010,404 | 100 | 98.6 | 1.4 | 27,214 | 100 | 85.0 | 11.3 | 3.7 |
| Production | 199,549 | 100 | 84.9 | 15.1 | 30,118 | 100 | 90.0 | 8.4 | 1.6 |
| Unclassified | 4,602 | 100 | 80.9 | 19.1 | 878 | 100 | 61.8 | 22.1 | 16.1 |
| Not stated. . | 115,450 | 100 | 89.9 | 10.1 | 11,627 | 100 | 69.3 | 20.6 | 10.2 |
| **Male** | | | | | | | | | |
| Total | 1,556,610 | 100 | 89.9 | 10.1 | 157,226 | 100 | 69.9 | 21.1 | 9.0 |
| Prof/Tech | 86,844 | 100 | 23.6 | 76.4 | 66,365 | 100 | 58.8 | 28.0 | 13.2 |
| Admin. Managerial | 6,644 | 100 | 24.4 | 75.6 | 5,025 | 100 | 31.8 | 37.9 | 30.3 |
| Clerical & Related | 22,216 | 100 | 70.2 | 29.8 | 6,618 | 100 | 74.8 | 20.1 | 5.1 |
| Sales workers | 115,459 | 100 | 90.3 | 9.7 | 11,194 | 100 | 63.8 | 28.2 | 8.0 |
| Service workers. . | 72,033 | 100 | 83.7 | 16.3 | 11,750 | 100 | 87.8 | 9.6 | 2.6 |
| Agric., Husbandry | 1,018,528 | 100 | 97.8 | 2.2 | 22,276 | 100 | 83.3 | 12.7 | 4.0 |
| Production | 166,920 | 100 | 84.7 | 15.3 | 25,563 | 100 | 89.4 | 8.9 | 1.7 |
| Unclassified | 2,898 | 100 | 78.6 | 21.4 | 619 | 100 | 59.8 | 23.7 | 16.5 |
| Not stated | 65,068 | 100 | 88.0 | 12.0 | 7,816 | 100 | 64.4 | 23.4 | 12.2 |
| **Female** | | | | | | | | | |
| Total | 1,255,818 | 100 | 94.8 | 5.2 | 65,742 | 100 | 81.9 | 13.8 | 4.3 |
| Prof/Tech workers. | 39,612 | 100 | 14.5 | 85.5 | 33,870 | 100 | 78.4 | 16.3 | 5.3 |
| Admin. Workers. . | 1,541 | 100 | 25.1 | 74.9 | 1,154 | 100 | 41.4 | 34.3 | 24.3 |
| Clerical & Related | 12,486 | 100 | 32.7 | 67.3 | 8,407 | 100 | 87.3 | 11.5 | 1.2 |
| Sales workers. | 90,532 | 100 | 93.6 | 6.4 | 5,819 | 100 | 82.9 | 14.2 | 2.9 |
| Service workers. | 35,056 | 100 | 91.6 | 8.4 | 2,929 | 100 | 90.0 | 8.1 | 1.9 |
| Agric., Husbandry | 991,876 | 100 | 99.5 | 0.5 | 4,938 | 100 | 92.3 | 5.2 | 2.5 |
| Production, Transport | 32,629 | 100 | 86.0 | 14.0 | 4,555 | 100 | 93.5 | 5.5 | 1.0 |
| Unclassified | 1,704 | 100 | 84.8 | 15.2 | 259 | 100 | 66.8 | 18.1 | 15.1 |
| Not stated. | 50,382 | 100 | 92.4 | 7.6 | 3,811 | 100 | 79.2 | 14.7 | 6.1 |

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 10.1 percent in 1990 to 7.9 percent in 2000 while those having no professional qualification declined from 89.3 percent in 1990 to 79.3 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 78.4 percent in 1990 to 73.4 percent in 2000 for Certificate and from 20.3 percent in 1990 to 18.9 percent in 2000 for Diploma. The proportion of those trained at degree level has increased from 1.3 percent in 1990 to 7.6 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 5.0 percent in 1990 to 29.2 percent in 2000, and Professional and Technical from 2.1 percent in 1990 to 10.5 percent in 2000).

Zambia 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 country only had 100 persons with university education and 1,200 with secondary education at the time of Independence in 1964. However, the data still show that the bulk of the Country's workforce is unskilled (and may have hence have low productivity), while critical skills in the Professional, Technical, Administrative, Managerial and related occupations may still be too inadequate to enable the country to sustain appreciable development efforts.

**Table 6.17: Usually Working Population 12 Years and over by Professional/Vocational Training; Occupation and Sex (Percent), Zambia, 1990**

| 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 | 1,838,410 | 100.0 | 89.3 | 10.7 | 195721 | 100.0 | 78.4 | 20.3 | 1.3 |
| Prof/Tech | 120,491 | 100.0 | 31.4 | 68.6 | 81272 | 100.0 | 69.9 | 28.0 | 2.1 |
| Admin. Managerial | 10,031 | 100.0 | 37.0 | 63.0 | 6122 | 100.0 | 41.5 | 53.5 | 5.0 |
| Clerical & Related | 49,306 | 100.0 | 60.6 | 39.4 | 19125 | 100.0 | 87.1 | 12.5 | 0.4 |
| Sales workers | 115,655 | 100.0 | 90.8 | 9.2 | 10463 | 100.0 | 75.2 | 24.0 | 0.9 |
| Service workers | 101,997 | 100.0 | 87.8 | 12.2 | 12326 | 100.0 | 89.6 | 10.2 | 0.2 |
| Agric. | 892,966 | 100.0 | 97.4 | 2.6 | 22827 | 100.0 | 88.8 | 10.7 | 0.5 |
| Production | 155,161 | 100.0 | 88.2 | 11.8 | 18106 | 100.0 | 89.3 | 10.4 | 0.2 |
| Unclassified | 37,138 | 100.0 | 91.5 | 8.5 | 3126 | 100.0 | 70.8 | 26.8 | 2.4 |
| Not stated. . | 355,665 | 100.0 | 93.6 | 6.4 | 22354 | 100.0 | 89.4 | 10.1 | 0.5 |
| **Males** | | | | | | | | | |
| Total | 1,204,938 | 100.0 | 87.8 | 12.2 | 145057 | 100.0 | 76.0 | 22.6 | 1.4 |
| Prof/Tech | 85,414 | 100.0 | 34.2 | 65.8 | 55248 | 100.0 | 64.1 | 33.4 | 2.5 |
| Admin. Managerial | 8,888 | 100.0 | 37.3 | 62.7 | 5403 | 100.0 | 40.2 | 54.9 | 4.9 |
| Clerical & Related | 29,330 | 100.0 | 73.9 | 26.1 | 7527 | 100.0 | 80.6 | 18.6 | 0.8 |
| Sales workers | 65,704 | 100.0 | 88.0 | 12.0 | 7770 | 100.0 | 70.9 | 28.1 | 1.0 |
| Service workers. . | 82,599 | 100.0 | 86.5 | 13.5 | 10981 | 100.0 | 89.6 | 10.2 | 0.2 |
| Agric., Husbandry | 542,436 | 100.0 | 96.2 | 3.8 | 20268 | 100.0 | 88.4 | 11.0 | 0.5 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Production | 138,027 | 100.0 | 88.2 | 11.8 | 16137 | 100.0 | 88.9 | 10.9 | 0.3 |
| Unclassified | 24,578 | 100.0 | 89.9 | 10.1 | 2435 | 100.0 | 69.1 | 28.5 | 2.3 |
| Not stated | 227,962 | 100.0 | 91.4 | 8.6 | 19288 | 100.0 | 89.8 | 9.8 | 0.4 |
| **Females** | | | | | | | | | |
| Total | 633,472 | 100.0 | 91.9 | 8.1 | 50664 | 100.0 | 85.4 | 13.7 | 0.9 |
| Prof/Tech workers. | 35,077 | 100.0 | 24.8 | 75.2 | 26024 | 100.0 | 82.2 | 16.6 | 1.3 |
| Admin. Workers. . | 1,143 | 100.0 | 34.6 | 65.4 | 719 | 100.0 | 51.0 | 43.4 | 5.6 |
| Clerical & Related | 19,976 | 100.0 | 41.2 | 58.8 | 11598 | 100.0 | 91.3 | 8.5 | 0.1 |
| Sales workers. | 49,951 | 100.0 | 94.5 | 5.5 | 2693 | 100.0 | 87.4 | 12.0 | 0.7 |
| Service workers. | 19,398 | 100.0 | 93.0 | 7.0 | 1345 | 100.0 | 89.4 | 10.4 | 0.2 |
| Agric., Husbandry | 350,530 | 100.0 | 99.3 | 0.7 | 2559 | 100.0 | 91.7 | 8.0 | 0.4 |
| Production, Transport | 17,134 | 100.0 | 88.4 | 11.6 | 1969 | 100.0 | 92.9 | 7.0 | 0.1 |
| Unclassified | 12,560 | 100.0 | 94.4 | 5.6 | 691 | 100.0 | 76.6 | 20.8 | 2.6 |
| Not stated | 127,703 | 100.0 | 97.6 | 2.4 | 3066 | 100.0 | 87.0 | 12.2 | 0.8 |

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

Table 6.18 shows the usually working population 12 years and over by field of training and professional/vocational training level completed by 2000. The biggest proportion of the country's workforce of 62.0 percent had not received training at any level by 2000. There is more concentration of training in the Social Sciences and Arts than in the Natural Sciences. The following are the five most important fields of training for those who received professional/vocational training in 2000: Teacher training (19.4 percent); Nursing (13.4 percent); Accountancy (8.3 percent); Business Administration (4.3 percent) and Mechanical Engineering (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), Zambia, 2000

| Sex and field of Training | Total usually Working Population | No Professional Education | Professional/vocational training | | | |
|---|---|---|---|---|---|---|
| | | | Total | Certificate | Diploma | Degree |
| Total Working Number | 2,812,428 | 2,589,460 | 222,968 | 163,711 | 42,214 | 17,043 |
| Total Percent. | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| | | | | | | |
| Natural science. | 0.1 | 0.0 | 0.8 | 0.2 | 1.0 | 5.6 |
| Civil engineering | 0.1 | 0.0 | 0.9 | 0.7 | 1.2 | 2.5 |
| Elec. & Electronic Engineering | 0.3 | 0.0 | 3.8 | 3.7 | 4.4 | 3.4 |
| Mechanical Engineering | 0.5 | 0.0 | 6.0 | 6.4 | 5.4 | 4.4 |
| Chemical Engineering | 0.0 | 0.0 | 0.3 | 0.2 | 0.5 | 0.9 |
| Mining Engineering | 0.1 | 0.0 | 1.0 | 0.8 | 1.2 | 1.7 |
| Industrial Engineering | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Metallurgical Engineering | 0.0 | 0.0 | 0.3 | 0.2 | 0.5 | 0.9 |
| Architectural& T/Planning | 0.0 | 0.0 | 0.4 | 0.2 | 0.5 | 1.1 |
| Other Engineering | 0.1 | 0.0 | 1.2 | 1.1 | 1.4 | 1.7 |
| Medicine and Surgery | 0.1 | 0.0 | 0.9 | 0.3 | 1.4 | 5.2 |
| Pharmacy | 0.0 | 0.0 | 0.4 | 0.3 | 0.7 | 0.6 |
| Dentistry | 0.0 | 0.0 | 0.3 | 0.3 | 0.4 | 0.3 |
| Nursing | 1.1 | 0.0 | 13.4 | 15.8 | 8.9 | 1.9 |
| Medical Technology | 0.1 | 0.0 | 1.1 | 0.4 | 2.1 | 4.9 |
| X-RAY Technology | 0.0 | 0.0 | 0.2 | 0.0 | 0.3 | 1.2 |
| Veterinary | 0.0 | 0.0 | 0.4 | 0.3 | 0.4 | 0.6 |

| Sex and field of Training | Total usually Working Population | No Professional Education | Professional/vocational training | | | |
|---|---|---|---|---|---|---|
| | | | Total | Certificate | Diploma | Degree |
| Statistics | 0.0 | 0.0 | 0.2 | 0.1 | 0.2 | 0.4 |
| Mathematics | 0.0 | 0.0 | 0.2 | 0.1 | 0.3 | 0.8 |
| Computer Science | 0.1 | 0.0 | 1.7 | 1.3 | 2.8 | 2.0 |
| Economics | 0.1 | 0.0 | 0.9 | 0.4 | 0.9 | 5.8 |
| Accountancy | 0.7 | 0.0 | 8.3 | 5.9 | 16.4 | 10.3 |
| Teacher Training | 1.5 | 0.0 | 19.4 | 20.7 | 17.3 | 12.0 |
| Law and Jurisprudence | 0.1 | 0.0 | 1.6 | 1.4 | 1.3 | 3.8 |
| Journalism | 0.0 | 0.0 | 0.5 | 0.2 | 1.3 | 0.7 |
| Fine Arts | 0.0 | 0.0 | 0.5 | 0.5 | 0.5 | 0.9 |
| Physical Education | 0.0 | 0.0 | 0.2 | 0.1 | 0.2 | 0.4 |
| Library Science | 0.0 | 0.0 | 0.2 | 0.2 | 0.2 | 0.4 |
| Social Welfare | 0.1 | 0.0 | 0.7 | 0.6 | 0.7 | 1.4 |
| Criminology | 0.1 | 0.0 | 1.6 | 2.0 | 0.5 | 0.3 |
| Business Administration | 0.3 | 0.0 | 4.3 | 2.9 | 8.5 | 7.7 |
| Secretarial Training | 0.3 | 0.0 | 3.4 | 4.1 | 2.1 | 0.4 |
| Shorthand Typing | 0.1 | 0.0 | 1.0 | 1.2 | 0.2 | 0.1 |
| Clerical Typing | 0.1 | 0.0 | 1.1 | 1.5 | 0.2 | 0.1 |
| Operating of Off. Machine | 0.0 | 0.0 | 0.5 | 0.5 | 0.3 | 0.1 |
| Service Trade | 0.1 | 0.0 | 1.4 | 1.6 | 0.8 | 0.3 |
| Radio & TV Broadcasting | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 |
| Fire Protection & Fire Fighting | 0.0 | 0.0 | 0.2 | 0.3 | 0.1 | 0.0 |
| Agriculture, Forestry & Fishery | 0.2 | 0.0 | 3.1 | 3.0 | 3.4 | 4.2 |
| Food and drink Processing | 0.0 | 0.0 | 0.5 | 0.6 | 0.4 | 0.2 |
| Wood working | 0.2 | 0.0 | 2.3 | 3.0 | 0.3 | 0.1 |
| Textile Trades | 0.1 | 0.0 | 1.8 | 2.3 | 0.4 | 0.2 |
| Leather Trades | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.0 |
| Other Programmers | 1.0 | 0.0 | 12.5 | 13.6 | 9.4 | 10.1 |
| No Training | 62.0 | 67.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| Not stated | 30.1 | 32.6 | 0.5 | 0.4 | 0.5 | 0.5 |

## 6.8. Unemployment

The unemployed population consists of all persons 12 years and over who are actively seeking work or are available for work during the reference period, i.e. the last seven days before the enumeration day. Poor economic conditions are primarily responsible for unemployment, although demographic trends do affect the growth and composition of the labourforce. A high unemployment rate 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.

Tables 6.19 and 6.20 show unemployment rates by sex and residence for 1990 and 2000. There was a decline in the overall unemployment rate from 15.0 percent in 1990 to 12.9 percent in 2000. Females experienced a bigger drop from 16.7 percent in 1990 to 11.3 percent in 2000 while the male unemployment rate remained the same at 14.1 percent during the two reference periods.

In the rural areas the unemployment rate declined for both male and females. The total unemployment rate declined from 14.4 percent in 1990 to 6.6 percent in 2000. The Male unemployment rate declined from 14.8 percent in 1990 to 7.8 percent in 2000 while the Female unemployment rate declined from 13.7 percent in 1990 to 5.0 percent in 2000. However unemployment rates increased in the urban areas. The total unemployment rate increased from 16.1 percent in 1990 to 26.5 percent in 2000. The increase in the male urban unemployment rate (from 12.9 percent in 1990 to 25.2 percent in 2000) is more than the increase in the urban female unemployment rate (from 24.5 percent in 1990 to 29.2 percent in 2000). The increase in the unemployment rates in the urban areas could be accounted for by the fact that there were a lot of job losses because a good number of companies were either liquidated or privatized. Correspondingly, this can explain the decrease in unemployment rates in the rural areas probably because those who lost jobs in the urban areas got employed in the rural areas.

Unemployment rates increased most in Lusaka Province (13.7 percent in 1990 to 26 percent in 2000) and Copperbelt Province (16.6 percent in 1990 to 24.4 percent in 2000). Western Province and Eastern Province recorded the biggest declines from 21 percent in 1990 to 5.1 percent for Western and from 10.6 percent to 4.8 percent for Eastern Provinces, respectively). Disaggregated by sex, the unemployment rates for males increased most in Lusaka Province (from 11 percent in 1990 to 24.2 percent in 2000) followed by Copperbelt Province (from 13.7 percent in 1990 to 23.9 percent in 2000). Western Province registered the biggest decrease in the male unemployment rate from 21.6 percent in 1990 to 6.0 percent in 2000. A similar pattern is observed for the female unemployment rates.

**Table 6.19: Trends in Unemployment Rates by Sex and Province, Zambia 1990 and 2000**

| Province | 1990 | | | 2000 | | |
|---|---|---|---|---|---|---|
| | **Both Sexes** | **Male** | **Female** | **Both Sexes** | **Male** | **Female** |
| Zambia | 15.0 | 14.1 | 16.7 | 12.9 | 14.1 | 11.3 |
| Central | 15.3 | 13.9 | 18 | 12.1 | 12.9 | 10.9 |
| Copperbelt | 16.6 | 13.7 | 24.6 | 24.4 | 23.9 | 25.4 |
| Eastern | 10.6 | 11.8 | 9 | 4.8 | 5.9 | 3.4 |
| Luapula | 14.5 | 13.6 | 16 | 6.7 | 7.1 | 6.2 |
| Lusaka | 13.7 | 11 | 20.5 | 26.0 | 24.2 | 30.0 |
| Northern | 14.3 | 14.9 | 13.3 | 6.2 | 7.2 | 5.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Northwestern | 17.7 | 19 | 15.8 | 7.3 | 8.8 | 5.6 |
| Southern | 15.3 | 14.2 | 17.4 | 16.1 | 16.8 | 14.9 |
| Western | 21.1 | 21.6 | 20.5 | 5.1 | 6.0 | 4.2 |

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

**Table 6.20: Unemployment Rates by Sex and Residence, Zambia, 1990 and 2000**

| Residence | Sex | 1990 | 2000 |
|---|---|---|---|
| Zambia | Both Sexes | 15.0 | 12.9 |
| | Male | 14.1 | 14.1 |
| | Female | 16.7 | 11.3 |
| Rural | Both Sexes | 14.4 | 6.6 |
| | Male | 14.8 | 7.8 |
| | Female | 13.7 | 5.0 |
| Urban | Both Sexes | 16.1 | 26.5 |
| | Male | 12.9 | 25.2 |
| | Female | 24.5 | 29.2 |

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

Current unemployment rates by age, sex and residence in 1990 and 2000 are shown in Table 6.21 and illustrated for 2000 in Figure 6.11. This Figure shows that unemployment is a more serious problem in the young age-groups 12-14 (19.9 percent); 15-19 (22.6 percent); 20-24 (20.8 percent) and 25-29 (13.9 percent). The peak is in the age-group 15-19 years. This pattern is the same for both sexes, and in both rural and urban areas.

The overall unemployment rate of 14.1 percent for males is more than that of females of 11.3 percent. A comparison of the rates by age between the two sexes shows that apart from the age-group 12-14 years, the male unemployment rates are higher than the female unemployment rates at all ages.

In rural areas, the male unemployment rates are higher than the female unemployment rates at all ages while in the urban areas, the female unemployment rates are higher than the male unemployment rates in the age-groups 12-14 up to the age-group 35-39. In the remaining age-groups the male unemployment rates in urban areas are higher than the female unemployment rates.

## Table 6.21: Current Unemployment Rates by Age, Sex and Residence, Zambia, 2000

| Age Groups | Current Unemployment Rates | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Zambia - Total | | | Rural | | | Urban | | |
| | Both Sexes | Male | Female | Both Sexes | Male | Female | Both Sexes | Male | Female |
| Total | 12.9 | 14.1 | 11.3 | 6.6 | 7.8 | 5.0 | 26.5 | 25.2 | 29.2 |
| 12 – 14 | 19.9 | 19.7 | 20.1 | 13.1 | 13.1 | 13.0 | 52.0 | 52.0 | 52.1 |
| 15 – 19 | 22.6 | 24.5 | 20.9 | 11.7 | 13.6 | 10.0 | 55.5 | 53.7 | 57.4 |
| 20 – 24 | 20.8 | 22.9 | 18.1 | 9.4 | 11.8 | 6.6 | 42.1 | 40.7 | 44.5 |
| 25 – 29 | 13.9 | 15.6 | 11.2 | 6.7 | 8.4 | 4.4 | 25.6 | 25.4 | 26.1 |
| 30 – 34 | 9.7 | 11.2 | 7.1 | 5.1 | 6.5 | 3.1 | 17.2 | 17.6 | 16.3 |
| 35 – 39 | 7.9 | 9.4 | 5.4 | 4.3 | 5.5 | 2.6 | 14.2 | 15.0 | 12.3 |
| 40 – 44 | 6.8 | 8.4 | 4.4 | 3.7 | 4.9 | 2.1 | 12.4 | 13.4 | 10.1 |
| 45 – 49 | 6.6 | 8.3 | 3.9 | 3.3 | 4.4 | 1.9 | 12.8 | 14.1 | 9.6 |
| 50 – 54 | 5.5 | 7.3 | 3.0 | 2.7 | 3.8 | 1.4 | 12.5 | 13.3 | 10.2 |
| 55 – 59 | 5.0 | 6.7 | 2.7 | 2.5 | 3.3 | 1.5 | 14.1 | 15.3 | 10.3 |
| 60 – 64 | 3.9 | 5.2 | 2.2 | 2.2 | 2.9 | 1.3 | 13.0 | 14.4 | 9.3 |
| 65 – 69 | 3.5 | 4.3 | 2.2 | 2.1 | 2.6 | 1.4 | 12.5 | 13.6 | 9.7 |
| 70 – 74 | 2.9 | 3.4 | 2.0 | 1.9 | 2.1 | 1.4 | 11.3 | 12.1 | 8.9 |
| 75+ | 2.8 | 2.9 | 2.6 | 2.0 | 2.0 | 2.0 | 11.2 | 11.6 | 10.1 |

**Figure 6.11: Usually Unemployed by Age and Sex, Zambia, 2000**

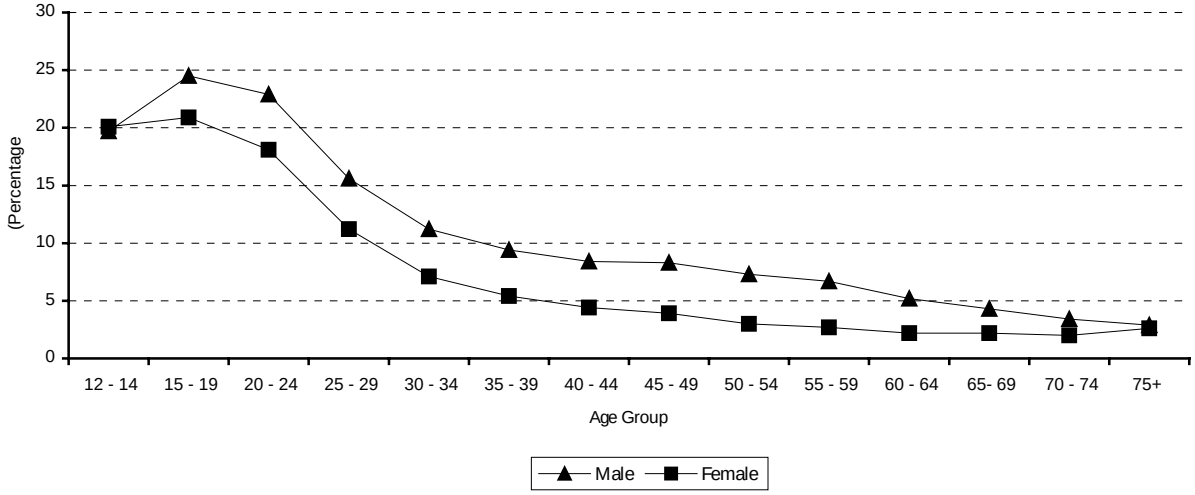



Table 6.22 shows the usually unemployed population by level of education completed and age in 2000.

About two thirds (68.2 percent) of the unemployed population in the country either completed no education or they had a rudimentary education of Grade 1 to 7. Slightly over a quarter of the unemployed population (28.7 percent) had secondary school education of grade 8 to 12. Those who had 'A' level education and Degree constitute 2.9 percent. The distribution of the unemployed population by age shows that the proportion of those who had 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 suggest that unemployment in the country is a bigger problem for those with little or no education. However, this also appears to be a growing problem for those with a secondary education of Grade 8-12, especially in the age group 20-54 years.

**Table 6.22: Usually Unemployed, by Level of Academic Educational Completed and Age, Zambia, 2000**

| Age Group | Total Number Unemployed | Total Percent | None | Grade 1-7 | Grade 8-12 | "A" Level | Degree |
|---|---|---|---|---|---|---|---|
| Total | 2,867,570 | 100.0 | 20.2 | 48.1 | 28.7 | 1.1 | 1.8 |
| 12-19 | 1,366,279 | 100.0 | 10.6 | 64.3 | 24.8 | 0.3 | 0.0 |
| 20-24 | 460,201 | 100.0 | 17.7 | 32.1 | 47.5 | 1.9 | 0.8 |
| 25-29 | 285,707 | 100.0 | 22.1 | 34.3 | 38.4 | 2.4 | 2.8 |
| 30-34 | 186,006 | 100.0 | 24.9 | 36.5 | 30.6 | 2.0 | 5.9 |
| 35-39 | 136,045 | 100.0 | 27.1 | 37.1 | 26.9 | 1.8 | 7.0 |
| 40-44 | 97,949 | 100.0 | 30.5 | 37.2 | 24.1 | 2.1 | 6.2 |
| 45-49 | 73,446 | 100.0 | 35.0 | 34.7 | 22.1 | 2.4 | 5.8 |
| 50-54 | 62,024 | 100.0 | 43.8 | 32.8 | 16.3 | 2.5 | 4.6 |
| 55-59 | 44,930 | 100.0 | 49.9 | 31.7 | 12.4 | 2.0 | 4.0 |
| 60-64 | 43,676 | 100.0 | 58.8 | 29.1 | 7.5 | 1.1 | 3.4 |
| 65-69 | 34,707 | 100.0 | 61.4 | 28.8 | 6.1 | 0.9 | 2.9 |
| 70-74 | 29,199 | 100.0 | 67.5 | 25.1 | 4.6 | 0.7 | 2.1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 75+ | 47,401 | 100.0 | 72.7 | 21.9 | 3.2 | 0.4 | 1.7 |

Table 6.23 shows the distribution of the currently unemployed population by marital status, sex and residence. According to the Table, the majority (59.5 percent) of the unemployed population had never been married, close to a third (30.1 percent) were married and 9.8 percent were either widowed, divorced or separated. The proportion of the female never married unemployed population is higher (59.8 percent in rural and 63.5 percent in urban areas) than the male never married unemployed population (53.3 percent in rural 60.4 in urban areas) in both rural and urban areas.

