ZAMBIA

2010 CENSUS OF POPULATION AND HOUSING

EASTERN PROVINCE ANALYTICAL REPORT

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Foreword

The 2010 Census of Population and Housing was conducted between 16th October and 15th November 2010. Complete enumeration in all parts of the country was achieved by 30th November 2010. The 2010 Census of Population and Housing marked the fifth national population census that Zambia has successfully conducted since independence in 1964. Previous censuses were conducted in 1969, 1980, 1990 and 2000.

This report presents analytical results of the population in Eastern Province based on data from the 2010 Population and Housing Census. The report presents detailed analysis on the population of Eastern Province including the Population Size, Growth and Distribution; Education and Economic characteristics, Disability and Coverage and Content errors.

I would like to thank all our cooperating partners that supported the 2010 Census of Population and Housing. Special gratitude goes to the United Nations Population Fund (UNFPA), the United Kingdom AID (UKAID-formerly DFID), the United States Agency for International Development (USAID) and the African Development Bank (AfDB) for their material, financial and technical support to the Government of the Republic of Zambia (GRZ) and the Central Statistical Office (CSO) during this mammoth national exercise.

I also extend my sincere gratitude to the people of Eastern Province and all the residents of Eastern Province for the support and cooperation during the census. I hope the information contained in this report will be effectively used by all to plan and deliver development to the people of Eastern province.

Alexander B. Chikwanda, MP
Minister of Finance

March, 2014

Acknowledgements

The 2010 Census of Population and Housing was successfully conducted between 16th October and 15th November 2010. However, field enumeration was only concluded in all parts of the country on 30th November 2010. Scanning of the 2010 Census questionnaires started in April 2011 and was successfully concluded in August 2011. Data verification and development of edit and imputation specifications and programmes started in May and was completed in November 2011.

I would like to commend and thank the Government of the Republic of Zambia (GRZ) for its commitment to take stock of its population including special groups by conducting the 2010 Census of Population and Housing. I would like to pay gratitude to the Treasury headed by the then Secretary to the Treasury Mr. Likolo Ndalamei and the current Secretary to the Treasury Mr. Fredson K. Yamba for their personal commitment to the 2010 Census. The continued support from the Government is a great indicator of the importance attached to information for planning and monitoring the development agenda set forth.

I would also like to pay sincere gratitude to UNFPA, UKAID, USAID and AfDB for the financial, material and technical support so far rendered to the 2010 Census.

I take special mention of the National Census Committee chaired by the then Secretary to the Cabinet, Dr. Joshua L. Kanganja, assisted by Mr. C. Evans Chibiliti, the then Deputy Secretary to the Cabinet (Finance and Economic Development). I also acknowledge the immense contribution of the National Census Steering Committee, the Provincial Census Committees and the District Census Committees in supporting the day-to-day monitoring and supervision of the entire census operation at the national, provincial and districts levels, respectively.

I extend sincere appreciation and gratitude to the various administrative and technical committees that spearheaded the preparation and execution of the 2010 Census of Population and Housing at different levels. These include the Cartographic Technical Committee chaired by the Surveyor General Mr. Danny Mubanga, Planning and Methodology Committee Chaired by Dr. Namuunda Mutombo (UNZA), Census Publicity Committee chaired by Mr. Gilbert Maimbo (former Director – ZANIS), the Logistics and Security Committee chaired by Mr. Daniel Bowasi (former Director Human Resource and Administration Ministry of Finance and National Planning) and the Data Processing Committee chaired by the late Dr. Jacob Mulenga from Centralised Computer Services Department (CCSD) of Ministry of Finance and National Planning.

I would further like to thank the 2010 Census Secretariat, in particular the former Deputy Director in charge of Social Statistics, Mr. William C. Mayaka, Mr. Iven Sikanyiti (Current Deputy Director in charge of Social Statistics), the former Census Manager, Mr. Richard Banda and the Current Census Manager, Ms. Nchimunya Nkombo, Mr. Palver Sikanyiti (Deputy Census Manager), Mr. Modesto Banda (Former Deputy Director - Agriculture and Environment Statistics), Mr. Peter Mukuka (Former Deputy Director - Information, Research and Dissemination), Mr. Goodson Sinyenga (Deputy Director -

Economic Statistics) and other members of the Secretariat for their dedication and hard work during the most challenging and difficult stages of the Census. Special recognition goes to the Census analysis Team for the tireless work of putting this report together.

I would like to extend and recognize the contribution of the data processing staff for the hard work and commitment during the data capture and processing of the 3.2 million census questionnaires. Special mention should be made of the IT Manager, Mr. Frank Kakungu and his Assistant Ms. Catherine Mwape, Mr. Chanda Lubemba, Senior Systems Analyst (Examinations Council of Zambia), Ms. Barbara Muyabi, Mr. Michelo Munzele and Mr. Sipho Inambao for effectively and efficiently coordinating the entire data processing exercise.

I also thank the mapping and cartographic teams for their work during the preparatory phase. I extend gratitude to the Regional Statisticians for effectively supporting the 2010 Census exercise from preparation, enumeration and post enumeration phases. I also make mention of the Provincial Census Officers, all the Master Trainers and Assistant Master Trainers for effectively coordinating the census in the various provinces and districts of assignment. I thank all the Supervisors and Enumerators for the job well done and for enduring the challenges of census data collection. Special gratitude go to staff of the Central Statistical Office and other institutions who all in one way or the other contributed to the successful conduct of the 2010 Census.

Lastly, but not at all the least, I would like to extend my sincere gratitude to the technical staff from the US Bureau of the Census, for their dedication and commitment during the development of edit and imputation specifications and programmes, data verification and editing, tabulation of the 2010 Census data and demographic data analysis. The skills transfer and capacity building that was done during this process will continue to serve CSO for many years to come.

I also thank the two census advisors Dr. Jeremiah Banda from AfDB and Dr. Griffith Feeney from DFID for their technical support to the census.

I hope all stakeholders and data users will make effective use of this Analytical Report.

John Kalumbi
Director
Census and Statistics

March, 2014

Chapter 1:
Provincial Profile; Eastern Province
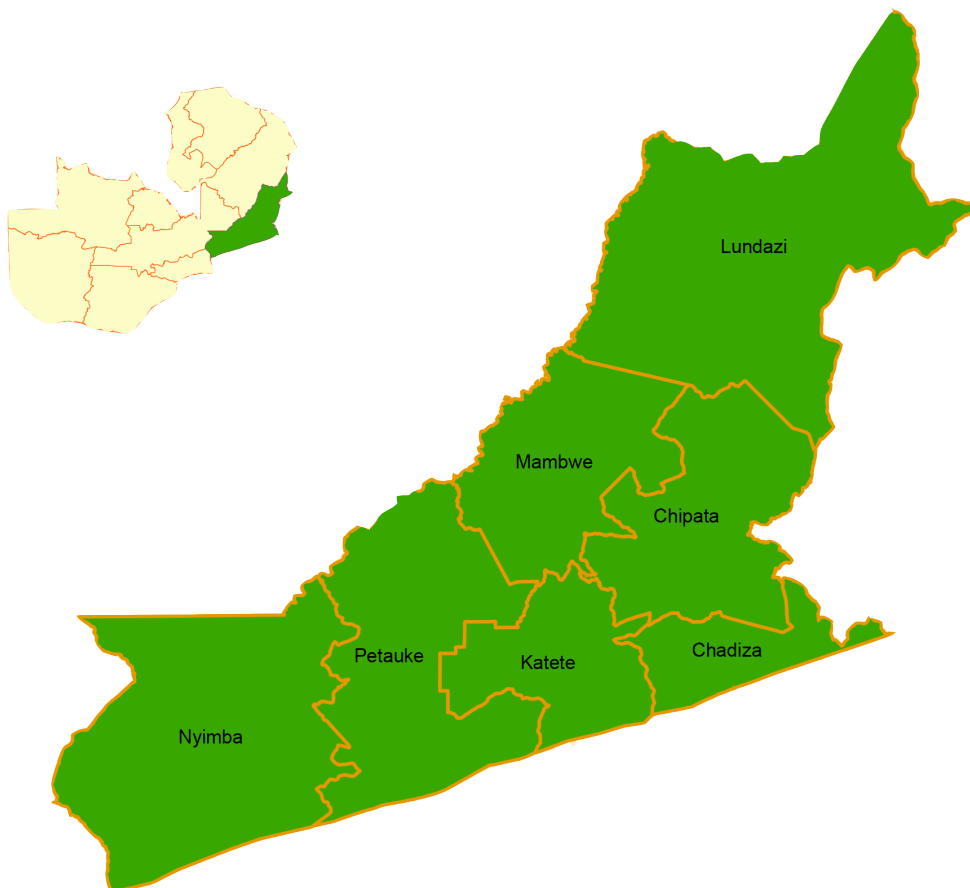
Chapter 1
Profile: Eastern Province

1.0 Introduction

Eastern Province as the name suggests is situated in the eastern part of Zambia. It is located between longitude 30 and 34 degrees east and latitude 10 and 15 degrees south and covers a total area of 51,293 square kilometers. The province in bordered by Malawi on the east and Mozambique on the South-east. Muchinga Province borders on the North and North-west, Central and Lusaka provinces on the west.

1.1 Administration

Eastern Province is administratively divided into 8 districts namely: Chadiza, Chipata, Katete, Lundazi, Mambwe, Nyimba and Petauke districts. Eastern Province has 17 constituencies and 168 wards. Chipata is the provincial capital of Eastern Province
.

1.2 Natural Resources

Eastern Province vegetation is mainly made up of savannah woodlands and grasslands. It has a tropical climate with three distinct seasons, the cool and dry season, the hot and dry season, the hot and dry season and the hot and wet season. The province has abundant natural. It has

Eastern Province has some of the best natural resources in the country. The Luangwa National Park has large concentration of crocodiles and other reptiles and it also has an abundant mammal, birdlife, and the finest wildlife in sanctuary in Africa. The other national parks are the Lukuzye National park, Nyika National Park and Masalangu Game Management Area (GMA). Other tourist attractions are the Tradition Ceremonies cerebrated annually in the in the province, which in include the N'cwala by the Ngoni, Kulamba by the Chewa and Twimba by the Nsenga.

1.3 Languages

English is the official language of communication and instruction in Eastern Province. The widely spoken language in Eastern Province is Chewa. The other main local languages include Nsenga, Nyanja, Tumbuka and Ngoni.

1.4 Religion

Zambia was officially declared a Christian nation according to the 1996 constitution while upholding the right of every person to enjoy that persons freedom of conscience or religion.

1.5 Health

Since 1991 the health sector has been making strides to improve the health delivery system in the province. Eastern Province has 2 general hospitals; Chipata General Hospital owned by the government and St Francis General Hospital run by the Catholics mission. The province has 8 level 1 hospitals, level 1 hospitals are referred to as hospitals that are found at districts level, they serve a population between 80,000 and 200,000 and provide service such as medical, surgical obstetric and diagnostic and diagnostic services and all clinical services in support of health center referrals. The province has 8 urban health centers and 156 rural health centers and 53 health posts complementing a total of 227 health centers.

According to the 2007 Zambia Democratic Health Survey (ZDHS), the infant mortality rate in Eastern Province was 82 deaths per 1,000 live births while under-five mortality rate was 151 deaths per 1,000 live births.

Table 1.1: Number of Health Facilities by Facility Type, Ownership and District, Eastern Province 2010

Type of Facility	Eastern	District						
		Chadiza	Chipata	Katete	Lundazi	Mambwe	Nyimba	Petauke
Level 3 Hospital	0	0	0	0	0	0	0	0
Level 2 Hospital	2	0	1	1	0	0	0	0
Level 1 Hospital	8	0	1	0	1	1	1	3
Urban Health Centres (UHCs)	8	1	3	1	1	0	1	1
Rural Health Centres (RHCs)	156	12	36	18	22	10	11	28
Health Posts (HPs)	53	6	4	8	19	3	5	6
Total	227	19	45	28	43	14	18	38
Ownership								
Number of GRZ health facilities	211	19	42	27	39	11	17	34
Number of mission health facilities	16	0	3	1	4	3	1	4
Number of private health facilities	0	0	0	0	0	0	0	0
Total	**227**	**19**	**45**	**28**	**43**	**14**	**18**	**38**

Source: Ministry of Health, 2010

HIV prevalence in adults aged 15-49 years was 10.3 percent in Eastern Province.

1.6 Economy

The major economic activity in Easter Province is Agriculture. Farming in this region is done on both commercial and subsistence level. Good soils of the plateau and sufficient rainfall in the province make it relatively high potential area for agriculture production of crops like maize, cotton, sunflower, groundnuts and soya beans. The valley is generally suitable for drought resistant crops like sorghum, finger millet and tobacco.

1.7 Education

Education is a powerful tool for economic development for an individual and nation. The sixth national development plan (SNDP) identifies education, training, science and technology as prime movers of development.

Zambia has a three-tier education system consisting of seven year primary education, followed by five year secondary education and post secondary schooling. The Government has in the past decade embarked on a number of initiatives to ensure universal access to education.

Eastern Province had a total of 1,202 schools, of these 741 were government run schools, 49 were grant aided schools, 23 were private schools and 389 were community schools. The majority of these schools were basic school (1,138) and the province had 64 secondary schools.

An increase was recorded in the number of high schools (Grade 10-12) which was largely attributed to the up grading of some basic schools into high schools and construction of new high schools. (Ministry of Finance and National Planning Annual Economic Report, 2010).

The continuous teacher recruitment program introduced by the government resulted in a total of 7,304 teachers in Eastern Province of which 2,902 are males and 4,402 are females (Education Statistical Bulleting 2010).

1.8 Gender Issues

Gender issues are concerned with promoting equality between the sexes and improvement in the status of both women and men in society. It is well understood that social and economic development can only be attained when there is equal participation of both men and women in the development process.

Zambia's vision on gender as stated in the "Vision 2030" is to achieve gender equality in the social-economic development process by 2030. In this regard, the government has put in place a Gender policy which ensures the advancement of gender mainstreaming policies and legislation.

1.9 Poverty

Majority of Zambians have continued to live in poverty. Results from the 2006 and 2010 Living Conditions Monitory Surveys (LCMS), show that poverty levels have remained high despite recording a decline between 2006 and 2010. The percentage of the extremely poor marginally declined from 42.7 percent to 42.3 percent.

1.9 Census of Population and Housing Undertaking

The 2010 Census is the fifth National Census of Population and Housing conducted in Zambia since independence in 1964. The country has so far conducted Census in 1969, 1980, 1990 and 2000.

The 2010 Census of Population and Housing was carried out from 16th October to 15th November, 2010. The field staff included about 25,000 schools leavers who worked as Census Enumerators and about 8,400 Census Supervisors who were mostly teachers and other civil servants. Four Hundred civil Servants from various government departments and ministries worked as Master Trainers, Assistant Master Trainers and Provincial Census Officers.

1.9.1 Main Objectives

The main objectives of the 2010 Census of Population and Housing include:

- *To provide accurate and reliable information on the size, composition and distribution of the population of Zambia at the time of the census;*

- *To provide information on the demographic and socio-economic characteristics of the population of Zambia at the lowest administrative level- the constituency and wards;*

- *To provide indicators for measuring progress towards national and international development goals in a timely and user friendly manner;*

- *To provide information on the number and characteristics of households engaged in agriculture and other economic activities;*

- *To provide an accurate sampling frame and sample weights for future inter-censal household and population based surveys;*

- *To provide information identifying the number of eligible voters for the 2011 General Elections;*

- *To provide a census that meets national and international standards and allows for comparability with other censuses;*

- *To provide information on the housing characteristics of the population.*

1.9.2 Methodologies applied in the 2010 Census of Population and Housing

Prior to the 2010 Census undertaking a comprehensive mapping exercise was conducted. The mapping strategy for 2010 Census was Geographical Information System (GIS) driven and involved the use of the Global Positioning System (GPS) and satellite imagery. The GPS was used to map rural areas while the urban were mapped using high resolution satellite imagery. The 2010 Census used a single questionnaire to capture individuals, households and housing characteristics

from the population, whereas the 2000 Census used two different questionnaires, Form A (Household and Housing Characteristics) and form B (individual Characteristics) to collect information from the population.

During data capturing, the 2010 Census used Optical Mark Reading (OMR) and Intelligent Character Recognition (ICR) technology, whereas the 2000 Census used OMR technology only.

The 2010 Census included the following questions which where not in the 2000 Census:

- *Deaths of household members during the 12 months period prior to the census enumeration, as well as cause of deaths for all reported deaths.*
- *Maternal deaths to women aged 12-49 years during the reference period (12 months prior to the Census).*

- *Albinism*

- *Orphan hood and foster hood*

The 2010 Census used school leavers that had completed their Secondary School Education within 2-5 years prior to the Census as Enumerators while the 2000 Census used Grade Eleven School Pupils.

1.9.3 Presentation of Results

The analysis in the report is based on the geography that existed at the time of census in 2010. However, the district analysis excludes Chama District that was included to the newly created Muchinga Province. Chama District is the only district that was realigned from Eastern Province leaving the province with six districts.

CHAPTER 2
POPULATION SIZE, GROWTH AND DISTRIBUTION

2.0 Summary

The population of Eastern Province in 2010 was 1,592,661. This was an increase from 1,231,283 in 2000. The population grew at an average annual rate of 2.6 percent during the 2000-2010 inter-censal period. This average annual rate was lower than 2.7 recorded in the 1990-2000 inter-censal period.

In 2010, 87.4 percent of the population was residing in rural areas while 12.6 percent was residing in urban areas.

Chipata District had the largest population at 455,783 while Mambwe District had the smallest population at 68,918.

The province had a population density of 30.9 persons per square kilometre. In 2010, Chipata District was the most densely populated with 68.1 persons per square kilometre while Nyimba District was the least densely populated with 8.1 persons per square kilometre.

Chapter 2
Population Size, Growth and Distribution

2.1 Introduction.

This chapter presents an analysis of the population size, growth and distribution of the 2010 Census for Eastern Province.

2.2 Concepts and definitions
Concepts and definitions used in this chapter are as follows:

De Facto Population

This refers to household members and visitors who spent the census night at a household. This, however, excludes:

- Foreign diplomatic personnel accredited to Zambia

- 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. In a de jure Census, institutional populations in places such as hospitals or health centres, prisons and academic institutions like universities, colleges and boarding schools are counted as members of their usual household. Figure 2.1 presents a diagrammatic picture of the de facto and de jure populations.

De Jure and De Facto Populations

The de jure count is considered the true or resident population of a country. It is used for the age-sex distribution and is also used as a denominator in the calculation of vital indicators for sectors such as education, for example, deriving Gross and Net enrolment rates.

However, the de jure population is not used in the analysis of data on various social, economic and health characteristics as some variables would be missing for individuals who were absent from the household at the time of the census.

Figure 2.1: Diagrammatic presentation of the de facto and the de jure populations
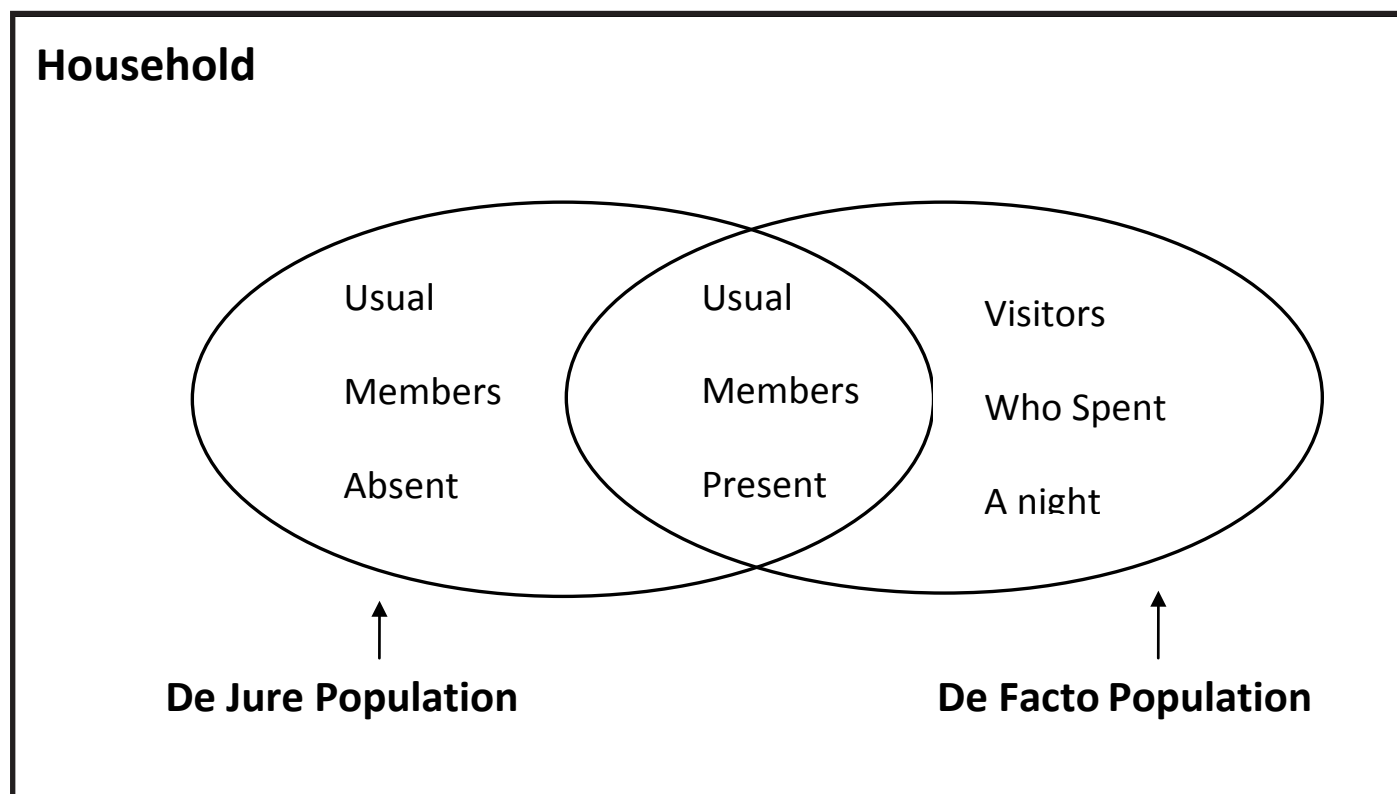
Population Growth Rate

This 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 the average annual growth rate for each year of the inter-censal period.

2.3 Population Size

This is the absolute number of people that was enumerated at the time of the census. Table 2.1 shows population size for Eastern Province by rural/urban from 1990 to 2010. The population in Eastern Province increased from 1,004,693 in 1990 to 1,231,283 in 2000 and to 1,592,661 in 2010. This represented a percentage change of 29.3 in the 2000-2010 inter-censal period.

Table 2.1: Population Size by Rural/Urban, Eastern Province 1990- 2010.						
Rural/Urban	1990-2000			2000-2010		
	1990 Population	2000 Population	percent change	2000 Population	2010 Population	Percent Change
Eastern Province	1,004,693	1,231,283	22.6	1,231,283	1,592,661	29.3
Rural	915,235	1,118,795	22.2	1,118,795	1,392,338	24.4
Urban	89,458	112,488	25.7	112,488	200,323	78.1
Sources: 1990, 2000 and 2010 Censuses of Population and Housing.						

The population in rural areas increased from 1,118,795 in 2000 to 1,392,338 in 2010 while the urban population increased from 112,488 in 2000 to 200,323 in 2010. This represented an increase of 24.4 percent in rural areas and 78.1 percent in urban areas.

Table 2.2 shows the percent distribution of the population by sex and rural/urban for Eastern Province in 2010. Of the total population in 2010, there were 784,680 males and 807,981 females. Males constituted 49.3 percent and females 50.7 percent.

Table 2.2: Total Population (De jure) and Percent Distribution by Sex and Rural/urban, Eastern Province 2010						
Rural/Urban	Both Sexes		Male Population		Female Population	
	Number	Percent	Number	Percent	Number	Percent
Eastern Province	1,592,661	100	784,680	49.3	807,981	50.7
Rural	1,392,338	100	686,577	49.3	705,761	50.7
Urban	200,323	100	98,103	49.0	102,220	51.0
Sources: 2010 Census of Population and Housing.						

Table 2.3 shows the distribution of the population by sex, rural/urban and district. Chipata District had the largest population

at 455,783 followed by Lundazi District at 323,870. Mambwe District had the smallest population at 68,918.

Table 2.3: Total Population (De Jure) by Sex, Rural/Urban and District, Eastern Province 2010.									
District	Total			Rural			Urban		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Eastern Province	1,592,661	784,680	807,981	1,392,338	686,577	705,761	200,323	98,103	102,220
Chadiza	107,327	53,404	53,923	104,445	51,950	52,495	2,882	1,454	1,428
Chipata	455,783	224,934	230,849	339,156	167,781	171,375	116,627	57,153	59,474
Katete	243,849	119,995	123,854	222,390	109,546	112,844	21,459	10,449	11,010
Lundazi	323,870	158,379	165,491	307,968	150,691	157,277	15,902	7,688	8,214
Mambwe	68,918	34,253	34,665	62,859	31,227	31,632	6,059	3,026	3,033
Nyimba	85,025	41,992	43,033	77,359	38,254	39,105	7,666	3,738	3,928
Petauke	307,889	151,723	156,166	278,161	137,128	141,033	29,728	14,595	15,133
Source: 2010 Census of Population and Housing.									

The most urbanized district was Chipata, followed by Petauke District at 116,627 and 29,728, respectively. The least urbanized was Chadiza at 2,882. Chipata District had the largest rural population at 339,156 while Mambwe District had the smallest at 62,859.