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

| Residence And Sex | Total Number Unemployed | Marital Status | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Total Percent | Married | Separated | Divorced | Widowed | Never Married | Living Together |
| Zambia – Total | | | | | | | | |
| Both Sexes | 409,772 | 100.0 | 30.1 | 2.8 | 3.8 | 3.2 | 59.5 | 0.6 |
| Male | 262,047 | 100.0 | 36.7 | 1.6 | 2.0 | 1.3 | 57.9 | 0.5 |
| Female | 147,725 | 100.0 | 18.4 | 5.0 | 6.9 | 6.5 | 62.3 | 0.9 |
| Rural | | | | | | | | |
| Both Sexes | 140,950 | 100.0 | 34.1 | 3.0 | 3.9 | 2.8 | 55.5 | 0.7 |
| Male | 92,370 | 100.0 | 41.2 | 1.7 | 2.1 | 1.2 | 53.3 | 0.5 |
| Female | 48,580 | 100.0 | 20.6 | 5.4 | 7.4 | 5.8 | 59.8 | 1.0 |
| Urban | | | | | | | | |
| Both Sexes | 268,822 | 100.0 | 28.0 | 2.8 | 3.7 | 3.4 | 61.6 | 0.6 |
| Male | 169,677 | 100.0 | 34.2 | 1.6 | 2.0 | 1.4 | 60.4 | 0.4 |
| Female | 99,145 | 100.0 | 17.3 | 4.8 | 6.7 | 6.8 | 63.5 | 0.8 |

## 6.10. Summary

The size of the working-age population in Zambia has increased by 22.4 percent between 1990 and 2000. The distribution of this population by age shows that it declines with the increase in age, just like the total population declines.

The labour force has increased by 49.5 percent between 1990 and 2000. About 62 percent of the labour force is in rural areas, while 37.6 percent is in urban areas. Three fifths of the labour force is in the young age-group of 12-29 years.

The employed population increased by 53.0 percent between 1990 and 2000. The female employed population increased by 98.3 percent, while the male employed labour force increased by 29.9 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 1980 Census.

The number of the unemployed increased by 29.9 percent between 1990 and 2000. The size of the male unemployed population increased by 36.9 percent, while that of females increased

by 19.1 percent. There were more unemployed persons in the urban areas than in the rural areas for both males and females. In 2000, unemployment was a more serious problem among the young age-group of 12-29 years than among the adult age-group of 30 years and over.

Lack of adequate education seems to have contributed to the problem of unemployment for the affected persons. The majority of the unemployed are young people.

The economically inactive population declined by 1.2 percent against an increase of 49.5 percent in the labour force between 1990 and 2000. This implies that most of the 22.4 percent increase in the working-age population between 1990 and 2000 has reduced the inactive population more than the labour force. Hence the labour force participation rate increased from 46.6 percent in 1990 to 55.7 percent in 2000. Similarly the overall unemployment rate declined from 15.0 percent in 1990 to 12.9 percent in 2000.

Economic activities are still organized around family labour as evidenced by the predominance (81.3 percent) of workers who are classified as either self-employed or unpaid family workers. In contrast, only 18.7 percent were classified as employees or employers. The transformation of the Zambian economy in the 1990's seems to have reduced employment opportunities in the formal sector, thereby forcing a large part of the labour force into self-employment in the informal sector. There is a large concentration of workers (71.5 percent) in the Agricultural and related occupations partly because of the ease of entry into the sector even with individuals with very low educational attainment.

Lack of industrialization in the country is reflected by the continued predominance of the primary economic activities of Agriculture which employed over two thirds (71.5 percent) of the workforce in 2000. This situation has been exacerbated by the economic recession of the 1990's, which has caused manpower losses in all the non-agricultural industries and manpower gains in the Agriculture industry.

A very big proportion of 62 percent of country's workforce had not received training at any level by 2000. This could explain the large number of people who find themselves in primary activities of Agriculture.

# CHAPTER 7

# FERTILITY LEVELS, PATTERNS AND TRENDS

## 7.0. Introduction

Fertility is one of the dynamics of population change. 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.

## 7.1. 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.
- **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 reached 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.

## 7.2. Nature and Quality of Fertility Data

### 7.2.1. 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.

### 7.2.2. 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 the different sets of spreadsheets in the Population Analysis Spreadsheets (PASEX), developed by the US Census Bureau.

**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 |

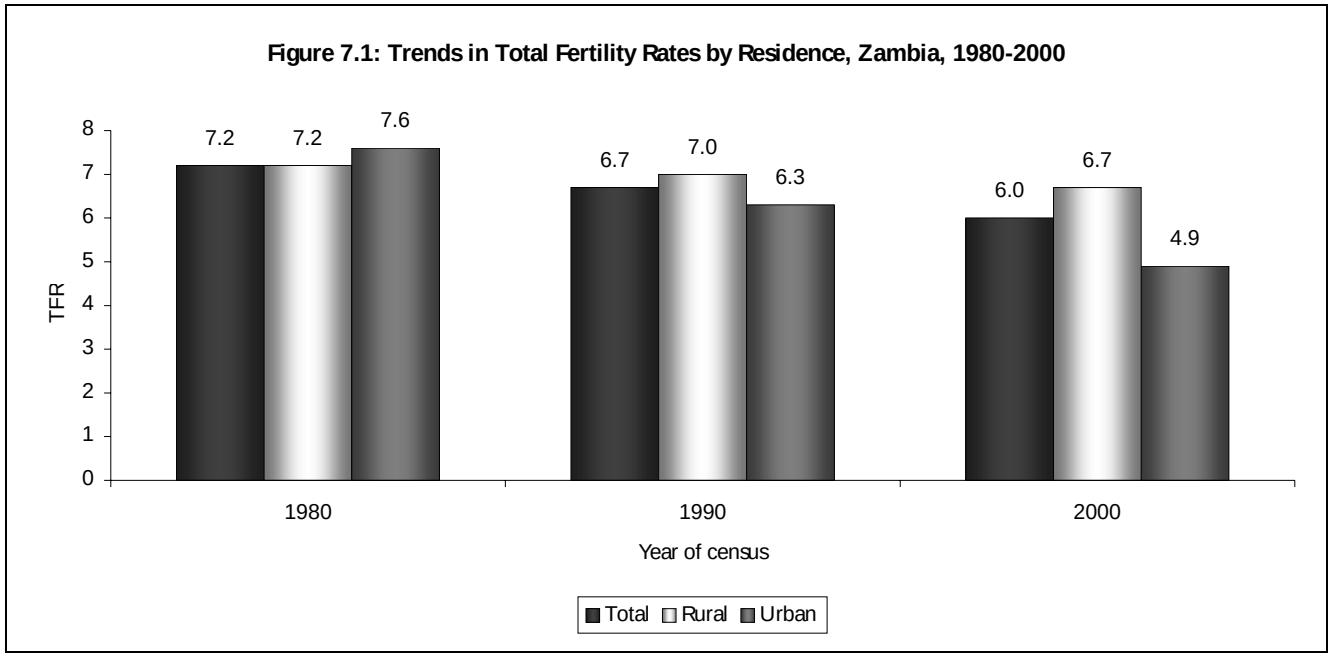
### 7.3. Fertility Levels, Patterns and Trends, 1980-2000

**Table 7.2 presents information on the current fertility levels for Zambia as a whole and for all provinces. According to the 2000 Census results, the total fertility rate is 6.0. This means that on average, a woman**

**in Zambia at the beginning of her childbearing years, will give birth to 6.0 children by the end of her reproductive period if current fertility levels remain constant. The TFRs range from 4.6 in Lusaka to 7.1 in Luapula. Fertility levels have remained high, with only Copperbelt, Lusaka and Western provinces experiencing TFRs below the national average.**

**The decline in fertility seems to be concentrated in urban areas, while fertility in rural areas has remained almost constant. This 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. The reduction in rural to urban migration in the last 20 years, i.e. between 1980 and 2000 could indirectly have an effect on lower fertility levels in urban, as most migrants tend to be people in the prime of their productive and reproductive years (refer to the Migration and Urbanization report).**

**Though Zambia's fertility has been declining, the rate of decline has been rather slow, with TFR declining from 7.2 in 1980 to 6.7 in 1990 and 6.0 in 2000 (Figure 7.1 below). It is important to point out that whereas fertility in Zambia has exhibited declining trends, it is still among the highest in the region.**




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

Table 7.2: Adjusted ASFR and TFR by Province, Zambia, 2000

| Age Group | Zambia | Central | Copperbelt | Eastern | Luapula | Lusaka | Northern | North Western | Southern | Western |
|---|---|---|---|---|---|---|---|---|---|---|
| 15-19 | 0.1407 | 0.1456 | 0.1205 | 0.1703 | 0.1598 | 0.1193 | 0.1496 | 0.1431 | 0.1483 | 0.1245 |
| 20-24 | 0.2768 | 0.2899 | 0.2404 | 0.3046 | 0.3152 | 0.2320 | 0.3168 | 0.2911 | 0.3008 | 0.2572 |
| 25-29 | 0.2692 | 0.2707 | 0.2514 | 0.2845 | 0.3221 | 0.2102 | 0.3127 | 0.2995 | 0.2806 | 0.2649 |
| 30-34 | 0.2317 | 0.2308 | 0.2132 | 0.2500 | 0.2745 | 0.1753 | 0.2736 | 0.2535 | 0.2339 | 0.2247 |
| 35-39 | 0.1748 | 0.1832 | 0.1445 | 0.1907 | 0.2126 | 0.1205 | 0.2061 | 0.1870 | 0.1814 | 0.1833 |
| 40-44 | 0.0833 | 0.0811 | 0.0560 | 0.0986 | 0.1022 | 0.0518 | 0.0979 | 0.1005 | 0.0911 | 0.0957 |
| 45-49 | 0.0301 | 0.0269 | 0.0176 | 0.0435 | 0.0310 | 0.0188 | 0.0340 | 0.0382 | 0.0267 | 0.0389 |
| **TFR** | **6.0** | **6.1** | **5.2** | **6.7** | **7.1** | **4.6** | **7.0** | **6.6** | **6.3** | **5.9** |

**Table 7.3 shows observed and adjusted ASFR and TFR for Zambia for the Census years 1980, 1990 and 2000.**

Table 7.3: Age Specific Fertility rate (ASFR), Total Fertility rate (TFR) and Mean Age at Childbearing (MACB), Zambia, 1980 - 2000

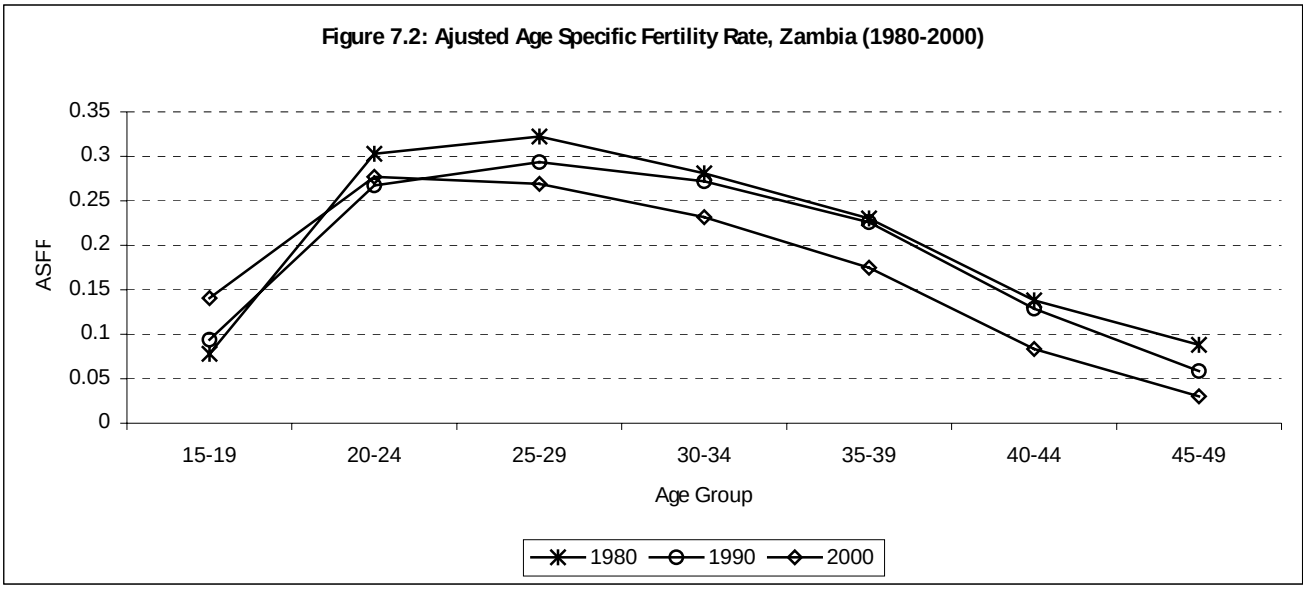
| Age Group | 1980 | | 1990 | | 2000 | |
|---|---|---|---|---|---|---|
| | Observed ASFR | Adjusted ASFR | Observed ASFR | Adjusted ASFR | Observed ASFR | Adjusted ASFR |
| 15-19 | 0.0610 | 0.0779 | 0.0879 | 0.0940 | 0.0928 | 0.1407 |
| 20-24 | 0.2370 | 0.3027 | 0.2501 | 0.2674 | 0.2118 | 0.2768 |
| 25-29 | 0.2523 | 0.3222 | 0.2746 | 0.2936 | 0.2116 | 0.2692 |
| 30-34 | 0.2199 | 0.2808 | 0.2543 | 0.2719 | 0.1846 | 0.2317 |
| 35-39 | 0.1803 | 0.2303 | 0.2112 | 0.2258 | 0.0420 | 0.1748 |
| 40-44 | 0.1081 | 0.1381 | 0.1203 | 0.1286 | 0.0710 | 0.0833 |
| 45-49 | 0.0689 | 0.0880 | 0.0549 | 0.0587 | 0.0290 | 0.0301 |
| Observed TFR | 5.6 | | 6.3 | | 4.7 | |
| Adjusted TFR | | 7.2 | | 6.7 | | 6.0 |
| Mean Age at Child bearing | 30.6 | | 30.3 | | | 29.6 |

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

Note**:** ***1980 and 1990 estimates extracted from Analytical Report Vol.X of the 1990 Census of Population, Housing and Agriculture, CSO 1995.***

**The age patterns of fertility indicate a decline in the peak of child bearing from the age group 25-29 in 1990 to the age group 20-24 in 2000. However, fertility declines are usually associated with an increase in the mean ages at marriage and childbearing. Noticeable increases in the fertility of young women aged 15-24 has been observed from the 2000 Census data. This could provide a possible explanation to the drop in the mean age at childbearing especially between 1990 and 2000, which may not necessarily be in line with the observed declining trends in fertility. However, caution should be taken in interpreting this shift in the MACB, as this could also be attributed to the omission of CEB and births occurring to older women.**

**Figure 7.2 below shows that fertility levels have declined across the age groups 25-29 to 40-49 over the period 1990-2000. Information from specialized surveys such as the Zambia Demographic and Health Survey (ZDHS) has attributed the decline in fertility to among other factors, increased awareness and use of contraceptives among women especially among older women in need of contraceptive methods for both spacing and limiting births. Results from the three surveys show an increase in the percentage of married women using contraceptives for *limiting* births from six percent in 1992 to 10 percent in 1996 and 15 percent in 2001/2. A similar pattern is observed in the use of contraceptives for spacing among married women, with the percentage increasing from nine percent in 1992 to 16 percent in 1996 and 19 percent in 2001/2.**




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

**Figure 7.2 shows that the peak of childbearing has shifted from the age group 25-29 in the 1980 and 1990 Censuses, to 20-24 in the 2000 Census. The mean age at childbearing has remained almost constant, declining marginally from 30.6 years in 1980 to 30.3 years in 1990 and finally to 29.6 in 2000 (Refer to Table 7.3). Though fertility decline is associated with increases in MACB, this does not seem to apply as it shows a decline. This could be attributed to the increase in the fertility levels among women aged 15-24, as compared to the decline in fertility among older women (Figure 7.2).**

**Table 7.4 shows that the difference in TFR between rural and urban areas is 1.8. This is a result of more rapid declines in fertility in urban areas compared to rural areas.**

Table 7.4: ASFR and TFR by Residence, Zambia, 2000

| Age Group | Zambia | Rural | Urban |
|---|---|---|---|
| 15-19 | 0.1407 | 0.1575 | 0.1141 |
| 20-24 | 0.2768 | 0.3066 | 0.2351 |
| 25-29 | 0.2692 | 0.2957 | 0.2304 |
| 30-34 | 0.2317 | 0.2533 | 0.1950 |
| 35-39 | 0.1748 | 0.1972 | 0.1315 |
| 40-44 | 0.0833 | 0.0974 | 0.0542 |
| 45-49 | 0.0301 | 0.0344 | 0.0191 |
| TFR | 6.0 | 6.7 | 4.9 |

**Urban TFR declined from 7.6 in 1980 to 6.3 in 1990 and finally to 4.9 in 2000. The TFR for rural areas, on the other hand, have remained almost stable, declining from 7.2 in 1980 to 7.0 in 1990 and finally to 6.7 in 2000 (See Table 7.5).**

**The more urbanized provinces of Lusaka and Copperbelt have experienced larger declines in fertility levels compared to other less urbanized provinces. Table 7.5 further shows that in 1980, the TFRs were 7.5 and 7.9, for Lusaka and Copperbelt provinces respectively. These rates dropped to 6.0 and 6.6 in 1990 and**

**then to 4.6 and 5.2 in 2000, for the two provinces respectively. The observed rates of fertility decline could be attributed to the fact that the population in Lusaka and Copperbelt province benefit from, among other socio-economic conditions associated with developed urban areas, the readily available reproductive health services necessary for transition to low fertility.**

Table 7.5: Adjusted Total Fertility Rate (TFR) by Residence, Zambia, 1980-2000

| Census Year | Zambia | | | Province | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Rural | Urban | Central | Copperbelt | Eastern | Luapula | Lusaka | Northern | North Western | Southern | Western |
| **1980** | **7.1** | **7.2** | **7.6** | 7.5 | 7.9 | 6.9 | 8.0 | 7.5 | 7.7 | 6.5 | 7.1 | 5.7 |
| **1990** | **6.7** | **7.0** | **6.3** | 6.3 | 6.6 | 6.9 | 7.2 | 6.0 | 7.5 | 6.9 | 7.0 | 6.2 |
| **2000** | **6.0** | **6.7** | **4.9** | 6.1 | 5.2 | 6.7 | 7.1 | 4.6 | 7.0 | 6.6 | 6.3 | 5.9 |

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

## 7.4. 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 residence, education levels, economic characteristics, religion, marital status, ethnicity and disability status.

### 7.4.1. Fertility Differentials by Educational Attainment of Women Aged 15-49

Table 7.6 and Figure 7.3 show the fertility levels according to women's levels of education. Women with tertiary education have lower fertility than women in other education categories. For instance, women with tertiary education had a TFR of 3.9 compared with TFR of 6.1 for women without any schooling. The difference is highest in Lusaka and Southern provinces where women without schooling have on average about two children more than those with tertiary education.

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

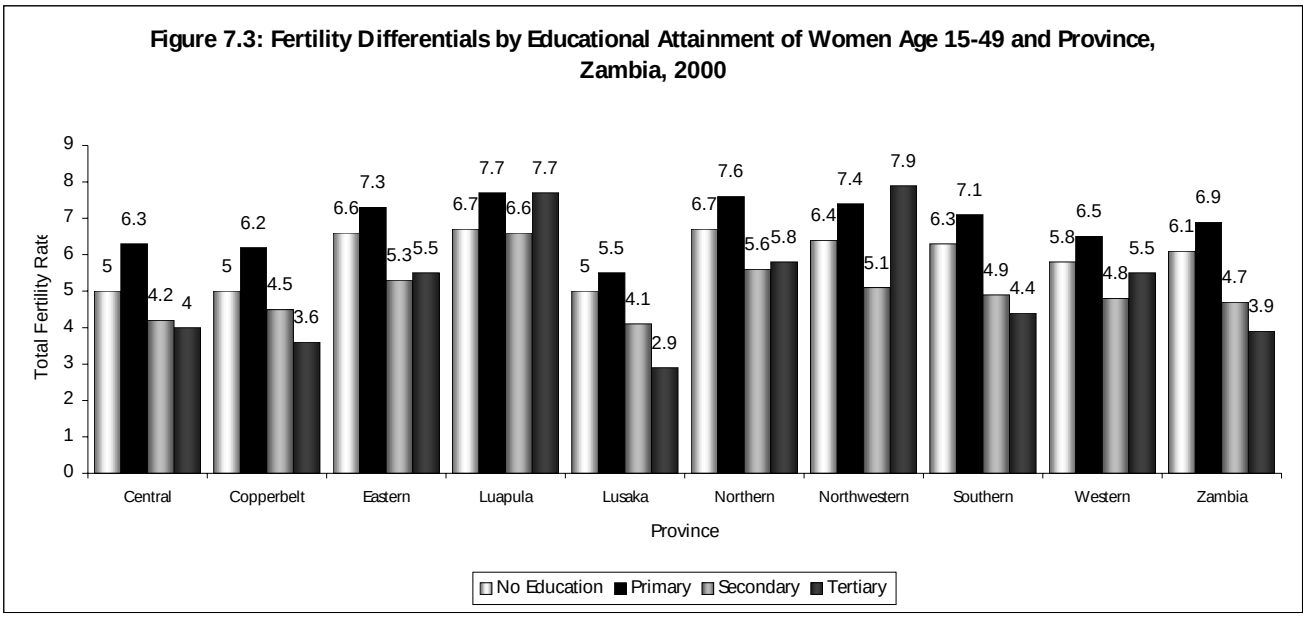
The pattern of fertility declining with increasing level of education is only noticeable after primary education. Between primary and tertiary education, fertility levels decrease with increasing level of education, except for less urbanized provinces of Eastern, Luapula, Northern, North Western and Western provinces. The variation is greater in North Western province in which the TFR is 5.1 for women with secondary education and 7.9 for those with tertiary education compared to the other provinces. The TFR for women with tertiary education in some provinces may not reflect the actual levels due to insufficient number of cases, therefore care should be taken in the interpreting some of the results

al fertility has been declining among women of all education background except for women with tertiary education whose fertility seems to have increased slightly between 1990 and 2000.

**Table 7.6: Total Fertility Rates By Education Background of Women Age 15-49 and Province, Zambia, 2000**

| Province | Total Women | No Education | Primary | Secondary | Tertiary |
|---|---|---|---|---|---|
| Central | 6.1 | 5.0 | 6.3 | 4.2 | 4.0 |
| Copperbelt | 5.2 | 5.0 | 6.2 | 4.5 | 3.6 |
| Eastern | 6.7 | 6.6 | 7.3 | 5.3 | 5.5 |
| Luapula | 7.1 | 6.7 | 7.7 | 6.6 | 7.7* |
| Lusaka | 4.6 | 5.0 | 5.5 | 4.1 | 2.9 |
| Northern | 7.0 | 6.7 | 7.6 | 5.6 | 5.8 |
| Northwestern | 6.6 | 6.4 | 7.4 | 5.1 | 7.9* |
| Southern | 6.3 | 6.3 | 7.1 | 4.9 | 4.4 |
| Western | 5.9 | 5.8 | 6.5 | 4.8 | 5.5 |
| **Zambia (2000)** | **6.0** | **6.1** | **6.9** | **4.7** | **3.9** |
| **Zambia (1990)** | **6.7** | **7.6** | **7.4** | **5.9** | **3.2** |
| **Zambia (1980)** | **7.2** | **7.4** | **7.4** | **6.4** | **3.5** |

Note: ***(*) Rates may not represent the true fertility levels due to insufficient number of cases***.




### 7.4.2. Fertility Differentials by Economic Status of Women Aged 15-49

Fertility levels of working and non-working women are shown in Table 7.7. Definitions of working are described in detail in Chapter six. Women classified as working have a lower TFR of 5.8 compared to 6.2 for those classified not working. All provinces except Western show that non-working women have a higher total fertility rate than those classified as working. However, the overall difference in the fertility between those women classified as working and not working is small. This could be attributed to the broad classification used, which lumps together, all those in formal and informal types of work. There has been a shift in the fertility pattern from those prevailing in 1980 and 1990, compared to those prevailing in 2000 with working women having lower fertility than non-working women.

**Table 7.7: Total Fertility Rates By Economic Background of women Age 15-49 and Province, Zambia, 2000**

| Province | 2000 | | |
|---|---|---|---|
| | Total Women | Working | Not Working |
| Central | 6.1 | 5.9 | 6.1 |
| Copperbelt | 5.2 | 4.5 | 5.4 |
| Eastern | 6.7 | 6.5 | 6.7 |
| Luapula | 7.1 | 6.9 | 7.1 |
| Lusaka | 4.6 | 3.9 | 5.0 |
| Northern | 7.0 | 6.7 | 7.0 |
| Northwestern | 6.6 | 6.2 | 6.6 |
| Southern | 6.3 | 6.0 | 6.3 |
| Western | 5.9 | 5.7 | 5.9 |
| **Zambia (2000)** | **6.0** | **5.8** | **6.2** |
| **Zambia (1990)*** | **6.7** | **7.1** | **5.2** |
| **Zambia (1980)*** | **7.2** | **7.1** | **6.5** |

Note: ***(*) 1980 and 1990 estimates extracted from Analytical Report Vol.X of the 1990 Census of Population, Housing and Agriculture, CSO 1995.***

### 7.4.3. Fertility Differentials by Religious Affiliation of Women Age 15-49

Table 7.8 shows the fertility levels of women of varying religions and those without any religious affiliation. Results show that women who reported to be Protestant by virtue of their religious affiliation and those that reported no religious affiliation had the highest TFR of 6.1 respectively. Hindu women had the lowest fertility with a TFR of 4.2. Muslim women had the highest TFR in Eastern province.