Table 2.4 shows population distribution by district and sex. Chipata District had the largest population in both 2000 and 2010 at 367,539 and 455,783, respectively.

Table 2.4: Population (De jure) by Sex and District, Eastern Province 2000 and 2010.						
District	2000			2010		
	Total	Male	Female	Total	Male	Female
Eastern Province	1,231,283	611,651	619,632	1,592,661	784,680	807,981
Chadiza	83,981	42,204	41,777	107,327	53,404	53,923
Chipata	367,539	183,352	184,187	455,783	224,934	230,849
Katete	189,250	94,148	95,102	243,849	119,995	123,854
Lundazi	236,833	117,277	119,556	323,870	158,379	165,491
Mambwe	47,376	23,699	23,677	68,918	34,253	34,665
Nyimba	70,425	34,824	35,601	85,025	41,992	43,033
Petauke	235,879	116,147	119,732	307,889	151,723	156,166
Source: 2000 and 2010 Censuses of Population and Housing.						

2.4 Population Growth.

The population of Eastern Province has continued to grow over the past three decades. Figure 2.2 shows the average annual population growth rate for Eastern Province between 1980 and 2010. The population grew at a rate of 2.6 percent per annum during the 2000-2010 inter-censal period. This was a decrease from the annual rate of population growth of 4.0 and 2.7 percent recorded during the 1980-1990 and 1990-2000 inter-censal periods, respectively.

The urban population grew at a rate of 5.9 percent per annum between 2000 and 2010. This was a decrease of 0.4 percentage points from 6.3 percent recorded between 1990 and 2000. The rural population grew at a rate of 2.2 percent per annum during the 2000-2010 inter-censal period. This was a decline from 7.3 percent recorded during the 1990-2000 inter-censal period.

Table 2.5 shows the average annual rate of population growth for Eastern Province by district.

Figure 2.2: Average Annual Rate of Population Growth by Rural/Urban, Eastern Province 1980-1990, 1990-2000, 2000-2010.
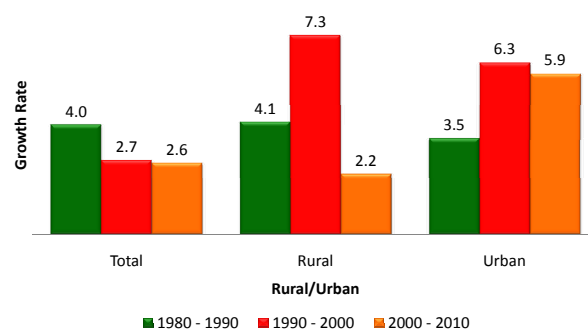
Source: 1980, 1990, 2000 and 2010 Censuses of Population and Housing.

Table 2.5: Population Size and Average Annual Population Growth Rate by Rural/Urban and District, Eastern Province 2000-2010.

Rural/Urban and District	Population Size 2000	Population Size 2010	Annual Growth Rate (2000-2010)
Eastern Province	**1,231,283**	**1,592,661**	**2.6**
Rural	1,118,795	1,392,338	2.2
Urban	112,488	200,323	5.9
Chadiza	83,981	107,327	2.5
Chipata	367,539	455,783	2.2
Katete	189,250	243,849	2.6
Lundazi	236,833	323,870	3.2
Mambwe	47,376	68,918	3.8
Nyimba	70,425	85,025	1.9
Petauke	235,879	307,889	2.7

Source: 2000 and 2010 Censuses of Population and Housing.

Mambwe District had the fastest growing population with an average annual population growth rate of 3.8 percent in the 2000-2010 inter-censal period while Nyimba District had the lowest average annual population growth rate at 1.9 percent in the 2000-2010 inter censal period.

2.5 Population Distribution

The population of Eastern Province has remained largely rural. Figure 2.3 shows the percent distribution of the population by rural/urban in 1990, 2000 and 2010.

Between 1990 and 2000, the population of Eastern Province in rural areas decreased from 91.1 percent to 90.9 percent. In 2010, the population living in rural areas was 87.4 percent. The urban population in 2010 made up 12.6 percent of the total population. Between 1990 and 2000, the urban population increased from 8.9 percent to 9.1 percent.

Figure 2.3: Percent Distribution of Population by Rural/Urban, Eastern Province 1990-2010.
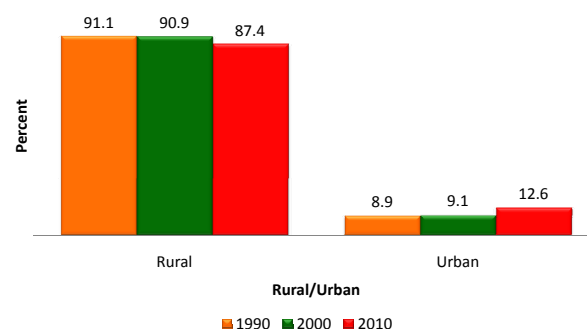
Source: 1990, 2000 and 2010 Censuses of Population and Housing.

Table 2.6 shows the percentage distribution of population by rural/ urban and district for Eastern Province from 2000 to 2010. In 2010, urban areas had a positive contribution towards the provincial population at 3.4 percent while the contribution of rural areas towards the provincial population reduced. Lundazi, Mambwe and Petauke districts had a positive contribution towards the provincial population at 1.1 percent while the contribution of the rest of the districts towards the provincial population reduced.

Table 2.6: Population Distribution (De jure) by Rural/Urban and District, Eastern Province 2000 and 2010					
District and Rural/Urban	2000		2010		Percentage Change
	Population	Percent	Population	Percent	
Eastern Province	1,231,283	100	1,592,661	100	N/A
Rural	1,118,795	90.9	1,392,338	87.4	-3.4
Urban	112,488	9.1	200,323	12.6	3.4
Chadiza	83,981	6.8	107,327	6.7	-0.1
Chipata	367,539	29.9	455,783	28.6	-1.2
Katete	189,250	15.4	243,849	15.3	-0.1
Lundazi	236,833	19.2	323,870	20.3	1.1
Mambwe	47,376	3.8	68,918	4.3	0.5
Nyimba	70,425	5.7	85,025	5.3	-0.4
Petauke	235,879	19.2	307,889	19.3	0.2
Source: 1990, 2000 and 2010 Censuses of Population and Housing.					

Figure 2.4 shows the percentage distribution of the population by district. Chipata District had the highest percentage of the population at 28.6 percent. Mambwe District had the lowest percentage of the provincial population at percent 4.3 percent.

2.6 Population Density

Population density is defined as the total number of persons per square kilometer. Table 2.7 shows the area of Eastern Province and population density by district in 2000 and 2010. The province has a total surface area of 51,476 square kilometres. The province is sparsely populated with a population density 30.9 persons per square kilometre representing an increase of 13.1 persons per square kilometre from 2000.

Chipata District had the highest population density at 68.1 persons per square kilometer. The least densely populated was Nyimba District at 8.1 persons per square kilometer.

Figure 2.4: Percentage Distribution of Population by Districts, Eastern Province 2010.

Source: 2010 Census of Population and Housing.
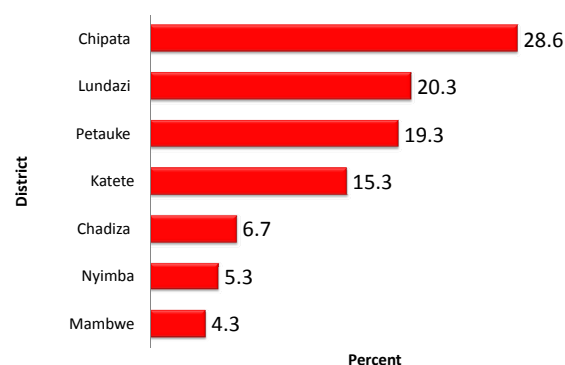
Table 2.7: Area and Population Density (De Jure) by District, Eastern Province 2010.				
District	Area (Sq.Km)	Population	Population Density (Population per Sq. Km)	
			2000	2010
Eastern Province	51,476	1,592,661	17.8	30.9
Chadiza	2,574	107,327	30.8	41.7
Chipata	6,693	455,783	51.2	68.1
Katete	3,989	243,849	45.1	61.1
Lundazi	14,058	323,870	15.8	23.0
Mambwe	5,294	68,918	12.4	13.0
Nyimba	10,509	85,025	4.3	8.1
Petauke	8,359	307,889	11.9	36.1
Source: 2000 and 2010 Censuses of Population and housing.				

CHAPTER 3
POPULATION COMPOSITION AND DEMOGRAPHIC CHARACTERISTICS

3.0 Summary

Eastern Province has a young population with 47.3 percent of persons aged below 15 years.
The median age was 16.1 years. The median age was higher in urban areas at 18.1 years compared to 15.8 years in rural areas.

The Overall Dependency Ratio was recorded at 102.5 persons per 100 persons aged between 15 and 64 years. Child and Aged Dependency Ratios were 95.8 and 6.7, respectively.

The overall sex ratio was 97.1 males per 100 females, while the sex ratio at birth was 103.0 males per 100 females

Chapter 3
Population Composition and Demographic Characteristics

3.1 Population Composition

Information on the age and sex structure of the population is essential in the analysis of demographic processes such as fertility, mortality and migration. The analysis in this chapter focuses on the age and sex composition of the population.

3.2 Age and Sex Composition

The 2010 Census collected information on sex and age in completed years at the time of enumeration. Figure 3.1 shows the percentage distribution by sex for the province in 2010. The distribution shows higher percentages of population in the younger ages. The percentage decreases with increase in age.

Figure 3.1: Percent Age Distribution by Sex, Eastern Province 2010
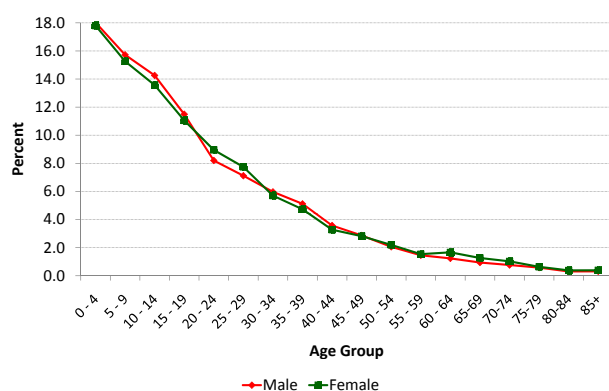
Source: 2010 Census of Population and Housing

A comparison between the sexes shows minimal differences in the percent age distribution with an exception of the population aged 20-29 years. The age group 20-29 years had fewer males than females.

Figure 3.2 shows the age distribution by rural/urban. A comparison of the percent age distribution shows a higher percent of the population aged 0-9 years and 60 years and older in rural areas. However, the proportion of the population aged 15-39 years in urban areas was higher than that of rural areas.

Figure 3.2: Percent Age Distribution by Rural/Urban, Eastern Province 2010
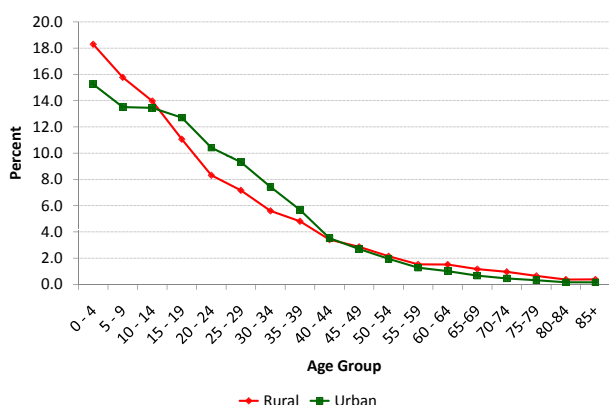
Source: 2010 Census of Population and Housing

Figure 3.2.1: Population Age and Sex Structure, Eastern Province 2010
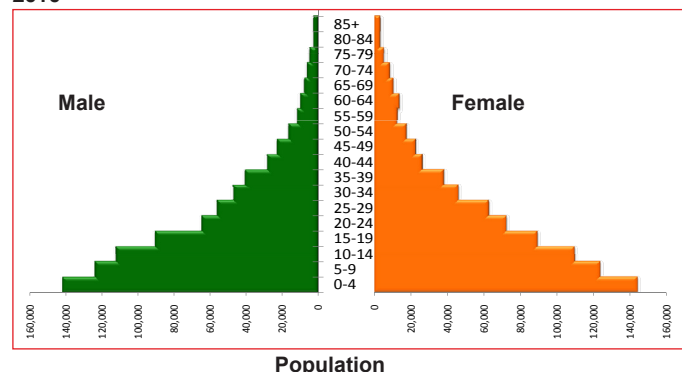
Source: 2010 Census of Population and Housing

For the purpose of policy interventions, proportions of some selected age groups have been presented. Selected age groups include adolescents aged 10-19 years; young people aged 10-24 years; children aged below 15 years; children aged below 18 years; persons in middle and later adolescence stages aged 15-19 years; youths aged 15-24 years; persons in the reproductive age group aged 15-49 years; youths aged 15-35 years; persons in the labour force aged 15-64 years and the elderly aged 60 years and older and 65 years and older.

Figure 3.3 shows the population proportions by selected age groups. The population aged below 18 years had the highest percent at 54.1. The elderly population aged 65 years and older had the lowest percent at 3.3. The population aged 15-24 and 15-35 years had proportions of 19.9 and 34.4 percent, respectively.

Figure 3.3: Population Proportions by Selected Age Groups, Eastern Province 2010
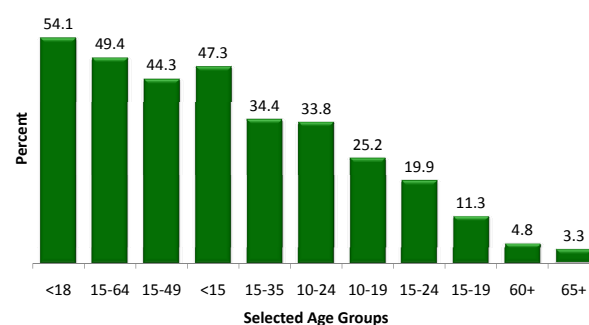
Source: 2010 Census of Population and Housing

Figure 3.4 shows the percent distribution of children aged below 15 years and the elderly (65 years and older) by District. Chadiza District had the highest percent of children below 15 years at 48.4 percent while Chipata District had the lowest at 45.9 percent.

Figure 3.4: Percent Distribution of Population Aged below 15 years and the Population 65 Years and Older by District, Eastern Province 2010
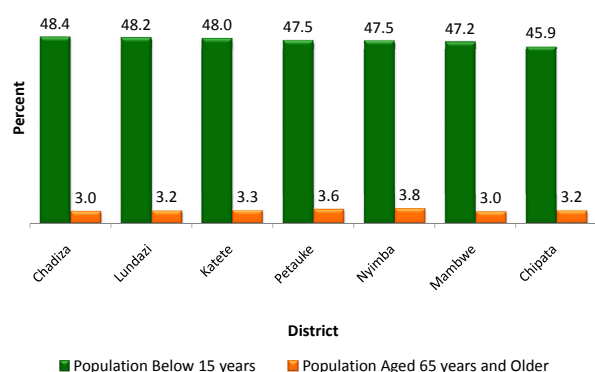
Source: 2010 Census of Population and Housing

3.3 Median Age

Median age is the age that divides the population into two numerically equal groups i.e. half the population are younger than that age while the other half are older. A median age that is lower than 20 years shows a young population; that which is between 20 and 30 years indicates an intermediate population that is either becoming younger or ageing; while a population with a median age above 30 years is an old population.

Figure 3.5 shows the median age by rural/urban in 2010. The median age was higher in urban areas at 18.1 years.

Figure 3.5: Median Age by Rural/Urban, Eastern Province 2010
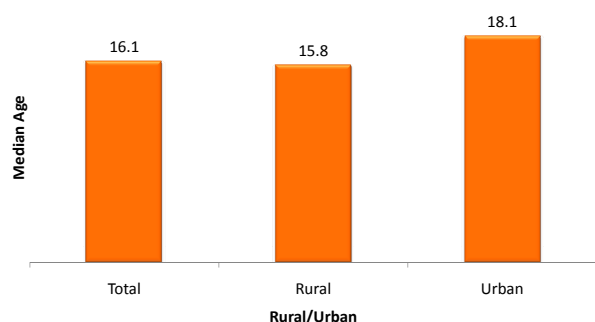
Source: 2010 Census of Population and Housing

Figure 3.6 shows the median age by sex and rural/urban. The median age in Eastern Province was 15.7 and 16.4 years for males and females, respectively. In urban areas, the median age for males (18.2 years) was higher than that of females (18.0 years). In rural areas, the median age for females was higher than that of males at 16.2 and 15.4 years, respectively.

Figure 3.6: Median Age by Sex and Rural/Urban, Eastern Province 2010
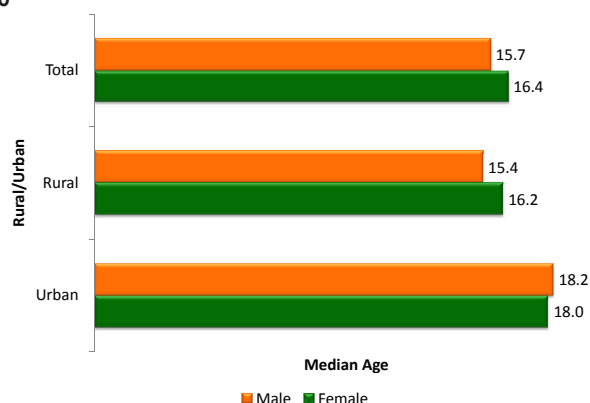
Source: 2010 Census of Population and Housing

Figure 3.7 shows the median age by District. The median age ranges from 15.6 years in Chadiza District which was the lowest to 16.6 years in Chipata District.

Figure 3.7: Median Age by District, Eastern Province 2010
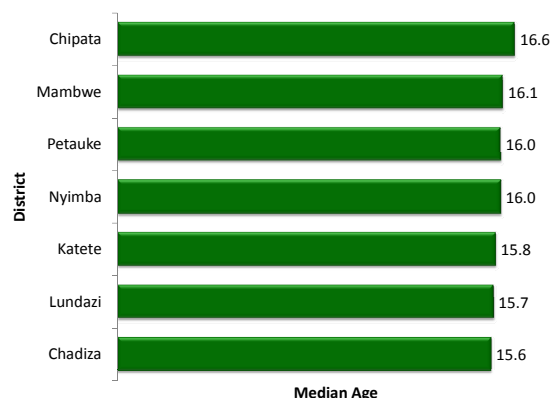
Source: 2010 Census of Population and Housing

3.4 Age Dependency Ratios

Age Dependency Ratio is the ratio of the population aged 0-14 years and persons aged 65 years and older, per 100 persons of working age 15-64 years. It shows the burden of dependency on the productive population.

The following age dependency ratios have been calculated in this section:

a) Child Dependency Ratio:
The number of children aged below 15 years per 100 persons aged between 15 and 64 years

b) Aged Dependency Ratio:
 The number of persons aged 65 years and older per 100 persons aged between 15 and 64 years

c) Overall Dependency Ratio:
The number of children below 15 years and elderly persons aged 65 years and older per 100 persons aged between 15 and 64 years.

Table 3.1 shows Age Dependency Ratios in 1990, 2000 and 2010. In 2010, the Overall Dependency Ratio was 102.5 per 100 persons aged 15-64 years; while the Child and Aged Dependency Ratios stood at 95.8 and 6.7 persons for every 100 persons aged 15-64 years, respectively. The ratios had declined from 2000.

Table 3.1: Age Dependency Ratio, Eastern Province 1990, 2000 and 2010				
	Age Dependency Ratios	**1990**	**2000**	**2010**
Eastern Province	Overall Dependency Ratio	95.7	104.5	102.5
	Child Dependency Ratio	88.6	97.2	95.8
	Aged Dependency Ratio	7.1	7.3	6.7
Sources: 1990, 2000 and 2010 Censuses of Population and Housing				

Table 3.2 shows the Overall, Child and Aged Dependency Ratios by district. Petauke District had the highest Overall Age Dependency Ratio at 115.9 per 100 persons aged 15-64 years while Chadiza District had the lowest at 108.9 per 100 persons aged 15-64 years.

Table 3.2: Overall, Child and Aged Dependency Ratios by District, Eastern Province 2010

District	Age Dependency Ratios		
	Overall	Child	Aged
Chadiza	108.9	104.4	4.4
Chipata	111.2	105.6	5.6
Katete	111.4	105.7	5.7
Lundazi	109.3	104.6	4.6
Mambwe	114.0	107.0	7.0
Nyimba	114.9	107.4	7.4
Petauke	115.9	107.9	7.9

Source: 2010 Census of Population and Housing

3.5 Sex Composition

This section analyses the composition of males and females in the population using sex ratio. Sex ratio is the number of males per 100 females. This type of sex ratio is also called the masculinity ratio. A value above 100 indicates excess of males over females.

Another indicator analyzed is sex ratio at birth, which is the ratio of males per 100 females at birth. The percent deficit males has been used to show the percent at which males are fewer than females in the population. It's the difference between the male and female population divided by the total population expressed as a percentage. A negative value shows a deficit of males while a positive value shows an excess of males.

3.5.1 Sex Ratio and Percent Deficit of Males

Table 3.3 shows sex ratio and percent deficit of males by rural/urban and district. Eastern Province had fewer males per 100 females, with a sex ratio of 97.1. This indicates a deficit of males of 1.5 percent of the total provincial population.

Chadiza District had the highest sex ratio at 99.0 males per 100 females, a 0.5 percent deficit of males. Lundazi District had the lowest sex ratio at 95.7 males per 100 females, with a 2.2 percent deficit of males.

Table 3.3: Sex Ratio and Percent Deficit of Males by Rural/Urban and District, Eastern Province, 2010

Region/ District	Sex Ratio	Percent Male Deficit
Eastern Province	**97.1**	**-1.5**
Rural	97.3	-1.4
Urban	96.0	-2.1
District		
Chadiza	99.0	-0.5
Chipata	97.4	-1.3
Katete	96.9	-1.6
Lundazi	95.7	-2.2
Mambwe	98.8	-0.6
Nyimba	97.6	-1.2
Petauke	97.2	-1.4

Source: 2010 Census of Population and Housing

3.5.2 Sex Ratio at Birth

The births in the last twelve (12) months were used as a proxy for the calculation of the sex ratio at birth. Figure 3.8 shows the sex ratios by rural/urban and district. The sex ratio at birth in Eastern Province was 103.0 males per 100 females. The sex ratio at birth was higher in urban areas (105.3 males per 100 females) than in rural areas (102.7 males per 100 females).

Figure 3.8: Sex Ratio at Birth by Rural/Urban and District, Eastern Province 2010
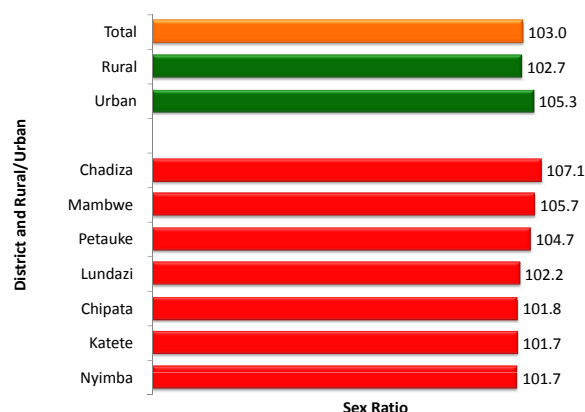
Source: 2010 Census of Population and Housing

Chadiza District had the highest sex ratio at birth at 107.1 males per 100 females. Nyimba and Katete Districts had the lowest sex ratio at birth, each with 101.7 males per 100 females.

CHAPTER 4
SOCIAL CHARACTERISTICS

4.0 Summary

In the 2010, Eastern Province had 791,463 persons aged 15 years and older. Of these 59.6 percent were married. Rural areas had a higher proportion of the population aged 15 years and older that were married (60.8 percent) compared to urban areas (52.1 percent).

The median age at first marriage was 20.1 years. The median age at first marriage was lower in rural areas (20.0 years) than urban areas (21.1 years). Males had a higher median age at first marriage than females at 22.6 years and 18.5 years, respectively.

In 2010, Eastern Province had 305,198 households. There were more households in rural than urban areas at 265,783 and 39,415, respectively. The average household size was 5.2 persons. Male headed households had a larger average household size at 5.5 than female headed households with 4.3 persons. Protestants and Catholics constituted 65.6 and 27.0 percent, respectively. Muslims and other religious affiliation made up 4.6 percent of the provincial population.

Of the population aged below 18 years, 87.4 percent did not have birth certificates. In 2010, the population aged 16 years and older that had Green National Registration Cards was 80.9 percent.

Chapter 4
Social Characteristics

4.1 Marital Status

Marital status is the categorization of the population in relation to whether an individual has never been married, is married, cohabiting, separated, divorced or widowed. Marital status was analysed for the population aged 15 years and older. In 2010, the population aged 15 years and older in Eastern Province was 791,463. Of these 377,526 were males and 413,937 were females.

Figure 4.1 shows the percentage distribution of the population aged 15 years and older in Eastern Province by marital status. The figure shows that 59.6 percent of the population aged 15 years and older were married and 27.2 percent were never married. The widowed and divorced made up 6.1 and 3.1 percent, respectively.

Figure 4.1: Percentage Distribution of the Population Aged 15 years and Older by Marital Status, Eastern Province 2010

Percent

Marital Status	
Married	59.6
Never married	27.2
Widowed	6.1
Divorced	3.1
Cohabiting	2.3
Separated	1.8
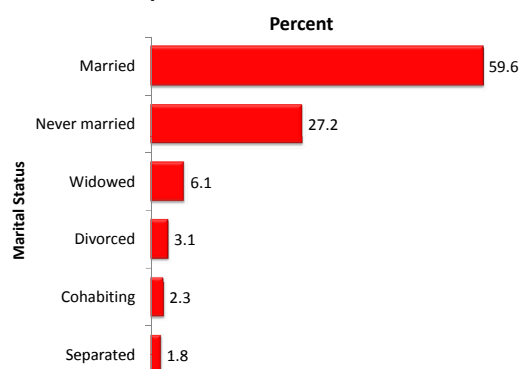
Source: 2010 Census of Population and Housing

Figure 4.2 shows the percentage distribution of the population aged 15 years and older by marital status and rural/urban. The percentage of the married was higher in rural areas (60.8 percent) than urban areas (52.1 percent). Of the population aged 15 years and older that had never married, urban areas had a higher percentage (36.3 percent) than rural areas (25.7 percent).

Figure 4.2: Percentage Distribution of the Population 15 years and Older by Marital Status and Rural/Urban, Eastern Province 2010

Percent

Marital Status	Urban	Rural
Married	52.1	60.8
Never married	36.3	25.7
Widowed	5.2	6.2
Divorced	2.7	3.2
Cohabiting	1.8	2.4
Separated	1.8	1.8
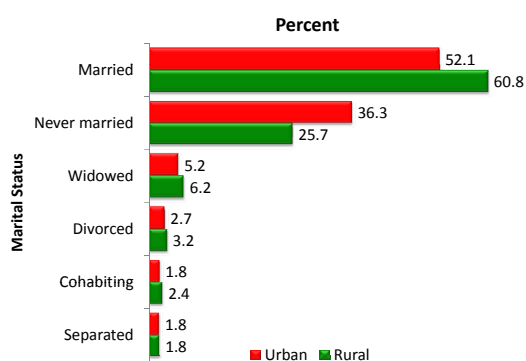
Source: 2010 Census of population and Housing.

Figure 4.3 shows the percentage distribution of the population aged 15 years and older by marital status and sex. More males had never been married (35.5 percent) than females (19.5 percent). There were more females who were widowed than males at 10.4 and 1.3 percent, respectively.

Figure 4.3: Percentage Distribution of the Population 15 Years and Older by Marital Status and Sex, Eastern Province 2010

Percent

Marital Status	Female	Male
Married	60.2	58.9
Never married	19.5	35.5
Cohabiting	2.6	1.9
Divorced	4.7	1.4
Widowed	10.4	1.3
Separated	2.6	0.9
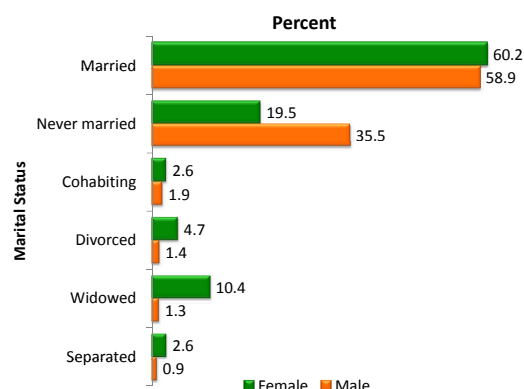
Source: 2010 Census of Population and Housing

4.2 Median Age At First Marriage

Median age at first marriage divides the married population into two parts, showing that 50 percent got married before the median age and 50 percent married after the median age.

Figure 4.4 shows the median age at first marriage by sex, district and rural/urban. Of the population aged 15 years and older in Eastern Province the median age at first marriage was 20.1 years. In rural areas, the median age at first marriage was 20.0 years and 21.1 years in urban areas. The median age for males was 22.6 years while that of females was 18.5 years.

Figure 4.4: Median Age at First Marriage by Sex, Rural/ Urban and District, Eastern Province 2010

Rural/Urban, Sex and District	Median Age at First Marriage
Total	20.1
Rural	20.0
Urban	21.1
Male	22.6
Female	18.5
Mambwe	20.4
Chipata	20.4
Petauke	20.2
Nyimba	20.1
Chadiza	20.1
Katete	19.9
Lundazi	19.7

Source: 2010 Census of population and Housing.

Mambwe and Chipata districts had the highest median age at first marriage at 20.4 years while Lundazi District had the lowest at 19.7 years.

4.3 Household Composition.

Household composition is the description of the household according to some aspect of its members such as age, sex, relationship to head and size. It is determined by some people living together and their relationships to one another.

A Household refers to a group of people who normally live and eat together. These may or may not be related by blood, marriage or adoption, but make common provision for food or other essentials for living and they have only one person whom they all regard as head of household. A household can also have one member.

A Household head is a person all members of the household regard as the head. He or she makes day to day decisions governing the running of the household. In cases of one member households, the member is taken as the household head.

A Usual household member is a person who has been living in the household for at least 6 (six) months or has joined the household and intends to live with the household for six months or longer.

4.3.1 Household and Household Headship.

In 2010, Eastern Province had 305,198 household heads. There were more households in rural areas than urban areas at 265,783 and 39,415 respectively. Household heads made up 19.2 percent of the population in Eastern Province.

Figure 4.5 shows the distribution of household heads by age. The population aged 30-34 years had the highest percentage of household heads at 15.2 percent followed by the age group 25-29 at 14.8 percent. Households headed by persons aged below 20 years made up 0.7 percent of the total number of household heads in the province.

Figure 4.5: Percentage Distribution of Household Heads by Age, Eastern Province 2010
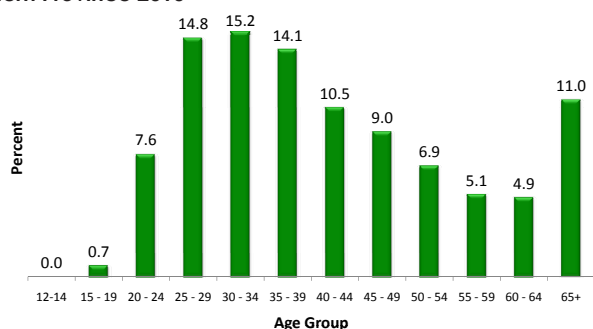
Source: 2010 Census of population and Housing.

Figure 4.6 shows the percentage distribution of household heads by sex and rural/urban. Male household heads constituted 77.5 percent of the total household heads while female household heads constituted 22.5 percent. There were more male household heads than female household heads in both rural and urban areas.

Figure 4.6: Percentage Distribution of Household Heads by Sex and Rural/Urban, Eastern Province 2010
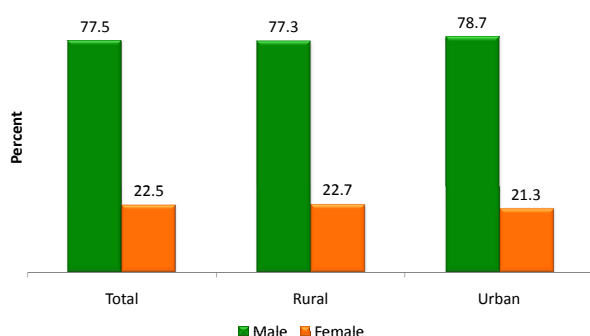
Source: 2010 Census of population and Housing.

4.3.2 Household Size.

Figure 4.7 shows the average household size by district and rural/urban. In 2010, the average household size in Eastern Province was 5.2 persons. Rural areas had a higher average household size than urban areas at 5.2 and 5.1 persons, respectively. The average household size was highest in Chadiza District at 5.4 persons followed by Nyimba District with 5.3 persons.

Figure 4.7: Average Household Size by Rural/Urban and District Eastern Province 2010
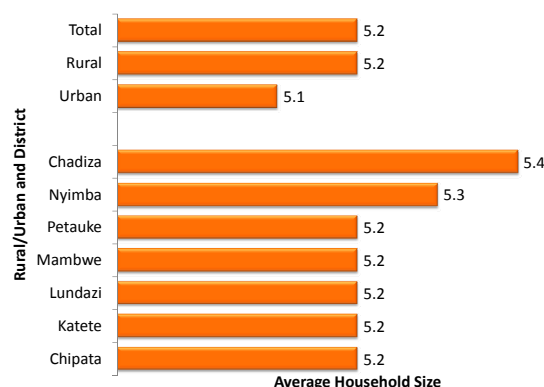
Source: 2010 Census of population and Housing.

Figure 4.8 shows the average household size by sex of household head, district and rural/urban. Male headed households had a higher average household size than female headed households at 5.5 and 4.3 persons, respectively.

Figure 4.8: Average Household Size by Sex of the Household Head, Rural/Urban and District, Eastern Province 2010
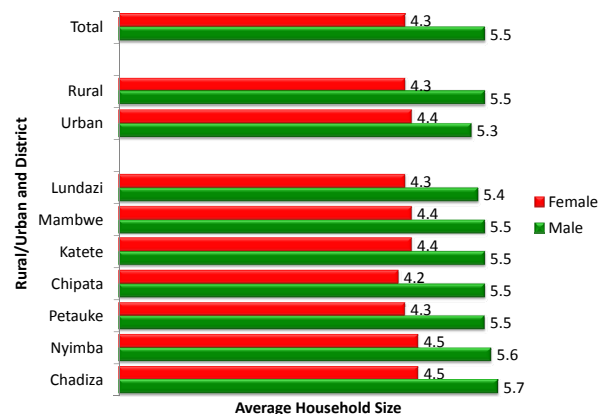
Source: 2010 Census of population and Housing.

4.3.3 Relationship To Head

Figure 4.9 shows the percentage distribution of population by relation to the household head. In 2010, 62.5 percent of the persons in the household were biological children of the household heads, while 17.9 percent were spouses.

Figure 4.9: Percent Distribution of the Population by Relationship to Household Head, Eastern Province 2010
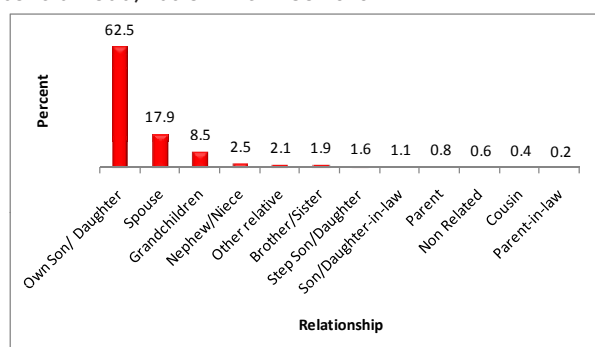
Source: 2010 Census of Population and Housing.

4.4 Religion

Figure 4.10 shows the percentage distribution of the population by religious affiliation. Protestants accounted for 65.6 percent of the population in Eastern Province while 27.0 percent were Catholics.

Figure 4.10: Percentage Distribution of Population by Religious Affiliation, Eastern Province 2010
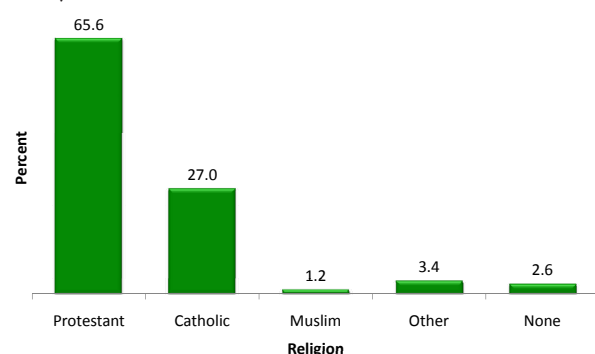
Source: 2010 Census of Population and Housing

4.5 Birth Certificate

Figure 4.11 shows the percentage distribution of persons aged below 18 years with or without birth certificates. Of the population aged below 18 years in Eastern Province, 87.4 percent did not have birth certificates. The proportion of those with birth certificates was highest in urban areas at 19.8 percent.

Figure 4.11 Percentage Distribution of Population Aged Below 18 Years with and Without Birth Certificates by Rural/Urban, Eastern Province 2010
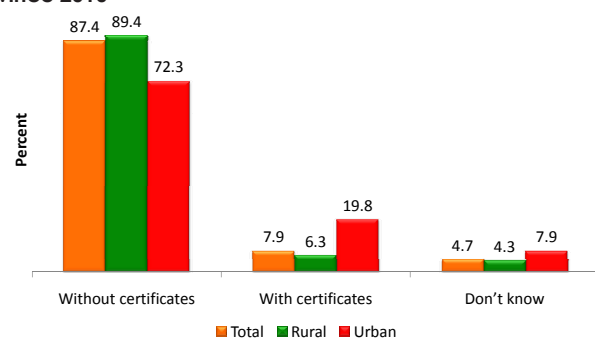
Source: 2010 Census of Population and Housing

Figure 4.12 shows the percentage distribution of persons aged below 18 years without birth certificates by district. Lundazi District had the highest proportion of persons without birth certificates at 91.3 percent while Chipata District had the lowest at 83.8 percent.

Figure 4.12: Percentage Distribution of the Population Aged Below 18 Years Without Birth Certificates by District, Eastern Province 2010
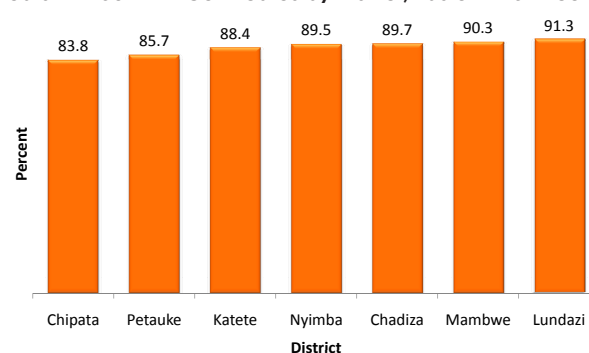
Source: 2010 Census of Population and Housing

4.6 Holders Of Green National Registration Cards

In Zambia, the age at which one is required to obtain a Green National Registration Card (NRC) is 16 years. In 2010, 752,990 citizens in Eastern Province were aged 16 years and older. Of these, 80.9 percent had NRCs.

Figure 4.13 shows the percentage distribution of the population aged 16 years and older with green National Registration Cards by sex, district and rural/urban.

Figure 4.13: Percentage Distribution of Eligible Population (16 years and older) with Green National Registration Cards by Sex, Rural/Urban and District, Eastern Province 2010
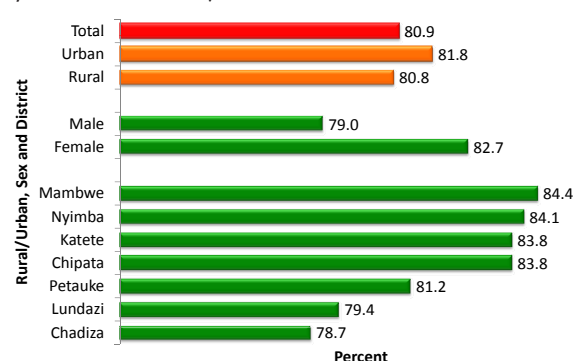
Source: 2010 Census of Population and Housing

Urban areas had a higher proportion of persons with Green National Registration Cards than rural areas at 81.8 and 80.8 percent, respectively. The proportion of females with Green National Registration Cards (82.7 percent) was higher than males (79.0 percent). The highest proportion of persons with green NRCs was Mambwe District (84.4 percent) and the lowest was Chadiza District (78.7 percent).

4.7 The Voting Population

The 2010 Census collected information on the number of registered voters at the time of the Census. This included people who were registered during the previous registration exercise as well as those registered during the 2010 registration exercise.

There were 689,672 eligible voters (persons aged 18 years and older) of which 416,050 (60.3 percent) were registered voters. Table 4.1 shows the percentage distribution of eligible voters (persons aged 18 years and older) and registered voters by sex and rural/urban. The registered voters in rural and urban areas were 88.1 and 11.9 percent, respectively. Of the registered Voters, males constituted 46.9 percent while females constituted 53.1 percent.

Table 4.1 Percentage Distribution of Eligible and Registered Voters (18 Years and Older) by Rural/Urban and Sex, Eastern Province 2010

Rural/Urban and Sex	Eligible Voters	Registered Voters
Eastern Province	**689,672**	**416,050**
Rural	86.2	88.1
Urban	13.8	11.9
Sex		
Male	47.2	46.9
Female	52.8	53.1
Source: 2010 Census of Population and Housing		

Figure 4.14: Percentage of Registered Voters among Eligible Voters by District, Eastern Province 2010

Source: 2010 Census of Population and Housing

Figure 4.14 shows the percentage of registered voters among eligible voters by district. The proportion of registered voters was highest in Mambwe and Katete districts at 66.2 percent and lowest in Chipata District at 54.1 percent.
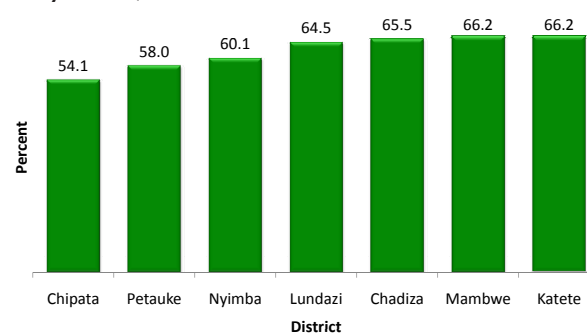
CHAPTER 5
EDUCATION CHARACTERISTICS

5.0 SUMMARY

The literacy rate at in Eastern Province was 54.4 percent. Literacy rate for rural and urban areas were 51.1 and 76.4 percent, respectively. Males had a higher literacy rate (58.3 percent) than females (50.7 percent).

Of the population aged 5 years and older, 27.5 percent were currently attending school. The net primary and secondary school attendance rate were 57.6 percent and 29.5 percent, respectively. The net primary school attendance rate was 55.3 percent in rural areas and 75.2 percent in urban areas. Net secondary school attendance rate was 25.2 percent in rural areas and 56.5 percent in urban areas.

The Gender Parity Index was 0.93. Rural and urban Gender Parity Index was 0.92 and 1.00, respectively. Of the population aged 25 years and older, 64.2 percent had completed primary school, 27.3 percent had completed secondary school and 7.9 percent had completed tertiary education.

In rural areas the completion rate was 70.7 percent for primary, 23.6 percent for secondary and 5.0 percent for tertiary education. In urban areas, the highest completion rate was for secondary education at 44.1 percent followed by primary at 34.3 percent. Urban areas recorded the highest completion rate for tertiary education at 21.3 percent.

More females (72.5 percent) had completed primary education than males (57.2 percent). At secondary and tertiary levels males had higher completion rate at 32.3 and 10.1 percent, respectively. Females had completion rate of 21.4 percent for secondary and 5.5 percent for tertiary.

5.1: Introduction

Education is a basic human right and is of central importance to the economic and social development of a nation. There are various benefits of education such as promoting economic growth, national productivity, innovations and social cohesion.

The current Education Policy supports free primary education for all. This is in line with the second Millennium Development Goal which is to 'achieve universal primary education, that is to ensure by 2015 children everywhere, boys and girls alike, will be able to complete a full course of primary schooling' (UN, 2000).

The population censuses in general provide a good basis for monitoring the participation of the population in an education system. The 2010 Census captured the education characteristics of the population such as literacy, school attendance, educational attainment, professional or vocational education attainment and fields of study.

5.2: Concepts And Definitions

School Attendance
This is defined as attendance at any accredited educational institution or programme, public or private, for organized learning at any level of education.

Gross School Attendance Rate
Gross school attendance rate is defined as the ratio of the population aged five years and older attending a specified education level to the applicable official school-age population. In some instances where there is extensive 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
The net school attendance rate measures the percentage of the school-age population that is attending a designated level of education. This indicator is much more refined than the 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.

Educational Attainment
This is the highest level of formal education that an individual has completed regardless of duration in school. It is the highest grade completed within the most advanced level attended in the educational system of the country where the education was received.

Literacy
Literacy refers to the ability to both read and write in any language. Members of the population who are able to read and write are literate, while those who cannot read and write in any language are considered illiterate.

Gender Parity Index
The Gender Parity Index (GPI) is the number of female students enrolled in primary, secondary and tertiary education to the number of male students in each level. A GPI of less than 1 indicates that there are fewer females than males in the formal education system to the appropriate school-age population. A gender parity index of more than 1 means that there are more females than males attending school. A score of 1 reflects equal enrolment rates for males and females.

5.3. Literacy

Figure 5.1 shows literacy rate of the population aged 5 years and older by sex and rural/urban in 2010. Of the population aged 5 years and older, 54.4 percent were literate. The literacy rate for males was higher (58.3 percent) than that of females (50.7 percent). The literacy rate for rural and urban areas were 51.1 and 76.4 percent, respectively.

Figure 5.1: Literacy Rate for Population Aged 5 years and Older by Sex and Rural/Urban, Eastern Province 2010
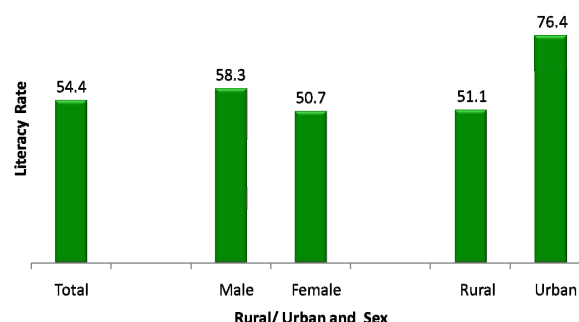
Source: 2010 Census of Population and Housing

Figure 5.2 shows literacy rate of the population aged 5 years and older by district. The district with the highest literacy rate in 2010 was Chipata District at 62.6 percent. Katete District had the lowest literacy rate at 45.5 percent.

Figure 5.2: Literacy Rate for Persons Aged 5 years and Older by District, Eastern Province 2010
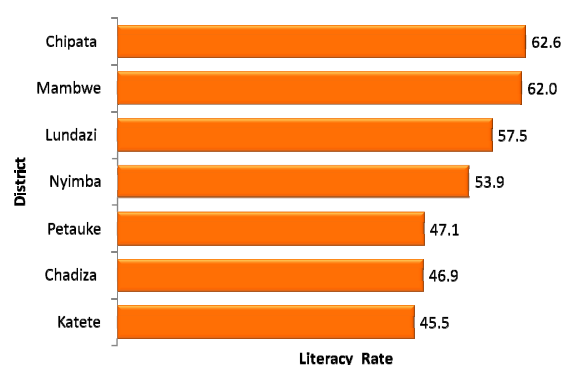
Source: 2010 Census of Population and Housing

5.3.1: Literacy Rate of the Youth Population (15 –24 years)

Youth literacy is one of the indicators used to assess the achievement of the universal primary education. Figure 5.3 shows the literacy rate for the population aged 15 to 24 by sex and rural/urban. The youth literacy was 75.2 percent in 2010. The male and female literacy rates were 78.3 percent and 72.2 percent. Urban areas recorded higher literacy rate than rural areas at 92.3 and 72.3 percent, respectively.

Figure 5.3: Literacy Rates for Youth Population (15 - 24 Years) by Sex and Rural/Urban, Eastern Province 2010
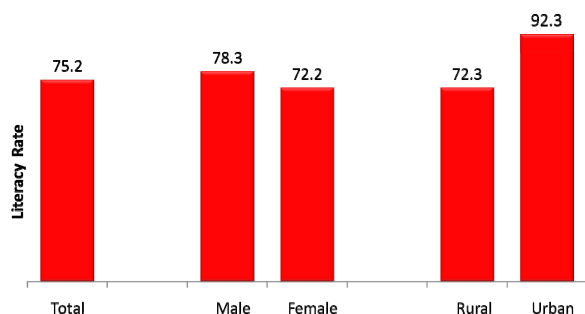
Source: 2010 Census of Population and Housing

Figure 5.4 shows literacy rate for the population aged 15 to 24 years by district. Chipata District had the highest youth literacy rate (83.2 percent) while Katete District had the lowest (64.8 percent).

Figure 5.4: Literacy Rate for Youth Population (15 - 24 Years) by District, Eastern Province 2010
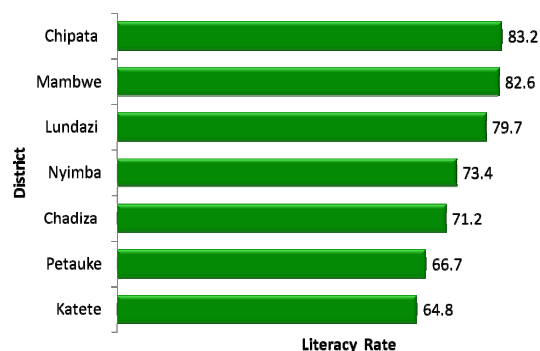
Source: 2010 Census of Population and Housing

5.3.2: Literacy Rate of the Adult Population (15 years and older)

Figure 5.5 shows the literacy rate for the adult population (15 years and older) by sex and rural/urban. The adult literacy rate was 66.5 percent in 2010. The adult literacy rate for urban areas was higher than rural areas at 88.0 and 63.0 percent, respectively. Males recorded a higher adult literacy rate (74.5 percent) than females (59.2 percent).

Figure 5.5: Literacy Rate for Adult Population (15 Years and Older) by Sex and Rural/Urban, Eastern Province 2010
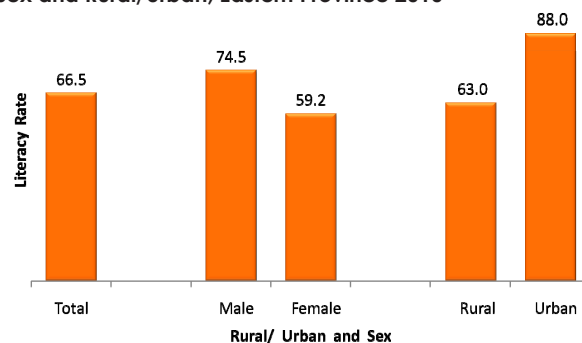
Source: 2010 Census of Population and Housing

Figure 5.6 shows the adult literacy rate by district. Chipata District had the highest adult literacy rate at 74.7 percent while Katete District had the lowest adult literacy rate at 55.6 percent.