Care must be taken in using and interpreting these results as analysis is based on the religious affiliation reported by women and their respective fertility captured at the time of the census. The fact that other variables have not been controlled for means no relationship between the fertility of women and their religious affiliation could be deduced from the information, and hence the results do not and should not be taken to portray such a relationship.

**Table 7.8: Total Fertility Rates By Religious Characteristics of Women Aged 15-49 and Province, Zambia, 2000**

| Total Fertility Rates by Religious Characteristics | | | | | | | |
|---|---|---|---|---|---|---|---|
| Province | **Total Women** | **Catholic** | **Protestant** | **Muslim** | **Hindu** | **Other** | **None** |
| Central | 6.1 | 5.6 | 6.3 | 5.2 | 3.2 | 6.3 | 5.5 |
| Copperbelt | 5.2 | 5.2 | 5.3 | 5.1 | 1.6 | 5.3 | 4.0 |
| Eastern | 6.7 | 6.5 | 6.7 | 8.1 | 5.5 | 7.0 | 6.6 |
| Luapula | 7.1 | 7.1 | 7.1 | 5.7 | - | 6.6 | 6.5 |
| Lusaka | 4.6 | 4.6 | 4.8 | 2.7 | - | 4.6 | 3.9 |
| Northern | 7.0 | 7.0 | 7.0 | 5.8 | 2.2 | 6.8 | 6.5 |
| North western | 6.6 | 6.7 | 6.5 | - | 2.6 | 6.8 | 6.6 |
| Southern | 6.3 | 6.0 | 6.4 | 6.3 | 2.7 | 5.6 | 6.9 |
| Western | 5.9 | 6.1 | 5.8 | 3.6 | - | 6.2 | 6.5 |
| **Zambia** | **6.0** | **6.0** | **6.1** | **4.5** | **4.2** | **6.0** | **6.1** |

**Note**: (-) *Missing due to insufficient number of cases for calculating TFR*

### 7.4.4. Fertility Differentials by Marital Status of Women Aged 15-49

Marital status of women has a bearing on their fertility because of the amount of exposure to the risk of pregnancy that married women have compared to other women. The 2000 Census results show that married women have higher fertility with a TFR of 6.4, compared to 5.1 for separated, 4.9 for divorced, 4.8 for widowed, 4.7 for living together (co-habiting) and 2.3 for never married women.

**Table 7.9: Total Fertility Rates By Marital Status of Women Aged 15-49 and Province, Zambia, 2000**

| Residence | Total Women | Married | Separated | Divorced | Widowed | Never Married | Living Together |
|---|---|---|---|---|---|---|---|
| Central | 6.1 | 6.6 | 5.0 | 4.8 | 5.1 | 2.0 | 4.6 |
| Copperbelt | 5.2 | 5.8 | 4.4 | 4.3 | 4.5 | 1.7 | 4.8 |
| Eastern | 6.7 | 6.9 | 5.5 | 5.3 | 5.5 | 2.1 | 5.3 |
| Luapula | 7.1 | 7.1 | 5.6 | 5.5 | 5.8 | 3.1 | 5.5 |
| Lusaka | 4.6 | 5.4 | 4.2 | 4.1 | 4.4 | 1.6 | 4.1 |
| Northern | 7.0 | 7.1 | 5.3 | 5.2 | 5.4 | 1.9 | 5.3 |
| Northwestern | 6.6 | 6.8 | 4.6 | 5.2 | 5.9 | 2.9 | 5.0 |
| Southern | 6.3 | 6.5 | 5.2 | 4.9 | 5.6 | 2.8 | 5.6 |
| Western | 5.9 | 6.4 | 5.4 | 5.8 | 6.1 | 3.7 | 5.2 |
| Zambia | 6.0 | 6.4 | 5.1 | 4.9 | 4.8 | 2.3 | 4.7 |

### 7.4.5. Fertility Differentials by Zambian Language Group of Women Aged 15-49

**Fertility levels of women of different language groups are shown in Table 7.10. There are no major variations in fertility levels of these women. The TFRs range from 5.3 among Tumbuka women to 6.6 among women from the Mambwe langage group. The pattern, however, varies from province to province and from one language group to another. For instance, women from the Bemba speaking language groups have the highest fertility in Luapula, Northern and Central provinces, with women from the Tonga speaking language groups in Central and Southern.**

**Care must be taken in using and interpreting these results as analysis is based on the reported Language grouping of women and their respective fertility captured at the time of the census. The fact that other variables have not been controlled for means no relationship between the fertility of women and their respective language grouping could be deduced from the information, and hence the results do not and should not be taken to portray such a relationship**

*Table 7.10: Differentials in Total Fertility By Language Grouping of Women Aged 15-49, Zambia, 2000*

| Province | All Groups | Bemba | Tonga | North Western | Barotse | Nyanja | Mambwe | Tumbuka |
|---|---|---|---|---|---|---|---|---|
| Central | 6.1 | 6.3 | 6.3 | 5.9 | 5.8 | 5.5 | 5.5 | 5.5 |
| Copperbelt | 5.2 | 5.3 | 5.1 | 5.7 | 5.7 | 4.7 | 5.0 | 5.0 |
| Eastern | 6.7 | 6.4 | 5.3 | 6.4 | 5.7 | 6.6 | 7.6 | 7.2 |
| Luapula | 7.1 | 7.1 | 5.0 | 6.0 | 6.0 | 5.9 | 5.0 | 5.6 |
| Lusaka | 4.6 | 4.6 | 4.9 | 4.6 | 4.3 | 4.7 | 4.5 | 4.9 |
| Northern | 7.0 | 7.0 | 5.2 | 5.9 | 5.3 | 6.2 | 7.0 | 6.6 |
| North-western | 6.6 | 6.2 | 3.9 | 6.6 | 5.9 | 5.3 | 4.2 | 5.0 |
| Southern | 6.3 | 5.2 | 6.6 | 5.4 | 5.2 | 5.4 | 5.1 | 5.1 |
| Western | 5.9 | 5.8 | 5.9 | 5.9 | 5.9 | 5.9 | 6.6 | 5.3 |

### 7.4.6. Fertility Differentials, All Women and Disabled Women, Aged 15-49

Table 7.11 compares the total fertility rates of all women with that of the disabled women. The TFR for the disabled women is 5.4. Disable women have a lower fertility than all women and this observation is true in all provinces. Due to the small numbers of disabled persons for the various disability categories, it has not been possible to compute the TFRs for women by type of disability.

**Table 7.11: Total Fertility Rates by all Women and Disabled Women, Aged 15-49 by Province, Zambia, 2000**

| Province | Total Fertility Rate for all women | Total Fertility Rate for disabled women |
|---|---|---|
| Central | 6.1 | 5.1 |
| Copperbelt | 5.2 | 4.6 |
| Eastern | 6.7 | 5.7 |
| Luapula | 7.1 | 6.3 |
| Lusaka | 4.6 | 4.5 |
| Northern | 7.0 | 6.2 |
| Northwestern | 6.6 | 5.8 |
| Southern | 6.3 | 5.6 |
| Western | 5.9 | 5.2 |
| Zambia | 6.0 | 5.4 |

## 7.5. Gross Reproductive Rates (GRR)

**From Table 7.12, it can be observed that the GRR for Zambia is estimated at 2.3. This means that by the time a woman reaches the end of her reproductive period, she will have given birth to 2.3 female children if she conforms to the currently observed age specific fertility patterns. The GRR for rural areas (2.7) is higher than that for urban areas (1.7). This pattern is similar to that of the TFR. Significant declines have been observed in the GRR between 1990 and 2000.**

Table 7.12: Gross Reproduction Rate (GRR) by Residence, Zambia 2000

| Age Group | Zambia | | Rural | | Urban | |
|---|---|---|---|---|---|---|
| | Total Female Births | ASFR (f) | Total Female Births | ASFR (f) | Total Female Births | ASFR (f) |
| 15-19 | 25,452 | 0.0457 | 18271 | 0.0542 | 7089 | 0.0323 |
| 20-24 | 50,693 | 0.1029 | 35424 | 0.1221 | 16328 | 0.0807 |
| 25-29 | 39,034 | 0.1029 | 27357 | 0.1211 | 12533 | 0.0817 |
| 30-34 | 24,689 | 0.0896 | 17727 | 0.1047 | 7502 | 0.0707 |
| 35-39 | 15,077 | 0.0690 | 11342 | 0.0826 | 3936 | 0.0484 |
| 40-44 | 5,694 | 0.0346 | 4541 | 0.0434 | 1261 | 0.0210 |
| 45-49 | 1,724 | 0.0140 | 1390 | 0.0171 | 344 | 0.0083 |
| GRR (2000) | | 2.3 | | 2.7 | | 1.7 |
| GRR (1990)* | | 3.3 | | 3.4 | | 3.1 |
| GRR (1980)* | | 3.5 | | 3.5 | | 3.7 |

**Note: (*)** ***1980 and 1990 estimates extracted from Analytical Report Vol.X of the 1990 Census of Population, Housing and Agriculture, CSO 1995.***

***ASFR (f) refers to the age specific fertility rates for female births only***

## 7.6. Net Reproduction Rate

**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.**

Table 7.13: Net Reproduction Rate (NRR) by Residence, Zambia, 2000

| Age Group | Zambia Total | | | Rural | | | Urban | | |
|---|---|---|---|---|---|---|---|---|---|
| | ASFR (f) | Survival Ratios | *ASFR (f) | ASFR (f) | Survival Ratios | *ASFR (f) | ASFR (f) | Survival Ratios | *ASFR (f) |
| 15-19 | 0.0457 | 0.7777 | 0.0355 | 0.0542 | 0.7443 | 0.0403 | 0.0323 | 0.8202 | 0.0265 |
| 20-24 | 0.1029 | 0.7598 | 0.0782 | 0.1221 | 0.7251 | 0.0885 | 0.0807 | 0.8047 | 0.0649 |
| 25-29 | 0.1029 | 0.7393 | 0.0761 | 0.1211 | 0.7031 | 0.0852 | 0.0817 | 0.7866 | 0.0643 |
| 30-34 | 0.0896 | 0.7162 | 0.0642 | 0.1047 | 0.6786 | 0.0710 | 0.0707 | 0.7663 | 0.0542 |
| 35-35 | 0.0690 | 0.6906 | 0.0477 | 0.0826 | 0.6513 | 0.0538 | 0.0484 | 0.7437 | 0.0360 |
| 40-44 | 0.0346 | 0.6626 | 0.0229 | 0.0434 | 0.6217 | 0.0270 | 0.021 | 0.7182 | 0.0151 |
| 45-49 | 0.0140 | 0.6325 | 0.0089 | 0.0171 | 0.5907 | 0.0101 | 0.0083 | 0.6901 | 0.0057 |
| **NRR** | | | **1.7** | | | **1.9** | | | **1.3** |

**Note*****: *ASFR (f) at prevailing rates of mortality***

**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 declining population. The NRR for Zambia in 2000 was estimated at 1.7 daughters, implying that each woman will be replaced by almost two daughters who will survive upto the end of their reproductive age. The NRR for rural areas is higher (1.9) than that for urban areas (1.3). This means that the population will continue growing at a faster rate in rural areas than in urban areas (See Table 7.13)**

**NRR has declined over the last 20 years (Table 7.14). This implies that population has been growing, but at a declining rate.**

Table 7.14: Trends in Net Reproduction Rate (NRR) by Residence, Zambia, 1980-2000

| Residence | Year of Census | | |
|---|---|---|---|
| | 1980 | 1990 | 2000 |
| Zambia | 2.6 | 2.2 | 1.7 |
| Rural | 2.5 | 2.3 | 1.9 |
| Urban | 2.9 | 2.2 | 1.3 |

## 7.7. Mean Parity

**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. The 2000 Census of Population and Housing estimates the CFS for women in Zambia at 6.8, with rural women having a higher CFS of 7.0 compared with their urban counterparts with CFS of 6.5 (Table 7.14).**

Table 7.15: Observed Mean Parity by Age Group and Residence, Zambia, 2000

| Age Group | Zambia Total | Rural | Urban |
|---|---|---|---|
| 15-19 | 0.3 | 0.3 | 0.2 |
| 20-24 | 1.4 | 1.6 | 1.1 |
| 25-29 | 2.7 | 3.0 | 2.3 |
| 30-34 | 4.1 | 4.4 | 3.6 |
| 35-39 | 5.4 | 5.7 | 4.9 |
| 40-44 | 6.4 | 6.7 | 6.0 |
| 45-49 | 6.8 | 7.0 | 6.5 |

**Table 7.16 and Figure 7.4 shows that the mean parity or CSF for Zambia has declined between 1990 and 2000. The completed family size for 1980 (6.6) was lower than that for both 1990 (7.1) and 2000 (6.8). The underlying factor could point to omission of CEB in the 1980 Census. Improvements in the collection of data on CEB were made in the 1990 and 2000 Census, with the aim of reducing the amount of omissions.**

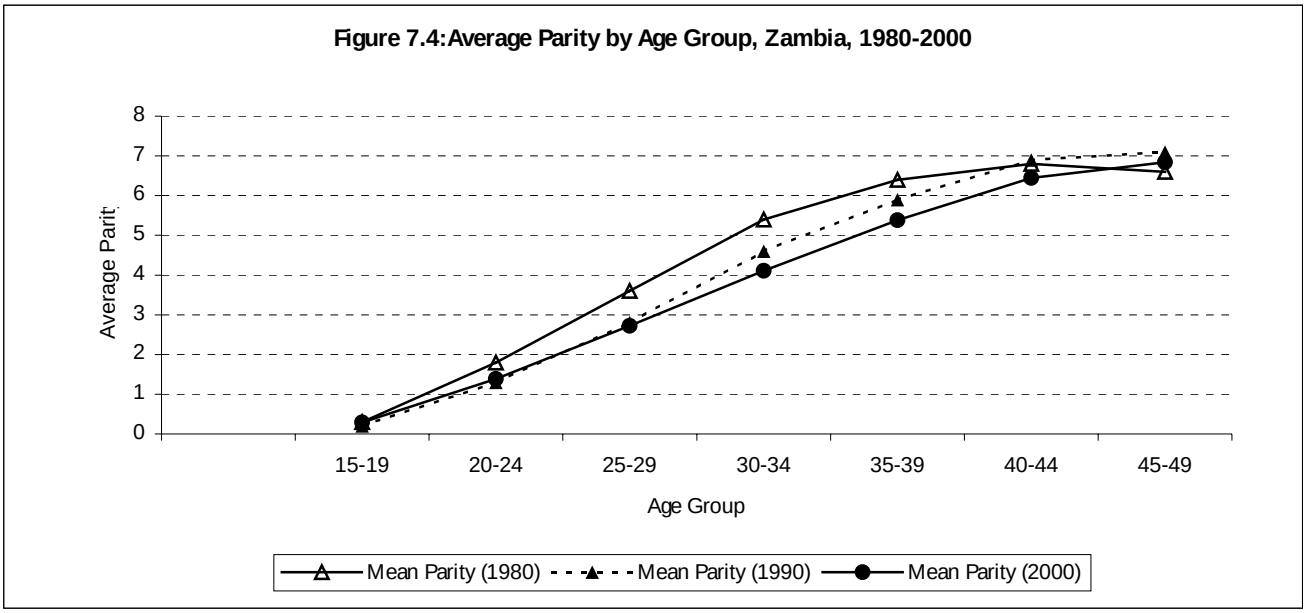
Table 7.16: Observed Mean Parity by Age Group, Zambia, 1980-2000

| Age Group | Mean Parity (1980)* | Mean Parity (1990)* | Mean Parity (2000) |
|---|---|---|---|
| 15-19 | 0.3 | 0.2 | 0.3 |
| 20-24 | 1.8 | 1.3 | 1.4 |
| 25-29 | 3.6 | 2.8 | 2.7 |
| 30-34 | 5.4 | 4.6 | 4.1 |
| 35-39 | 6.4 | 5.9 | 5.4 |

| | | | |
|---|---|---|---|
| 40-44 | 6.8 | 6.9 | 6.4 |
| 45-49 | **6.6** | **7.1** | **6.8** |

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

Note**: (*)** ***1980 and 1990 estimates extracted from Analytical Report Vol.X of the 1990 Census of Population, Housing and Agriculture, CSO 1995.***




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

**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 the TFR is a measure of current fertility, the CFS measures past or completed fertility. Overall, women age 45-49 reported having given birth to an average of 6.8 children. This compares with a TFR of 6.0 for women age 15-49, the difference may be attributed to the observed fertility decline over time as one measure (Mean Parity) measures completed fertility while the other measure (TFR) measures current fertility (Table 7.17 below).**

Table 7.17: Comparison of Total Fertility Rates and Mean Parity by Province, Zambia, 2000

| Residence/Province | Mean Parity | Total Fertility Rate |
|---|---|---|
| Zambia - Total | 6.8 | 6.0 |
| Rural | 7.0 | 6.7 |
| Urban | 6.5 | 4.9 |
| Central | 6.3 | 6.1 |
| Copperbelt | 6.7 | 5.2 |
| Eastern | 7.0 | 6.7 |
| Luapula | 7.3 | 7.1 |
| Lusaka | 6.4 | 4.6 |
| Northern | 7.3 | 7.0 |
| North Western | 6.5 | 6.6 |
| Southern | 7.0 | 6.3 |
| Western | 6.3 | 5.9 |

## 7.8. Other Fertility Indicators

**Table 7.18 shows a summary of fertility indicators. These include the Crude Birth Rate (CBR), Child Woman Ratio (CWR) and the General Fertility Rate (GFR). The 2000 census estimates the crude birth rate as 36 births per thousand persons in the population. While the CBR increased between 1980 and 1990 from 37 to 44, it declined between 1990 and 2000 to 36. The pattern for rural and urban areas is similar to that for Zambia as a whole. The 2000 Census also estimates the CWR of 729, implying that there is 729 children aged 0-4 per thousand women in the reproductive aged group of 15-49. This is an increase from the 1990 figure of 678 children per 1000 women aged 15-49. The increase in the CWR could be attributed to the decline in the denominator (women aged 15-49).**

**The GFR for 2000 was estimated at 152 births per 1000 women age 15-49. This compared with 185 in 1990 and 173 in 1980. Generally all the fertility indices, except the (CWR), show declining trends in the 1990 to 2000 period. The declines are more pronounced in the urban areas than rural areas.**

Table 7.18: Summary of Fertility Indicators by Residence and Province, Zambia, 1980-2000

| Residence | TFR | CFS | CBR | CWR | GFR | GRR | NRR |
|---|---|---|---|---|---|---|---|
| **Zambia** | | | | | | | |
| 1980 | 7.2 | 6.6 | 37 | 834 | 173 | 3.5 | 2.6 |
| 1990 | 6.7 | 7.1 | 44 | 678 | 185 | 3.3 | 2.2 |
| 2000 | 6.0 | 6.8 | 36 | 729 | 152 | 2.3 | 1.7 |
| **Rural** | | | | | | | |
| 1980 | 7.2 | 6.5 | 36 | 813 | 166 | 3.5 | 2.5 |
| 1990 | 7.0 | 7.2 | 45 | 712 | 194 | 3.4 | 2.3 |
| 2000 | 6.7 | 7.0 | 40 | 843 | 178 | 2.7 | 1.9 |
| **Urban** | | | | | | | |
| 1980 | 7.6 | 7.0 | 40 | 867 | 185 | 3.7 | 2.9 |
| 1990 | 6.3 | 6.9 | 43 | 629 | 171 | 3.1 | 2.2 |
| 2000 | 4.9 | 6.5 | 29 | 605 | 111 | 1.7 | 1.3 |
| **Fertility indicators All Provinces, 2000** | | | | | | | |
| Central | 6.1 | 6.3 | 37 | 764 | 163 | 2.7 | 1.8 |
| Copperbelt | 5.2 | 6.7 | 28 | 622 | 115 | 1.7 | 1.3 |
| Eastern | 6.7 | 7.0 | 41 | 816 | 181 | 2.7 | 1.9 |
| Luapula | 7.1 | 7.3 | 42 | 797 | 181 | 2.8 | 1.8 |
| Lusaka | 4.6 | 6.4 | 29 | 613 | 114 | 1.6 | 1.3 |
| Northern | 7.0 | 7.3 | 40 | 798 | 174 | 2.7 | 1.8 |
| North Western | 6.6 | 6.5 | 39 | 812 | 170 | 2.6 | 2.0 |
| Southern | 6.3 | 7.0 | 39 | 790 | 169 | 2.5 | 1.9 |
| Western | 5.9 | 6.3 | 35 | 680 | 145 | 2.3 | 1.5 |

Note***: 1980 and 1990 estimates extracted from Analytical Report Vol.X of the 1990 Census of Population, Housing and Agriculture, CSO 1995.***

## 7.9. Summary

**Over the past decade, Zambia'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 Zambia. Compared with other sub-Saharan countries, Zambia's TFR remains among the highest.**

**The TFR for rural areas (6.7) is considerably higher than that of urban areas (4.9). More urbanized provinces have a much lower fertility level compared to the less urbanized ones. Lusaka and Copperbelt have TFRs of 4.6 and 5.2 respectively, while Luapula has a TFR of 7.1 and Northern, 7.0.**

**The peak of child bearing has shifted from age group 25-29 in the 1980 and 1990 censuses to 20-24 in the 2000 census. This has been more as a result of the increase in fertility of younger women aged 15-24 compared to the overall decline in the fertility of older women aged 25-49.**

**Women with tertiary education and those classified as working have lower fertility compared to women with primary or no education. The married and protestant women have higher fertility than women of other marital status and religious categories respectively.**

# CHAPTER 8

# MORTALITY

## 8.0 Introduction

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

Indirect demographic methods are used to derive both child and adult mortality indicators. Information on child mortality estimation was based on the reports of the mothers, aged 15-49 years, of the survival of their children by sex. This gives information on children surviving and not surviving out of the total children ever born per woman (mother) in the reproductive age group (15-49 years). The United Nations Mortality measurement package, Mortpak-Lite, was 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.

## 8.1 Concepts and Definitions

- *Mortality* refers to the occurrence of deaths in a population.
- *Infant mortality rate* (IMR) ($_1q_0$) refers to the number of deaths among infants aged below one year per thousand (1,000) live births per year
- *Child mortality rate* (CMR) ($_5q_1$) 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) ($_5q_0$) 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* ($e_0$) 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* ($e_x$) 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* ($_{60}q_{15}$) refers to the number of deaths that occur to persons in the age range 15 to 60 years.

## 8.2 Infant Mortality Levels, Trends and Differentials

Table 8.1 shows various mortality indicators in Zambia from 1980 to 2000. Overall, infant mortality rate has declined in Zambia by about 12 percent, but still higher than the 1980 Figure. In 1980, IMR stood at 99 deaths per 1000 live births. It increased by about 24 percent between 1980 and 1990, from 99 to 123 deaths per 1000 live births, respectively. In 2000, it dropped to 110 deaths per 1000 live births. In other words about 11 children died more in 2000 than in 1980 for every 1000 live births. However, when compared to the 1990 Figure, about 13 children survived more in 2000 for every 1000 infants born, suggesting that survival chances for infants were better in 1980 than they were in both 1990 and 2000.

**Table 8.1: Childhood Mortality indicators by Sex of Child, Residence and Province, Zambia, 1980-2000**

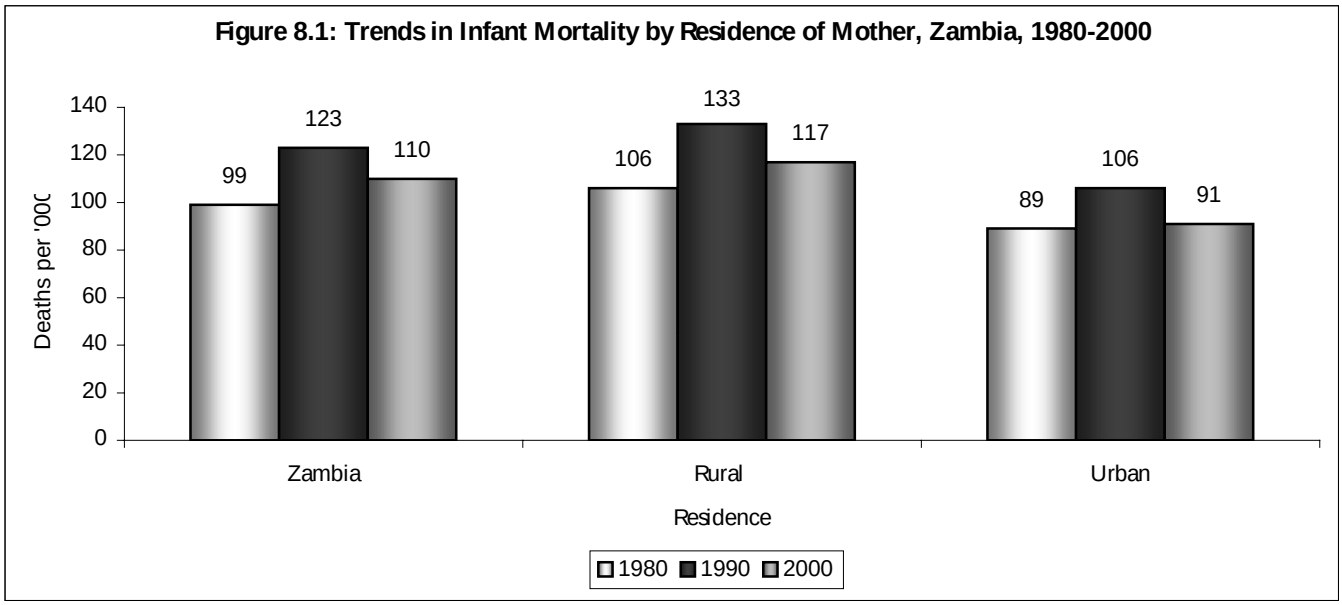
| Characteristics | Infant Mortality Rate (per '000) | | | Child Mortality Rate (per '000) | | | Under-five mortality Rate (per '000) | | | Life Expectancy at Birth (Years) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1980 | 1990 | 2000 | 1980 | 1990 | 2000 | 1980 | 1990 | 2000 | 1980 | 1990 | 2000 |
| **Zambia** | **99** | **123** | **110** | **71** | **95** | **82** | **121** | **151** | **162** | **52** | **47** | **50** |
| **Sex of Child** | | | | | | | | | | | | |
| Male | 101 | 127 | 120 | 73 | 98 | 91 | 124 | 157 | 169 | 52 | 46 | 48 |
| Female | 94 | 120 | 100 | 66 | 91 | 72 | 115 | 146 | 155 | 53 | 48 | 52 |
| **Residence** | | | | | | | | | | | | |
| Rural | 106 | 133 | 117 | 78 | 104 | 89 | 132 | 164 | 180 | 50 | 45 | 48 |
| Urban | 89 | 106 | 91 | 61 | 77 | 64 | 108 | 128 | 126 | 54 | 51 | 54 |
| **Province** | | | | | | | | | | | | |
| Central | 81 | 105 | 100 | 54 | 77 | 72 | 100 | 129 | 144 | 56 | 51 | 52 |
| Copperbelt | 87 | 109 | 91 | 59 | 81 | 63 | 97 | 132 | 126 | 55 | 50 | 54 |
| Eastern | 128 | 149 | 129 | 99 | 120 | 100 | 177 | 206 | 196 | 46 | 42 | 46 |
| Luapula | 127 | 161 | 132 | 99 | 132 | 103 | 161 | 199 | 224 | 46 | 40 | 45 |
| Lusaka | 87 | 106 | 88 | 60 | 78 | 60 | 106 | 129 | 126 | 55 | 50 | 54 |
| Northern | 104 | 137 | 130 | 75 | 108 | 101 | 127 | 169 | 180 | 51 | 44 | 46 |
| North-Western | 77 | 103 | 83 | 50 | 75 | 56 | 95 | 126 | 137 | 57 | 51 | 56 |
| Southern | 94 | 97 | 93 | 66 | 69 | 65 | 115 | 118 | 138 | 53 | 53 | 53 |
| Western | 106 | 141 | 140 | 77 | 113 | 111 | 132 | 175 | 201 | 51 | 43 | 44 |

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

### *8.2.1 Infant Mortality Rate by Residence of the Mother*

There are rural and urban differentials in IMR (Table 8.1 and Figure 8.1), with the former experiencing higher levels than the latter. In 1980, for instance, IMR in rural areas was 16 percent higher than in urban areas. The trend persisted in both 1990 and 2000. In 2000, about one in nine infants in rural areas and one in 11 infants in urban areas die before celebrating their first birthday.