Figure 5.6: Literacy Rate for Adult Population (15 Years and Older) by District, Eastern Province 2010
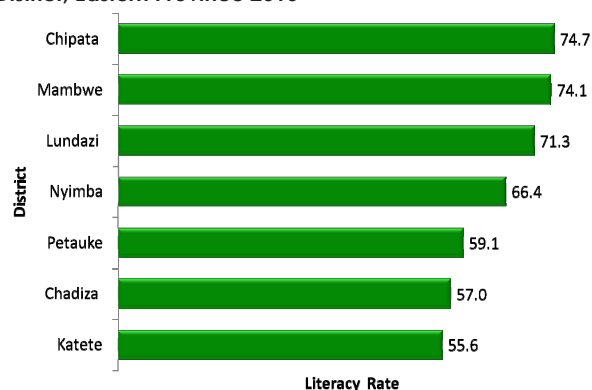
Source: 2010 Census of Population and Housing

5.4: School Attendance

The primary school official entry age in Zambia is seven years. Grades 1 to 7 correspond to pupils aged 7 to 13 years while 8 to 9 correspond to pupils aged 14 to 15 years. Grades 10 to 12 correspond to pupils aged 16 to 18 years. The population 18 years and above are expected to be in higher institutions of learning.

Figure 5.7 shows the percent of the population aged 5 years and older that were currently attending school by sex and rural/urban. In 2010, 27.5 percent of the population were currently attending school.

Figure 5.7: Percentage of Population (5 Years and Older) Currently Attending School by Sex and Rural/Urban, Eastern Province 2010
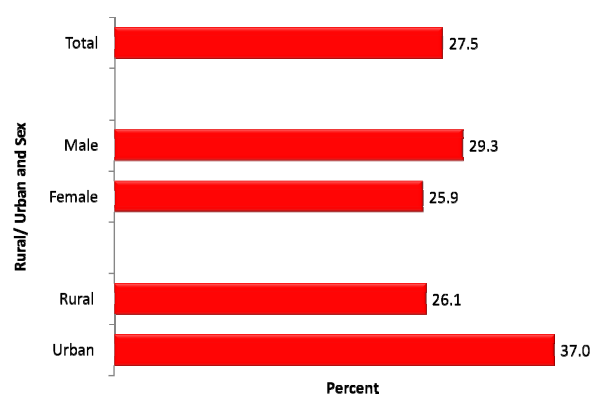
Source: 2010 Census of Population and Housing

In rural and urban areas the percentage of the population aged 5 years and older that was currently attending school was 26.1 and 37.0 percent, respectively. The males currently attending school were higher (29.3 percent) than females (25.9 percent).

Figure 5.8 shows the percentage of the population aged 5 years and older currently attending school by 5 year age groups. The age group 10-14 had the highest proportion currently attending school at 70.9 followed by the age group 15-19 at 55.3 percent. The lowest age group currently attending school was 45 years and older at 1.3 percent.

Figure 5.8: Percentage Distribution of the Population Currently Attending School by 5 year Age Groups, Eastern Province 2010
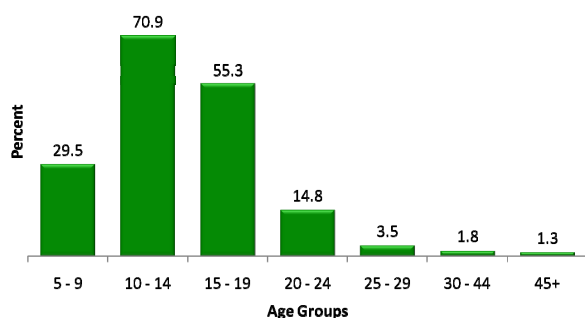
Source: 2010 Census of Population and Housing

Figure 5.9 shows the percent distribution of the population aged 5 years and older currently attending school by age group and rural/urban. Across all age groups, the population currently attending school was higher in urban areas than rural areas. The age group 10-14 had the highest proportion of the population currently attending school in both rural and urban areas at 68.6 and 87.7 percent, respectively.

Figure 5.9: Percentage Distribution of the Population (5 Years and Older) Currently Attending School by Age Group and Rural/Urban, Eastern Province 2010
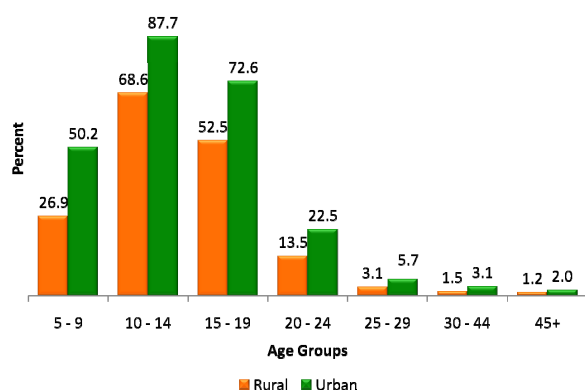
Source:2010 Census of Population and Housing

Figure 5.10 shows the percentage distribution of the population currently attending school by sex and age group. There were more females currently attending school than males in younger age groups from 5 to 14 years. The age group 10-14 had the highest percentage of the population currently attending school for both males and females at 67.8 and 74.1 percent, respectively.

Figure 5.10: Percent Distribution of the Population (5 years and older) Currently Attending School by Sex and Age group, Eastern Province 2010
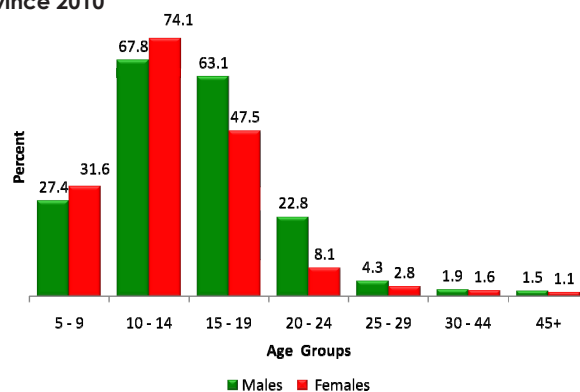
Source: 2010 Census of Population and Housing

Figure 5.11 shows the percent of population aged 5 years and older that was currently attending school by district. Mambwe District had the highest proportion of the population that was currently attending school at 33.8 percent while Petauke District had the lowest at 22.8 percent.

Figure 5.11: Percentage Distribution of Population (5 Years and Older) Currently Attending School by District, Eastern Province 2010
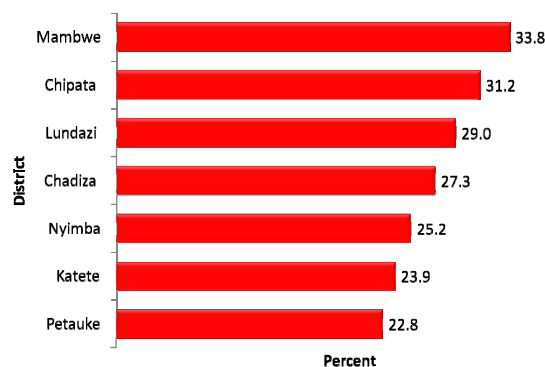
Source: 2010 Census of Population and Housing

5.4.1 Primary School Attendance Rate

Figure 5.12 shows the percentage of the population aged 7 to 13 years that was currently attending primary school by sex and rural/urban. In 2010, primary school attendance rate was 58.9 percent. In rural areas, 56.2 percent of the population aged 7-13 years was currently attending primary school, while 79.6 percent of the population aged 7-13 years was currently attending primary school in urban areas. Primary school attendance rate for males and females was 55.7 and 62.2 percent, respectively.

Figure 5.12: Percentage of the Population Aged 7 to 13 Years Currently Attending School by Sex and Rural/Urban, Eastern Province 2010
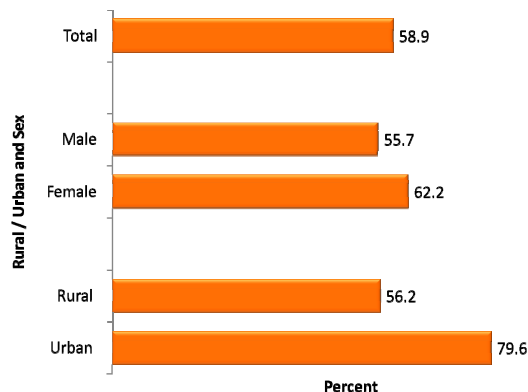
Source: 2010 Census of Population and Housing

Current primary school attendance rate by district are shown in Figure 5.13. Mambwe District had the highest proportion of the population currently attending school at 71.8 percent while Petauke District had the lowest at 44.8 percent.

Figure 5.13: Percentage of the Population (7 to 13 years Old) Currently Attending Primary School by District, Eastern Province 2010
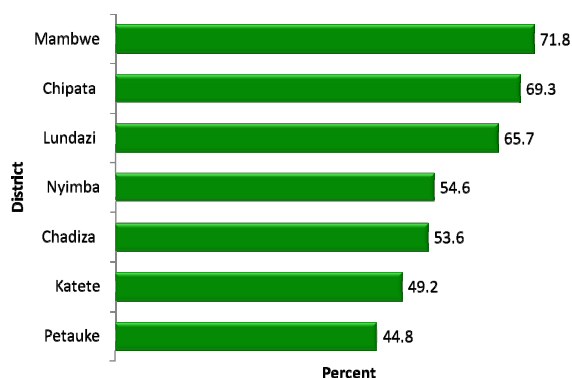
Source: 2010 Census of Population and Housing

5.4.2 Gross Primary School Attendance Rate

Figure 5.14 shows gross primary school attendance rate. In 2010, the gross primary school attendance rate was 81.8 percent. The gross primary school attendance rate was higher in urban areas (99.0 percent) than rural areas (79.6 percent). Males had a higher gross primary school attendance rate than females at 81.2 and 82.4 percent, respectively.

Figure 5.14: Gross Primary Attendance Rate by Sex and Rural/ Urban, Eastern Province 2010
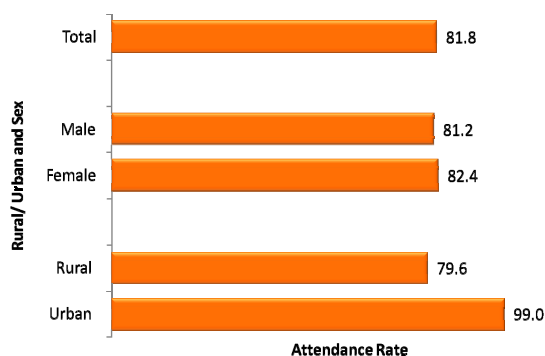
Source: 2010 Census of Population and Housing

Figure 5.15 shows the gross primary school attendance rate by district. Mambwe District had the highest gross primary school attendance rate at 96.2 percent followed by Chipata District at 92.2 Percent. Petauke District had the lowest gross primary school attendance rate at 66.8 percent.

Figure 5.15: Gross Primary School Attendance Rates by district, Eastern Province 2010
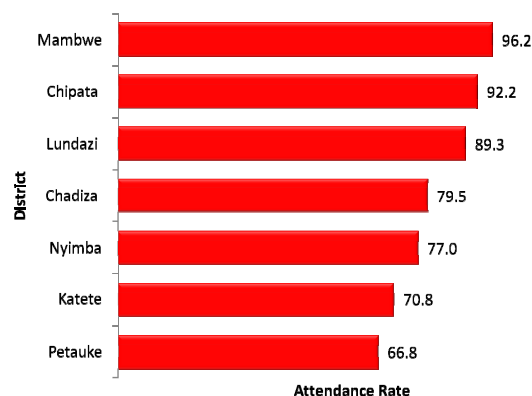
Source: 2010 Census of Population and Housing

5.4.3 Net Primary School Attendance Rate

Net primary school attendance rate shows the percentage of the primary school age population (7 to 13 years) currently attending primary grades (Grades 1 to 7). Figure 5.16 shows net primary school attendance rate by sex and rural/urban. In 2010, the net primary school attendance rate was 57.6 percent. The net primary school attendance rate means that the percentage of eligible primary school age children not in school was 42.4 percent in 2010.

In rural areas the net primary school attendance rate was 55.3 percent while in urban areas the net primary school attendance rate was 75.2 percent. The net primary school attendance rate for males and females were 54.5 and 60.7 percent, respectively.

Figure 5.16: Net Primary School Attendance Rate by Sex and Rural/Urban, Eastern Province 2010
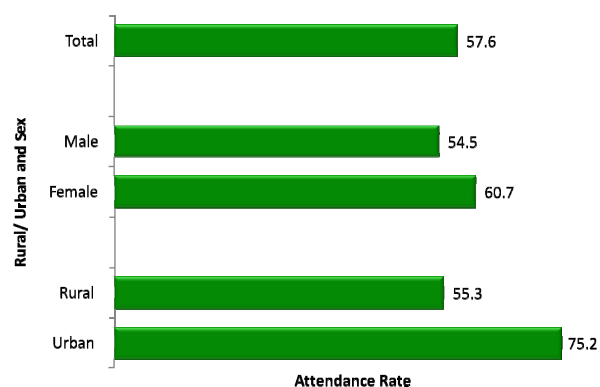
Sources: 2010 Census of Population and Housing

Figure 5.17 shows net primary school attendance rate by district. Mambwe District had the highest net primary school attendance rate at 69.9 percent while Petauke District had the lowest at 43.9 percent.

Figure 5.17: Net Primary School Attendance Rate by District, Eastern Province 2010
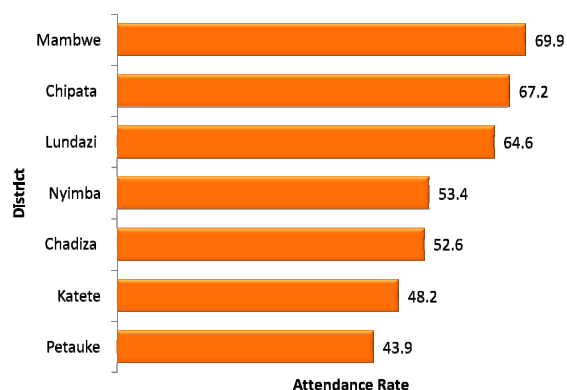
Source: 2010 Census of Population and Housing

5.4.4 Gross Secondary School Attendance

In Zambia, the official secondary school age ranges from 14-18 years. Figure 5.18 shows gross secondary school attendance rate by sex and rural/urban. In 2010, the gross secondary school attendance rate for the population aged 14-18, was 46.8 percent. Urban areas had a higher gross secondary school attendance rate than rural areas at 88.9 and 40.1 percent, respectively. Male gross secondary school attendance was 52.3 percent while female gross secondary school attendance was 41.1 percent.

Figure 5.18: Gross Secondary Attendance Rate by Sex and Rural/ Urban, Eastern Province 2010
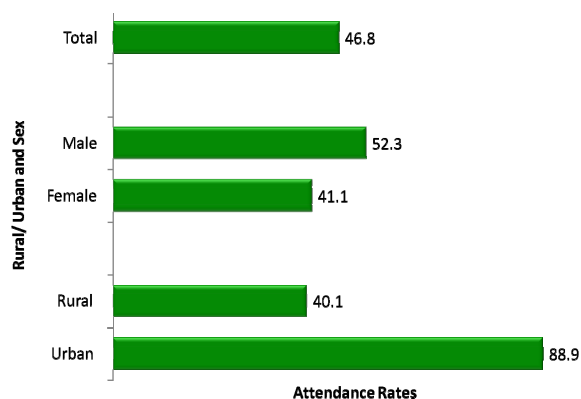
Source: 2010 Census of Population and Housing

Figure 5.19 shows gross secondary attendance rate by district. Mambwe District recorded the highest gross secondary school attendance rate at 59.1 percent while Nyimba District had the lowest at 39.4 percent.

Figure 5.19: Gross Secondary School Attendance Rate by District, Eastern Province 2010
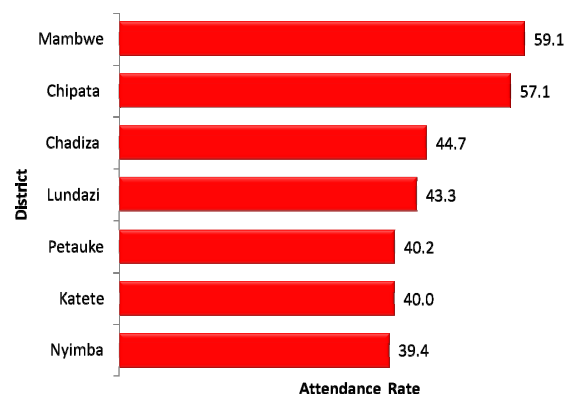
Source: 2010 Census of Population and Housing

5.4.5 Net Secondary School Attendance Rate

Net secondary school attendance rate shows the percentage of the secondary school age population (14-18 years) currently attending secondary grades 8 to 12. Figure 5.20 shows net secondary attendance rate by sex and rural/urban. In 2010, the net secondary school attendance rate was 29.5 percent. The net secondary school attendance in rural areas was 25.2 percent while in urban areas, the net secondary school attendance was 56.5 percent. The male and female net secondary school attendance rate were 30.1 and 28.8 percent, respectively.

Figure 5.20: Net Secondary School Attendance Rate by Sex and Rural/Urban, Eastern Province 2010
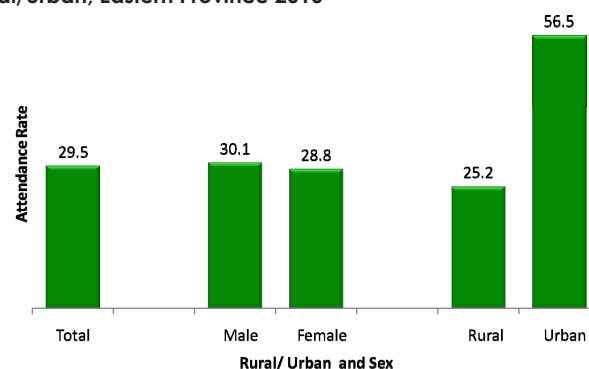
Sources: 2010 Census of Population and Housing

Figure 5.21 shows net secondary school attendance rate by district. Mambwe District had the highest net secondary school attendance rate at 38.2 percent while Petauke District had the lowest at 19.0 percent.

Figure 5.21: Net Secondary School Attendance Rate by District, Eastern Province 2010
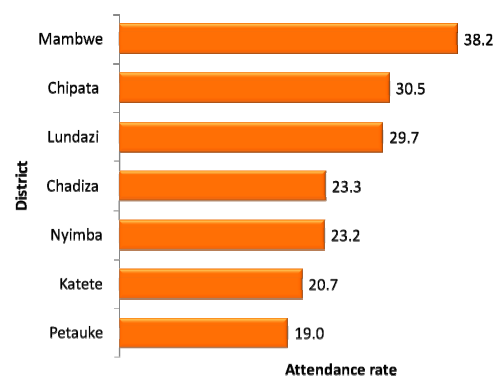
Source: 2010 Census of Population and Housing

5.5 Gender Parity Index

Gender Parity Index (GPI) shows the disparities in education and helps in addressing unequal access to education among females in developing countries. Figure 5.22 shows gender parity index by rural/urban and district. The gender parity index for those currently attending school was 0.93, implying that there were less females than males currently attending school.

Figure 5.22: Gender Parity Index by Rural/Urban and District , Eastern Province 2010
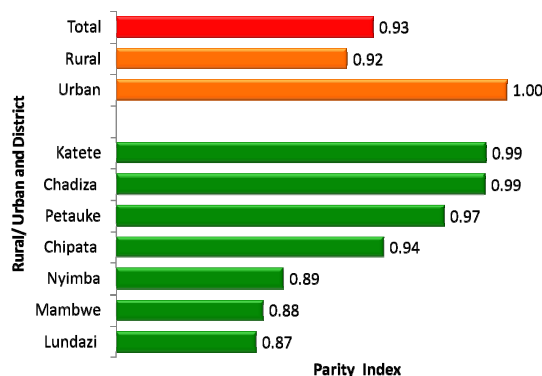
Source: 2010 Census of Population and Housing

The GPI for rural areas was 0.92 while that of urban areas was 1.00. Katete District had the highest GPI of 0.99 while Lundazi District had the lowest at 0.87.

Figure 5.23 shows gender parity index for the population currently attending primary school by rural/urban district. The Gender Parity Index for those currently attending primary school was 1.00. The GPI for rural areas was 0.99 while that of urban areas was 1.07. Chadiza District had the highest GPI of 1.08 while Lundazi District had the lowest at 0.94.

Figure 5.23: Gender Parity Index for Population Currently Attending Primary School by Rural/Urban and District, Eastern Province 2010
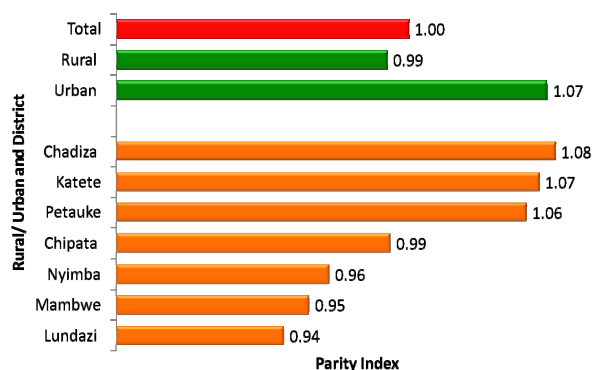
Source: 2010 Census of Population and Housing

Figure 5.24 shows Gender Parity Index for the population currently attending secondary school by rural/urban and district. The GPI for those currently attending secondary school was 0.76. In rural areas the GPI was 0.72 while in urban areas the GPI was 0.92. Chipata District had the highest GPI at 0.81 and Lundazi District had the lowest at 0.67.

Figure 5.24: Gender Parity Index for Population Currently Attending Secondary School by Rural/Urban and District, Eastern Province 2010
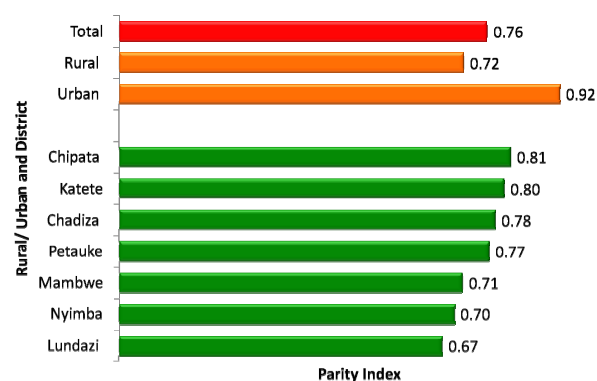
Source: 2010 Census of Population and Housing

5.6 Highest Education Level Completed

Educational attainment is the highest level of education completed in the country where the education was received (United Nations, 1998). The United Nations recommends that educational attainment be included among the basic areas of census inquiry and that data on the subject be collected for all persons 5 years of age and older.

Indicators on highest education qualification level completed and highest professional/vocational qualification in this analysis uses the population aged 25 years and older. Note that the population under 25 years of age may still be attending school and that the measures for these persons would tend to understate their eventual educational attainment to some degree (Siegel and Swanson, 2004).

Figure 5.25 shows the percent distribution of the population (25 years and older) that ever attended school by highest education level completed and rural/urban. In 2010, 64.2 percent had completed primary level and 27.3 percent had completed secondary education. Tertiary education was completed by 7.9 percent of the population aged 25 years and older that had ever attended school.

Figure 5.25: Percentage Distribution of Population (25 Years and Older) that Ever Attended School by Highest Education Level Completed and Rural/Urban, Eastern Province 2010
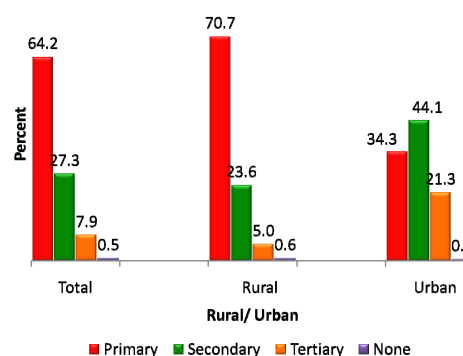
Source: 2010 Census of Population and Housing

In rural areas 70.7 percent had primary as the highest level of education completed while 23.6 percent had completed secondary education. Secondary education was the highest level of education completed in urban areas at 44.1 percent followed by primary education at 34.3 percent. The percentage of the population that had completed tertiary education in urban areas was 21.3 percent.

Figure 5.26 shows the percentage distribution of the population (25 years and older) that ever attended school by highest education level completed and sex. There were more females than males who had primary education as the highest level completed at 72.5 percent and 57.2 percent, respectively. The percentage of males who had secondary and tertiary as their highest level of education completed was higher than that of females.

Figure 5.26: Percentage Distribution of Population (25 Years and Older) that Ever Attended School by Highest Education Level Completed and Sex, Eastern Province 2010
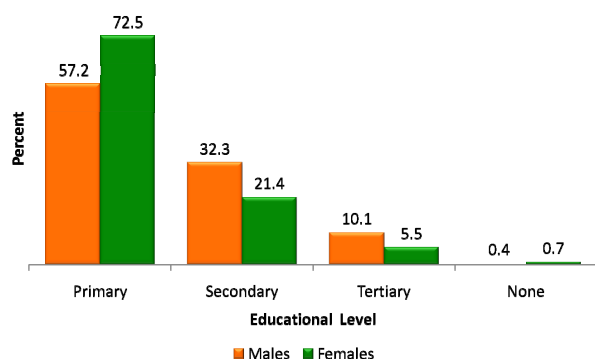
Source: 2010 Census of Population and Housing

Figure 5.27 shows the percentage distribution of the population (25 years and older) that ever attended school by highest education level completed and district. Chipata District had the highest percentage of the population with tertiary as their highest level of education completed at 10.4 percent. Lundazi District had the lowest at 5.3 percent.

Figure 5.27: Percentage Distribution of Population (25 Years and Older) that Ever Attended School by Highest Education Level Completed and District, Eastern Province 2010

Source: 2010 Census of Population and Housing

5.7 Highest Profession/Vocational Qualification Completed

Figure 5.28 shows the percentage distribution of highest profession/vocational qualification completed. Certificate holders constituted 3.6 percent followed by diploma holders at 1.3 percent. Less than one percent (0.0) of the population 25 years and older had doctorate degrees (PhD).

Figure 5.28: Percentage Distribution of Population (25 Years and Older) by Highest Profession/Vocational Qualification Completed, Eastern Province 2010
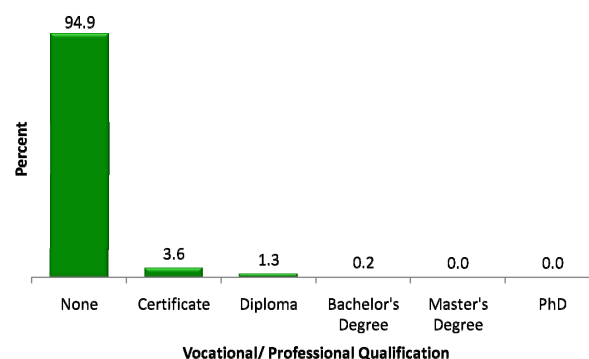
Source: 2010 Census of Population and Housing

Figure 5.29 shows the percent distribution of population 25 years and older by highest profession/vocational qualification completed and sex. In all professional and vocational qualification categories males had higher percentages than females except for those that had no professional/vocational qualification. The highest percentage difference was recorded in the Certificate category where males accounted for 5.1 percent compared to 2.2 percent for females.

Figure 5.29: Percentage Distribution of Highest Profession/Vocational Qualification Completed by Sex, Eastern Province 2010
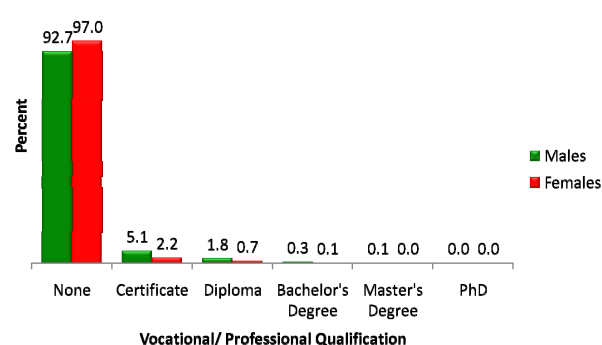
Source: 2010 Census of Population and Housing

5.8 Field of Study

Table 5.1 shows the percent distribution of the population 25 years and older by field of study and sex. Teacher training was the field of study reported by 1.7 percent of the total population 25 years and older. Other notable fields of study included nursing at 0.4 percent and accountancy, business administration, and mechanical engineering all at 0.2 percent.

Field of Study	Population	Percent of total	Percent Males	Percent Females
Total	**497,359**		**47.4**	**52.6**
Natural science (e.g. biological science programme chemistry programme geological programme etc).	230	0.0	84.3	15.7
Civil engineering	205	0.0	97.1	2.9
Electrical and electronics engineering	469	0.1	95.3	4.7
Mechanical engineering	888	0.2	98.2	1.8
Chemical engineering	29	0.0	100.0	0.0
Mining engineering	85	0.0	95.3	4.7
Industrial engineering	73	0.0	71.2	28.8
Metallurgical engineering	30	0.0	100.0	0.0
Architectural and town planning engineering	79	0.0	78.5	21.5
Other engineering	202	0.0	94.6	5.4
Medicine and surgery	156	0.0	84.6	15.4
Pharmacy	198	0.0	79.3	20.7
Dentistry	89	0.0	76.4	23.6
Nursing	2,041	0.4	56.1	43.9
Medical technology	188	0.0	78.2	21.8
X-Ray technology	26	0.0	69.2	30.8
Veterinary	142	0.0	86.6	13.4
Statistics	32	0.0	84.4	15.6
Mathematics	113	0.0	78.8	21.2
Computer science/Economics	451	0.1	53.4	46.6
Accountancy	1,104	0.2	80.9	19.1
Teacher training	8,549	1.7	58.1	41.9
Law and jurisprudence (includes magistrates and judges)	354	0.1	84.7	15.3
Journalism	110	0.0	72.7	27.3
Fine arts	95	0.0	74.7	25.3
Physical education	69	0.0	58.0	42.0
Library science	59	0.0	61.0	39.0
Social welfare	357	0.1	55.5	44.5
Criminology	216	0.0	92.6	7.4
Business administration and related programmes	822	0.2	71.5	28.5
Secretarial training	531	0.1	13.7	86.3
shorthand typing	171	0.0	36.8	63.2
Clerical Typing	173	0.0	50.9	49.1
Operating of office machines	54	0.0	79.6	20.4
Service trade (e.g. cooking tourist trade etc.)	344	0.1	52.9	47.1
Radio and television broadcasting	27	0.0	92.6	7.4
Fire protection and fire fighting	55	0.0	72.7	27.3
Agriculture forestry and fishery	1,306	0.3	80.3	19.7
Food and drinks processing trades programmes	184	0.0	46.7	53.3
Wood working	649	0.1	96.1	3.9
Textile trades	243	0.0	32.1	67.9
Leather trades	24	0.0	70.8	29.2
Other programmes	4,583	0.9	79.8	20.2
None	471,554	94.8	46.2	53.8

Source: 2010 Census of Population and Housing

CHAPTER 6
ECONOMIC CHARACTERISTICS

6.0 Summary

The population aged 12 years and older was 908,683 in 2010. Out of these, 86.4 percent were in rural areas while 13.6 percent were in urban areas. Males comprised 48.1 percent of total population aged 12 years and older while female comprised 51.9 percent.

Of the population aged 12 years and older, 533,661 were in the labour force, out of which 90.6 percent were in rural areas and 9.4 percent were in urban areas.

The unemployment rate was 8.8 percent of the total labour force. Urban unemployment rate was 19.1 percent while rural unemployment rate was 7.5 percent. The unemployment for males was 10.0 percent compared to 7.2 for females.

The youth unemployment rate was 10.4 percent, of which urban youth unemployment rate was higher (24.1 percent) than the rural unemployment rate (8.6 percent). The unemployment rate for male youths (11.9 percent) was higher than that of female youths (8.7 percent).

Of the employed population, the highest proportion was self employed (51.3 percent) and the lowest were employers (0.4 percent).

Chapter 6
Economic Characteristics

6.1 Introduction

Individuals engage in economic activities in order to attain and sustain a certain acceptable level of consumption of goods and services. Engagement in these activities not only ensures a person's livelihood but also equips an individual with the means of acquiring and sustaining the basic needs of life such as food, clothing and shelter. In a developing country like Zambia, it becomes imperative to constantly measure and monitor changes in the levels of economic activities because fluctuations in labour force participation rates, employment levels and economic dependency levels have an impact on poverty.

6.2 Concepts and Definitions

Concepts and definitions used in this chapter are as follows:

Labourforce Participation Rate: This is the ratio of the economically active population to the working age population expressed as a percent.

Unemployment rate: This is the proportion of the labourforce who have no jobs, are available for work and are seeking work in a given reference period in the total labourforce expressed as a percent.

Youth Unemployment Rate: This was defined as a proportion of the labourforce aged 15-35 years who had no jobs, were available for work and were seeking work in a given reference period in the total youthful labour force expressed as a percent.

In the 2000 and 2010 Population Censuses, data pertaining to economic characteristics of the population 12 years and older were collected and analyzed. The main topics covered are:
i) Labour force participation
ii) Economic dependency
iii) Employment and unemployment
iv) Employment status
v) Occupation
vi) Industry
vii) Educational attainment

6.2 Working Age Population

The working-age population was defined as all persons 12 years and older. This is the population from which measurement of the economic characteristics of the population is based.

Figure 6.1 shows the various components of the population 12 years and older. It shows the composition of the economically active and economically inactive population, including their sub components.

Figure 6.1: Organogram for the structure of Population Aged 12 Years and Older
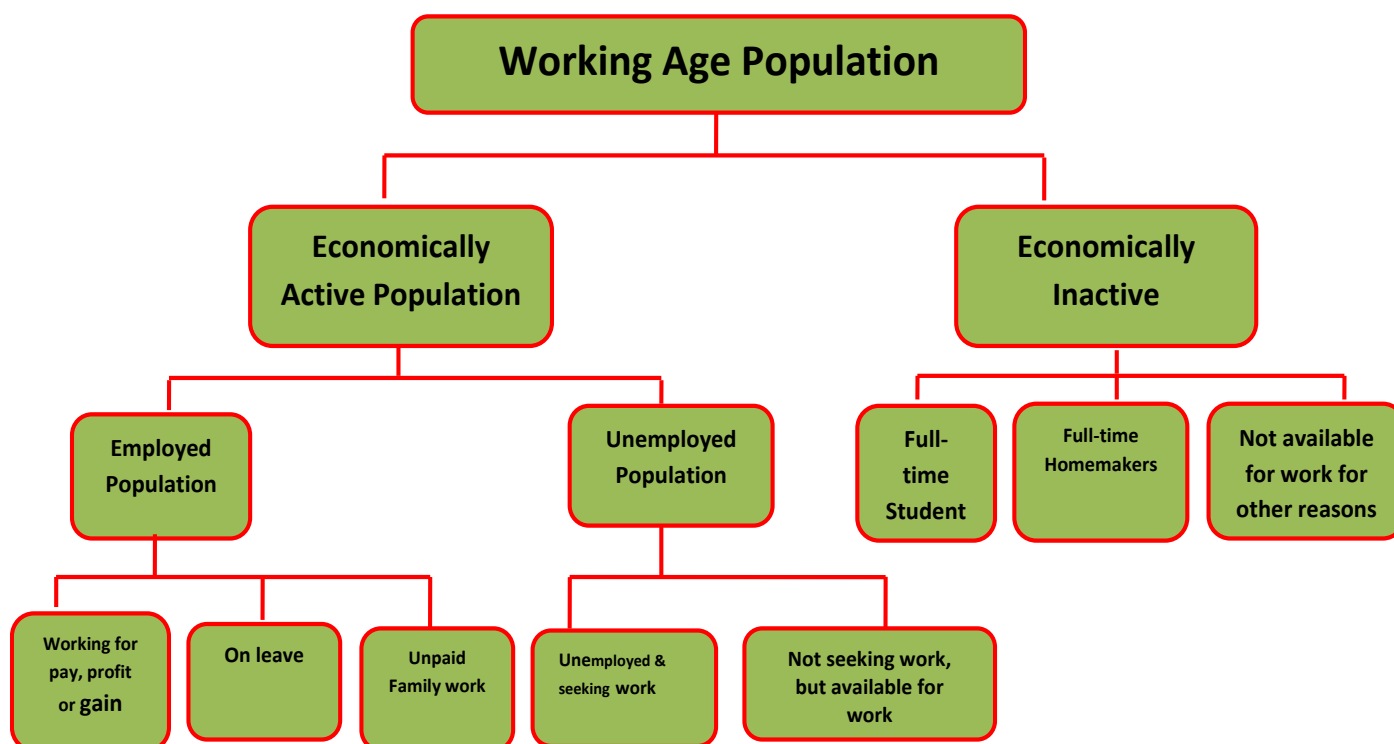
The question asked in the 2010 Census to determine the economic activity status was 'What did (NAME) do in the last 7 days and last 12 months?' The reference period for the response categories was the last 7 days (Current activity status) and last 12 months (Usual activity status).

6.3.1 Population 12 years and older

In 2010, the population aged 12 years and older represented 59.6 percent of the total population of Eastern Province. The population 12 years and older (Working age population) was reported at 908,683 in Eastern Province. Out of these, 86.4 percent were in rural areas while 13.6 percent were in urban areas. Males comprised 48.1 percent of total population aged 12 years and older while female comprised 51.9 percent.

Figure 6.3 shows the annual average growth rate of the labour force by district between 2000 and 2010 in Eastern Province. The labour force average annual growth rate was 1.2 percent. This growth was lower than the national labour force average annual growth rate which was recorded at 3.0 percent.

Figure 6.2: Average Annual Growth Rate of the Labour force by District, Eastern Province 2000-2010
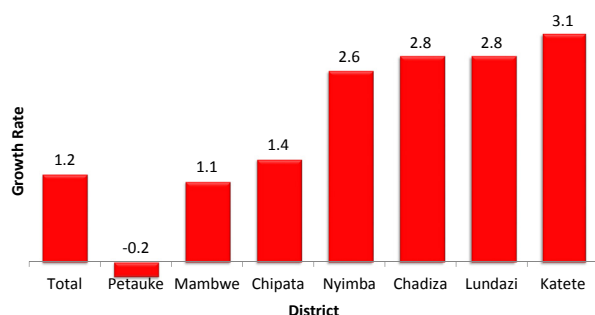
Source: 2000 and 2010 Censuses of Population and Housing

Katete District recorded the highest labour force annual average growth rate of 3.1 percent while Petauke District recording a negative average growth rate of -0.2 percent per annum.

6.4 Economic Activity Status

The population 12 years and older is subdivided into two broad economic activity status categories, namely economically active and the economically inactive. The economic activity status thus refers to whether a person aged 12 years and older is in the labour force or outside the labour force.

6.4.1 Economically Active

The economically active population (labour force) comprises persons who during the 7 days prior to the census night were either employed (i.e. employers, employees and unpaid family workers) or unemployed (i.e. without work but actively looking for work and those willing to work).

The analysis for the economic activity status is based on the current (in the 7 days prior to the census night) economic activity of the population. In 2010, the population of the labour force was 533,661 persons in Eastern Province. Of these, 294,249 were male and 239,412 were female.

6.4.2 Economically Inactive

The economically inactive population comprises people who, during the reference period, were outside the labour force. These included full time students, full time homemakers (e.g. full time housewives) and those not available for work for other reasons such as not able to work due to sickness, old age, beggars, among others.

Figure 6.3 shows the percent share of the population 12 years and older by economic activity status. Of the population 12 years and older, 58.7 percent were economically active while 41.3 percent were economically inactive.

Figure 6.3: Percentage of Population (12 Years And Older) by Economic Activity Status, Eastern Province 2010
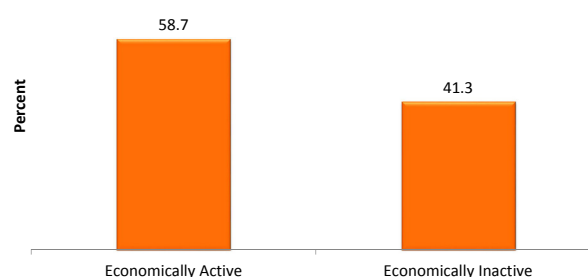
Sources: 2010 Census of Population and Housing

6.5 Labour Force Participation Rate

The labour force participation rate shows how much of the population is economically active. Figure 6.4 shows the labour force participation rate for the population 12 years and older by sex and rural/urban. In 2010, labour force participation rate was 58.7 percent. Males had a higher labour force participation rate (67.4 percent) than females (50.7 percent).

Labour force participation rate was higher in rural areas (60.8 percent) than urban areas (45.9 percent). The results also show that the labour force participation rates were higher for males than females in both rural and urban areas.

Figure 6.4: Labour Force Participation Rate for Population (12 Years and Older) by Sex and Rural/ Urban, Eastern Province 2010
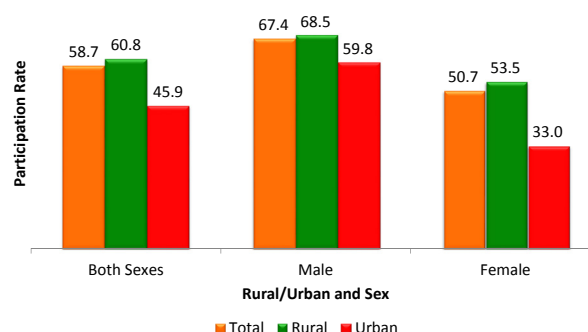
Sources: 2010 Census of Population and Housing

Figure 6.5 shows labour force participation rate for the population 12 years and older by age and sex. Labour force participation was higher among males than females in all age groups except for the age group 15-19 years.

Figure 6.5: Labour Force Participation Rate for Population (12 Years and Older) by Sex and Rural/ Urban, Eastern Province 2010
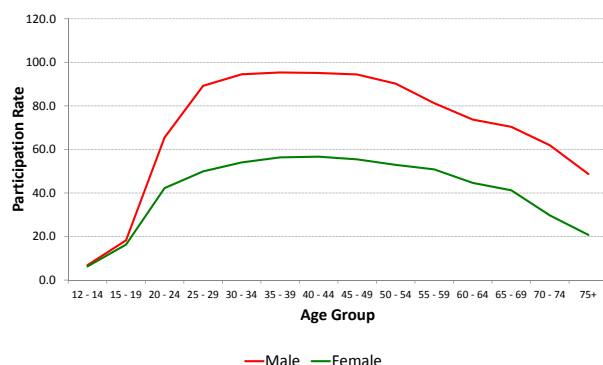
Source: 2010 Census of Population and Housing

The participation rate for both sexes increased with progression in age and later declined in older ages above 50 years.

Figure 6.6 shows the labour force participation rate for the population 12 years and older by district. Chadiza District had the highest labour force participation rate at 69.6 while Chipata District had the lowest at 55.1 percent.

Figure 6.6: Labour Force Participation Rate for the Population (12 Years and Older) by District, Eastern Province 2010
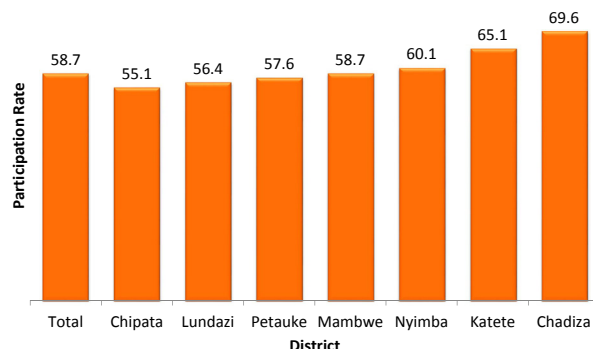
Source: 2010 Census of Population and Housing

6.6 Employed Population

Employment in Zambia is measured as a percent of the labour force. In the 2010 census, it made up those who reported to be working or on leave during the reference period (seven days prior to the census night). Out of 533,661 persons in the labour force, 486,923 persons were employed, representing 91.2 percent of the labour force. Out of the employed population, 54.4 percent were male and 45.6 percent were female.

Figure 6.7 shows the percentage of employed population by sex and rural/urban. The results show that there were more employed persons in rural areas (90.6 percent) than in urban areas (9.4 percent). In rural areas, female employment accounted for 92.4 percent while male employment was at 89.0 percent. There was higher male employment (11.0 percent) than the female employment (7.6 percent) in urban areas.

Figure 6.7: Percentage of Employed population (12 Years and Older) by Sex and Rural/Urban, Eastern Province 2010
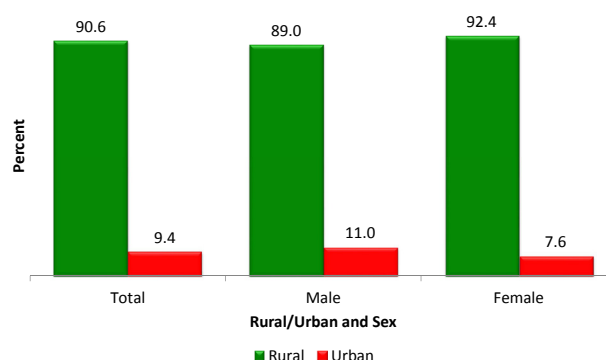
Sources: 2010 Census of Population and Housing

6.7 Unemployment

The unemployed population consists of all persons 12 years and older who were actively seeking work or were available for work during the period, seven days prior to the census night. Unemployment is a state of total lack of work for those persons within the employable age available for work but without work, looking for work but did not do anything i.e. zero hours of work in the 7 days prior to the census night.

Figure 6.8 shows unemployment rate for the population 12 years and older by district. Of the 533,661 persons in the labour force 46,738 (8.8 percent) were unemployed. Mambwe District had the highest unemployment rate at 12.8 percent while Chadiza District had the lowest unemployment rate at 3.4 percent.

Figure 6.8: Unemployment Rate for the Population 12 Years and Older by District, Eastern Province 2010
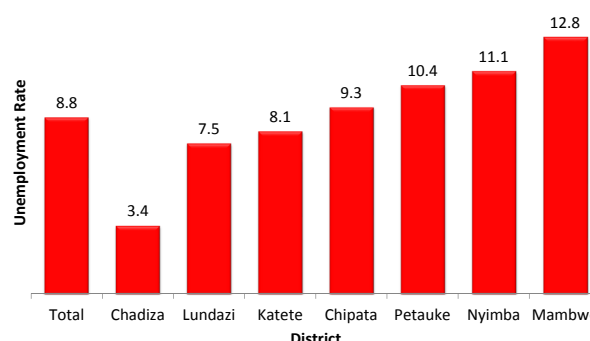
Sources: 2010 Census of Population and Housing

Figure 6.9 shows unemployment rate of the population (12 years and older) by age group. Unemployment rate was highest in the age group 15-19 years at 13.7 percent followed by the age group 20-24 years at 12.6 percent. The lowest unemployment rate was 4.6 percent in the age group 75 years and older.

Figure 6.9: Unemployment Rate of Population (12 Years and Older) by Age Group, Eastern Province 2010
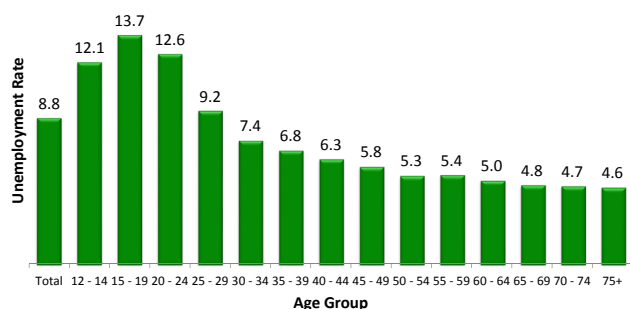
Source: 2010 Census of Population and Housing

Figure 6.10 shows unemployment rate of population (12 years and older) by sex and rural/urban. Unemployment rate was 10.0 percent for males and 7.2 percent for females. Unemployment was higher in urban areas (19.1 percent) than in rural areas (7.5 percent). In rural areas, males recorded a higher unemployment rate (8.9 percent) than females (5.9 percent). Males recorded lower unemployment rate (18.0 percent) than females (20.9 percent) in urban areas.

Figure 6.10: Unemployment Rate of Population (12 Years and Older) by Sex and Rural/Urban, Eastern Province 2010
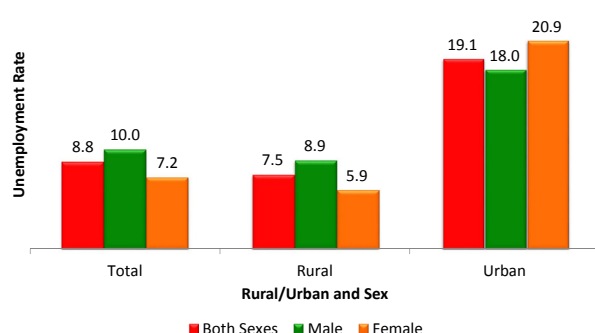
Source: 2010 Census of Population and Housing

6.7.1 Youth Unemployment

The national youth policy defines a youth as any person aged 15-35 years. In this chapter, this age group has been used to analyse youth unemployment. The youth population in the labour force was 302,490 representing 56.7 percent of the total labour force. Of these, 54.6 percent were male while 45.4 percent were female. In rural areas, 8.6 percent youths were unemployed and 24.1 percent of the youths in urban areas were unemployed.

The youth unemployment rate by age group is shown in figure 6.11. The highest youth unemployment rate was in the age group 15-19 years at 13.7 percent while the lowest rate was for the youth population in the age group 30-35 years at 7.3 percent.

Figure 6.11: Youth Unemployment Rate by Age Group, Eastern Province 2010
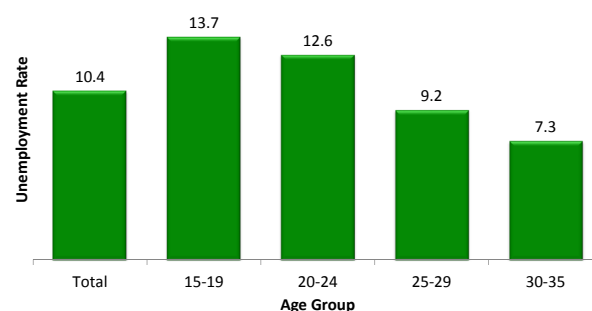
Source: 2010 Census of Population and Housing

Figure 6.12 shows the youth unemployment rate by age group and sex. Overall, unemployment rate for male youths was higher in all age groups. The total youth unemployment rate among males was 11.9 percent and 8.7 percent among females. The age group with the highest disparity between males and females was 20-24 years with 14.7 percent for males and 10.3 percent for females.