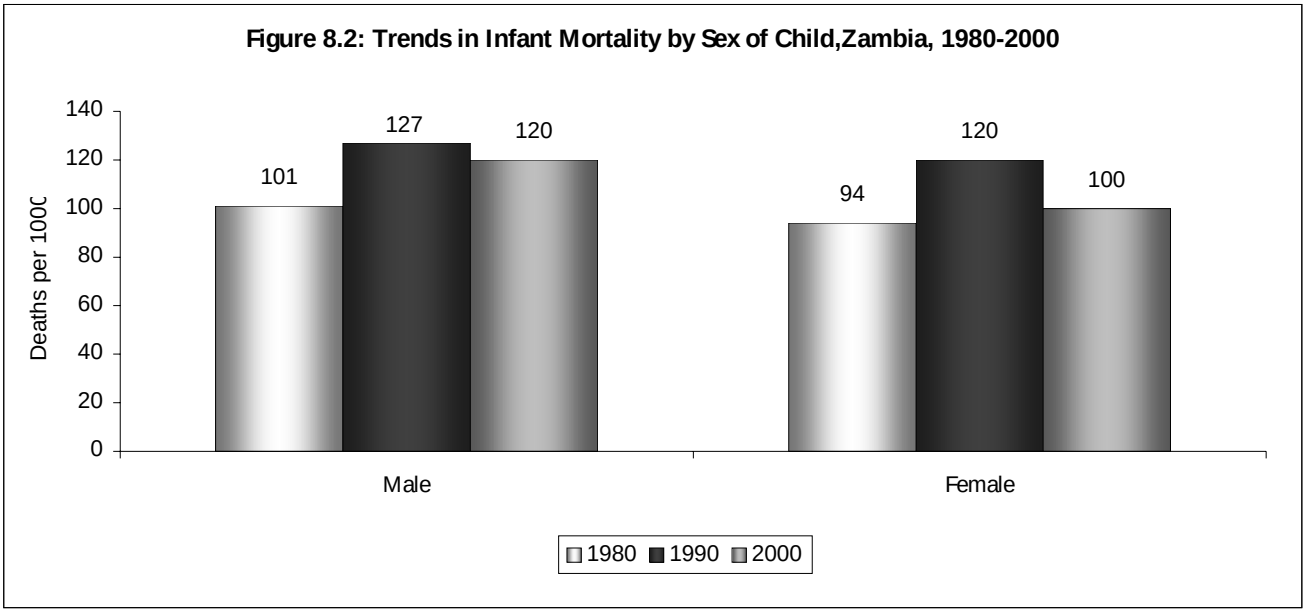
In rural areas, IMR increased from 106 in 1980 to 133 in 1990, but declined to 117 in 2000. The trends in urban areas were similar: increased from 89 in 1980 to 106 in 1990 and declined to 91 in 2000. This result shows that children in the rural areas of Zambia experience a higher risk of dying before age one than urban infants (Table 8.1 and Figure 8.1).




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

### *8.2.2 Infant Mortality Rate and Sex of Child*

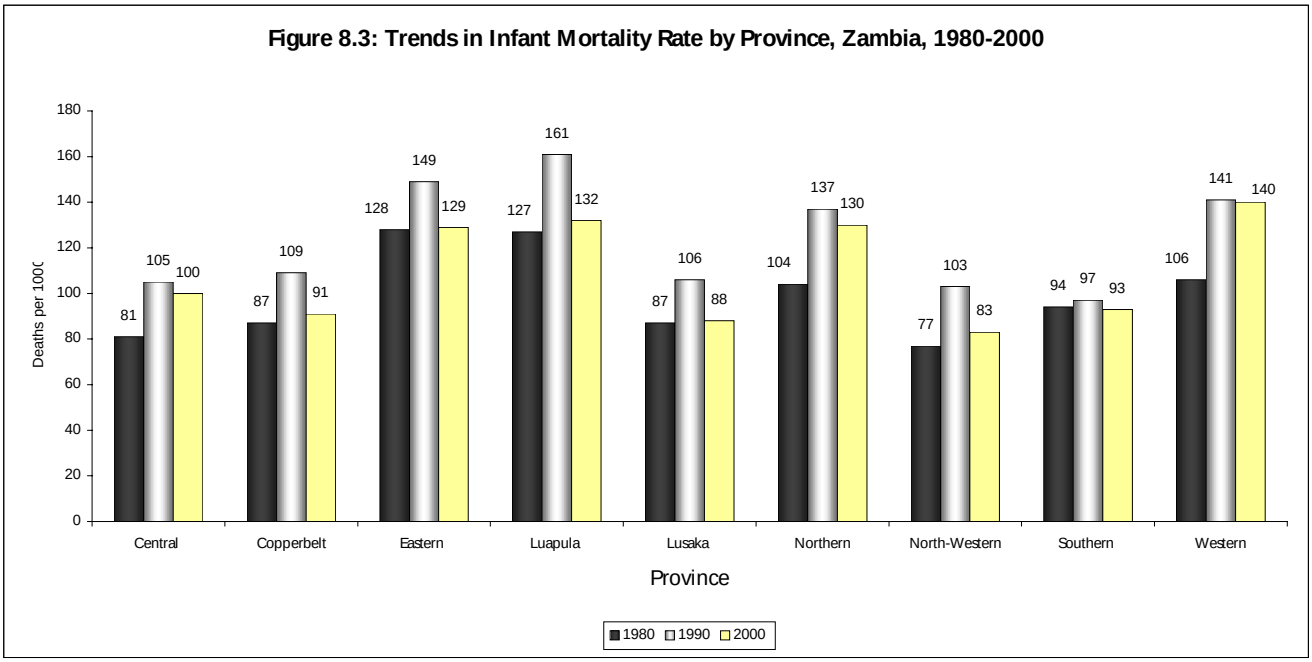
Results presented in Table 8.1 and Figure 8.2 show that males died more than females. In 2000, 120 deaths per 1000 live births occurred among males compared to 100 deaths for females. A similar pattern is also observed for the 1980 and 1990 census data. In 1980, 101 male and 94 female infants died before reaching age one. In 1990, 127 male infants and 120 for female infants died before reaching age one. However, the 2000 IMR for both sexes is still higher than the 1980 levels.




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

### *8.2.3 Infant Mortality Rate by Province of Residence of the Child*

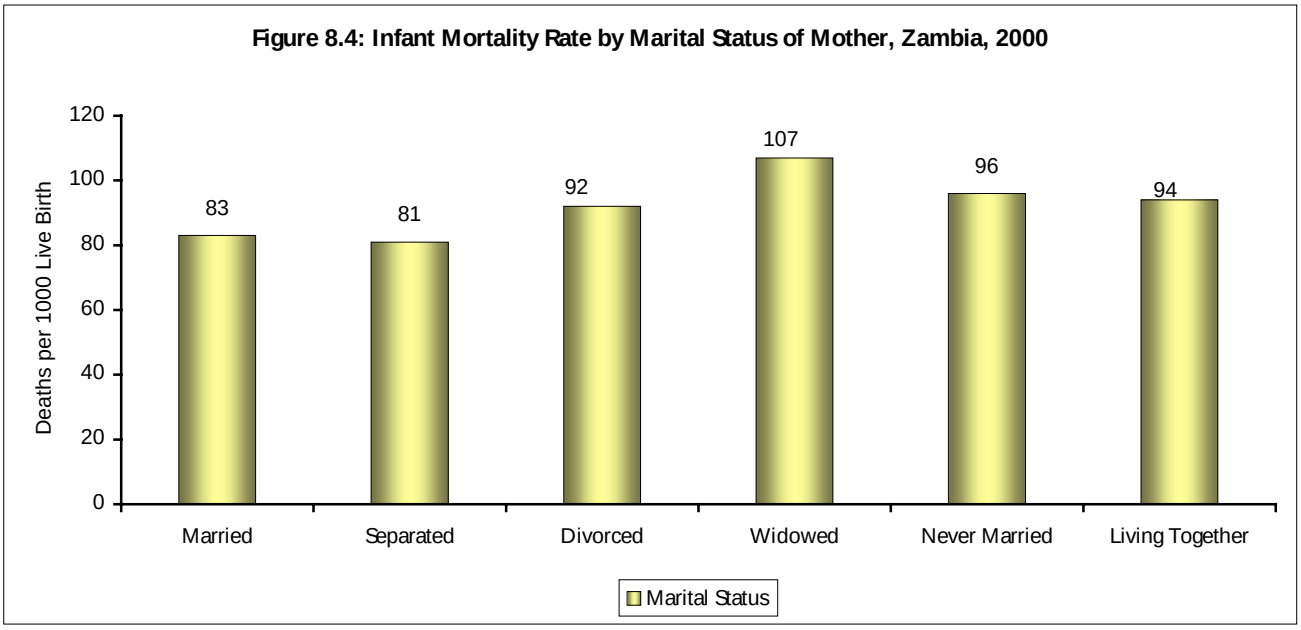
Table 8.1 and Figure 8.3 reveal that overall IMR has declined between 1990 and 2000, but still higher than the 1980 levels. In 1980, Eastern Province experienced the highest level of infant deaths (128), followed by Luapula Province (127). The lowest rate was observed in North-Western province. In 2000, the highest IMR was experienced in Western Province (140) and the lowest still remained North-Western Province (83).




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

### 8.2.4 Infant Mortality Rate by Marital Status of the Mother

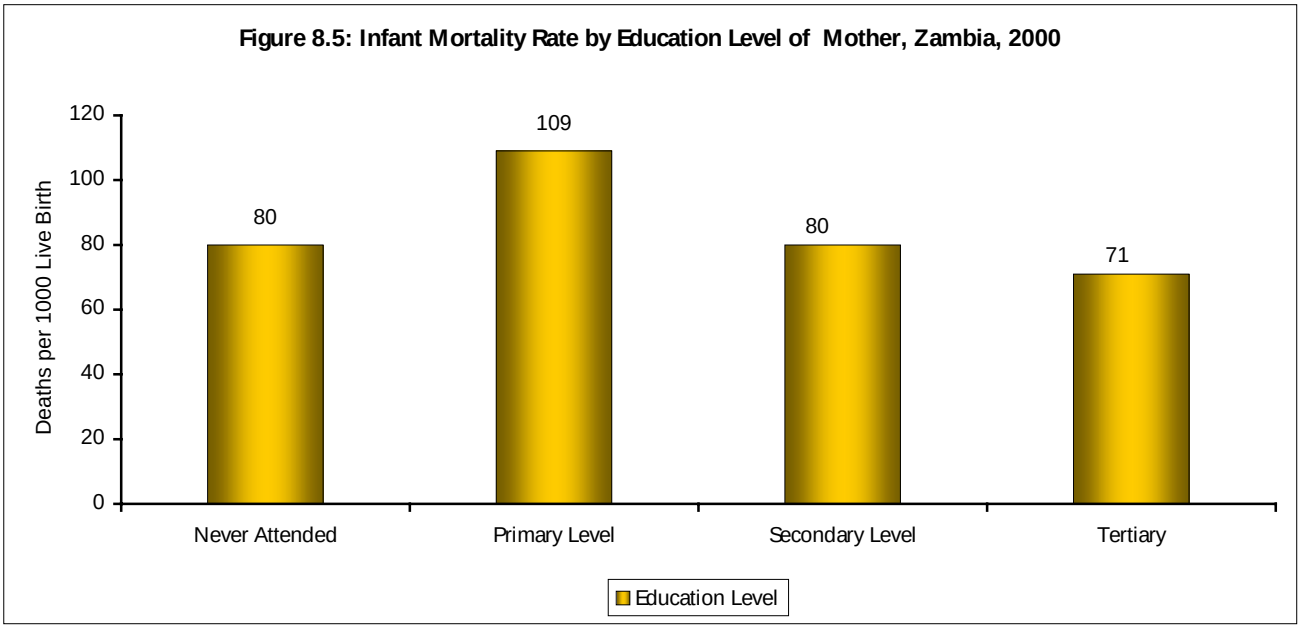
Figure 8.4 shows that children born to mothers who are not in marital union (widowed, never married, living together and divorced) tend to die more (almost one in every 10 children) than children born to married and separated mothers (one in every 12 children).




### 8.2.5 Infant Mortality Rate by Education Level of the Mother

Results in Figure 8.4 indicate that IMR among children born to mothers who have never attended school is significantly lower than those with primary level of education (80 compared to 109 deaths per 1000 live births, respectively). However, IMR varies markedly according to the level of education of mother (Primary to tertiary), with survival chances of infants increasing substantially as the level of education of mothers increases from 109 to 80 and then 71 deaths per 1000 live births, accordingly.

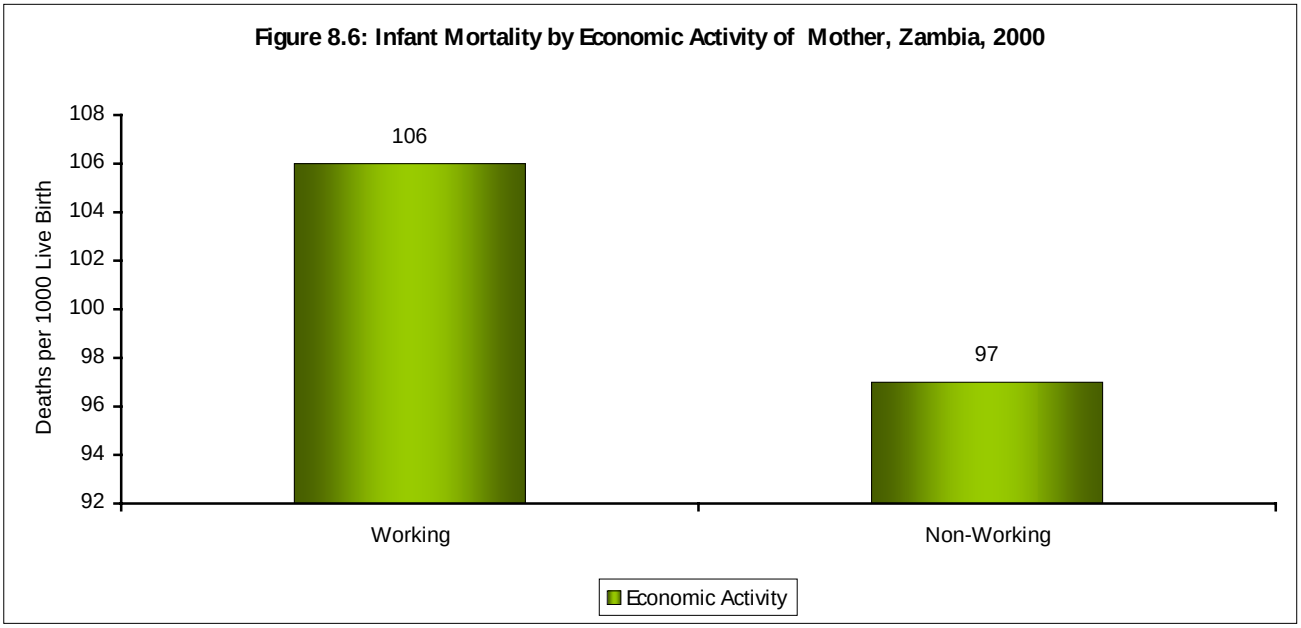
**Figure 8.5: Infant Mortality Rate by Education Level of Mother, Zambia, 2000**




### 8.2.6 Infant Mortality Rate by Economic Activity of the Mother

Children born to working mothers have lower chances of reaching age one than those born to non-working mothers (Figure 8.6). The differences are relatively significant (106 versus 97 deaths per 1000 children), representing about 8 percent higher deaths among the working mothers.

**Figure 8.6: Infant Mortality by Economic Activity of Mother, Zambia, 2000**

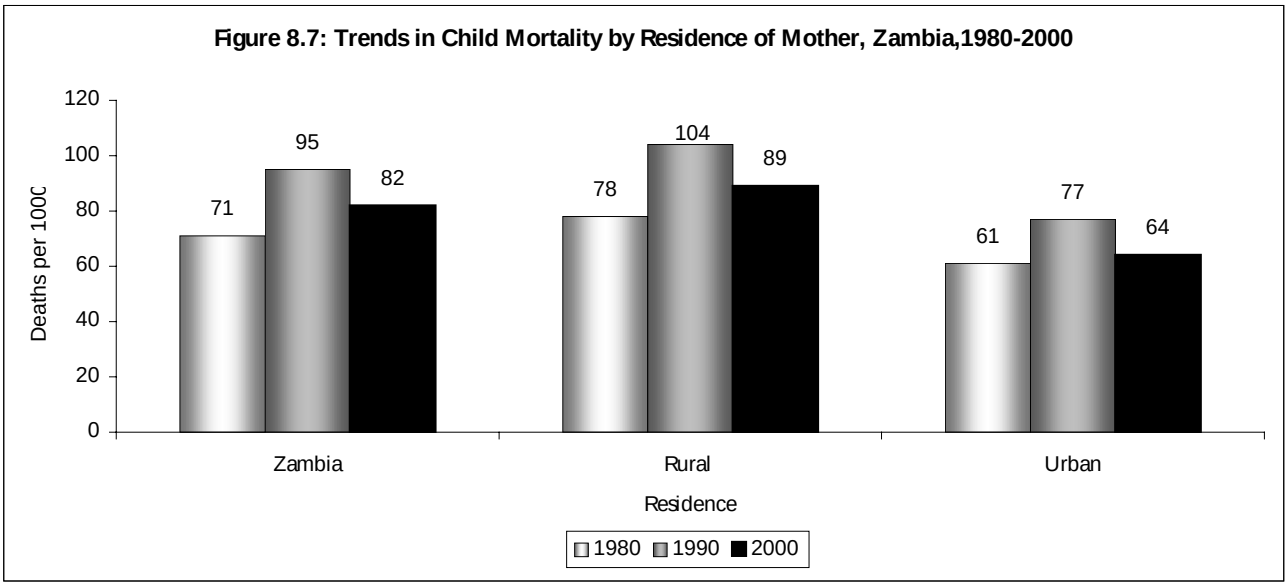



## 8.3 Child Mortality Levels, Trends and Differentials

Overall, results in Figure 8.7 show that Child Mortality Rate (CMR) has declined slightly between 1990 and 2000 by about 13 percent, from 95 to 82 deaths per 1000 children, respectively. Despite this decline, the 2000 levels are still higher (16 percent) than the 1980 level (82 compared with 71 deaths per 1000 children).

### *8.3.1 Child Mortality Rate by Residence of Mother*

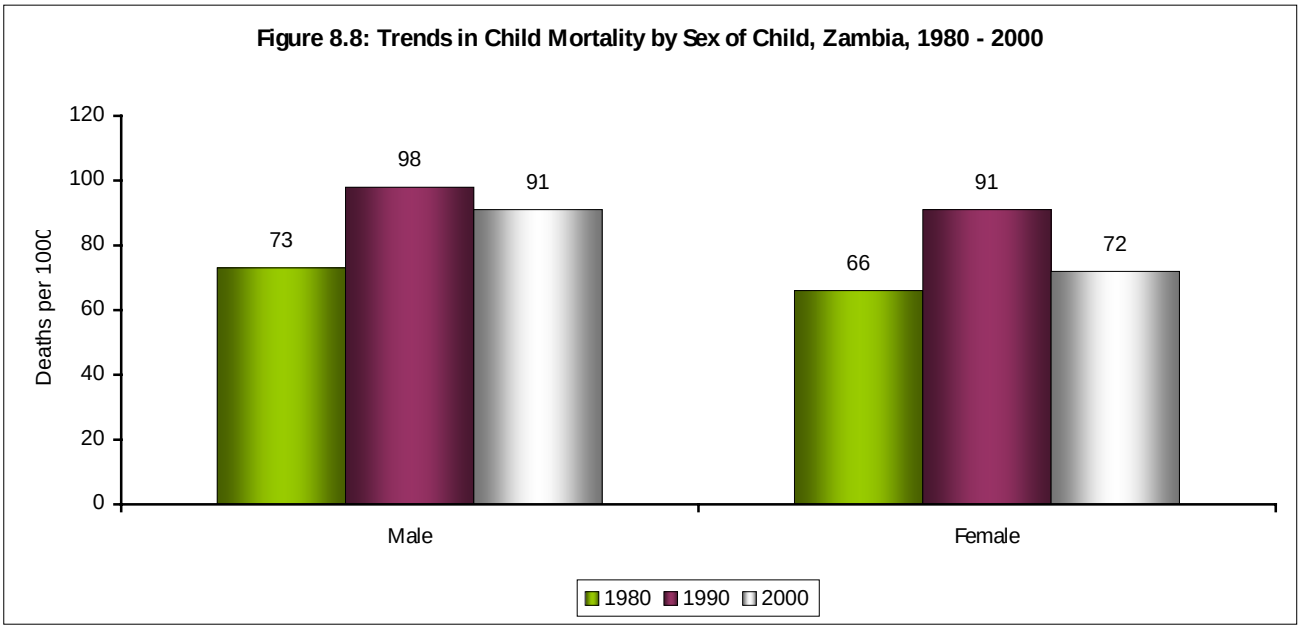
The pattern of CMR is similar to IMR (section 8.2.1). Children born to mothers residing in rural areas have higher risks of dying between age one and five than those in urban areas (89 compared to 64 deaths per 1000 children) (Figure 8.7).




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

### *8.3.2 Child Mortality Rate by Sex of the Child*

CMR is higher (91 deaths per 1000 children) among males than females (72 deaths per 1000 children). A similar pattern is observed for the 1980 and 1990 census data. In 1980, 73 male and 66 female children, and in 1990, 98 male and 91 female died between age one and five. The 1980 levels are lower than those observed in 1990 and 2000, respectively.

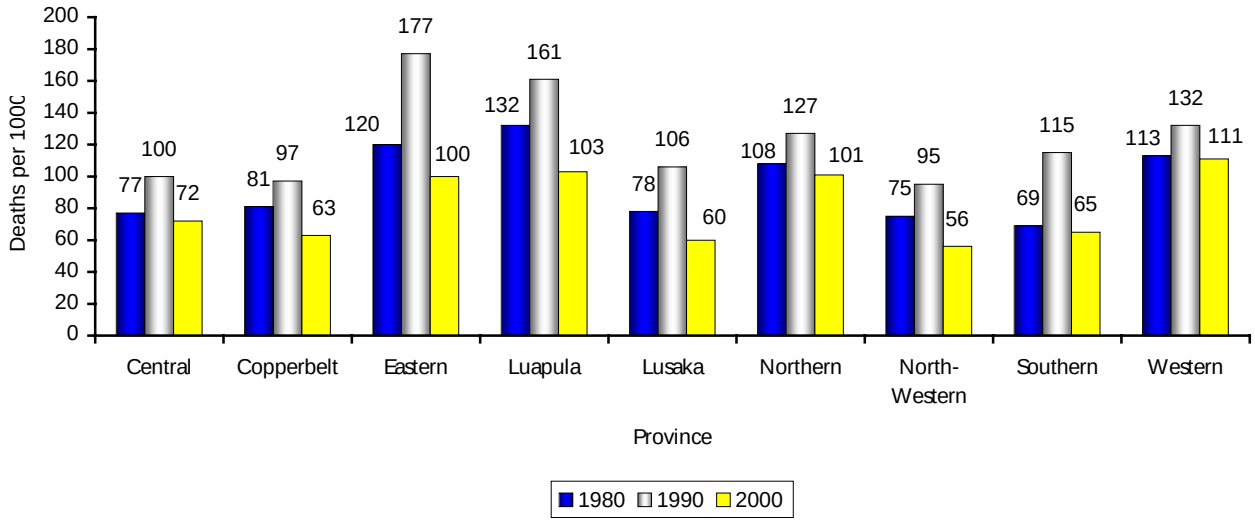



**Source:** CSO, 1980, 1990 and 2000 Censuses of Population and Housing

### *8.3.3 Child Mortality Rate by Province of Residence of the Child*

At the provincial level, the CMR trends follow those of the national picture. All the nine provinces have registered declines in CMR 2000 from the 1990 but still higher than the 1980 levels (Figure 8.9). In 1990, CMR was relatively very high in Eastern (177), Luapula (161), Western (132) and Northern (127) and relatively low in north-western (95), (copperbelt (97) and Central (100), respectively. In 2000, the highest CMR was observed in Western Province (111) and the lowest in North-Western Province (56).

**Figure 8.9: Trends in Child Mortality by Province, Zambia, 1980 - 2000**

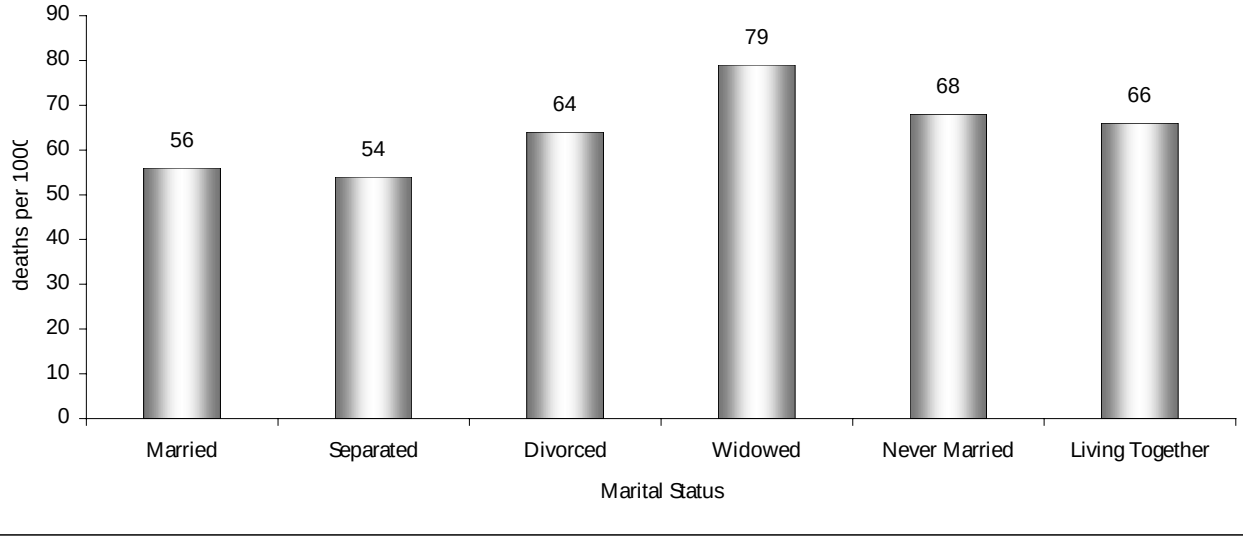



**Source:** CSO, 1980, 1990 and 2000 Censuses of Population and Housing

### 8.3.4 Child Mortality Rate by Marital Status of the Mother

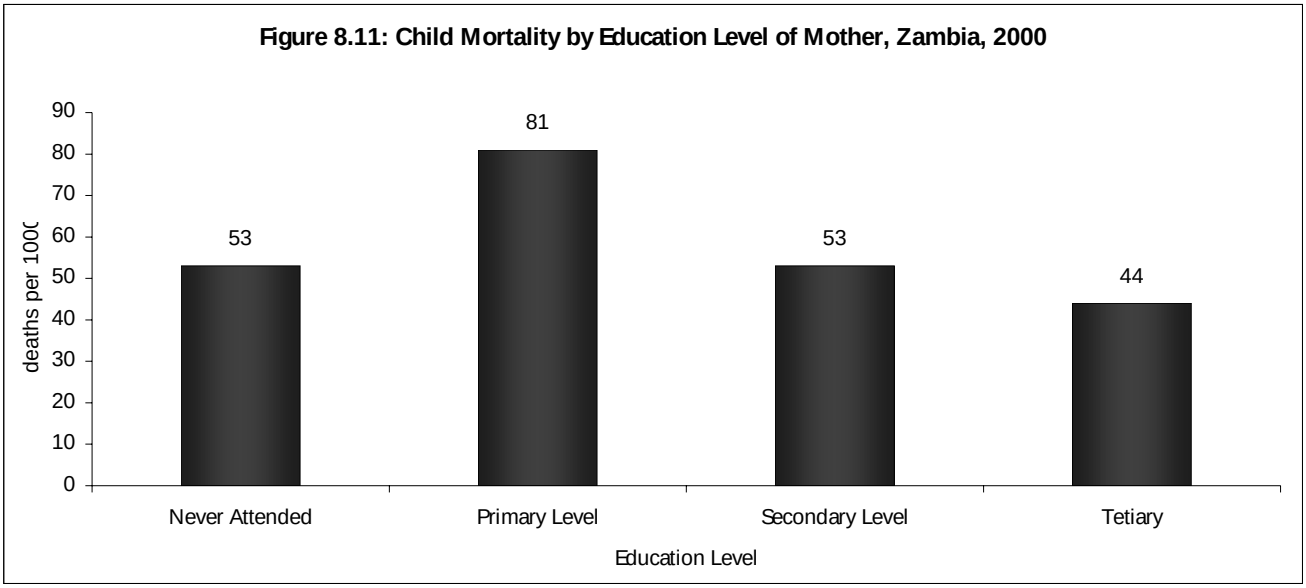
Figure 8.10 shows that children born to mothers who are not in marital union (widowed, never married, living together and divorced) have lower chances of surviving between exact age one and five (almost one in every 15 children), while children born to separated and married mothers have higher survival chances (1 in every 18 children).

**Figure 8.10: Child Mortality by Marital Status of Mother, Zambia, 2000**



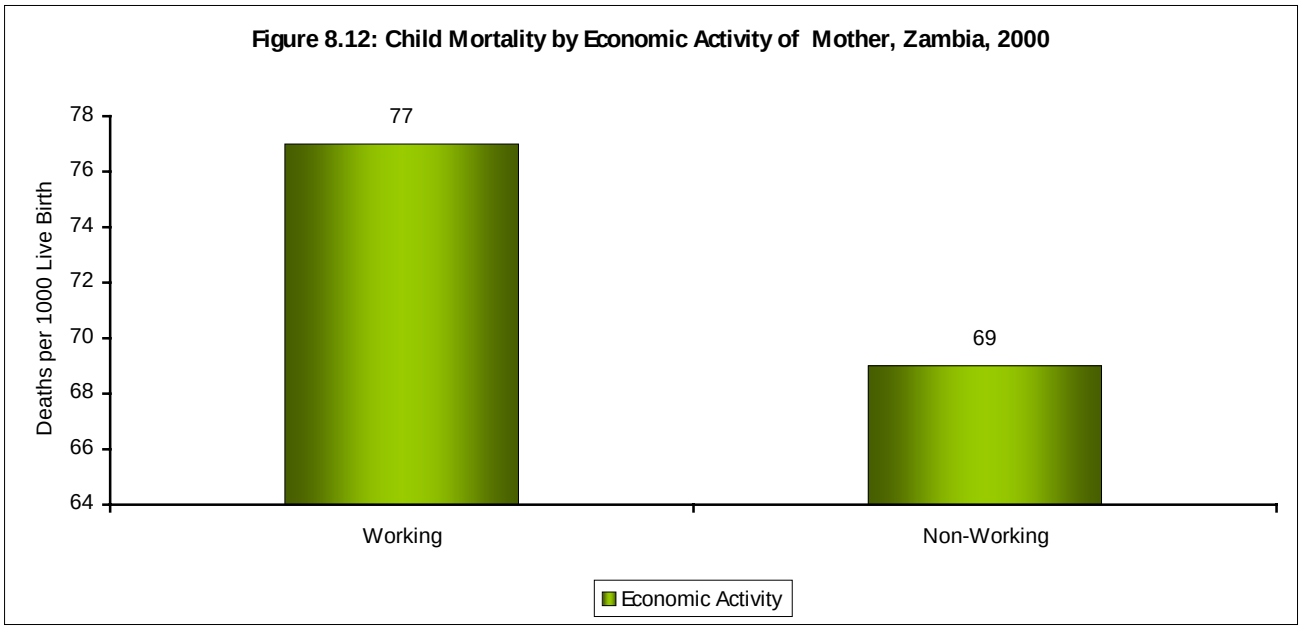
### 8.3.5 Child Mortality Rate by Education Level of the Mother

The lowest CMR was observed among women who had attained tertiary level of schooling (44) (Figure 8.11). CMR among children born to mothers with no education school was 53 deaths per 1000 children. CMR varies markedly according to the level of education of mother (Primary to tertiary). Survival chances of children increase substantially as the level of education of mothers increases. CMR for mothers with primary level of education is 81 deaths per 1000 children, 53 deaths per 1000 for mothers with secondary school education and 44 deaths per 1000 for those with tertiary education. It can be noted that CMR for children born to mothers with no education are markedly higher than those born to mothers with primary school level of education.




### 8.3.6 Child Mortality Rate by Economic Activity of the Mother

Children born to working mothers have higher chances of dying between exact age one and five than those born to non-working mothers. The differences are notable (77 versus 69 deaths per 1000 children, respectively), representing 10 percent higher deaths among the working mothers (Figure 8.12).



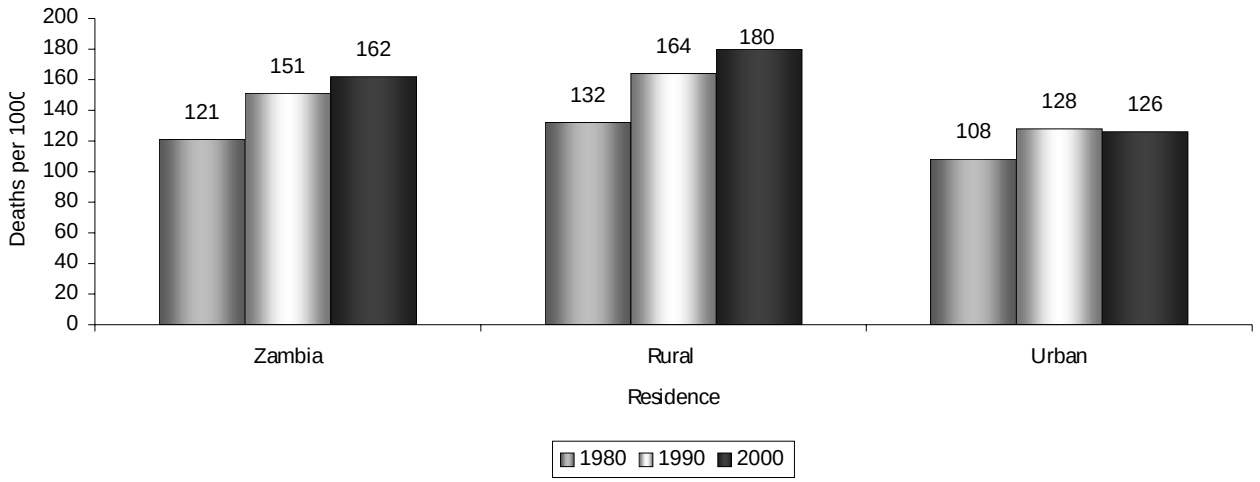
## 8.4 Under-Five Mortality Levels, Trends and Differentials

Under-five Mortality Rates (UMRs) in Zambia continued to increase between 1980 and 2000 (Figure 8.13). It increased by about seven percent, from 151 to 162 deaths per 1000 children between 1990 and 2000, respectively. In 1980, UMR stood at 121 deaths per 1000 children, representing about 34 percent increment over the 2000 level.

### *8.4.1 Under-Five Mortality Rate by Rural-Urban Residence of Mother*

The increasing UMR in rural areas is similar to the national trend (as observed in Figure 8.13). UMR in 1980 stood at 132 deaths per 1000 children. This increased substantially by about 24 percent in 1990 (132) to 164 deaths per 1000 children. However, UMR remained relatively stable between 1990 and 2000 in urban areas, from 128 to 126 deaths per 1000 children. Overall, children born to mothers residing in rural areas have higher risks of dying between birth and age five than those in urban areas (164 compared to 128 deaths per 1000 children).

**Figure 8.13: Trends in Under-Five Mortality by Residence of Mother, Zambia, 1980-2000**

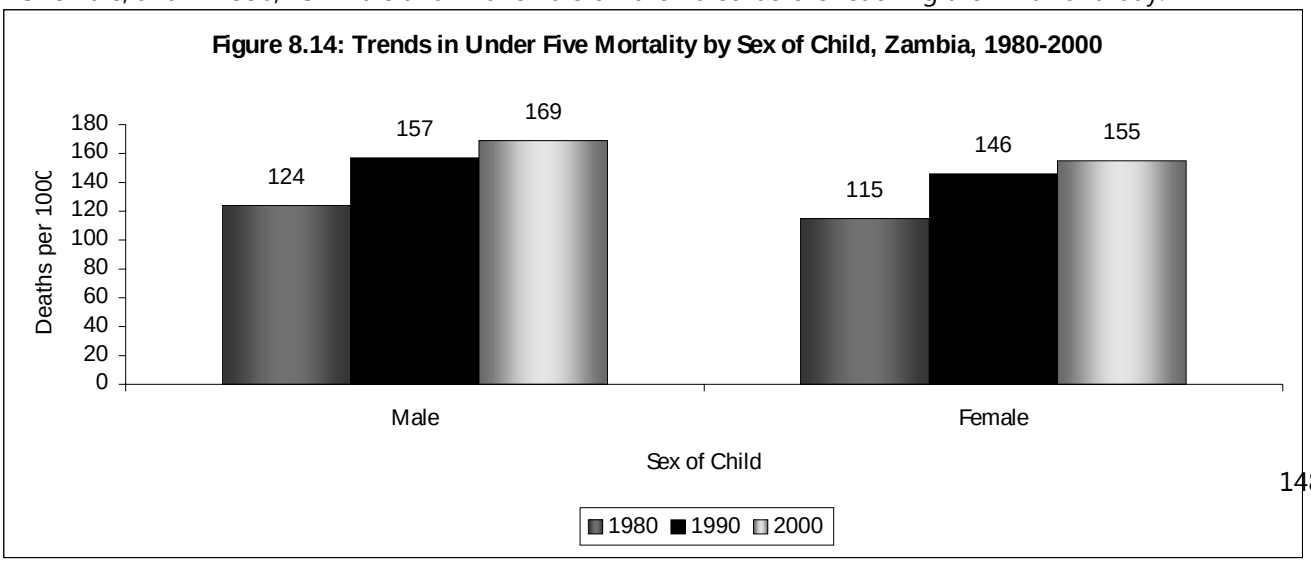



**Source:** CSO, 1980, 1990 and 2000 Censuses of Population and Housing

### *8.4.2 Under-Five Mortality Rate by Sex of the Child*

More male than female children in 2000 did not celebrate their fifth birthday, 169 versus 155 deaths per 1000 children (Figure 8.14). A similar pattern was also observed in 1980 and 1990 census years. In 1980, 124 male and 115 female, and in 1990, 157 male and 146 female children died before reaching their fifth birthday.

**Figure 8.14: Trends in Under Five Mortality by Sex of Child, Zambia, 1980-2000**

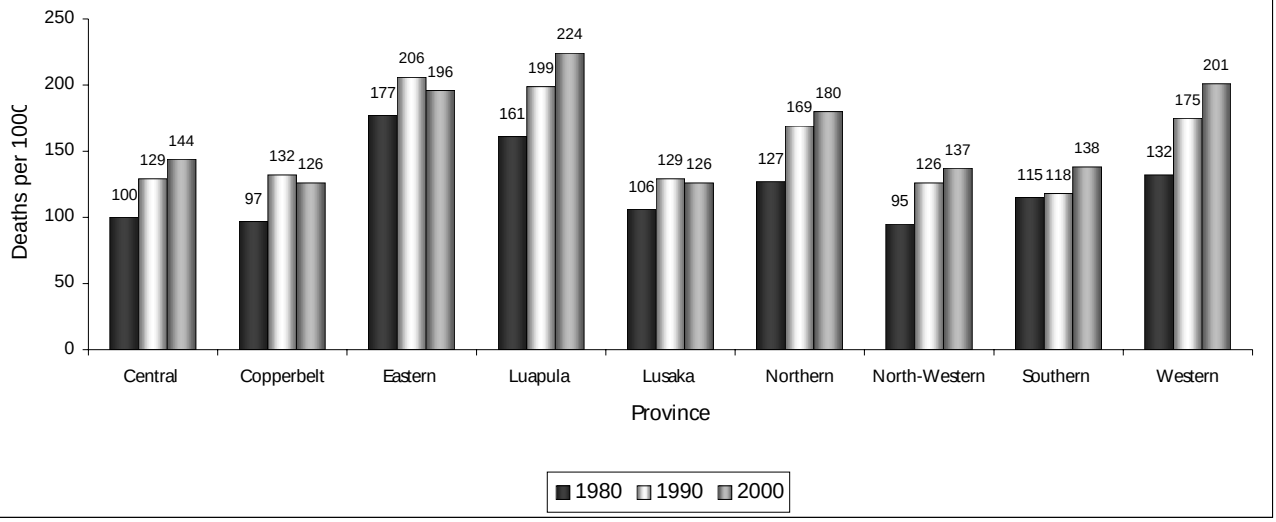


**Source:** CSO, 1980, 1990 and 2000 Censuses of Population and Housing

### 8.4.3 Under-Five Mortality Rate by Province of Residence of the Mother

Figure 8.15 shows that at the provincial level, overall UMR has been increasing between 1980 and 2000, except in Lusaka and the Copperbelt where it remained relatively stable in the last decade. In 2000, the highest UMR level was observed in Luapula (224) and the lowest recorded in Lusaka and Copperbelt Provinces (126).

**Figure 8.15: Trends in Under Five Mortality by Province, Zambia, 1980-2000**




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

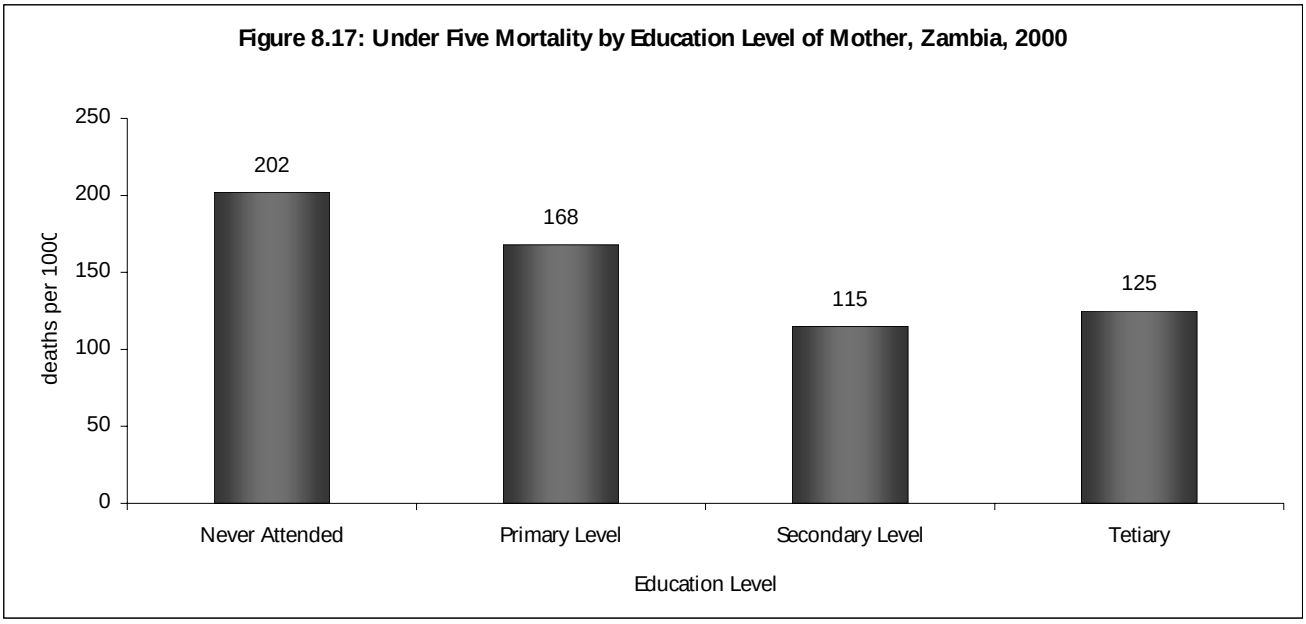
### 8.4.4 Under-Five Mortality Rate by Marital Status of Mother

There are no notable differences in the risks of children dying by various marital status (Figure 8.16). On average, in all marital categories, almost one in every five children die before celebrating their fifth birthday. However, it is worth noting that children born to mothers who were previously married (separated, divorced or widowed) slightly have higher chances of dying before reaching age five than those born to mothers who are currently or never married.

**Figure 8.16: Under Five Mortality Rate by Marital Status of Mother, Zambia, 2000**

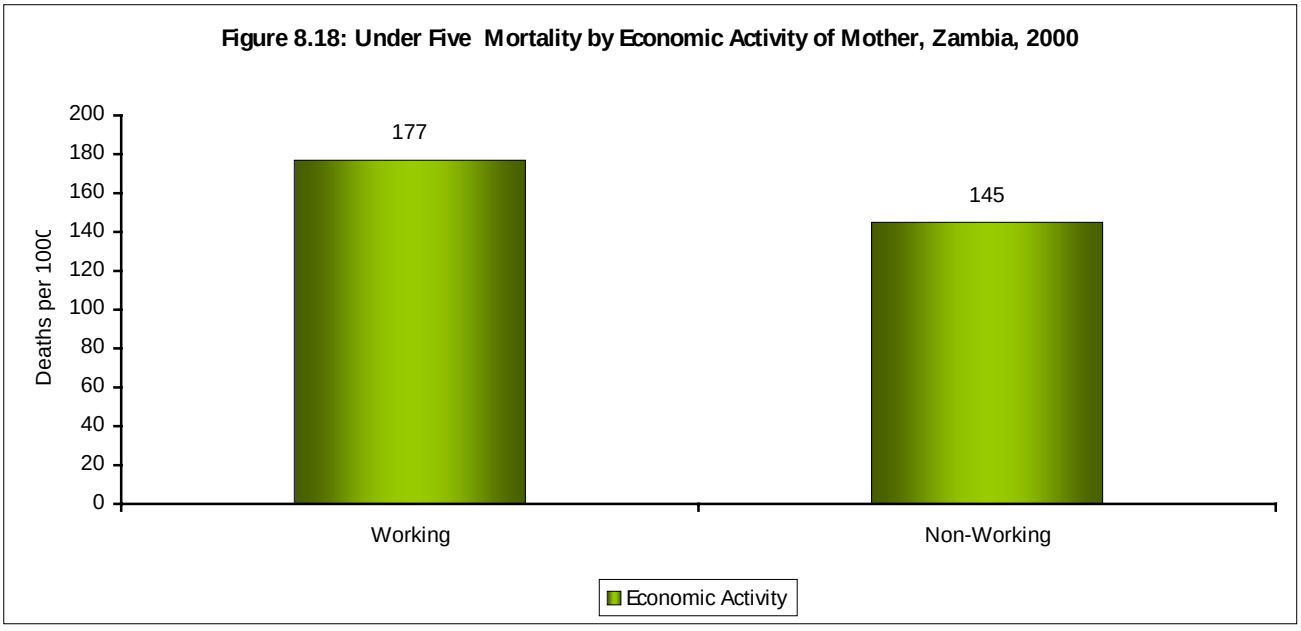
### 8.4.5 Under-Five Mortality Rate by Education Level of Mother

UMR varies markedly according to the level of education of mother (Primary or less to tertiary) (Figure 8.16). Children born to mothers with primary or less formal education are at the greatest risk of not celebrating their fifth birthday than those born to mothers with above primary school level of education.




### 8.4.6 Under-Five Mortality Rate by Economic Activity of the Mother

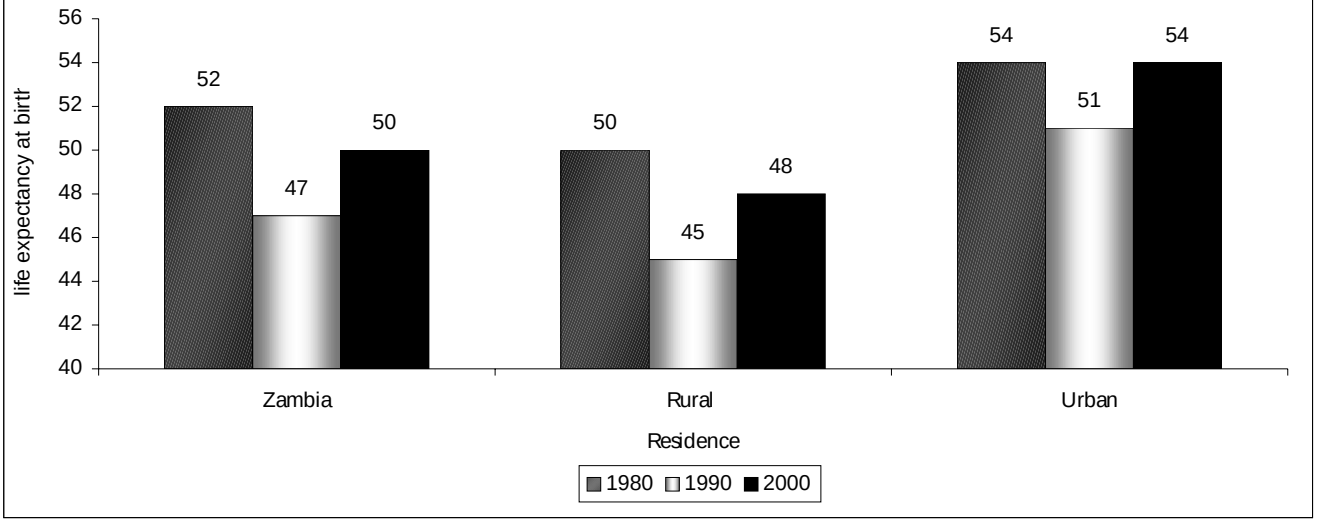
Results in Figure 8.19 show that children born to working mothers are at greater risks of not surviving to age five than those born to non-working mothers. The differences are marked (177 versus 145 deaths per 1000 children, respectively), representing about 18 percent higher deaths among the working mothers.



## 8.5 Life Expectancy at Birth: Levels, Trends and Differentials

There has been an increase in Life Expectancy at Birth between 1990 and 2000 (Figure 8.19). It rose from 47 in 1990 to 50 in 2000, an improvement of about three years. Despite the increase, the 2000 Figure is still lower than the 1980 one estimated at 52. When disaggregated by sex, the same trend is observed. It is also observed that female babies experience higher expectation of life at birth at 53, 48 and 52 years in 1980, 1990 and 2000, respectively compared to males at 52, 46 and 48 years in 1980, 1990 and 2000, respectively.