Figure 6.12: Youth Unemployment Rate by Age Group and Sex, Eastern Province 2010
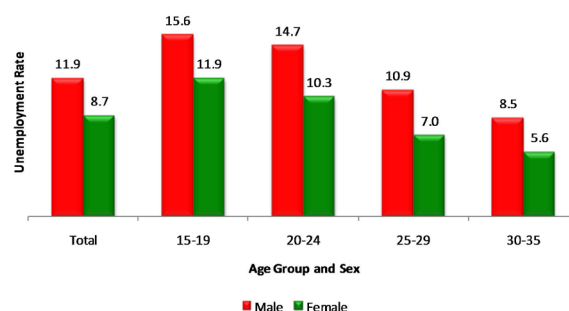
Source: 2010 Census of Population and Housing

Figure 6.13 shows the youth unemployment rate by rural/urban and district. The unemployment rate was higher in urban areas (24.1 percent) than in rural areas (8.6 percent). Mambwe District reported the highest youth unemployment rate of 14.7 percent and Chadiza recorded the lowest rate of 3.9 percent.

Figure 6.13: Youth Unemployment Rate by Rural/Urban and District, Eastern Province 2010
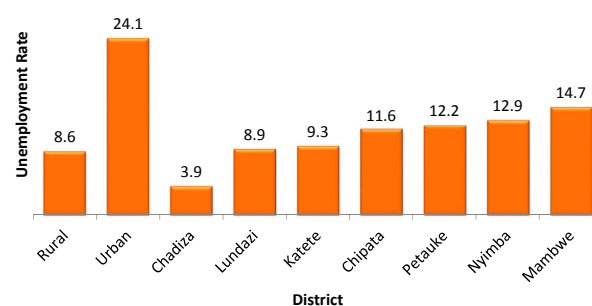
Source: 2010 Census of Population and Housing

1.2 Economically Inactive Population

The economically inactive population refers to persons who reported to be either full-time homemakers (e.g. full-time housewives), full-time students or not available for work for other reasons (e.g. beggars, too sick to work and so on).

Figure 6.14 shows the percentage distribution of the economically inactive population by reason of inactivity. The highest proportion for both the male and female economically inactive population was full time students at 75.9 and 43.8 percent, respectively.

Figure 6.14: Percentage Distribution of the Economically Inactive Population by Reason of Inactivity, Eastern Province 2010
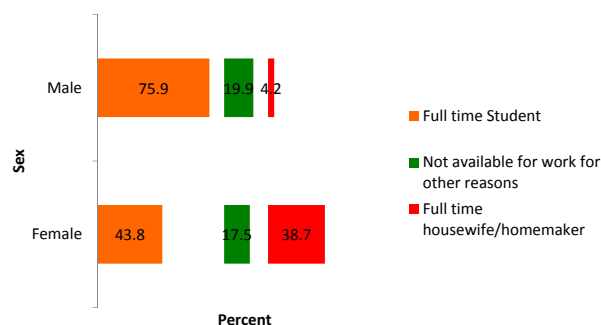
Source: 2010 Census of Population and Housing

Economic Dependency Ratios

Economic dependency measures the extent to which the economically inactive population is dependent on the economically active population. It is the ratio of the economically inactive persons to a 100 economically active persons.

Figure 6.15 shows the economic dependency ratio by sex and rural/urban. In Eastern Province, the economic dependency ratio was 70. This means that, there were 70 economically inactive people for every 100 economically active people. The economic dependence ratio was high among the females (97) than the males (48). The dependency ratio was higher in urban areas (118) than in rural areas (65).

Figure 6.15: Dependency Ratio by Sex and Rural/Urban, Eastern Province 2010
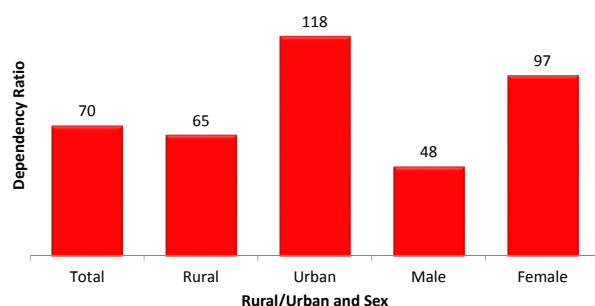
Source: 2010 Census of Population and Housing

6.10 Employment Status, Occupation and Industrial Classification

The employment status, occupational and industrial structure of a country's workforce reflects the level of its economic development and the efficiency with which it uses and allocates its resources. The analysis that follows is based on the usually working population, (i.e. those that were working in the 12 months prior to the census night) as this reflects the characteristics of the population for a longer period.

6.10.1 Employment Status

Employment status refers to whether a person 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, salaries, commissions, 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. An unpaid family worker is a person who works without pay in an economic enterprise operated by a related family member of the same household (including peasant farmers).

Figure 6.16 shows the percentage distribution of usually working population 12 years and older by employment status. The results show that the majority of the usually working population was self-employed at 51.3 percent, followed by unpaid family workers at 41.4 percent. The lowest proportion were employers at 0.4 percent.

Figure 6.16: Percentage Districbution of Ususally Working Population (12 Years and Older) by Employment Status, Eastern Province 2010
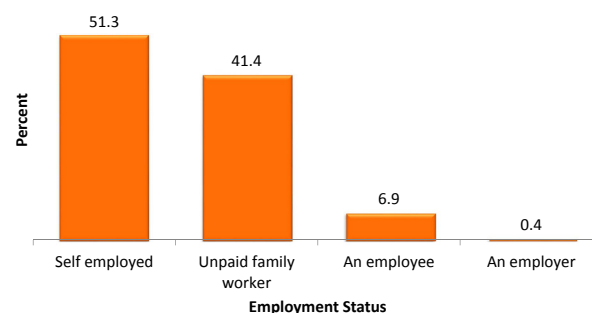
Source: 2010 Census of Population and Housing

The percentage distribution of the usually working population by employment status and sex is shown in Figure 6.17. The figure shows that 53.2 percent of the females were unpaid family workers and 43.0 percent were self employed. The highest percentage for males was self employed at 59.3 percent followed by unpaid family workers at 30.3 percent.

Figure 6.17: Percentage Distribution of Usually Working Population (12 Years and Older) by Employment Status and Sex, Eastern Province 2010
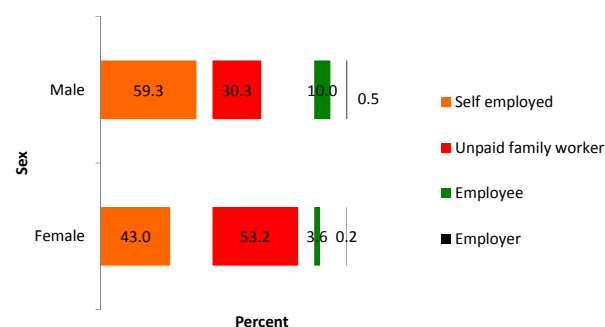
Source: 2010 Census of Population and Housing

6.10.2 *Working Population by Occupation*

Occupation is defined as the actual work or task that a person does in his/her main job at his/her place of work whether in paid employment, unpaid family work or self-employment.

Figure 6.18 shows the percentage distribution of the usually working population (12 years and older) by occupation. The main occupation among the usually working population was Skilled agricultural, forestry and fishing at 77.2 percent, followed by the Elementary occupations at 9.7 percent. Managers accounted for 0.2 percent of the total working age population.

Figure 6.18: Percentage Distribution of Ususally Working Population (12 Years and Older), Eastern Province 2010
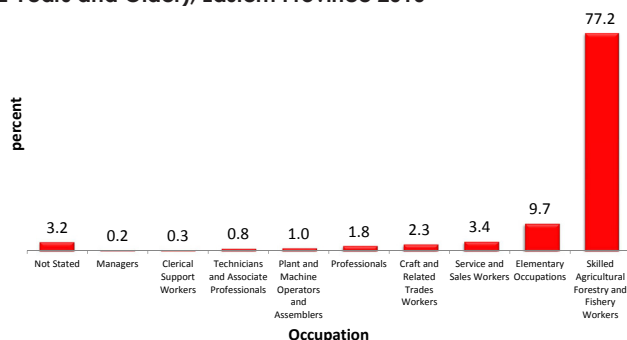
Source: 2010 Census of Population and Housing

Figure 6.19 shows the percentage distribution of the usually working population (12 years and older) by occupation and sex. The largest percent share of the working population for both males and females was Skilled agriculture, forestry and fishing, 73.4 and 81.2 percent, respectively.

Figure 6.19: Percentage Distribution of Usually Working Population (12 Years and Older) by Occupation and Sex, Eastern Province 2010
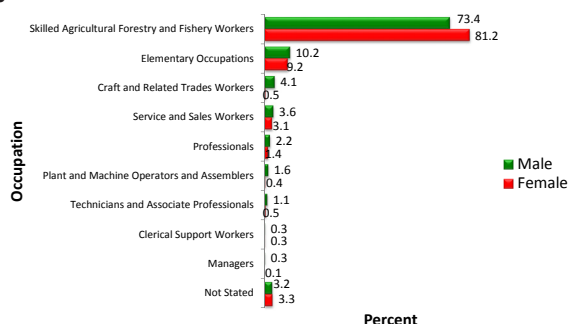
Source: 2010 Census of Population and Housing

Figures 6.20 and 6.21 show the percentage distribution of the usually working population (12 years and older) by occupation for rural and urban areas, respectively. The largest percent share of the usually working population in rural areas was in the Skilled agriculture, forestry and fishing occupation (82.6 percent), followed by Elementary occupations (9.6 percent).

Figure 6.20: Percentage Distribution of Usually Working Population (12 Years and Older) by Occupation, Eastern Province Rural 2010
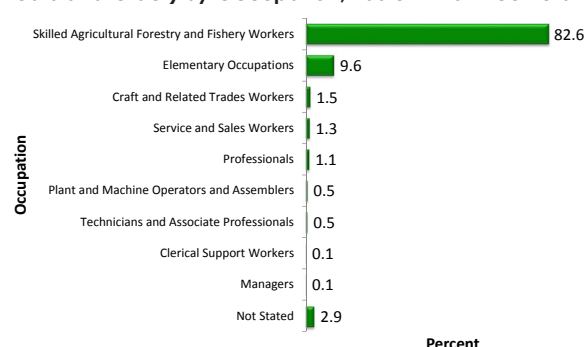
Source: 2010 Census of Population and Housing

In urban areas the largest percent share of the usually working population was in the Services and Sales ccupations (26.6 percent), followed by Skilled agriculture forestry and fishery workers (18.6 percent). The lowest percentage in urban areas was managers at 1.3 percent.

Figure 6.21: Percentage Distribution of Usually Working Population (12 Years and Older) by Occupation, Eastern Province Urban 2010

Source: 2010 Census of Population and Housing

6.10.3 *Working Population by Industry*

Industry is defined as the type of activity carried out by an enterprise where a person works. Industry categorisation used the International Standard Industrial Classification of All Economic Activity Revision IV (ISIC Rev. 4).

The percentage distribution of the usually working population by industry is shown in Figure 6.22. The Agriculture industry accounted for 85.1 percent of the usually working population. Other industries with a fair share of the usually working population were Community, social and personal services, and Wholesale and retail trade at 3.6 percent and 3.3 percent, respectively.

Figure 6.22: Percentage Distribution of Usually Working Population (12 Years and Older) by Industry Sex, Eastern Province 2010
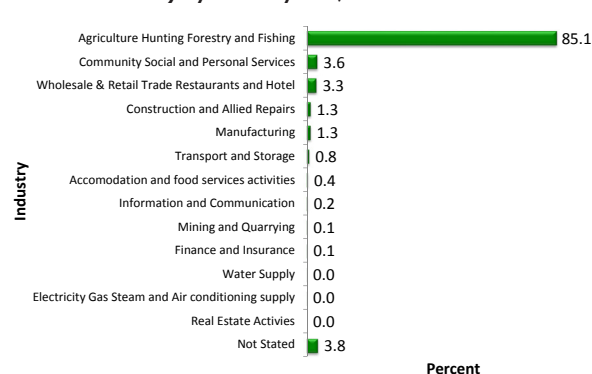
Source: 2010 Census of Population and Housing

Figures 6.23 and 6.24 show the percentage distribution of the usually working population (12 years and older) by industry in rural and urban areas, respectively. The Agriculture industry accounted for 91.1 percent of the usually working population in rural areas. This was followed by Community, social and personal services at 1.9 percent.

In urban areas, Wholesale and retail trade industry accounted for 26.1 percent of the usually working population followed by Community social and personal services (22.3 percent).

Figure 6.23: Percentage Distribution of Usually Working Population (12 Years and Older) by Industry, Eastern Province Rural 2010

Source: 2010 Census of Population and Housing

Figure 6.24: Percentage Distribution of Usually Working Population (12 Years and Older) by Industry, Eastern Province Urban 2010

Source: 2010 Census of Population and Housing

CHAPTER 7:
FERTILITY CHARACTERISTICS

7.0 Summary

The Total Fertility Rate (TFR) for Eastern Province was 6.6. The TFR in rural areas was 7.0 and 4.8 in urban areas. Chadiza District recorded the highest TFR at 7.5 and Chipata had the lowest at 6.1.

The Crude Birth Rate (CBR) in 2010 was 38 live births per 1000 population. Rural areas had a higher CBR than urban areas at 39 and 29 live births per 1000 population, respectively.

In 2010, the Child Woman Ratio (CWR) for Eastern Province was 819 children (0-4 years) per 1000 women. The CWR for rural areas was 857 compared with 602 in urban areas.

The General Fertility Rate was 169. Rural areas had a GFR of 179 and urban areas had GFR of 109.

The Completed Family Size (CFS) was 6.3 children. The CFS for rural and urban areas was 6.4 and 6.3, respectively.

The Gross Reproduction Rate (GRR) was 2.6. The GRR for rural and urban areas were 2.8 and 1.6, respectively.

The Net Reproduction Rate (NRR) was 1.8. The NRR for rural and urban areas were 1.9 and 1.2 respectively.

The Mean Age at Child Bearing (MACB) was 29.0 years.

Chapter 7:
Fertility Characteristics

7.1 Introduction

Fertility remains one of the most important aspects of census undertaking. The census provides a unique opportunity to collect reliable data on migration and fertility, which is very hard to do in a survey. It provides information to help understand and appreciate past, current and future trends of the population size, composition and growth. Fertility data leads planners, government, non-governmental organizations, among others, to evidence based socio-economic planning, monitoring and evaluation for various current and future aspects of population development. There were two fertility questions in the 2010 Census of Population and Housing. One asked all females 12 years and older if they ever had a live birth broken down by whether these children were still living or not. The second question asked females, 12 to 49 years old if they had any live births in the 12 months preceding the Census, broken down by whether these children were still alive or not.

7.2. Concepts and Definitions

- **Age Specific Fertility Rates (ASFR):** Is the annual number of births to women in a particular age group per 1000 women in that age group.

- **Child Woman Ratio (CWR):** The ratio of all children aged 0-4 years to women aged 15-49 years in the population.

- **Completed Family Size (Mean Parity):** Is the number of children ever born to women who have completed their reproduction i.e. those aged 50 and older.

- **Crude Birth Rate (CBR):** Is the annual number of live births per 1,000 population present at mid-year.

- **Fertility:** refers to the occurrence of live births among women in a population.

- **General Fertility Rate (GFR):** The number of live births occurring in a year per 1,000 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.

- **Mean Age at Child Bearing (MACB):** Is the mean age of mothers at the birth of their children if women were subject throughout their lives to the age-specific fertility rates observed in a given year. It is computed as the sum of age-specific fertility rates weighted by the midpoint of each group.

- **Mean Parity:** Refers to the completed family size (CFS)

- **Net Reproduction Rate (NRR):** refers to the average number of female births born to women aged 15-49 years that would survive to the end of their reproductive period after experiencing the prevailing fertility and mortality levels.

- **Total Fertility Rate (TFR):** Is the average number of live births a woman would have by age 50 if she were subject, throughout her life, to the age specific fertility rates observed in a given year. The calculation assumes there is no mortality and is expressed as number of children per woman.

7.3 Data Availability and Limitations

Fertility measurement in most developing countries, Zambia inclusive, is still a significant challenge. This is so because direct methods of measuring fertility, such as the vital registration system, are still underdeveloped. As a result, the 2010 Census applied indirect estimation methods to measure fertility. The 2010 Census followed international standards in asking questions on children ever born and births occurring in the 12 months prior to census night. The question on 'children ever born' provides a total record of women's child bearing experience from the beginning of their reproductive period to the current age (Manual X 1983 pp 31). The average number of children ever born, obtained by dividing the number of reported children by the number of women is a measure of the fertility experience of a cohort of women (Ibid 1983 pp33). The question on Children Ever Born (CEB) provides estimates for lifetime fertility and completed mean parity or family size.

Data from the question on births occurring 12 months prior to the census was used to estimate Age Specific Fertility Rate (ASFR), Total Fertility Rate (TFR), Gross Reproduction Rate (GRR) and Net Reproduction Rate (NRR) for national, provincial and district levels.

Omission of children by women responding to the census question on children ever born and births in the last twelve months may introduce errors in the estimation of fertility, especially those that died or are living elsewhere. In view of this weakness, the 2010 Census broke down this question to include other questions such as 'how many children are living with you?', 'how many are living elsewhere?' and 'how many are dead?' This form of investigation has the advantage of providing more accurate data for making appropriate estimates (Ibid 1983 pp27).

7.4 Evaluation and Justification for Adjustments

The 2010 Census data on fertility was evaluated for completeness of reporting of children ever born and births in the last 12 months using the Coale-Demeny and Brass Empirical formula technique. Using data for CEB, the Brass empirical formula yielded this result: $(P2)(P4/P3)4 = (1.342) (3.859/2.623)4 = 7.897$. Observed average parity for women 45-49 years for the 2010 Census was 6.018. Comparing the Brass empirical formula result with observed parity for women 45-49 years, it is clear that there was under reporting of children. This therefore called for the adjustment of reported fertility in order to come up with adjusted Age Specific Fertility Rates (ASFRs) and Total Fertility Rates (TFRs).

The 2010 Census therefore applied the P/F Ratio Technique, which uses children ever born data to adjust fertility data for underreporting in number of births that occurred in the last 12 months prior to the census (Arriaga et al 2005). The P/F Ratio Technique is based on cumulating fertility (represented by letter 'F') up to ages 20, 25, …50 (49) which are later adjusted and compared with CEB, represented by letter 'P'. The general assumption of this technique is that the number of children ever born is more accurately reported than births in the last year. In the same way, the P/F Ratio Technique also assumes that the completeness of data is the same for all age groups of women; that the reporting of the average number of children ever born per woman is complete at least up to ages 30 or 35 years; that there is no age misreporting of women of childbearing age; and that the pattern and level of fertility have not changed in the 10-15 years prior to the census (Coale and Trussel, 1974).

7.5 Fertility Indicators

7.5.1 Adjusted Age Specific Fertility Rates

Figure 7.1 shows the Adjusted Age Specific Fertility Rate. The age group with the highest ASFR in 2010 was 20-24 years. This was followed by the age group 25-29 years. (See details in appendix Table E1).

Figure 7.1: Adjusted Age Specific Fertility Rate by Age Group, Eastern Province 2010
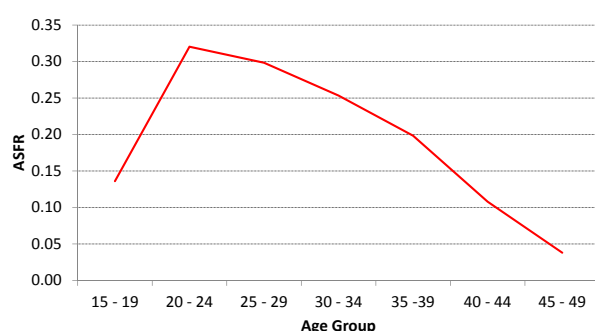
Source: 2010 Census of Population and Housing

Figure 7.2 shows the Adjusted Age Specific Fertility Rate by rural/urban. The peak for child bearing in rural areas was in the 20-24, while in urban areas the ASFR peak was in the age group 25 – 29.

Figure 7.2: Adjusted Age Specific Fertility Rates by Age Group and Rural/Urban, Eastern Province 2010
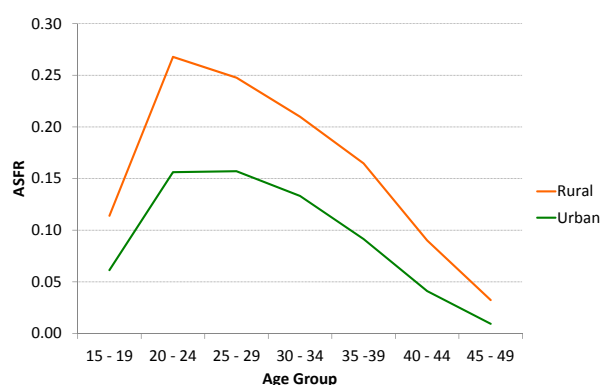
Source: 2010 Census of Population and Housing

7.5.2 Total Fertility Rate (TFR)

Figure 7.3 shows the Total Fertility Rate (TFR) by rural/urban. In 2010 the TFR for Eastern Province was 6.6. The rural areas had a higher TFR compared to the urban areas at 7.0 and 4.8 respectively.

Figure 7.3: Total Fertility Rate by Rural/Urban, Eastern Province 2010
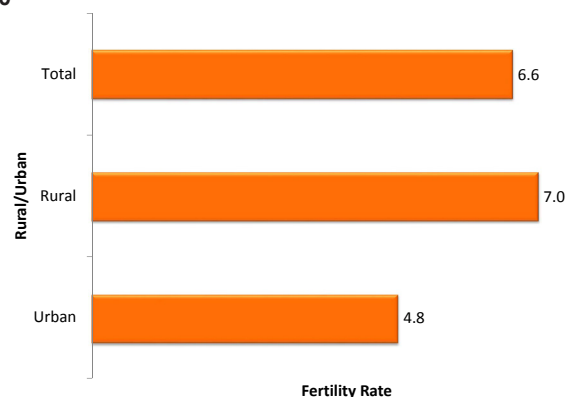
Source: 2010 Census of Population and Housing

7.5.2.1 Total Fertility Rate by District

Figure 7.4 shows total fertility rate by district. Chadiza District had the highest TFR at 7.5 while Chipata District had the lowest TFR at 6.1.

Figure 7.4: Total Fertility Rate by District, Eastern Province 2010
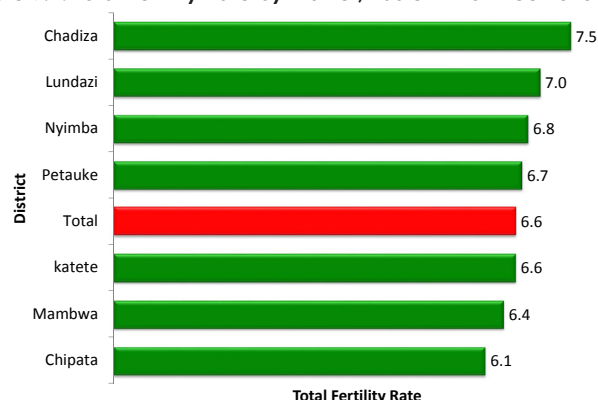
Sources: 2010 Census of Population and Housing

7.5.3 Mean Age at Child Bearing (MACB)

Figure 7.5 shows the Mean Age at Child Bearing (MACB). In 2010, the MACB for Eastern Province was 29.0 years. The MACB in rural and urban areas were 29.0 and 28.5 years, respectively.

Figure 7.5 Mean Age at Child Bearing, Eastern Province 2010
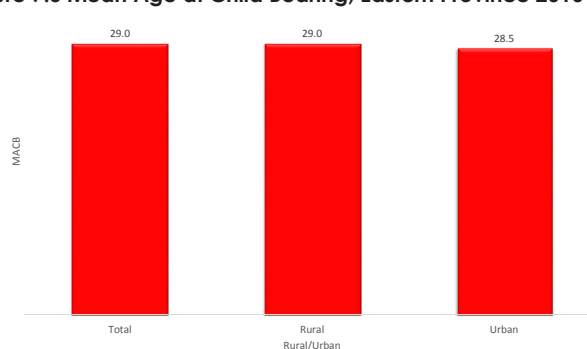
Source: 2010 Census of Population and Housing

7.5.4 Gross Reproduction Rates (GRR)

Figure 7.6 shows the Gross Reproduction Rate by rural/urban, in 2010. The GRR for Eastern Province was 2.6. The GRR was higher in rural areas at 2.8 compared to 1.6 in urban areas.

Figure 7.6: Gross Reproduction Rate by Rural/Urban, Eastern Province 2010
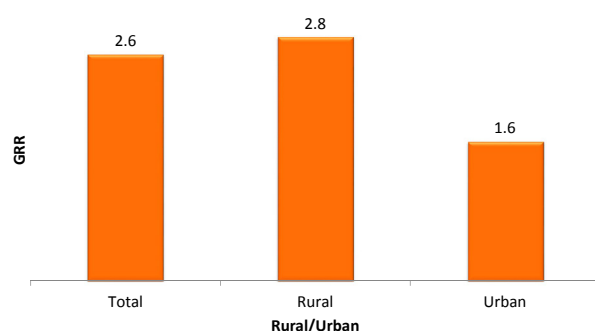
Source: 2010 Census of Population and Housing

7.5.6 Other Fertility Indicators

Several other indicators of fertility can also be measured from data on births and population. These include the Crude Birth Rate (CBR), Child-Woman Ratio (CWR), Completed Family Size (CFS) and the General Fertility Rate (GFR).

7.5.5 Net Reproduction Rates (NRR)

Figure 7.7 shows the Net Reproduction Rate by rural/urban. The NRR for Eastern province in 2010 was 1.8. The NRR was higher in rural areas than urban areas at 1.9 and 1.2, respectively.