**Figure 8.19: Trends in Life Expectancy at Birth by Residence, Zambia, 1980-2000**



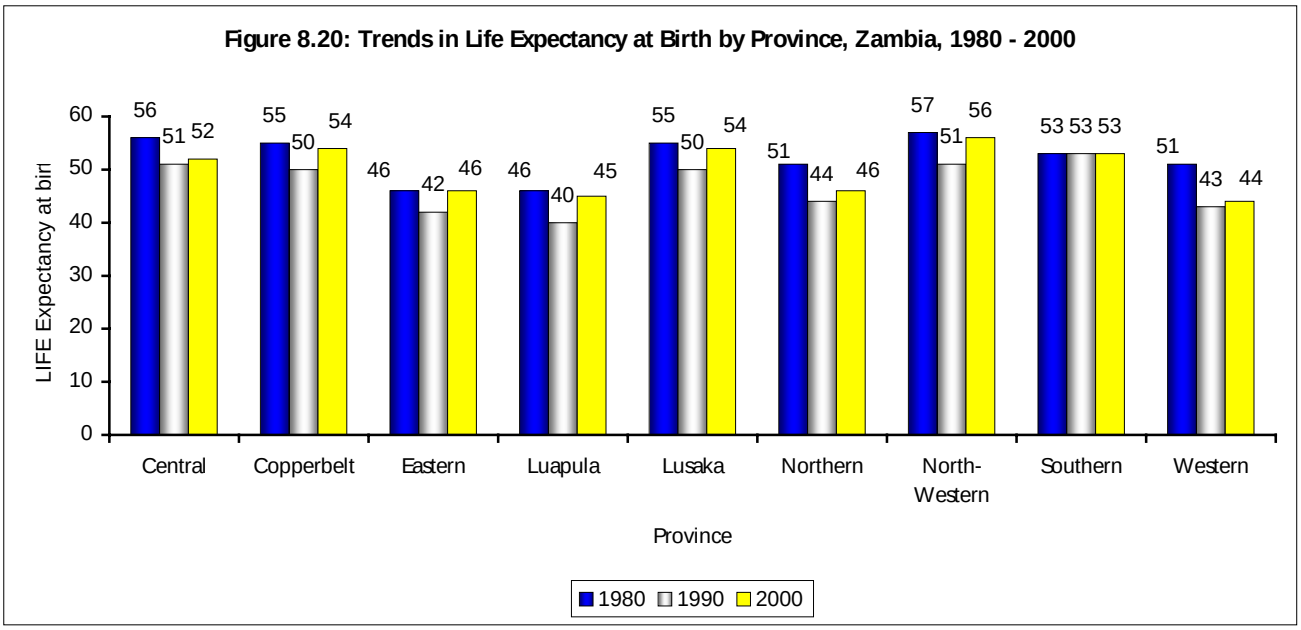

**Source:** CSO, 1980, 1990 and 2000 Censuses of Population and Housing

### *8.5.1 Life Expectancy at Birth by Rural-Urban Residence of the Mother*

In terms of residence, the rural results (Figure 8.19) follow the national trend where the 2000 life expectancy at birth has not increased above the 1980 Figure. In the urban areas, however, the 2000 Figure is equal to that of 1980. It is also 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 54 while in the rural areas it was 50, 45 and 48 in 1980, 1990 and 2000, respectively.

### *8.5.2 Life Expectancy at Birth by Province of Residence of the Mother*

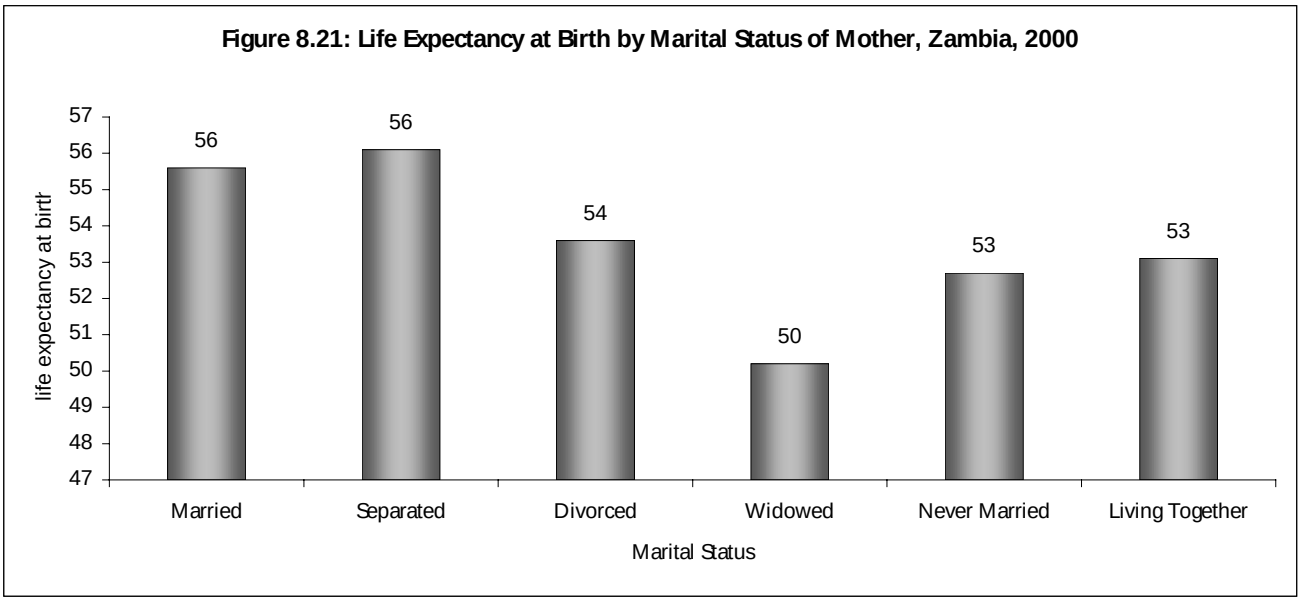
At the provincial level, Life Expectancy at Birth is relatively low in Western province (44) and Luapula (45) and relatively high in North-Western (56) and Lusaka (54). All the provinces had an increase in the years newly born babies were expected to live from 1990 to 2000, apart from Southern province, which experienced no change between 1980-2000 (Figure 8.20).




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

### 8.5.3 Life Expectancy at Birth by Marital Status of the Mother

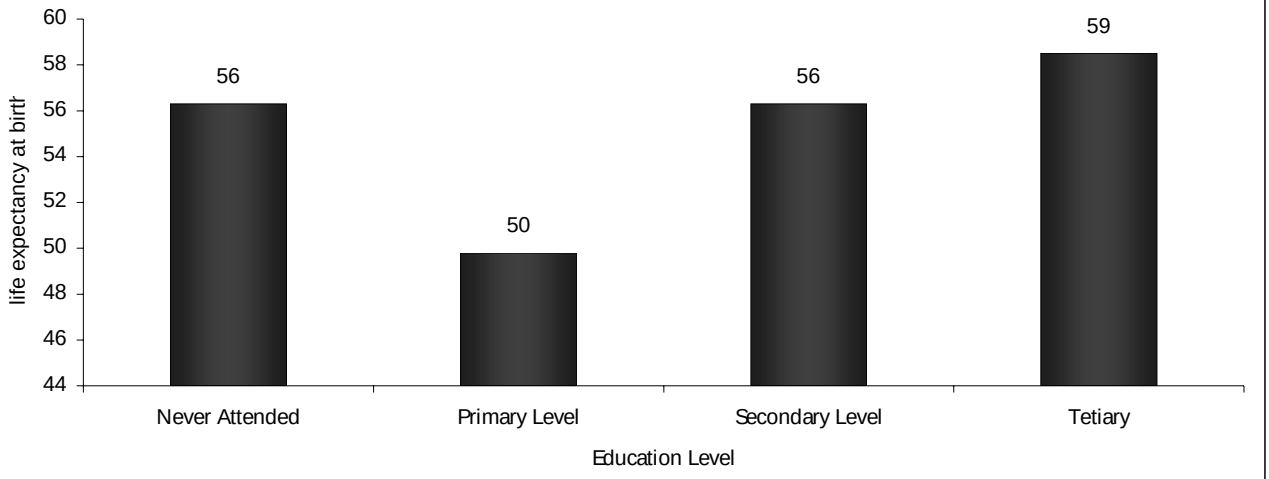
There are no notable differences in life expectancy at birth by marital status (Figure 8.21). The years range from 50 years for children born to widowed mothers to about 56 years for those born to married and separated mothers.




### 8.5.4 Life Expectancy at Birth by Education Level of the Mother

Life Expectancy at Birth varies markedly according to the level of education of mother (Primary or less to tertiary). Children born to mothers with tertiary education have the highest number of years they are expected to live (59 years) where as those born to mothers with primary education have the lowest number of years they are expected to live at 50 years. However, those born to mothers who have never attended formal schooling survive six years more than those with primary education, and three years less than those with tertiary education.

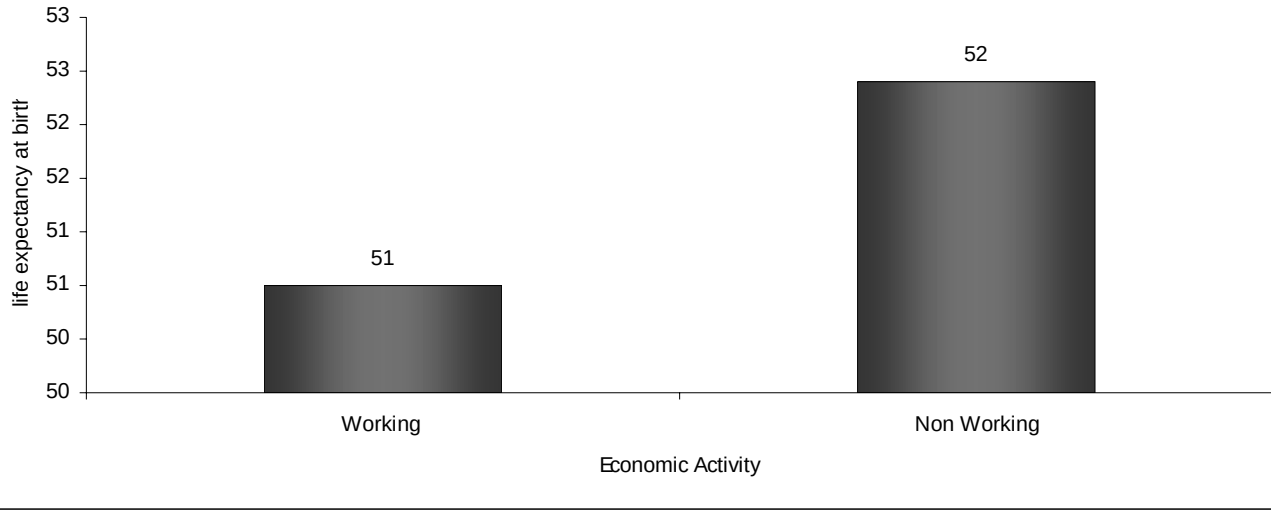
**Figure 8.22: Life Expectancy at Birth by Education Level of Mother, Zambia, 2000**




### 8.5.5 Life Expectancy at Birth by Economic Activity of the Mother

As may be expected, children born to working mothers have a higher expectation of life at birth than those born to non-working mothers (Figure 8.23). The difference, however, is not large (52 compared with 51 years, respectively).

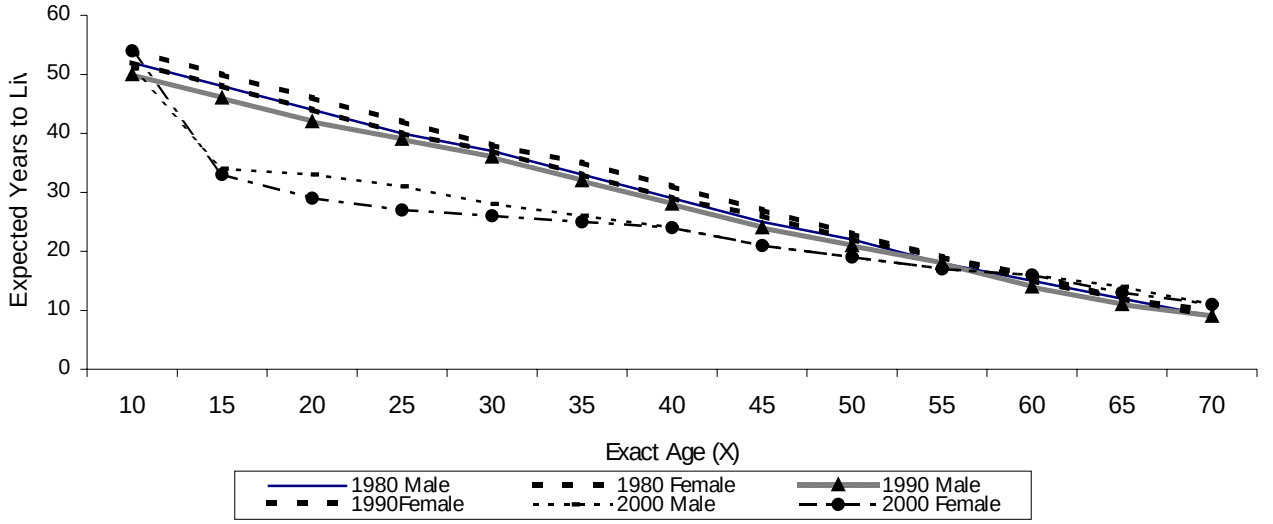
**Figure 8.23: Life Expectancy at Birth by Economic Activity of Mother, Zambia,2000**




## 8.6 Adult Mortality: Survivorship Levels, Trends and Differentials

Results in Figure 8.24 reveal that adult survivorship levels in Zambia have been deteriorating in the last 20 years (1980-2000). In the 1990 -2000 intercensal period the adult survival levels deteriorated significantly, especially in the 15-55 years age-group. The deteriorating situation may be attributable to the HIV/AIDS pandemic. Between 1980 and 1990, more female than male adults survived from age 10.

**Figure 8.24: Trends in Adult Survivorship Levels by Sex of Adult, Zambia, 1980-2000**

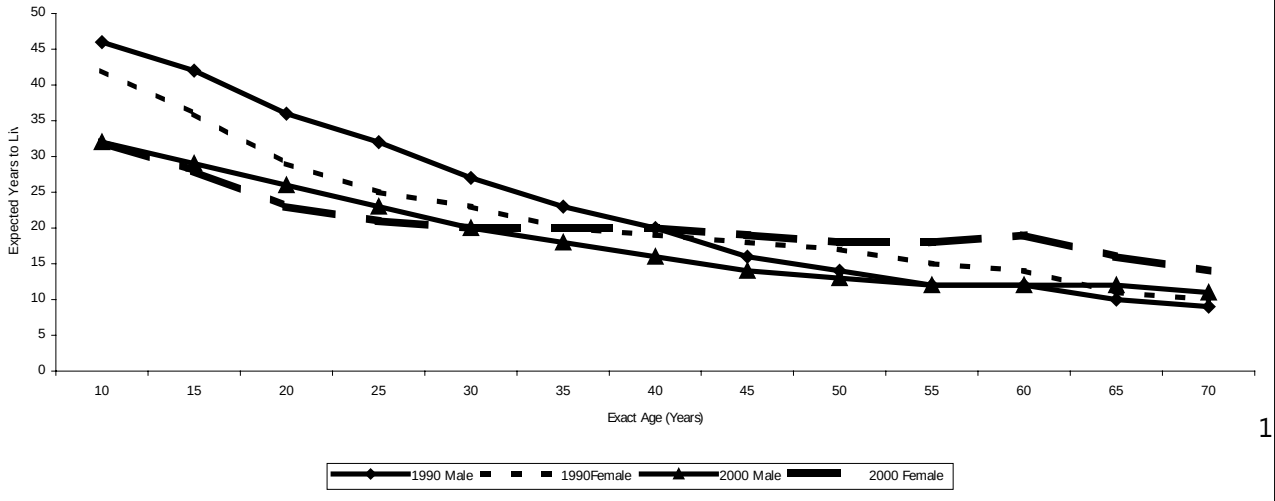



**Source:** CSO, 1980, 1990 and 2000 Censuses of Population and Housing

However, after 1990, the situation changed. Overall, more male than female adults survived, especially in the younger age group (15-40 years). It is interesting to note that after age 60, both sexes live longer than in the 1980s and 1990s. At age 15 both sexes lost at least 12 years between 1980 and 2000 and about 10 years between 1990 and 2000.

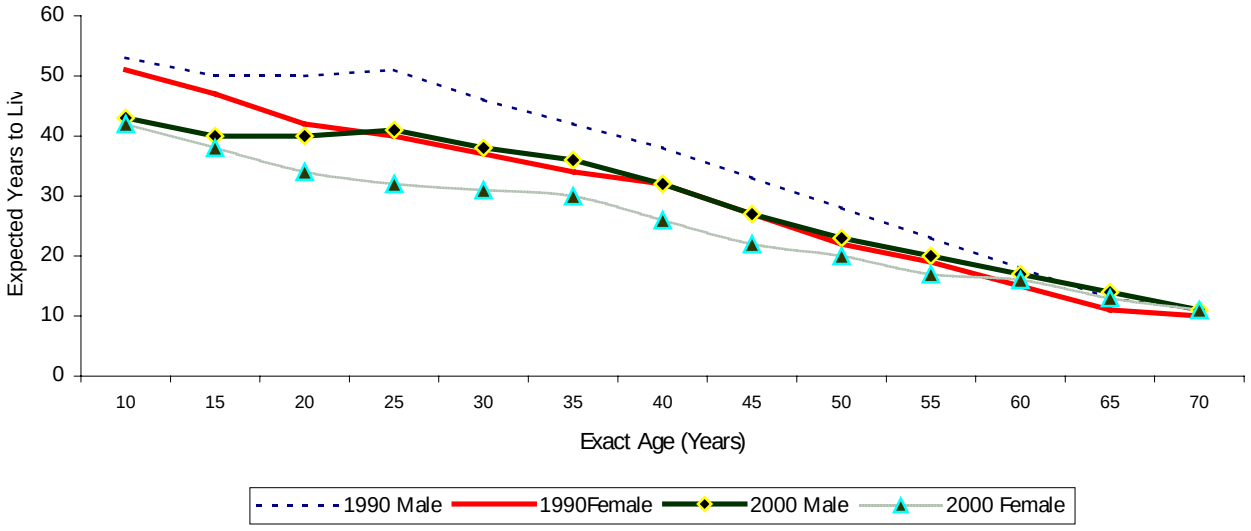
Differentials by residence in Figures 8.25 and 8.26 show that adults in urban areas have higher chances of surviving to older ages than in rural areas. In rural areas, although female adults have high chances of dying between age 10 and 30, they however have more years to live after age 40 until older ages (even above the 1990 mortality levels). In urban areas, on the contrary, the pattern is very different. In both 1990 and 2000, more male than female adults live longer in adulthood. The gap is even wider between age 15 and 55 years.

**Figure 8.25: Trends in Adult Survivorship Levels by Sex of Adult, Rural Zambia, 1990-2000**



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

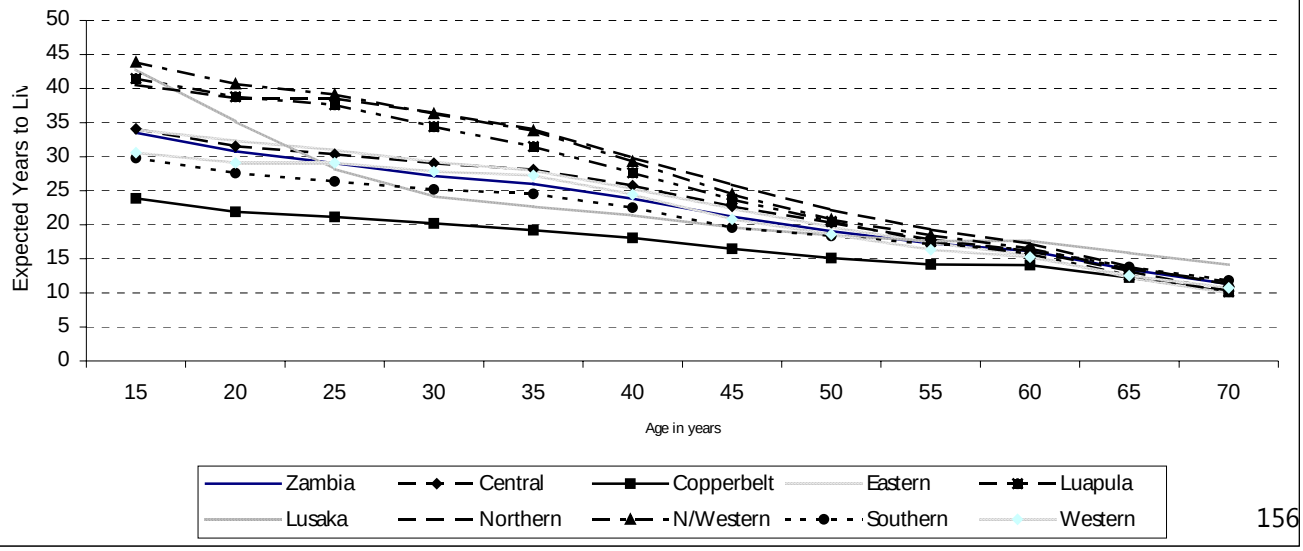
**Figure 8.26: Trends in Adult Survivorship Level by Sex of Adult, Urban Zambia, 1990-2000**




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

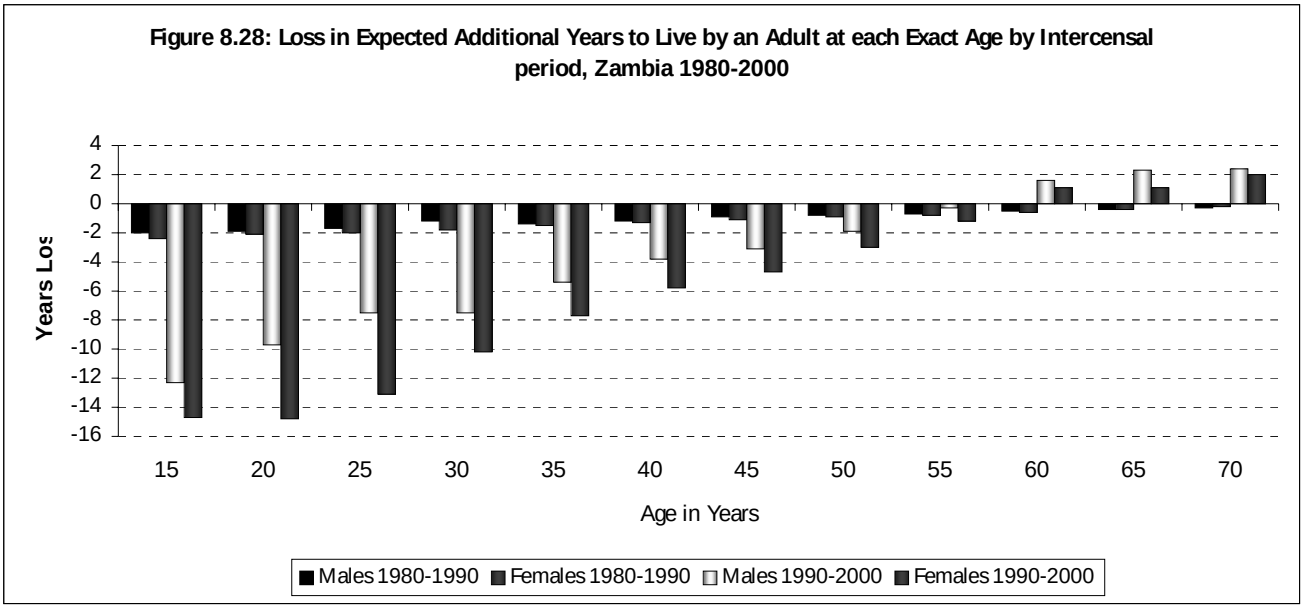
At provincial level, adult survivorship levels vary markedly. North-Western Province has the least adult mortality risks whereas the Copperbelt Province has the greatest risks of adults not surviving to older ages. Southern province showed a drastic decline in adult survivorship levels between age 25 and 40,while the rest of the Provinces showed a steady decline (Figure 8.27).

**Figure 8.27: Adult Survivorship Levels by Province, 1990-2000**



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

**Figure 8.28: Loss in Expected Additional Years to Live by an Adult at each Exact Age by Intercensal period, Zambia 1980-2000**




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

Figure 8.28 shows that overall, adults lost more years to live between 1990-2000 than 1980-1990 intercensal period. Further, adult survival chances remained barely the same for both males and females between 1980 and 1990. However, in the later intercensal period of 1990-2000, adult females lost more years to live than male adults between exact age 15 and 55 years. It is worth noting that more years of survival for adults are lost in the most productive and reproductive age-group, 15-55 years.

## 8.7. Summary

Overall, infant mortality rate in the 1990 to 2000 intercensal period declined in Zambia by about 12 percent. Despite the decline, the levels are still high and with about one in nine infants dying before their first birthday compared to one in eight in 1990. The decline in infant mortality rate has had no major impact on reduction of under-five mortality. At province level, Western registered the highest infant deaths and North-western the least. In Western province about one in seven infants do not survive to their first birthday compared to one in 12 in North-western province. Higher Infant mortality risks are associated with mothers who live in a rural area, has less education, currently not married and working.

There was a 13 percent decline in child mortality rate between 1990 and 2000, from 95 to 82. However, the 2000 level is still above the 1980 one (71 deaths per 1000). At the provincial level CMR was highest in Eastern (111) and lowest in North-western (56). Higher incidents of dying among children aged between exact age 1 and 5 were observed in those born to rural mothers, widowed and divorced mothers, mothers with a low level of education (primary or less), and working.

The number of children that die before their fifth-birthday has increased in Zambia between 1990 and 2000 by about seven percent. Between 1990 and 2000, about one in six under-five children died before their fifth birthday compared to one in seven in the 1980 to 1990 period. At provincial level, both Copperbelt and Lusaka provinces

recorded the least under-five deaths and Luapala province recorded the highest. Under-five children in both Lusaka and Copperbelt provinces are twice less likely to die than those in Luapula province. About one in four under-five children in Luapula die before reaching age five. Greater numbers of children dying before their fifth birthday were associated with mothers from rural areas, low level of education, previously married and among working women.

The expected number of years of life after birth in Zambia improved by about three years in 1990 to 2000 period (rose from about 47 to 50 years). At province level, Western registered the lowest life expectancy at birth of 44 years, compared with the highest, North-western at 56 years. Low Life Expectancy at Birth is also associated with babies born to rural mothers, widowed mothers, mothers with a low level educational, and working mothers.

Adult survivorship levels have significantly deteriorated between 1990-2000 compared to the periods 1980-1990 and 1969-1980. Between 1990 and 2000, an adult has lost about 11 years of survival (33 versus 44 years). Males have higher chances of surviving than females. At province level, adults in North-western province have higher chances of surviving to older ages while adults in the Copperbelt province have higher risks of not surviving to older ages.

# CHAPTER 9
# DISABILITY

## *9.0. 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<br>2. Deaf and/or mute<br>3. Loss of limb<br>4. Sick | 1. Blind<br>2. Deaf and/or mute<br>3. Crippled, or loss of limb<br>4. Mentally Retarded<br>5. Sick<br>6. Combination of two or more categories | 1. Blind<br>2. Deaf-Dumb<br>3. Crippled<br>4. Mentally Retarded<br>5. Multiple Disabilities | 1. Blind<br>2. Partially sighted<br>3. Deaf/Dumb<br>4. Hard of Hearing<br>5. Mentally ill<br>6. Ex- Mental<br>7. Mentally Retarded<br>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.