Figure 7.7 Net Reproduction Rate by Rural/Urban, Eastern Province 2010
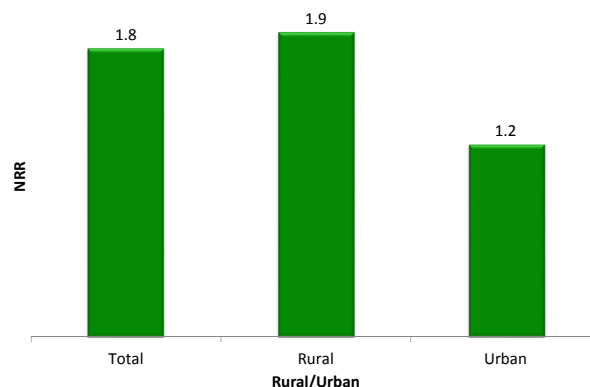
Source: 2010 Census of Population and Housing

Table 7.1 shows a summary of fertility indicators by rural/urban and district. In 2010, the CBR was at 38 births per 1000 mid-year population, while the CWR was at 819 per 1000 women aged 15-49 years. Other indicators such as the GFR and CFS were at 169 per 1,000 women aged 15-49 years and 6.3, respectively.

Table 7.1: Fertility Indicators By Rural/Urban and District Eastern Province 2010

Census year Rural/Urban and province	Total Fertility Rate (TFR)	Completed Family Size (CFS)	Crude Birth Rate (CBR)	Child Woman Ratio (CWR)	General Fertility Rate (GFR)	Gross Reproduction Rate (GRR)	Net Reproduction Rate (NRR)
Eastern Province	**6.6**	**6.3**	**38**	**819**	**169**	**2.6**	**1.8**
Rural	6.9	6.4	39	857	179	2.8	1.9
Urban	4.8	6.3	29	602	109	1.6	1.2
Fertility indicators - Districts							
Chadiza	7.5	6.9	41	883	188	2.9	2.2
Chipata	6.1	6.5	35	768	151	2.3	1.6
Katete	6.6	6.1	38	848	170	2.6	1.9
Lundazi	7.0	6.3	41	846	186	2.9	2.0
Mambwe	6.4	6.3	34	780	151	2.3	1.7
Nyimba	6.8	6.5	37	828	167	2.6	1.6
Petauke	6.7	6.1	39	834	176	2.7	1.8

Source: 2010 Census of Population and Housing

7.6 Fertility Differentials and Selected Background Characteristics of Women Aged 15-49 years

The section below presents results on the fertility levels by various background characteristics of women. These characteristics include religious affiliation, education level and economic characteristics.

7.6.1: Total Fertility Rate by Province and Religious Affiliation of Women Aged 15–49 Years

Table 7.2 shows fertility levels by religious affiliation of women. Total Fertility Rate was highest among women who were Hindus at 11.8, followed by Muslim women at 7.3. Catholic women had the least total fertility rate at 6.4.

Table 7.2: Total Fertility Rates by Religious Affiliation of Women Aged 15-49 years and District, Eastern Province 2010

District	All Women	Religious Affiliation of Women (15-49 years)					
		Catholics	Protestants	Muslims	Hindus	Other	None
Eastern Province	**6.6**	**6.4**	**6.7**	**7.3**	**11.8**	**6.8**	**7.1**
Chadiza	7.5	7.2	7.7	11.7		7.5	7.9
Chipata	6.1	6.0	6.2	5.3	2.5	6.3	6.8
Katete	6.6	6.3	6.6	7.8	-	7.1	6.8
Lundazi	7.0	6.8	7.0	7.8	-	7.2	7.8
Mambwe	6.4	6.7	6.2	2.0	-	6.3	5.7
Nyimba	6.8	6.5	6.8	8.4	-	5.8	8.1
Petauke	6.7	6.4	7.0	8.4	-	6.8	7.6

Source: 2010 Census of Population and Housing

7.6.2 Total Fertility Rate by District and Education attainment of Women Aged 15–49 years

Table 7.3 shows the total fertility rate for women by their education attainment and district. Women with primary education had the highest TFR at 7.2, followed by women with no education at 6.9. Women with tertiary education had the lowest TFR at 2.9.

District	All Women	Education Level Attainment (15-49 years)			
		No education	Primary	Secondary	Tertiary
Eastern Province	**6.6**	**6.9**	**7.2**	**4.9**	**2.9**
Chadiza	7.5	7.8	7.7	5.5	3.7
Chipata	6.1	6.5	7.0	4.6	2.9
Katete	6.6	6.7	7.0	5.0	2.5
Lundazi	7.0	7.1	7.5	5.6	3.4
Mambwe	6.4	6.9	7.2	4.2	2.7
Nyimba	6.8	7.1	7.2	5.1	3.2
Petauke	6.7	7.0	7.1	4.9	3.0

Table 7.3: Total Fertility Rate by Education Attainment of Women Aged 15-49 years and District, Eastern Province 2010

Source: 2010 Census of Population and Housing

7.6.3 Total Fertility Rate by Employment Status of Women Aged 15–49 Years

Figure 7.8 shows the total fertility rate by employment status of women aged 15-49 years and district. The total fertility rate among the unemployed women (6.7) was higher than the employed women (6.2). The same pattern was observed for all the districts.

The figure also shows that the economically active women in Chadiza District had the highest TFR at 7.0 while employed women in Chipata District had the lowest TFR at 5.7.

Figure 7.8: Total Fertility Rate by Employment Status of Women (Aged 15-49 Years) and District, Eastern Province 2010
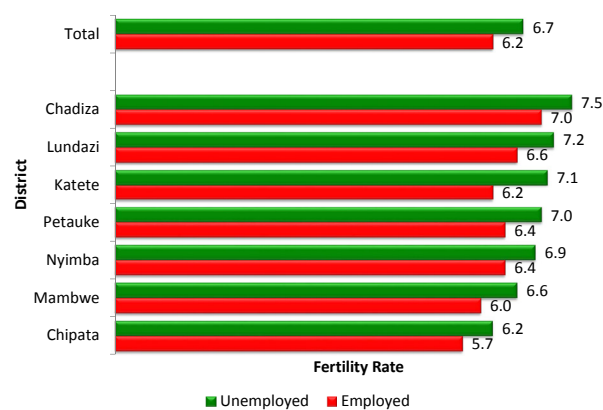
Source: 2010 Census of Population and Housing

CHAPTER 8
CHILDHOOD MORTALITY CHARACTERISTICS

8.0 Summary

The infant mortality rate (IMR) was 97.0 deaths per 1,000 live births in 2010.

In 2010, the child mortality rate (CMR) was 99.3 deaths per 1000 live births.

The under five mortality rate (U5MR) was 196.3 deaths per 1000 live births.

Chapter 8
Childhood Mortality Characteristics

8.1 Introduction

Child mortality is a key indicator not only of child health and nutrition but also of the implementation of child survival interventions and, more broadly, of social and economic development (UNICEF, 2011). Reducing the current levels of child mortality is one of the eight millennium development goals (MDG4). Though it is a global goal, it is also a national goal set in Zambia's national health strategic plans over time. In the past decade, the government through the Ministry of Health (MOH) has scaled up child health interventions such as the child health week programme aimed at expanding access to immunization and other child health interventions like vitamin A supplementation to the hard to reach children in communities.

Among the majors causes of child mortality are infectious diseases like pneumonia, diarrhea, malaria and measles. These diseases are common and affect most children in some provinces of Zambia. HIV/AIDS and its related complications, coupled with high levels of malnutrition also contribute to the high disease burden among children under the age of five in some provinces of Zambia.

8.2 Concepts and definitions

* **Mortality:** refers to the occurrence of deaths in a population.

* **Age Specific Death Rate (ASDR):** refers to mortality rates from deaths occurring to a specified population age group or sex per 1,000 population in that age group or sex during a given time period.

* **Infant Mortality Rate (IMR):** is usually denoted by the life table notation (1q0) and refers to the number of infant (children below the age of one) deaths per 1,000 live births occurring during a specified reference period, in this case taken to be one year prior to the census.

* **Child Mortality Rate (CMR):** usually denoted by the life table notation (4q1) refers to the number of child (children aged between exact age one and four) deaths per 1,000 live births occurring during a specified reference period, in this case taken to be one year prior to the census.

* **Under-five mortality rate (UMR):** usually denoted by the life table notation (5q0) refers to the number of deaths among children aged below the age of five years per 1,000 live births occurring during a specified reference period, in this case taken to be one year prior to the census. UMR therefore, constitutes both the infant and child mortality.

8.3 Collection of Childhood Mortality data in the 2010 Census

Information collected in population and housing censuses on the total number of children ever born and children surviving are used in the estimation of childhood mortality (UN, 1983). Two questions are usually included in a census on children ever born (CEB) and births in the last 12 months prior to the census. This information is also used in the estimation of fertility.

All women aged 12 years and older in all households were asked whether they had a live birth, including those who died after birth. Follow up questions were asked to find out how many of the children born alive were living in the household by sex, how many were living elsewhere by sex and how many were dead. This information was also collected from all women aged 12-49 years for the 12 months period prior to the census.

8.4 Childhood Mortality data evaluation and estimation procedure

It is well known that the proportions of children ever born who have died are indicators of child mortality and can yeild robust estimates of childhood mortality (UN, 1983). However, it is equally well known that children ever born data sometimes suffers from under reporting of dead children, especially those that die early in infancy. Infants that die within 24 hours after birth are sometimes classified not as deaths but as "stillbirths" (Shryock, 1980).

8.4.1 Crude Death Rate

Child mortality data collected using the question on household deaths in the last twelve months was evaluated using demographic methods. Crude mortality rates were computed using observed unadjusted data. Evaluation was made of the observed crude measures. The observed crude death rate for the population aged 0-4 years are shown in Figures 8.1, 8.2 and Table 8.1.

Figure 8.1 shows that childhood mortality was higher among infants with 104.0 deaths per 1000 population aged less than one year. The observed CDR declined with increase in age, reaching 14.5 deaths per 1000 population at age four.

Figure 8.1: Observed Crude Death Rate per 1000 Population Aged 0-4 Years by Single Age, Eastern Province 2010
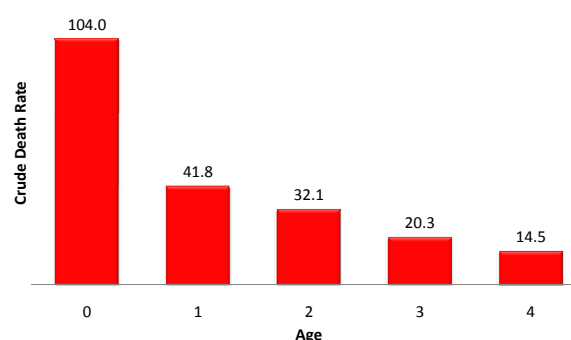
Source: 2010 Census of Population and Housing

Figure 8.2 shows observed crude death rate by rural/urban. The observed crude death rate was higher in rural areas at 44.1 deaths per 1,000 population aged 0-4 years compared to 28.3 deaths per 1,000 population in urban areas.

Figure 8.2: Observed Crude Death Rate per 1000 Population Aged 0-4 Years by Rural/Urban, Eastern Province 2010
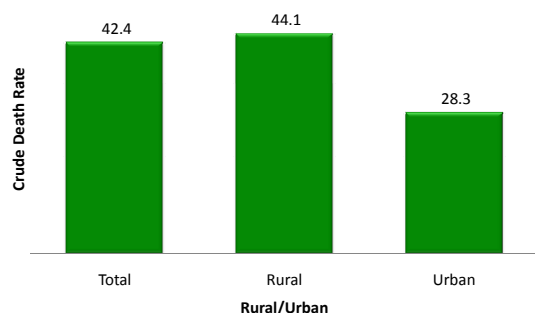
Source: 2010 Census of Population and Housing

Table 8.1 shows crude death rate by single ages 0-4 years, sex and rural/urban. The analysis of crude death rate presented in table 8.1 provides proxy indications of the expected levels of infant, child and under five mortality rates. The table shows that infant mortality rate was 104, child mortality rate was 108 and under five mortality rate was 212.

The table further shows that, the infant mortality rate was 107 for rural areas and 76 for urban areas. The child mortality rate was 113 for rural areas and 68 for urban areas. Under five mortality rate was 144 for urban areas and 220 for rural areas.

Table 8.1: Observed Crude Death Rates (CDR) by Sex and Single Age for Population Aged 0-4 Years, Rural/Urban, Eastern Province 2010

Age	Eastern Province			Rural			Urban		
	Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females
0	0.104	0.113	0.095	0.107	0.117	0.097	0.076	0.082	0.071
1	0.042	0.045	0.039	0.043	0.046	0.040	0.032	0.034	0.031
2	0.032	0.033	0.031	0.034	0.035	0.033	0.016	0.017	0.016
3	0.020	0.020	0.020	0.021	0.021	0.021	0.011	0.014	0.009
4	0.014	0.015	0.014	0.015	0.016	0.014	0.009	0.009	0.010

Source: 2010 Census of Population and Housing

Direct estimation procedures were used to generate childhood mortality indicators. These indicators were extracted from the empirical life tables generated using information on household deaths in the period 12 months prior to the census. The US Census Bureau spreadsheet LTPOPDTH was used to generate the life tables.

8.5 Infant Mortality Rate

Table 8.2 shows infant mortality rate (IMR) by sex and rural/urban for Eastern Province for the period 12 months prior to the census. In 2010, the IMR was 97.0 deaths per 1000 live births. In rural areas the IMR was 99.6 deaths per 1000 live births and 72.6 deaths per 1000 live births in urban areas. Estimated IMR was higher for male children than female children in both urban and rural areas.

Table 8.2: Infant Mortality Rate (IMR) by Sex and Rural/Urban, Eastern Province 2010

Rural/Urban	Both Sexes	Males	Females
Eastern Province	**97.0**	**105.1**	**88.9**
Rural	99.6	108.0	91.2
Urban	72.6	77.6	67.6

Source: 2010 Census of Population and Housing

Infant mortality rate (IMR) by district is presented in Figure 8.3. Lundazi District had the highest Infant Mortality Rate at 125.5 infant deaths per 1000 live births while the lowest was Chadiza District at 81.2 infant deaths per 1,000 live births.

Figure 8.3: Infant Mortality Rate (IMR) by District, Eastern Province 2010
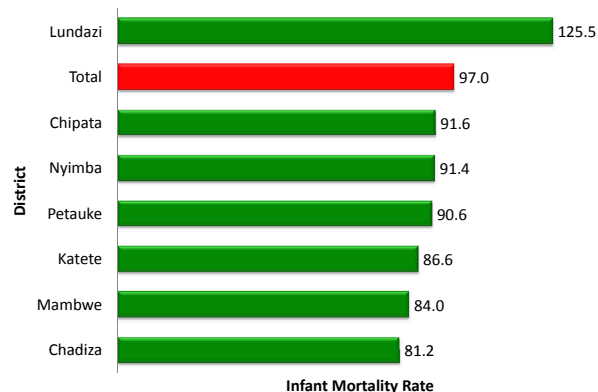
Source: 2010 Census of Population and Housing

8.6 Child Mortality Rate

Table 8.3 shows child mortality rate (CMR) by sex and rural/urban in 2010. The CMR for Eastern Province was 99.3 deaths per 1,000 live births. In rural areas, the CMR was 103.3 deaths per 1,000 live births and 66.1 deaths per 1000 live births in urban areas. The CMR was higher for male than female children in rural areas and it was the same in urban areas.

Table 8.3: Child Mortality Rate by Sex and Rural/Urban, Eastern Province 2010

Rural/Urban	Both Sexes	Males	Females
Eastern Province	**99.3**	**103.5**	**95.2**
Rural	103.3	107.6	99.0
Urban	66.1	69.3	69.3

Source: 2010 Census of Population and Housing

Figure 8.4 shows the child mortality rate (CMR) by district. Nyimba District had the highest child mortality rate at 143.1 deaths per 1000 live births while Chadiza District had the lowest child mortality rate at 79.4 deaths per 1000 live births.

Figure 8.7: Child Mortality Rate (CMR) by District, Eastern Province 2010
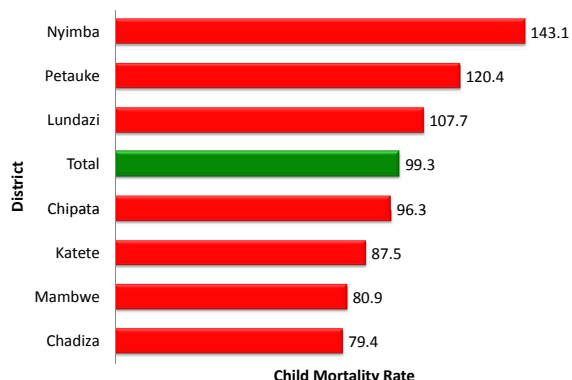
Source: 2010 Census of Population and Housing

8.7 Under-Five Mortality Rate (U5MR)

Table 8.4 shows under-five mortality rate (U5MR) by sex and rural/urban. The U5MR was 196.3 deaths per 1,000 live births. The U5MR in rural areas was 202.9 deaths per 1,000 live births and 138.7 deaths per 1,000 live births in urban areas.

As observed in infant and child mortality, under-five mortality rate was higher for male children than female children in both rural and urban areas.

Table 8.4: Under-Five Mortality Rate (U5MR) by Sex and Rural/Urban, Eastern Province 2010

Rural/Urban and Province	Both Sexes	Males	Females
Eastern Province	**196.3**	**208.6**	**184.0**
Rural	202.9	215.6	190.2
Urban	138.7	146.9	136.9
Source: 2010 Census of Population and Housing			

Figure 8.5 shows under five mortality rate by district. Under five Mortality Rate was lowest in Chadiza District at 160.7 deaths per 1,000 live births while Nyimba District had the highest at 234.5 deaths per 1,000 live births.

Figure 8.5: Under Five Mortality Rate (U5MR) by District, Eastern Province 2010

Source: 2010 Census of Population and Housing

CHAPTER 9
GENERAL AND MATERNAL MORTALITY CHARACTERISTICS

9.0 Summary

The Crude Death Rate (CDR) in 2010 was 15.6 deaths per 1,000 population; The CDR for males was 16.7 deaths per 1,000 population and 14.5 deaths per 1,000 population for females. Rural areas had a higher CDR at 16.0 deaths compared to 12.7 deaths per 1,000 population in urban areas.

The age groups with the highest percentage of reported adult deaths were the age groups 30-34 for females and 35-39 for males. For ages below 35 years, the percentages of the reported adult deaths were higher among females than males.

The life expectancy at birth was 49.1 years. The life expectancy in rural and urban areas were 47.8 and 48.7 years, respectively. Females had a higher life expectancy at birth of 49.9 years compared to 45.7 years for males.

The most common cause of death was illness/disease accounting for 76.3 percent of all reported causes.

9.1 Introduction

Mortality data are useful in assessing the performance of national health programs, including interventions aimed at disease control and prevention. Mortality statistics provide a foundation on which health policy is formulated.

Mortality measure, though a challenge in the absence of complete vital registration is still critical to national planning. Census and surveys still form a major source of mortality information for Zambia. However, the costs and periodicity of censuses and surveys affect the timeliness and accuracy.

A national population census provides a unique opportunity to collect mortality data for district and sub-district level estimates. This is the core advantage of collecting mortality data in a census over other sources. The district level estimates of mortality form critical input into population projections and components of district planning.

9.2 Concepts and definitions

The following concepts and definitions have been used in analyzing General Mortality in this chapter;

- **Death (Mortality):** The complete disappearance of any signs of life at any time after a live birth has occurred.

- **Crude Death Rate (CDR):** The ratio of the number of deaths occurring in a year to the mid-year population expressed per 1,000 population.

- **Age Specific Death Rates (ASDR):** Mortality rates from deaths occurring to a specified population age group or sex per 1,000 population in that age group or sex during a given time period

- **Life Expectancy at Birth (e0):** Average number of years expected to be lived by a birth cohort, based on prevailing age specific mortality rates

9.3 Collection of Mortality Data in the 2010 Census

Information on children ever born, children surviving and children dead and direct questions on deaths in the 12 months prior to the census were asked to all households in the census. All households in the census were asked whether there was any member who had died since October 2009, the sex of the deceased, age and the cause of death.

9.4 General Mortality

9.4.1 Crude Death Rate (CDR)

Crude Death Rate (CDR) gives a general indication of the levels of mortality in a population. Crude Death Rate is calculated for 12 month periods such as calendar years or fiscal years so as to eliminate the effect of seasonal or monthly variations on the comparability of the rates (Shryock et al., 1980).

Figure 9.1 shows the observed crude death rate (CDR) for Eastern Province by sex and rural/urban. The Crude Death Rate was 15.6 deaths per 1,000 population. The CDR for males was 16.7 deaths per 1,000 population and 14.5 deaths per 1,000 population for females. The CDR was higher in rural areas than urban areas at 16.0 deaths per 1,000 population and 12.7 deaths per 1,000 population, respectively.

Figure 9.1: Observed Crude Death Rate (CDR) per 1,000 Population by Sex and Rural/Urban, Eastern Province 2010
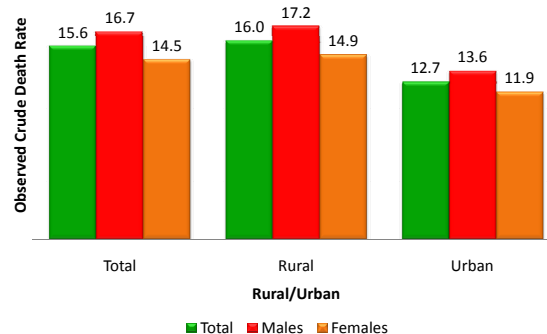
Source: 2010 Census of Population and Housing

Figure 9.2 shows Crude Death Rate by district. The figure shows that Nyimba District had the highest CDR at 21.4 deaths per 1,000 population while Chadiza District had the lowest CDR at 11.8 deaths per 1,000 population.

Figure 9.2: Crude Death Rate (CDR) by District, Eastern Province 2010
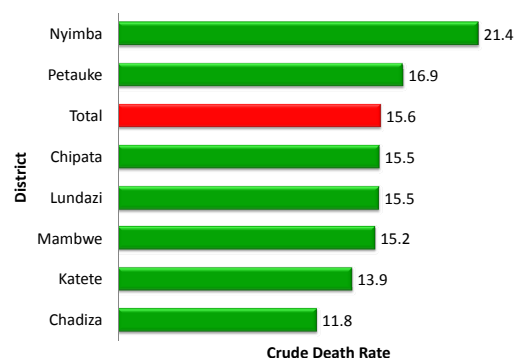
Source: 2010 Census of Population and Housing

Table 9.1 shows the observed crude death rate by sex and district. The CDR was highest in Nyimba District for both males and females at 22.5 and 20.3 deaths per 1,000 population, respectively. The lowest CDR was recorded in Chadiza District at 12.6 deaths per 1,000 population for males and 11.0 deaths per 1,000 population for females.

Table 9.1: Observed Crude Death Rate by Sex and District, Eastern Province 2010

District	Male	Female
Chadiza	12.6	11.0
Chipata	16.3	14.7
Katete	15.2	12.6
Lundazi	17.3	13.7
Mambwe	16.8	13.7
Nyimba	22.5	20.3
Petauke	17.7	16.2
Source: 2010 Census of Population and Housing		

9.4.2 Age-Sex Specific Death Rate

Age and sex form two important demographic variables in the analysis and understanding of mortality levels and patterns. Certain diseases or mortality risks tend to be age or sex selective. Age-sex specific death rate refers to mortality rate from deaths occurring to a specified population age group or sex per 1,000 population in that age group or sex during a given time period.

Figure 9.3 shows the observed age-sex specific death rate for Eastern Province in 2010. The figure shows a u-shaped characteristic with high mortality at the very young and oldest ages. The high death rate in the age groups less than 1 and 1 to 4 years explains the high child mortality in Eastern Province. Further, the figure shows increasing mortality in both males and females after 15 years, levelling off in the mid-thirties for both males and females.

Figure 9.3: Observed Age-Sex Specific Death Rate by Age Group and Sex, Eastern Province 2010
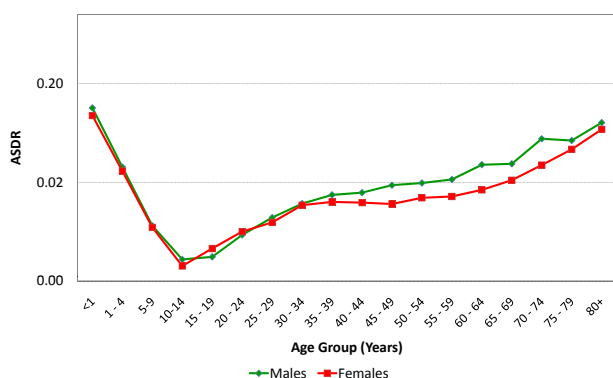
Source: 2010 Census of Population and Housing

Eastern Province follows the typical u-shaped age specific death rate pattern, starting off high in early childhood, declining to the lowest at the age group 10-14 years and increasing with age. There is a "bump" set off by rising mortality after age 15. The figure also shows higher mortality among males than females, especially after age 30.

Figures 9.4 and 9.5 show age-sex specific death rate for rural and urban areas, respectively. In both cases, the mortality pattern is characterized by high mortality in young ages that decline with increasing age until the age of 15 years. After age 15, mortality steadily increases before levelling off in the thirties for females and in the late forties for males and then it increases with age.

Generally, in both rural and urban areas, mortality was higher among males than females, especially over the age of 30 years.