## *9.1. 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

## 9.2. Limitations of Data on Disability

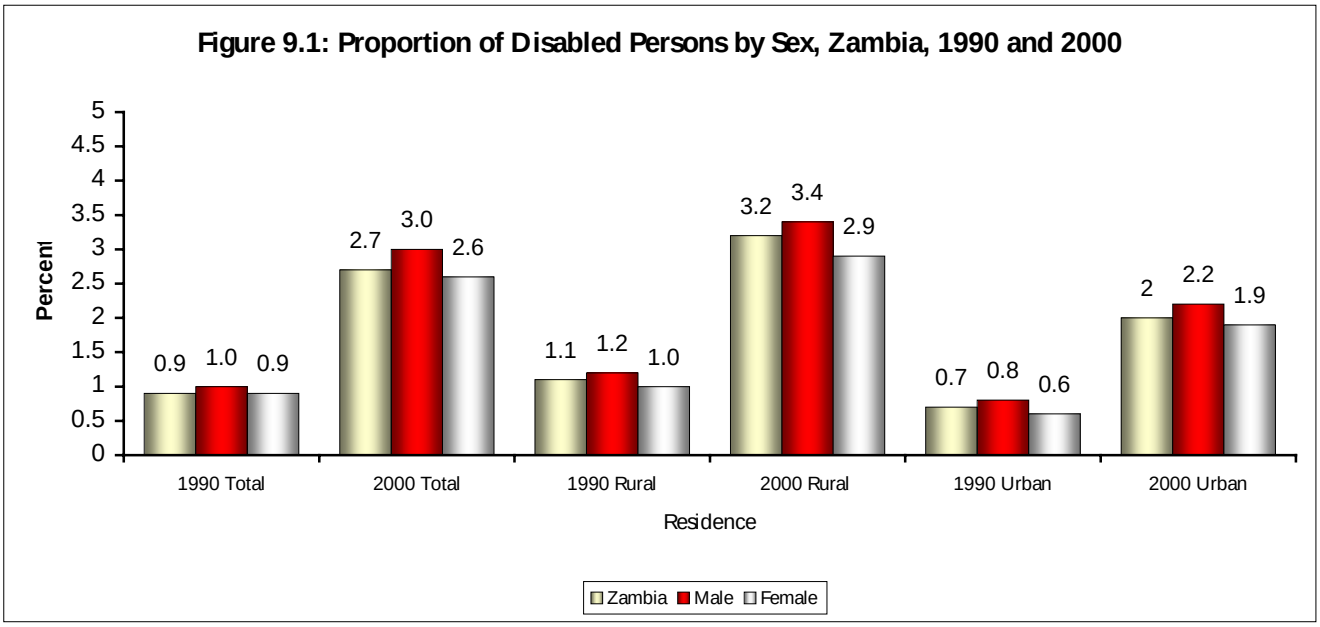
Policy makers and planners require data on disabled persons. Information needs are more than just basic counts of the number of people with disabilities but also on the quality of life of people living with disabilities.

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.

## 9.3. Proportion of the Disabled to the Total Population

Out of a 2000 Census of Population and Housing total population of 9.3 million**,** 256,690 are disabled; a proportion of 2.7 percent of the total population. This proportion is an increase over the 1990 census when only 0.9 percent of the total population were 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. The observed increase may be largely caused by the increase in the categories and coverage of the disabled (See Figure 9.1).




A comparison of the provinces shows that Western Province has the largest proportion of persons with disabilities. About 4 percent of the population of Western Province is disabled. This is followed by Luapula, in which 3.6 percent of the population is disabled. In Copperbelt, only 0.4 percent of the population is disabled.

Rural-urban differentials exist in terms of proportions of persons with disabilities. Of the total rural population, 3.3 percent is disabled compared to 2.1 in urban areas.

## Table 9.2: Proportion of Disabled Persons by Province, Sex and Residence, Zambia, 1990 and 2000

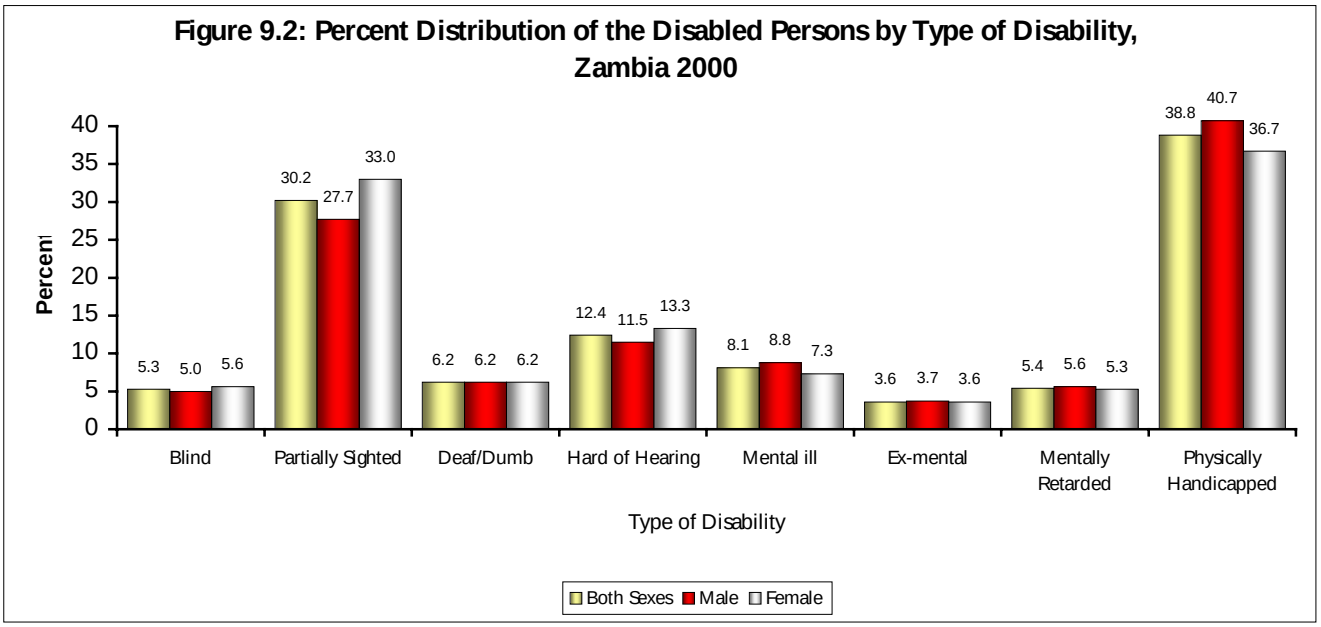
| Province and sex | Total Population | | | Proportion of the Disabled (%) | | |
|---|---|---|---|---|---|---|
| | Zambia | Rural | Urban | Zambia | Rural | Urban |
| Zambia Total 1990 | 7,383,097 | 4,477,814 | 2,905,283 | 0.9 | 1.1 | 0.7 |
| Male | 3,617,577 | 2,163,761 | 1,453,816 | 1.0 | 1.2 | 0.8 |
| Female | 3,765,520 | 2,314,053 | 1,451,467 | 0.9 | 1.0 | 0.6 |
| Zambia Total 2000 | 9,337,425 | 5,990,356 | 3,347,069 | 2.7 | 3.2 | 0.2 |
| Male | 4,594,290 | 2,931,551 | 1,662,739 | 3.0 | 3.4 | 2.2 |
| Female | 4,743,135 | 3,058,805 | 1,684,330 | 2.6 | 2.9 | 1.9 |
| **2000** | | | | | | |
| Central total | 957,288 | 725,100 | 232,188 | 2.5 | 2.7 | 2.0 |
| Male | 475,952 | 361,434 | 114,518 | 2.8 | 2.9 | 2.2 |
| Female | 481,336 | 363,666 | 117,670 | 2.3 | 2.5 | 1.9 |
| Copperbelt total | 1,527,294 | 290,724 | 1,236,570 | 2.3 | 3.5 | 2.0 |
| Male | 764,550 | 147,506 | 617,044 | 2.5 | 3.8 | 2.2 |
| Female | 762,744 | 143,218 | 619,526 | 2.1 | 3.1 | 1.9 |
| Eastern total | 1,226,767 | 1,118,004 | 108,763 | 3.1 | 3.2 | 2.0 |
| Male | 597,526 | 544,503 | 53,023 | 3.3 | 3.4 | 2.2 |
| Female | 629,241 | 573,501 | 55,740 | 2.9 | 3.0 | 1.7 |
| Luapula total | 729,828 | 616,846 | 112,982 | 3.4 | 3.4 | 3.2 |
| Male | 355,827 | 300,831 | 54,996 | 3.6 | 3.6 | 3.5 |
| Female | 374,001 | 316,015 | 57,986 | 3.2 | 3.2 | 2.9 |
| 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 |
| Northern total | 1,174,316 | 1,011,727 | 162,589 | 3.2 | 3.1 | 3.5 |
| Male | 573,347 | 494,071 | 79,276 | 3.4 | 3.3 | 3.7 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Female | 600,969 | 517,656 | 83,313 | 2.9 | 2.9 | 3.3 |
| North western | 539,822 | 468,796 | 71,026 | 2.8 | 2.9 | 1.9 |
| Male | 265,084 | 230,334 | 34,750 | 3.1 | 3.3 | 2.1 |
| Female | 274,738 | 238,462 | 36,276 | 2.4 | 2.5 | 1.6 |
| Southern total | 1,132,810 | 892,141 | 240,669 | 2.6 | 2.8 | 1.7 |
| Male | 553,657 | 434,542 | 119,115 | 2.8 | 3.0 | 1.8 |
| Female | 579,153 | 457,599 | 121,554 | 2.4 | 2.6 | 1.6 |
| Western total | 708,133 | 628,535 | 79,598 | 3.8 | 4.1 | 2.0 |
| Male | 336,260 | 297,651 | 38,609 | 4.1 | 4.3 | 2.1 |
| Female | 371,873 | 330,884 | 40,989 | 3.6 | 3.9 | 1.9 |

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

## 9.4. Types of Disability

The distribution of disabled persons by type of disability is shown in Table 9.3. The table shows that out of a total of 256,690 disabled persons in Zambia, 52.8 percent are male and 47.2 percent female. The residential distribution shows that 26 percent are in urban areas and 74 percent in rural areas.




As mentioned earlier, the types of disability include the blind (visually impaired), partially sighted, deaf/dumb (hearing/speech impaired), hard of hearing, mentally ill, ex-mental, mentally retarded and the physically handicapped. Figure 9.2 shows that the physically handicapped form the largest proportion of the disabled persons. These form 38.8 percent of the total disabled persons. The second most common disability is partial sight, which was reported by 30.2 percent of the disabled population. Some disability categories such as blindness (5.3 percent), ex-mental (3.6 percent) and mental retardation (5.4 percent) are less common (See Table 9.3 for details).

***Table 9.3: Percent Distribution of the Disabled Persons by Type of Disability, Sex, Residence and Zambia, 2000***

| Residence /Sex/ Province | Total Number | Type of Disability | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Blind | Partially Sighted | Deaf/ Dumb | Hard of Hearing | Mental ill | Ex-mental | Mental Retarded | Physically Handicapped |
| **Zambia Total** | | | | | | | | | |
| Both Sexes | 256,690 | 5.3 | 30.2 | 6.2 | 12.4 | 8.1 | 3.6 | 5.4 | 38.8 |
| Male | 135,613 | 5.0 | 27.7 | 6.2 | 11.5 | 8.8 | 3.7 | 5.6 | 40.7 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Female | 121,077 | 5.6 | 33.0 | 6.2 | 13.3 | 7.3 | 3.6 | 5.3 | 36.7 |
| **Rural** | | | | | | | | | |
| Both Sexes | 188,945 | 5.3 | 29.2 | 6.2 | 12.9 | 8.0 | 3.4 | 5.1 | 39.5 |
| Male | 99,289 | 5.0 | 26.8 | 6.1 | 12.0 | 8.7 | 3.5 | 5.3 | 41.2 |
| Female | 89,656 | 5.7 | 31.8 | 6.2 | 13.8 | 7.2 | 3.3 | 4.9 | 37.7 |
| **Urban** | | | | | | | | | |
| Both Sexes | 67,745 | 5.2 | 33.1 | 6.4 | 10.9 | 8.4 | 4.3 | 6.3 | 36.8 |
| Male | 36,324 | 5.0 | 30.1 | 6.4 | 10.1 | 9.1 | 4.2 | 6.2 | 39.3 |
| Female | 31,421 | 5.4 | 36.5 | 6.4 | 11.9 | 7.6 | 4.4 | 6.5 | 33.9 |
| **Provinces** | | | | | | | | | |
| Central | 24,379 | 4.0 | 32.0 | 5.4 | 12.7 | 7.0 | 2.3 | 4.6 | 38.0 |
| Copperbelt | 35,433 | 5.2 | 32.0 | 5.9 | 10.6 | 8.1 | 3.3 | 5.9 | 39.1 |
| Eastern | 37,691 | 3.6 | 24.8 | 6.1 | 12.1 | 9.3 | 3.8 | 6.1 | 40.3 |
| Luapula | 24,669 | 7.3 | 30.6 | 7.5 | 12.7 | 9.1 | 4.9 | 6.5 | 37.8 |
| Lusaka | 25,963 | 2.9 | 34.9 | 4.4 | 8.8 | 6.1 | 3.3 | 5.2 | 33.8 |
| Northern | 37,008 | 7.0 | 32.2 | 7.7 | 15.3 | 9.6 | 5.1 | 6.4 | 36.9 |
| North western | 14,963 | 3.6 | 23.6 | 5.1 | 11.6 | 6.4 | 2.7 | 4.1 | 46.6 |
| Southern | 29,404 | 6.5 | 27.7 | 7.2 | 11.6 | 8.7 | 3.4 | 5.0 | 43.5 |
| Western | 27,180 | 6.9 | 32.8 | 5.6 | 15.2 | 6.9 | 3.1 | 3.8 | 35.9 |

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

Table 9.3 also shows that there are more male than female persons with disabilities; (135,613 against 121,077). 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. This pattern is also similar across provinces although proportions vary slightly. For instance, Luapula (7.3 percent), Northern (7.0 percent) and Western (6.9 percent) provinces have higher proportion of the blind compared to provinces such as Lusaka (2.9 percent), Eastern (3.6 percent) and North-Western (3.6 percent). Partial sightedness is most common in Lusaka Province (35 percent) and least in North-Western (24 percent) province. The proportion of the deaf and dumb ranges from 4.4 percent in Lusaka to 7.7 percent in Northern Province while that of the hard of hearing ranges from 8.8 percent in Lusaka to 15.3 percent in Northern province. A comparison of the provinces as regards the physically handicapped shows that it is most common in Northwestern province with 47 percent and least in Lusaka with 34 percent.

### *9.5. Age Structure of the Disabled*

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

**Table 9.4: Percent Distribution of the Disabled Persons by Type of Disability and Age, Zambia, 2000**

| Age group | Type of Disability | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Blind | Partially Sighted | Deaf/Dumb | Hard of Hearing | Mentally ill | Ex Mental | Mentally Retarded | Physically Handicapped |
| 0 – 4 | 13,343 | 6.4 | 20.3 | 13.1 | 13.9 | 11.1 | 7.6 | 8.7 | 41.5 |
| 5 – 9 | 18,386 | 4.0 | 18.7 | 13.5 | 16.5 | 9.8 | 5.4 | 7.7 | 35.7 |
| 10 – 14 | 19,309 | 3.9 | 19.4 | 12.4 | 16.3 | 11.1 | 5.2 | 9.2 | 35.9 |
| 15 – 19 | 18,848 | 3.8 | 21.3 | 9.1 | 12.5 | 11.7 | 4.7 | 9.4 | 38.2 |
| 20 – 24 | 18,883 | 3.7 | 21.4 | 7.1 | 10.3 | 11.7 | 4.6 | 8.3 | 40.3 |
| 25 – 29 | 18,768 | 3.3 | 22.0 | 5.8 | 9.8 | 12.8 | 4.6 | 7.3 | 40.9 |
| 30 – 34 | 18,286 | 3.8 | 23.4 | 5.3 | 9.3 | 10.3 | 4.3 | 5.9 | 44.1 |
| 35 – 39 | 16,283 | 4.0 | 26.6 | 4.3 | 9.3 | 9.4 | 3.9 | 5.3 | 42.8 |
| 40 – 44 | 15,260 | 3.9 | 31.5 | 3.7 | 8.9 | 7.7 | 3.4 | 4.1 | 41.4 |
| 45 – 49 | 14,278 | 4.0 | 36.9 | 3.3 | 8.8 | 6.7 | 2.8 | 3.6 | 39.5 |
| 50 – 54 | 14,985 | 4.5 | 38.9 | 3.1 | 9.4 | 5.1 | 2.4 | 3.1 | 39.3 |
| 55 – 59 | 12,573 | 6.1 | 38.5 | 2.9 | 10.7 | 4.2 | 1.8 | 2.6 | 39.6 |
| 60 – 64 | 14,204 | 6.5 | 42.6 | 2.8 | 12.4 | 3.6 | 1.7 | 2.0 | 37.8 |
| 65 – 69 | 12,781 | 7.3 | 42.7 | 2.7 | 13.0 | 3.6 | 1.6 | 1.8 | 38.0 |
| 70 – 74 | 11,215 | 8.8 | 46.4 | 2.7 | 15.1 | 3.0 | 1.4 | 1.7 | 36.1 |
| 75+ | 19,288 | 12.6 | 49.1 | 3.3 | 20.3 | 2.3 | 1.0 | 1.7 | 31.0 |
| **Total** | 256,690 | 5.3 | 30.2 | 6.2 | 12.4 | 8.1 | 3.6 | 5.4 | 38.8 |

### 9.6. Causes of Disability

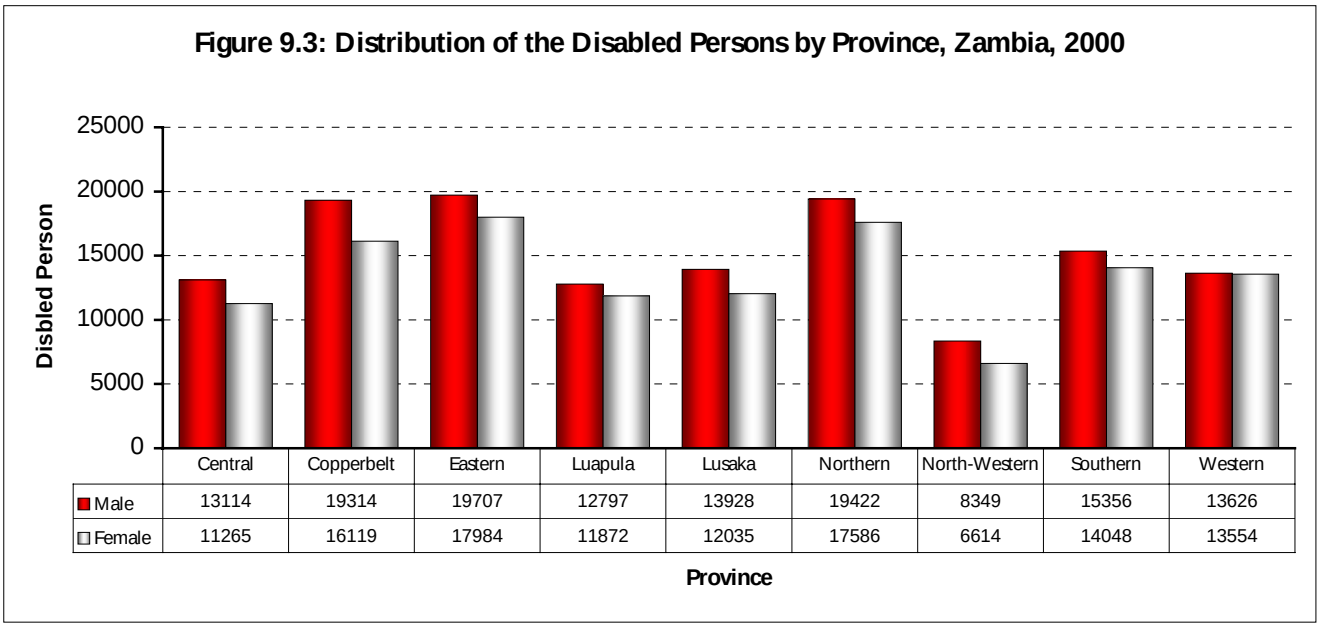
The various causes of disability were categorized as pre-natal, disease, injury, other and unknown. Of these, the most common cause is disease, which was reported by 38.9 percent of the disabled population. Prenatal causes were reported by 13.7 percent, injury causes by 17.2 percent, and other by 9 percent while 20 percent reported that they did not know the cause of their disability.

Some causes of disability affect females more than 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.

**Table 9.5: Percent Distribution of the Disabled by Cause, Sex and Province, Zambia, 2000**

| Cause of Disability | Total | Province | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Central | Copperbelt | Eastern | Luapula | Lusaka | Northern | N/Western | Southern | Western |
| **Both Sexes** | 256,690 | 24,379 | 35,433 | 37,691 | 24,669 | 25,963 | 37,008 | 14,963 | 29,404 | 27,180 |
| Total Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Congenital/pre-natal | 13.7 | 12.0 | 12.9 | 13.5 | 15.6 | 12.6 | 16.8 | 11.2 | 15.9 | 10.6 |
| Disease/illness | 38.9 | 36.1 | 32.6 | 39.7 | 40.8 | 30.8 | 38.8 | 40.0 | 38.9 | 54.1 |
| Injury/accident/trauma | 17.2 | 16.6 | 20.5 | 17.3 | 17.1 | 16.5 | 17.1 | 20.0 | 18.1 | 11.6 |
| Other | 9.3 | 9.5 | 10.4 | 8.3 | 9.6 | 12.8 | 10.0 | 8.4 | 7.6 | 7.0 |
| Unknown | 20.2 | 22.9 | 21.1 | 19.0 | 21.2 | 23.6 | 19.9 | 18.5 | 18.1 | 17.6 |
| **Male** | 135,613 | 13,114 | 19,314 | 19,707 | 12,797 | 13,928 | 19,422 | 8,349 | 15,356 | 13,626 |
| Total Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Congenital/pre-natal | 13.7 | 12.0 | 12.8 | 13.5 | 15.3 | 12.6 | 17.0 | 11.0 | 16.2 | 10.9 |
| Disease/illness | 36.3 | 33.7 | 29.7 | 37.2 | 39.2 | 29.4 | 35.9 | 36.8 | 35.9 | 51.6 |
| Injury/accident/trauma | 20.7 | 20.3 | 24.6 | 21.0 | 19.8 | 20.3 | 20.5 | 23.9 | 21.5 | 14.4 |
| Other | 8.9 | 9.1 | 10.1 | 7.5 | 9.4 | 12.5 | 9.5 | 8.2 | 7.1 | 6.7 |
| Unknown | 19.4 | 22.1 | 19.8 | 18.5 | 20.5 | 22.0 | 19.1 | 18.0 | 17.7 | 17.4 |
| **Female** | 121,077 | 11,265 | 16,119 | 17,984 | 11,872 | 12,035 | 17,586 | 6,614 | 14,048 | 13,554 |
| Total Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Congenital/pre-natal | 13.7 | 12.0 | 13.0 | 13.6 | 16.0 | 12.7 | 16.6 | 11.5 | 15.5 | 10.3 |
| Disease/illness | 41.9 | 38.9 | 36.1 | 42.5 | 42.5 | 32.4 | 42.1 | 44.1 | 42.1 | 56.7 |
| Injury/accident/trauma | 13.2 | 12.3 | 15.7 | 13.4 | 14.2 | 12.2 | 13.4 | 15.1 | 14.4 | 8.7 |
| Other | 9.7 | 10.0 | 10.8 | 9.1 | 9.8 | 13.1 | 10.5 | 8.6 | 8.1 | 7.3 |
| Unknown | 21.0 | 23.8 | 22.7 | 19.5 | 22.0 | 25.4 | 20.8 | 19.2 | 18.7 | 17.8 |

***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.




Almost 39 percent of the disabled population cited disease as a cause of their disability in Zambia. Among the provinces, Western has the largest proportion of 54 percent while Lusaka has the least proportion with 31 percent reporting disease as a cause of disability. In all provinces a larger proportion of the disabled females cited

disease as a cause of their disability than their male counterparts. This implies that disabilities are preventable and efforts towards prevention can significantly contribute to reduction of disabilities.

## . Education Levels of the Disabled

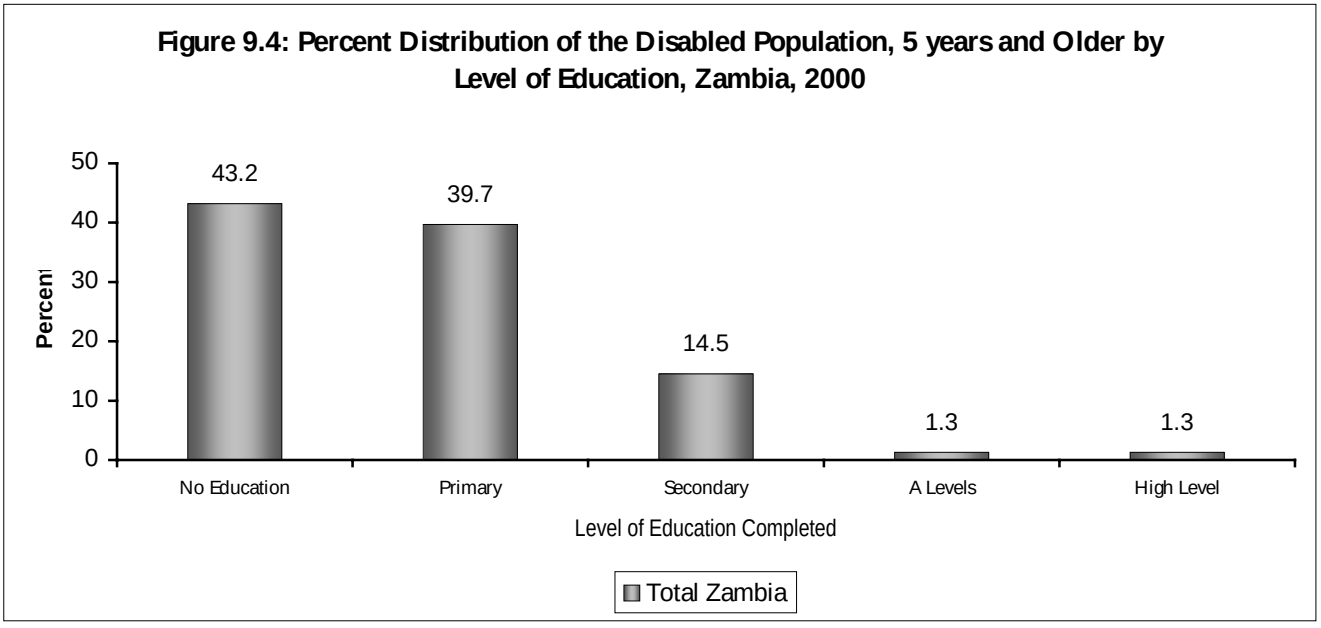
e role of education in the development of the nation and lives of its citizens has been clearly stated under chapter five on education in the report. Educational needs of persons with disabilities including any impediments should therefore continue to be addressed to ensure that more persons with disabilities become educated.

e percent distribution of disabled persons five years and above by type of disability and level of education is shown in Table 9.6 and Figure 9.4. About two in five disabled persons have never attended school and another two in five have only completed primary education.

e proportion of those who have never attended school is highest among the deaf/dumb (62.3 percent). The highest proportion of those who completed higher education was among the partially sighted.

**Table 9.6: Percent Distribution of the Disabled Population, 5 years and Older by Type of Disability and Level of Education, Zambia, 2000**

| Type of Disability | Level of Education Completed | | | | | | |
|---|---|---|---|---|---|---|---|
| | Total Number | Total Percent | No Education | Primary | Secondary | A Levels | Higher Level |
| Blind | 12,754 | 100.0 | 57.0 | 29.8 | 11.0 | 0.8 | 1.3 |
| Partially Sighted | 74,882 | 100.0 | 39.6 | 40.7 | 15.6 | 2.2 | 1.8 |
| Deaf/Dumb | 14,233 | 100.0 | 62.3 | 28.1 | 8.2 | 0.4 | 1.0 |
| Hard of Hearing | 29,886 | 100.0 | 48.9 | 40.1 | 9.4 | 0.6 | 1.0 |
| Mentally Ill | 19,345 | 100.0 | 51.2 | 33.3 | 13.9 | 0.5 | 1.1 |
| Ex-Mental | 8,341 | 100.0 | 40.2 | 41.7 | 16.0 | 0.6 | 1.5 |
| Mentally Retarded | 12,810 | 100.0 | 53.6 | 34.9 | 10.1 | 0.4 | 1.1 |
| Physically Handicapped | 94,085 | 100.0 | 39.4 | 42.8 | 15.5 | 1.1 | 1.2 |
| Total | 243,347 | 100.0 | 43.2 | 39.7 | 14.5 | 1.3 | 1.3 |

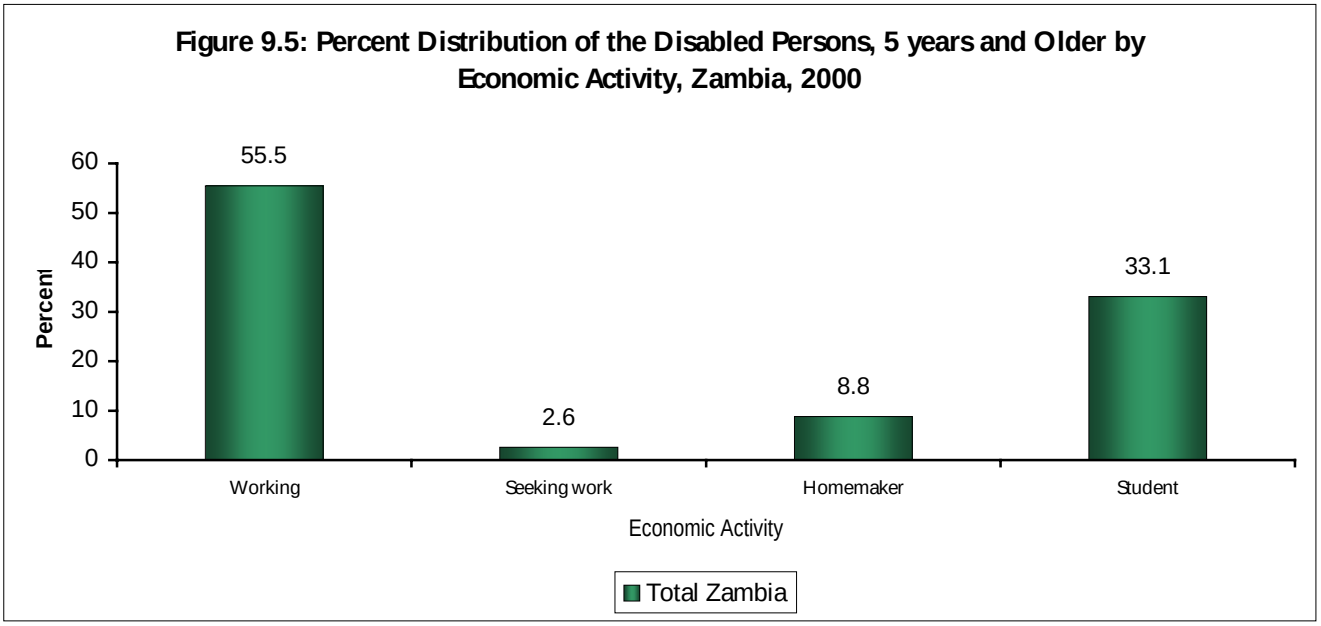


## . Economic Activity of the Disabled

le 9.7 and Figure 9.5 show the economic activities of the disabled persons. The working age population of persons with disabilities is 194,039. Of these, over half (55.5 percent) are working and one third are students. Among the blind, mentally ill and mentally retarded, the majority are students while for 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, Zambia, 2000**

| Usual Economic Activity | Type of Disability | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Blind | Partially Sighted | Deaf/ Dumb | Hard of Hearing | Mentally ill | Ex Mental | Mentally Retarded | Physically Handicapped |
| Working | 55.5 | 28.6 | 62.5 | 47.5 | 57.5 | 30.8 | 51.2 | 38.8 | 56.6 |
| Seeking work | 2.6 | 1.7 | 2.5 | 2.7 | 2.1 | 2.5 | 3.3 | 3.1 | 2.6 |
| Homemaker | 8.8 | 6.9 | 8.1 | 13.3 | 10.8 | 8.3 | 13.7 | 11.9 | 8.6 |
| Student | 33.1 | 62.8 | 26.9 | 36.4 | 29.6 | 58.4 | 31.8 | 46.3 | 32.2 |
| Percent Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total Number | 194,039 | 10,586 | 61,570 | 9,557 | 22,798 | 15,307 | 6,080 | 9,736 | 76,256 |

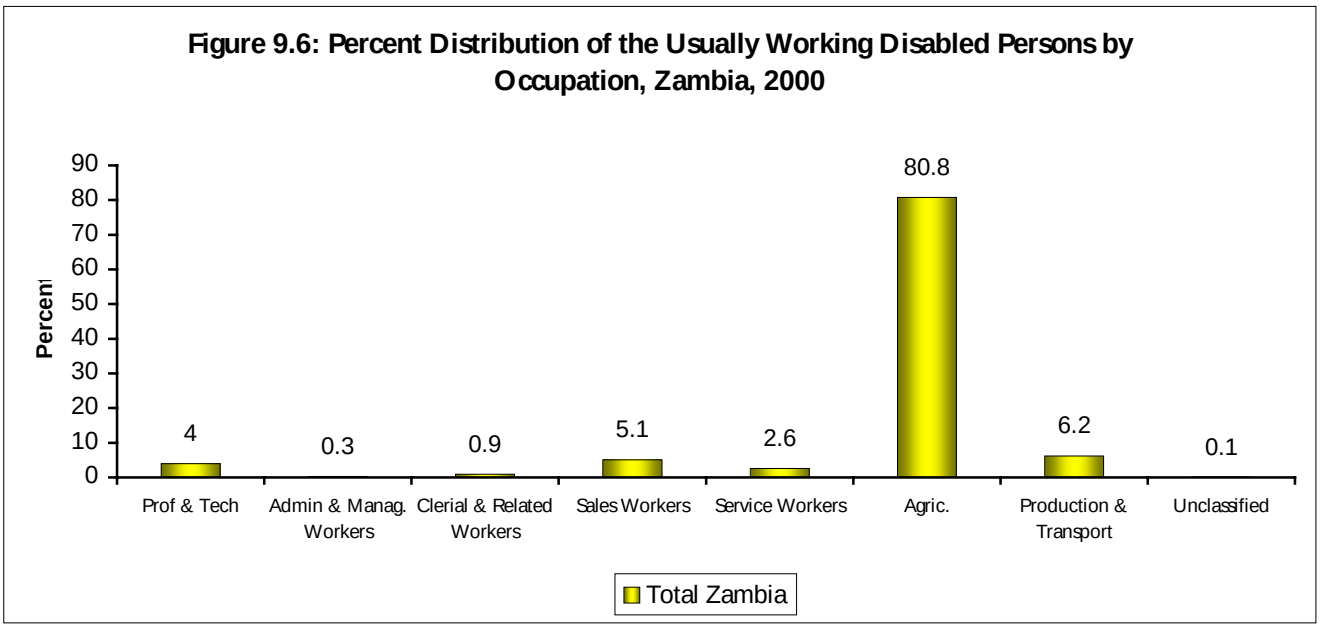



## . Occupation of the Disabled

a on occupation of the disabled persons was also collected during the 2000 Census and is presented in Table 9.8 and Figure 9.6. The data show that the most common occupation among the disabled is agriculture. Sales, production and transportation are also fairly common occupations.

**Table 9.8: Percent Distribution of the Usually Working Disabled Persons by Type of Disability and Occupation, Zambia, 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 | Unclassified |
| Blind | 2,876 | 100.0 | 3.8 | 0.3 | 3.2 | 5.0 | 2.9 | 77.5 | 7.2 | 0.1 |
| Partially Sighted | 37,083 | 100.0 | 6.0 | 0.5 | 1.0 | 5.1 | 2.5 | 79.0 | 5.6 | 0.2 |
| Deaf/Dumb | 4,352 | 100.0 | 1.7 | 0.0 | 0.5 | 4.1 | 2.4 | 86.1 | 5.1 | 0.1 |
| Hard of Hearing | 12,632 | 100.0 | 1.7 | 0.1 | 0.4 | 3.7 | 2.2 | 86.8 | 5.0 | 0.1 |
| Mentally ill | 4,501 | 100.0 | 1.8 | 0.0 | 0.6 | 4.4 | 2.2 | 85.8 | 5.0 | 0.1 |
| Ex Mental | 3,006 | 100.0 | 2.9 | 0.0 | 0.7 | 8.2 | 3.2 | 78.9 | 5.8 | 0.2 |
| Mentally Retarded | 3,611 | 100.0 | 1.6 | 0.0 | 0.7 | 4.0 | 3.0 | 85.6 | 4.9 | 0.1 |
| Physically Handicapped | 41,499 | 100.0 | 3.6 | 0.2 | 0.8 | 5.6 | 2.9 | 79.3 | 7.5 | 0.1 |
| Total | 109,560 | 100.0 | 4.0 | 0.3 | 0.9 | 5.1 | 2.6 | 80.8 | 6.2 | 0.1 |

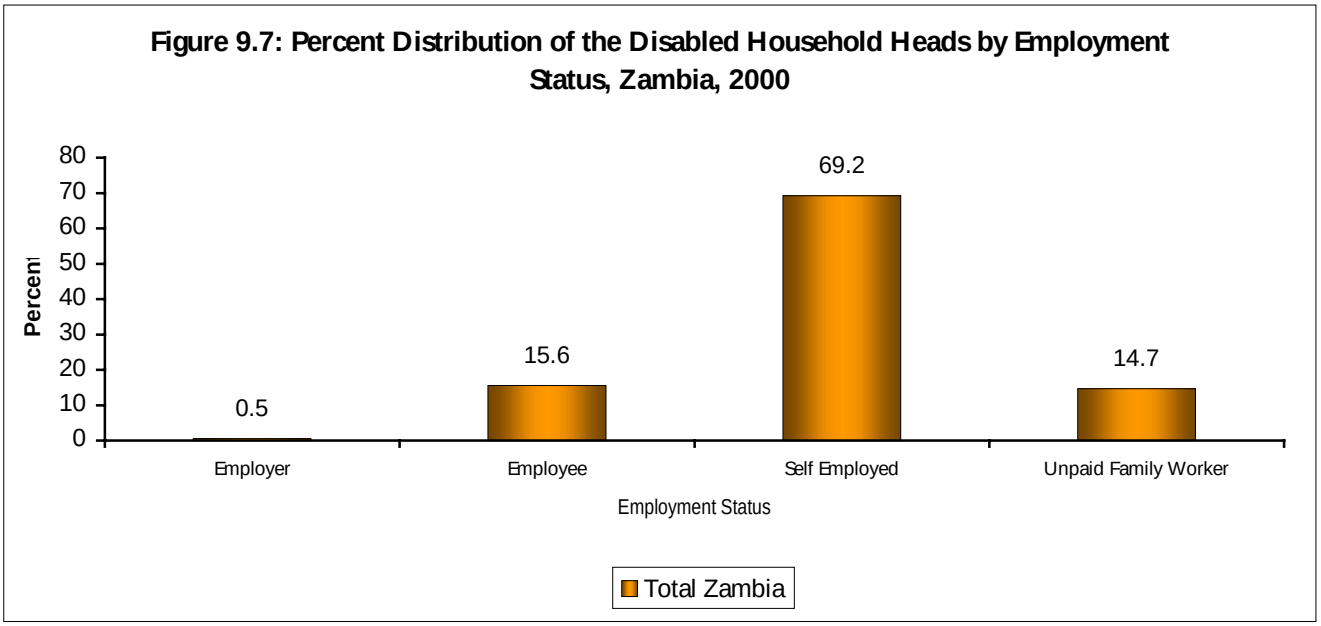



## 0. Employment Status of Household Heads with Disabilities

Table 9.9 and Figure 9.7 show the percent distribution of the disabled household heads by type of disability and employment status. Amongst all categories of disability, the largest proportion of the household heads are self-employed (69%) while the least proportion are employers (0.5%).

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

| Type of Disability | Employment status | | | | | |
|---|---|---|---|---|---|---|
| | Total Number | Percent Total | Employer | Employee | Self Employed | Unpaid Family Worker |
| Blind | 1,871 | 100.0 | 0.6 | 18.6 | 67.7 | 13.1 |
| Partially Sighted | 7,509 | 100.0 | 0.3 | 7.5 | 73.1 | 19.1 |
| Deaf/Dumb | 1,789 | 100.0 | 0.5 | 13.3 | 69.1 | 17.0 |
| Hard of Hearing | 5,837 | 100.0 | 0.4 | 11.2 | 72.4 | 16.1 |
| Mentally Ill | 1,521 | 100.0 | 0.0 | 9.4 | 73.5 | 17.1 |
| Ex-Mental | 2,334 | 100.0 | 0.6 | 9.7 | 75.7 | 14.0 |
| Mentally Retarded | 1,935 | 100.0 | 0.4 | 10.6 | 71.9 | 17.1 |
| Physically Handicapped | 25,233 | 100.0 | 0.5 | 16.4 | 68.8 | 14.4 |
| Total Population | 66,173 | 100.0 | 0.5 | 15.6 | 69.2 | 14.7 |

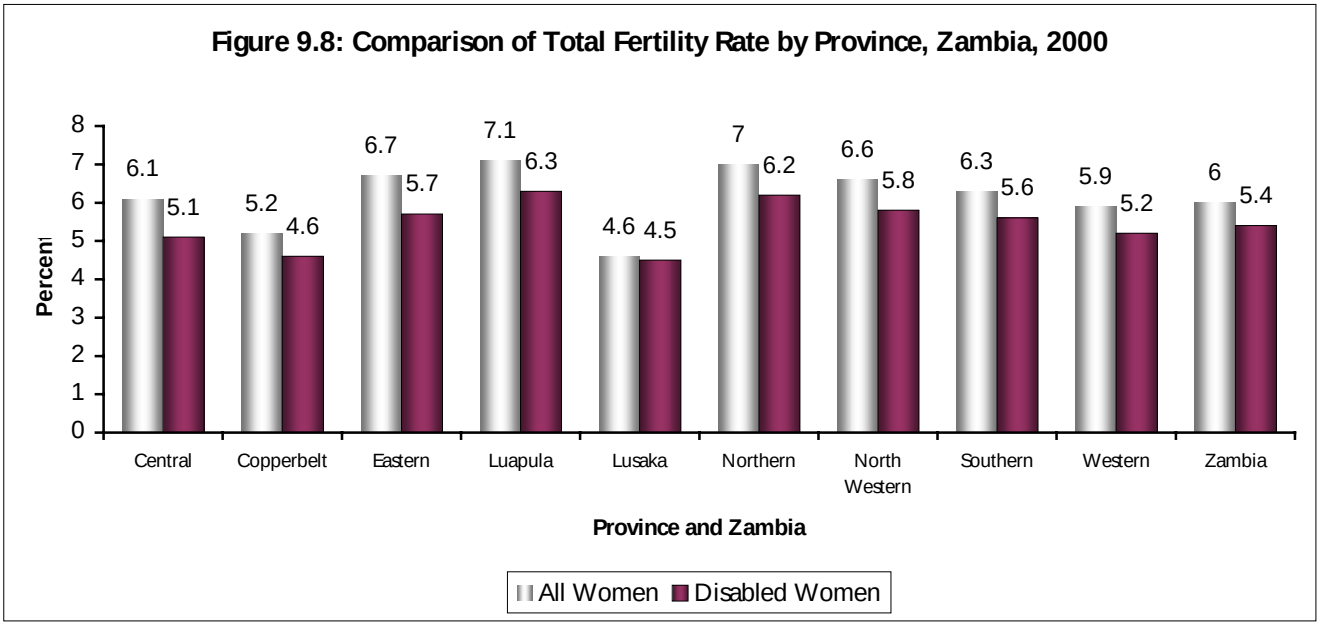



## 1 Fertility Levels among Women with Disabilities

Table 9.10 and Figure 9.8 compare the Total Fertility Rates (TFRs) of all women with that of the women with disabilities. The TFR for the women with disabilities is 5.4, less than the national average, which stands at 6.0 percent. The pattern of a lower fertility among the disabled women compared to the provincial average is similar across provinces. Due to the small numbers of persons with disabilities for the various disability categories, it has not been possible to compute the TFRs for the various disability categories.

**Table 9.10: Total Fertility and Disability, Zambia, 2000**

| *Province* | **Total Fertility Rate for all women** | **Total Fertility Rate for disabled women** |
|---|---|---|
| Central | 6.1 | 5.1 |
| Copperbelt | 5.2 | 4.6 |
| Eastern | 6.7 | 5.7 |
| Luapula | 7.1 | 6.3 |
| Lusaka | 4.6 | 4.5 |
| Northern | 7.0 | 6.2 |
| Northwestern | 6.6 | 5.8 |
| Southern | 6.3 | 5.6 |
| Western | 5.9 | 5.2 |
| **Zambia** | **6.0** | **5.4** |




## 9.12. Summary

Out of the total population of Zambia, 2.7 percent is disabled. The proportion of the disabled persons is higher in rural than urban areas. Among the provinces, Western has the largest proportion of the disabled (3.8 percent) while Lusaka has the least with 1.9 percent. There are more disabled male (53 percent) than female (47 percent).

Physical disability is the most common type of disability affecting about 39 percent of the disabled population while the ex mentally ill persons make up the smallest proportion of 4 percent.

ease is the most common cause of disability reported by about 39 percent of the disabled population. Prenatal causes were reported by 13.7 percent, injury by 17.2 percent, and other by 9 percent while 20 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 provinces, Western reported the largest proportion of the disabled citing disease as a cause of their disability with 54 percent while Lusaka has the least with 31 percent.

out two fifths of the disabled have never been to school and another two fifths have completed primary education. Amongst all categories of disability, the largest proportions of the disabled persons are self-employed. The least proportion is among the employers. The most common occupation among the disabled is agriculture, which takes up about 81 percent.

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# APPENDICES

## Table 2: Child Mortality Indicators by Selected Background Characteristics of Mother, Zambia, 2000

| Background Characteristics of Mother | Child Mortality Indicators | | | |
|---|---|---|---|---|
| | Deaths per 1000 live births | | | |
| | Infant Mortality Rate | Child Mortality Rate | Under-Five Mortality Rate | Life Expectancy at Birth |
| **Marital Status** | | | | |
| Married | 83 | 56 | 161 | 55.6 |
| Separated | 81 | 54 | 201 | 56.1 |
| Divorced | 92 | 64 | 203 | 53.1 |
| Widowed | 107 | 79 | 191 | 50.2 |
| Never Married | 96 | 68 | 161 | 52.7 |
| Living Together | 94 | 66 | 188 | 53.1 |
| **Educational Level** | | | | |
| Never Attended | 80 | 83 | 202 | 56.3 |
| Primary Level | 109 | 81 | 168 | 49.8 |
| Secondary Level | 80 | 53 | 115 | 56.3 |
| Tertiary | 71 | 44 | 125 | 58.5 |
| **Economic Activity** | | | | |
| Working | 106 | 77 | 177 | 50.5 |
| Non Working | 97 | 69 | 145 | 52.4 |

**Sources:** 2000 Census of Population and Housing

## Table 3: Child Mortality Indicators by Selected Background Characteristics according to Rural-Urban Residence, Zambia, 2000

| Background Characteristics of Mother | Infant Mortality Rate (per '000) | | | Child Mortality Rate (per '000) | | | Under-five mortality Rate (per '000) | | | Life Expectancy at Birth (Years) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Rural | Urban | Total | Rural | Urban | Total | Rural | Urban | Total | Rural | Urban |
| **Marital Status** | | | | | | | | | | | | |
| Married | 83 | 92 | 67 | 56 | 64 | 40 | 161 | 181 | 122 | 55.6 | 53.6 | 59.7 |
| Separated | 81 | 87 | 69 | 54 | 59 | 42 | 201 | 219 | 155 | 56.1 | 54.6 | 59.1 |
| Divorced | 92 | 97 | 80 | 64 | 69 | 52 | 203 | 218 | 170 | 53.1 | 52.4 | 56.4 |
| Widowed | 107 | 114 | 96 | 79 | 86 | 68 | 191 | 219 | 156 | 50.2 | 48.6 | 52.6 |
| Never Married | 96 | 111 | 78 | 68 | 83 | 51 | 161 | 180 | 132 | 52.7 | 49.3 | 56.8 |
| Living Together | 94 | 101 | 81 | 66 | 73 | 54 | 188 | 204 | 152 | 53.1 | 51.5 | 56.0 |
| **Educational Level** | | | | | | | | | | | | |
| Never Attended | 80 | 114 | 98 | 83 | 85 | 61 | 202 | 197 | 158 | 56.3 | 48.8 | 52.3 |
| Primary Level | 109 | 114 | 103 | 81 | 85 | 74 | 168 | 178 | 140 | 49.8 | 48.7 | 51.2 |
| Secondary Level | 80 | 90 | 73 | 53 | 62 | 46 | 115 | 137 | 102 | 56.3 | 54.0 | 58.0 |
| Tertiary | 71 | 107 | 56 | 44 | 78 | 31 | 125 | 169 | 94 | 58.5 | 51.5 | 62.3 |
| **Economic Activity** | | | | | | | | | | | | |
| Working | 106 | 109 | 88 | 77 | 80 | 60 | 177 | 189 | 131 | 50.5 | 49.8 | 54.4 |
| Non Working | 97 | 108 | 87 | 69 | 79 | 5 | 145 | 165 | 125 | 52.4 | 50.0 | 54.6 |

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

**Table 4: Expectation of Life Between Exact Age 10 and 70, Zambia, 1980-2000**

| Exact Age (Years) | 1980 | | 1990 | | 2000 | |
|---|---|---|---|---|---|---|
| | Male | Female | Male | Female | Male | Female |
| 10 | 52 | 54 | 50 | 52 | 51 | 54 |
| 15 | 48 | 50 | 46 | 48 | 34 | 33 |
| 20 | 44 | 46 | 42 | 44 | 33 | 29 |
| 25 | 40 | 42 | 39 | 40 | 31 | 27 |
| 30 | 37 | 38 | 36 | 37 | 28 | 26 |
| 35 | 33 | 35 | 32 | 33 | 26 | 25 |
| 40 | 29 | 31 | 28 | 29 | 24 | 24 |
| 45 | 25 | 27 | 24 | 26 | 21 | 21 |
| 50 | 22 | 23 | 21 | 22 | 19 | 19 |
| 55 | 18 | 19 | 18 | 19 | 17 | 17 |
| 60 | 15 | 16 | 14 | 15 | 16 | 16 |
| 65 | 12 | 12 | 11 | 12 | 14 | 13 |
| 70 | 9 | 10 | 9 | 9 | 11 | 11 |

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

**Table 5: Expectation of Life Between Exact Age 10 and 70, Rural Zambia, 1990-2000**

| Exact Age (Years) | 1990 | | 2000 | |
|---|---|---|---|---|
| | Male | Female | Male | Female |
| 10 | 46 | 42 | 32 | 32 |
| 15 | 42 | 36 | 29 | 28 |
| 20 | 36 | 29 | 26 | 23 |
| 25 | 32 | 25 | 23 | 21 |
| 30 | 27 | 23 | 20 | 20 |
| 35 | 23 | 20 | 18 | 20 |
| 40 | 20 | 19 | 16 | 20 |
| 45 | 16 | 18 | 14 | 19 |
| 50 | 14 | 17 | 13 | 18 |
| 55 | 12 | 15 | 12 | 18 |
| 60 | 12 | 14 | 12 | 19 |
| 65 | 10 | 11 | 12 | 16 |
| 70 | 9 | 10 | 11 | 14 |

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

**Table 6: Expectation of Life Between Exact Age 10 and 70, Urban Zambia, 1990-2000**

| Exact Age (Years) | 1990 | | 2000 | |
|---|---|---|---|---|
| | Male | Female | Male | Female |
| 10 | 53 | 51 | 43 | 42 |
| 15 | 50 | 47 | 40 | 38 |
| 20 | 50 | 42 | 40 | 34 |
| 25 | 51 | 40 | 41 | 32 |
| 30 | 46 | 37 | 38 | 31 |
| 35 | 42 | 34 | 36 | 30 |
| 40 | 38 | 32 | 32 | 26 |
| 45 | 33 | 27 | 27 | 22 |
| 50 | 28 | 22 | 23 | 20 |
| 55 | 23 | 19 | 20 | 17 |
| 60 | 18 | 15 | 17 | 16 |
| 65 | 13 | 11 | 14 | 13 |
| 70 | 11 | 10 | 11 | 11 |

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

# APPENDIX E

## KEY PERSONS INVOLVED IN THE ANALYSIS

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