Figure 9.4: Observed Age-Sex Specific Death Rate by Age Group and Sex, Eastern Province Rural
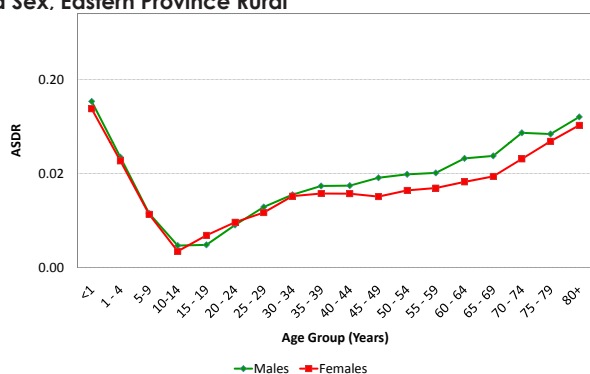
Source: 2010 Census of Population and Housing

Figure 9.5: Observed Age-Sex Specific Death Rate by Age Group and Sex, Eastern Province Urban 2010
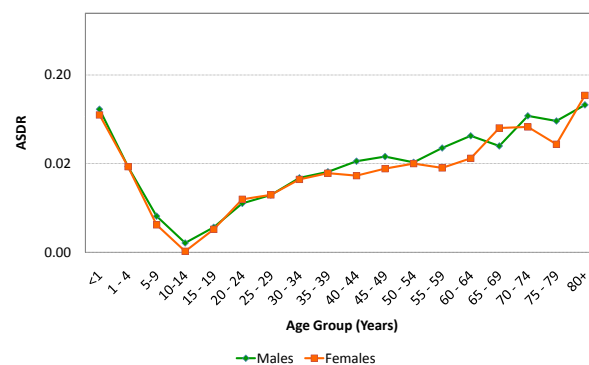
Source: 2010 Census of Population and Housing

Figure 9.6 shows Observed Age-Specific Death Rate by rural/urban for Eastern Province. The figure shows that below 15 years, the mortality is higher in rural areas than urban areas and then after 20 years, mortality is higher in urban areas than in rural areas.

Figure 9.6: Observed Age Specific Death Rate by Age Group and Rural/Urban, Eastern Province 2010
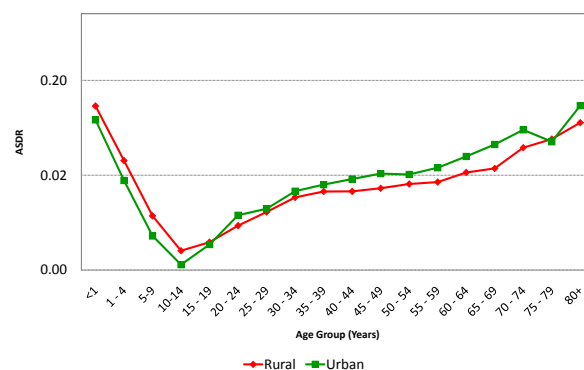
Source: 2010 Census of Population and Housing

In all societies, mortality levels are influenced more by the age structure. However, some causes of death tend to be sex selective. Therefore, mortality tends to vary by age and sex.

Figure 9.7 shows the percentage of reported adult deaths by age group and sex for Eastern Province. The age groups with the highest percentage of reported adult deaths were the age groups 30-34 for females and 35-39 for males. The percentage of reported adult deaths was higher for females than males in the age groups 15-34, while the percentage of reported adult deaths were higher for males than females among the population aged 35 years and older.

Figure 9.7: Percent Reported Adult Deaths by Age Group and Sex, Eastern Province 2010
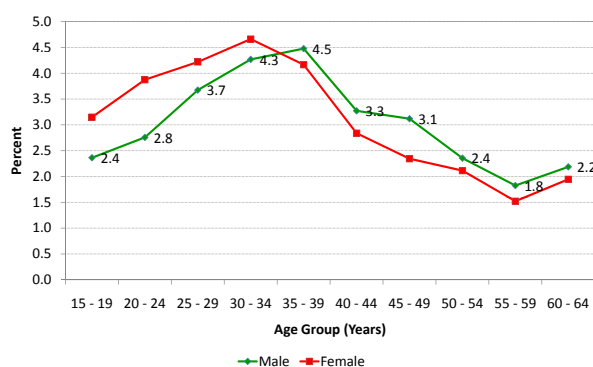
Source: 2010 Census of Population and Housing

9.5 Life Expectancy

Life expectancy refers to the average numbers of years expected to be lived from a particular age of reference e.g. from age 0 (life expectancy at birth), age 5, age 15, age 45 or age 65. It is computed using prevailing age specific mortality rates and implied life table probabilities. Hence, Life expectancy is a useful summary measure because it takes into account the mortality situation at each age yet expresses the result in a single figure (US Census Bureau, 1994).

The most commonly used measure of life expectancy is the life expectancy at birth (e0), which refers to the average number of years expected to be lived by a birth cohort, based on prevailing age specific mortality rates.

Unadjusted household deaths data were used to generate abridged life tables for Eastern Province by sex and rural/urban. The 2000 life expectancy estimates were indirectly estimated based on the North Model, while the 2010 estimates are based on empirical data on household deaths collected during the 2010 Census. The US Bureau spreadsheet LTPOPDTH was used to generate life tables from which the estimates of life expectancy at birth had been extracted. Table 9.2 shows life expectancy at birth by sex and rural/urban for Eastern Province in 2010.

Table 9.2: Life Expectancy at Birth by Sex and Rural/Urban, Eastern Province 2010

Eastern Province Rural/Urban	Both Sexes	Males	Females
Eastern Province	49.1	45.7	49.9
Rural	47.8	46.9	51.1
Urban	48.7	48.7	51.5
Source: 2010 Census of Population and Housing			

The life expectancy at birth was 49.1 years. The life expectancy at birth for rural areas (47.8) was lower than urban areas (48.7). In both rural and urban areas, females had higher life expectancy at birth than males.

For each district, life expectancy at birth was generated from abridged life tables based on reported household deaths 12 months prior to the census. Figure 9.8 shows life expectancy at birth by district. Chadiza District had the highest life expectancy at birth at 55.7 years and Nyimba District had the lowest life expectancy at birth of 41.1 years.

Figure 9.8: Life Expectancy at Birth by District, Eastern Province 2010
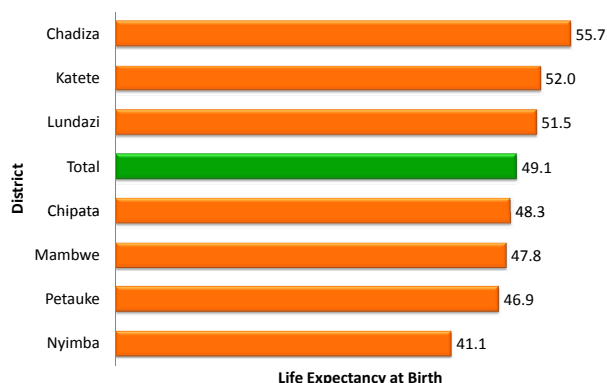
Source: 2010 Census of Population and Housing

Figure 9.9 shows life table function nqx (probability of dying between exact age n and n+x). This is presented by age and sex due to the variability of mortality by age and sex.

Figure 9.9: Life Table Probability of Dying (nqx) by Age and Sex, Eastern Province 2010
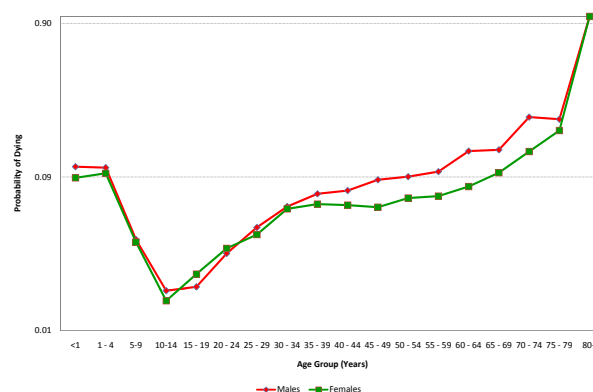
Source: 2010 Census of Population and Housing

The probability of dying is higher for males than females almost in all ages except at age groups 15 to 19 and 20 to 24 years. At age 10, there is improved survival prospects for both sexes. As mortality increases beyond age 30, the gap in the probability of dying between males and females increases and is even wider between the ages 45 to 60. This contributes to the lower life expectancy among males than females.

9.6 Cause of Death

Information on the cause of death is important in focusing interventions to prevent and reduce mortality. For all deaths reported during the 2010 Census, cause of death information was collected. However, the broad categories were pre-specified due to limited space on the questionnaire.

Figure 9.10 shows the percentage of reported cause of death for deceased household members as reported by households. The major cause of mortality was illness/disease accounting for 76.3 percent of all reported household deaths. Accidents were cited as a cause of death for 2.5 percent of deaths reported, while other causes were cited in 12.8 percent of reported deaths.

Figure 9.10: Percent Reported Cause of Death for Deceased Household Members that Died 12 Months Prior to the Census, Eastern Province 2010
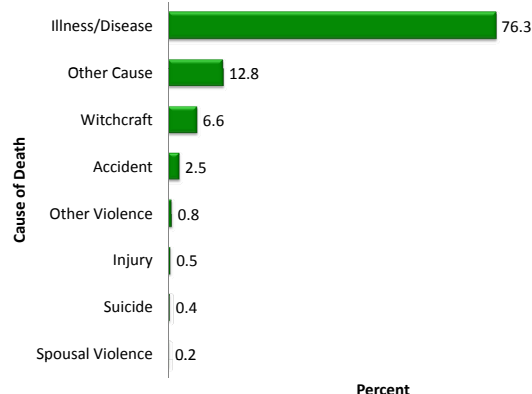
Source: 2010 Census of Population and Housing

Some causes of death are selective due to selective nature of exposure to risk. Hence it is important to look at cause of death by sex so as to assess any variation in cause of death by sex. Figure 9.11 shows information on cause of death by sex of deceased persons reported in the census.

Illness/disease was the major cause of mortality among females and males at 77.9 and 74.8 percent, respectively. The percentage of deaths attributed to the rest of the causes of death was higher for males than females.

Figure 9.11: Percent Reported Cause of Death for Deceased Household Members that Died 12 Months Prior to the Census by Sex of Deceased, Eastern Province 2010
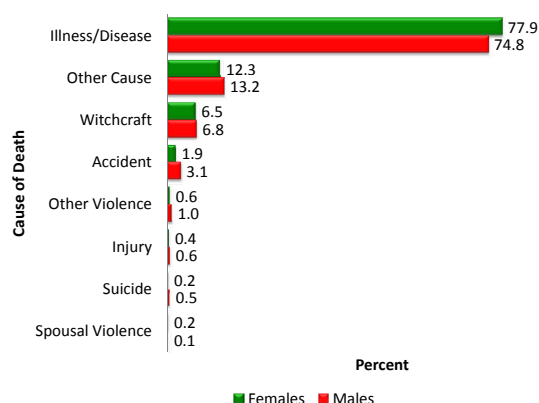
Source: 2010 Census of Population and Housing

Figure 9.12 shows the percentage of reported adult deaths due to illness/disease by age and sex of the deceased person. The percentage of reported female deaths due to illness/disease was higher than that of males for the age groups 15-39, while the percentage of males dying from illness/disease was higher than females for ages over 40 years.

Figure 9.12: Percent Reported Adult Deaths Due to Illness/Disease by Age and Sex of Deceased Person, Eastern Province 2010
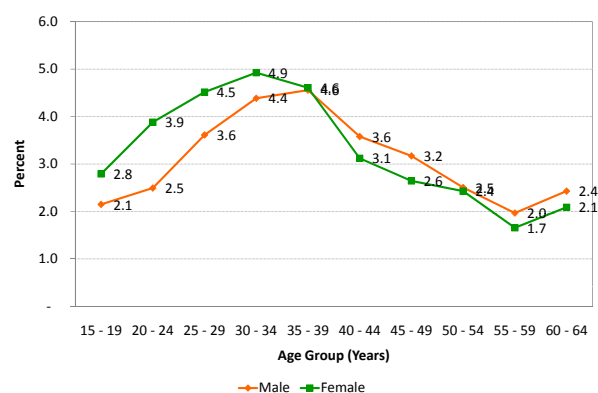
Source: 2010 Census of Population and Housing

CHAPTER 10
LANGUAGE AND ETHNICITY

10.0 Summary

Chewa was the most widely used language of communication in Eastern Province at 34.6 percent. Lala and Tonga were the least used languages of communication at 0.1 percent each.

Chewa was spoken by a higher proportion of the population in Chadiza (88 percent) and Katete (88.9 percent) Districts. Nyanja was widely spoken in Chipata District at 50.1 percent. In Lundazi District, Tumbuka was the most widely spoken language at 80.8 percent while Kunda (61.4 percent) was widely spoken in Mambwe District. Nsenga language was widely spoken in Nyimba (93.5 percent) and Petauke (77.8 percent) Districts.

Chewa was the largest ethnic group with 39.7 percent of the population in Eastern Province.

Chapter 10
Language And Ethnicity

10.1 Introduction

The Zambian society is endowed with many languages; there are officially 73 ethnic groups, from which, seven language clusters have been identified. There 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.

This chapter presents data on widely used language of communication and ethnicity. Widely used language of communication looks at the language use. Therefore the number of language users does not necessarily reflect the number of people that belong to an ethnic grouping.

The data is presented by sex, rural/urban and province and by census year. Some tables show the data by broad language/ethnic groups and others by single language/ethnic groups. Broad language/ethnic groups are formed using different criteria:

- By combining most spoken languages in a geographical location such as North-Western language groups

- By combining languages which are mutually intelligible. For example, Mambwe, Lungu, Namwanga, Wina and Tambo form one language group called the Mambwe language group because they are mutually intelligible languages.

- By combining languages which are trans-tribe such as Nyanja

To collect ethnicity data, Zambians were asked to indicate their ethnic group. Zambians of different origin and Non-Zambians were asked to indicate a major racial group they belonged to (such as African, Asian, European or American).

It is important to note that during data collection, children under the age of three years whose speech was still developing and persons with speech impairment did not report any language of communication. Therefore, the total population reported to have been speaking a predominant language is less than the defacto population. The analysis on ethnicity included all persons in the defacto population.

10.2 Concepts and Definitions

Ethnicity: This is the tribal group that one identifies himself/herself with. Ethnic group is a self-perceived conception of social group membership.

Widely Used Language of Communication: This is the language which is mostly spoken by an individual during their day to day communication, at work, with neighbours or in market places. This is simply the language currently spoken or most often spoken by the individual in his/her present home.

10.3: Widely Used Language of Communication

Table 10.1 shows the 13 most spoken languages in Eastern Province by rural and urban. The widely used language of communication in Eastern Province was Chewa at 34.6 percent. In rural areas, Chewa was the most spoken language at 37.2 percent while Nyanja was widely spoken in urban areas at 53.6 percent.

Table 10.1: Percent Distribution of the Population by Widely Spoken Language of Communication and Rural/urban, Eastern Province, 2010			
Widely Used Language of communication	**Total**	**Rural**	**Urban**
Bemba	0.6	0.2	2.8
Lala	0.1	0.1	0.0
Bisa	1.0	1.2	0.0
Tonga	0.1	0.0	0.3
Chewa	34.6	37.2	16.5
Nsenga	21.4	22.3	14.9
Ngoni	4.6	4.7	3.7
Nyanja	17.4	12.1	53.6
Kunda	2.8	3.0	1.4
Chikunda	0.2	0.2	0.0
Tumbuka	16.5	18.2	4.8
Senga	0.3	0.3	0.2
English	0.2	0.0	1.0
Other Languages	0.5	0.4	0.8
Total Percent	**100.0**	**100.0**	**100.0**
Total Population	**1,349,207**	**1,176,395**	**172,812**

Source: 2010 Census of Population and Housing

Note: *Languages that had less than 0.1 percent of the total population in the province were lumped in the "Other Languages" category. "Not applicable", "Not stated" and "Major Racial Group" categories were excluded from the analysis of widely used language of communication.*

10.3.1: Language Groups

In this analysis, seven language groups had been identified according to the criteria described in 10.1. These are (in alphabetical order) Barotse, Bemba, Mambwe, North Western, Nyanja, Tonga and Tumbuka. Table 10.2 shows the percentage distribution of language groups by rural/urban. Languages in the Nyanja group were widely spoken by 80.9 percent of the population followed by languages from the Tumbuka group at 16.8 percent. In both rural and urban areas, languages from the Nyanja group were widely used at 79.5 and 90.2 percent, respectively.

Table 10.2 Percentage Distribution of the Population by Major Language Group and Rural/Urban, Eastern Province 2010			
Language Group	Total	Rural	Urban
Bemba	1.8	1.6	2.9
Tonga	0.1	0.0	0.3
North Western	0.0	0.0	0.1
Barotse	0.2	0.2	0.3
Mambwe	0.1	0.1	0.1
Nyanja	80.9	79.5	90.2
Tumbuka	16.8	18.5	5.0
English	0.2	0.0	1.0
Others	0.0	0.0	0.1
Total Percent	100.0	100.0	100.0
Total Population	1,349,207	1,176,395	172,812

Source: 2010 Census of Population and Housing

10.3.2: Widely Used Language of Communication by Sex

Table 10.3 shows the percentage distribution of the population by widely used language of communication by sex and rural/urban. The table shows that Chewa was the most widely used language of communication for both males and females at 34.9 and 34.3 percent, respectively. In rural areas, Chewa was the widely used language of Communication at 37.5 percent for males and 37.0 percent for females. Nyanja was widely used by males (53.6 percent) and females (53.5 percent) in urban areas.

Table 10.3: Widely Used language of Communication by Sex, Rural/Urban, Eastern Province 2010									
Widely Spoken Language of Communication	Total			Rural			Urban		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Bemba	0.6	0.5	0.6	0.2	0.2	0.2	2.8	2.8	2.8
Lala	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
Bisa	1.0	1.0	1.1	1.2	1.1	1.2	0.0	0.0	0.0
Tonga	0.1	0.1	0.1	0.0	0.0	0.0	0.3	0.3	0.3
Chewa	34.6	34.9	34.3	37.2	37.5	37.0	16.5	16.7	16.2
Nsenga	21.4	21.3	21.4	22.3	22.2	22.4	14.9	14.8	15.0
Ngoni	4.6	4.5	4.6	4.7	4.7	4.7	3.7	3.6	3.8
Nyanja	17.4	17.4	17.5	12.1	12.2	12.1	53.6	53.6	53.5
Kunda	2.8	2.8	2.8	3.0	2.9	3.0	1.4	1.4	1.5
Chikunda	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.1
Tumbuka	16.5	16.4	16.6	18.2	18.1	18.4	4.8	4.7	4.9
Senga	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2
English	0.2	0.2	0.1	0.0	0.0	0.0	1.0	1.1	0.9
Other Languages	0.5	0.5	0.4	0.4	0.4	0.4	0.8	0.8	0.8
Total Percent	100	100	100	100	100	100	100	100	100
Total Population	1,349,207	656,888	692,319	1,176,395	573,654	602,741	172,812	83,234	89,578

Source: 2010 Census of Population and Housing

10.3.3 Widely Used Language of Communication by District

Table 10.4 shows the distribution of widely spoken language of communication by district. Chewa was widely spoken in Katete District (88.9 percent) followed by Chadiza District (88.0 percent). Nyanja was widely spoken in Chipata District by 50.1 percent of the population.

Tumbuka was widely used in Lundazi District at 80.8 percent while Kunda (61.4 percent) was widely used in Mambwe District. Nsenga language was widely spoken in Nyimba and Petauke Districts at 93.5 and 77.8 percent, respectively.

Table 10.4 Widely Used Language of Communication by District, Eastern Province 2010								
Widely Used Language of Communication	Total	Chadiza	Chipata	Katete	Lundazi	Mambwe	Nyimba	Petauke
Bemba	0.6	0.3	0.9	0.3	0.4	0.8	0.7	0.4
Lala	0.1	0.0	0.0	0.0	0.0	0.0	1.5	0.0
Bisa	1.0	0.0	0.0	0.0	4.9	0.8	0.0	0.0
Tonga	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1
Chewa	34.6	88.0	30.2	88.9	8.7	22.3	0.8	18.6
Nsenga	21.4	0.6	3.3	1.0	0.3	1.5	93.5	77.8
Ngoni	4.6	3.3	13.7	0.6	0.7	2.9	0.2	0.2
Nyanja	17.4	7.3	50.1	7.7	2.8	6.6	2.3	1.9
Kunda	2.8	0.0	0.1	0.6	0.1	61.4	0.0	0.0
Chikunda	0.2	0.0	0.0	0.4	0.0	2.7	0.0	0.0
Tumbuka	16.5	0.1	0.6	0.1	80.8	0.3	0.1	0.1
Senga	0.3	0.0	0.2	0.1	0.9	0.1	0.0	0.0
English	0.2	0.1	0.4	0.1	0.1	0.2	0.1	0.1
Other Languages	0.5	0.3	0.5	0.3	0.3	0.4	0.7	0.8
Total Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total Population	1,349,207	90,164	388,587	207,193	271795	57,642	71,685	262,141

Source: 2010 Census of Population and Housing

10.4 Ethnicity

This section shows ethnic groups that had a population of at least 0.1 percent of the total population in Eastern Province. The rest of the ethnic groups are lumped under the "other" category.

10.4.1. Ethnicity by Rural and Urban

Table 10.5 shows the percent distribution of the population by ethnic groups and rural/urban. The Chewa ethnic group had the highest percentage of the provincial population at 39.7 percent followed by the Nsenga ethnic group at 20.3 percent. In rural areas, the Chewa ethnic group had the highest percentage of the provincial population at 41.0 percent followed by Nsenga at 21.1 percent. The Chewa ethnic group had the highest percentage at 30.5 percent followed by Ngoni at 22.3 percent of the population in urban areas.

Table 10.5: Percentage Distribution of the Population by Ethnicity and Rural/Urban, Eastern Province 2010			
Ethnicity	Total	Rural	Urban
Bemba	1.2	0.7	5.2
Lala	0.1	0.1	0.3
Bisa	1.3	1.4	0.8
Tonga	0.5	0.3	1.9
Lenje	0.1	0.0	0.3
Soli	0.1	0.0	0.2
Luvale	0.1	0.0	0.4
Kaonde	0.1	0.0	0.4
Lozi	0.3	0.2	1.3
Chewa	39.7	41.0	30.5
Nsenga	20.3	21.1	15.2
Ngoni	15.3	14.3	22.3
Nyanja	0.4	0.4	0.3
Kunda	3.3	3.1	4.1
Chikunda	0.1	0.0	0.2
Tumbuka	15.6	16.1	11.9
Senga	0.6	0.4	1.3
Mambwe	0.1	0.0	0.3
Namwanga	0.2	0.1	0.8
English	0.0	0.0	0.0
Ethnicity Not Stated	0.1	0.1	0.2
Major racial groups	0.1	0.0	0.5
Other Ethnic Groups	0.6	0.5	1.6
Total Percent	100	100	100
Total Population	1,525,123	1,333,443	191,680
Source: 2010 Census of Population and Housing			

10.4.2. Ethnicity by Rural/Urban and Sex

Table 10.6 shows ethnicity by sex and rural/urban. The Chewa ethnic group had the highest proportion of males and females at 39.9 and 39.5 percent, respectively. The table shows that there were no major differences by sex in the proportions of the population for all ethnic groups in both rural and urban areas.

Table 10.6: Percentage Distribution of the Population by Ethnicity, Rural/Urban and Sex, Eastern Province 2010									
Ethnicity	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Bemba	1.2	1.3	1.2	0.7	0.7	0.7	5.2	5.3	5.1
Lala	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.3
Bisa	1.3	1.3	1.4	1.4	1.4	1.5	0.8	0.7	0.8
Tonga	0.5	0.5	0.5	0.3	0.3	0.3	1.9	1.9	1.9
Lenje	0.1	0.1	0.1	0.0	0.0	0.0	0.3	0.3	0.3
Soli	0.1	0.1	0.1	0.0	0.0	0.0	0.2	0.2	0.2
Luvale	0.1	0.1	0.1	0.0	0.0	0.0	0.4	0.4	0.3
Kaonde	0.1	0.1	0.1	0.0	0.0	0.0	0.4	0.4	0.4
Lozi	0.3	0.3	0.3	0.2	0.2	0.2	1.3	1.3	1.3
Chewa	39.7	39.9	39.5	41.0	41.2	40.8	30.5	30.8	30.2
Nsenga	20.3	20.2	20.4	21.1	21.0	21.2	15.2	15.0	15.4
Ngoni	15.3	15.4	15.2	14.3	14.4	14.2	22.3	22.2	22.4
Nyanja	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3
Kunda	3.3	3.2	3.3	3.1	3.1	3.2	4.1	4.0	4.3
Chikunda	0.1	0.1	0.1	0.0	0.0	0.0	0.2	0.2	0.2
Tumbuka	15.6	15.5	15.7	16.1	16.0	16.2	11.9	11.9	11.9
Senga	0.6	0.5	0.6	0.4	0.4	0.4	1.3	1.3	1.4
Mambwe	0.1	0.1	0.1	0.0	0.1	0.0	0.3	0.4	0.3
Namwanga	0.2	0.2	0.2	0.1	0.1	0.1	0.8	0.8	0.7
English	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethnicity Not Stated	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2
Major racial groups	0.1	0.1	0.1	0.0	0.0	0.0	0.5	0.6	0.5
Other Ethnic Groups	0.6	0.6	0.6	0.5	0.5	0.5	1.6	1.6	1.6
Total Percent	100	100	100	100	100	100	100	100	100
Total Population	1,525,123	744,354	780,769	1,333,443	651,737	681,706	191,680	92,617	99,063
Source: 2010 Census of Population and Housing									

CHAPTER 11
DISABILITY

11.0 SUMMARY

The proportion of the population with disabilities in Eastern Province was 2.1 percent. The proportion in rural areas was higher than urban areas at 2.2 and 1.4 percent, respectively. Nyimba District had the highest proportion of the population with disability at 2.6 percent while Katete District had the lowest at 1.9 percent.

The median age for the population with disability was 31.6 years. Physical disability was the most common type of disability at 33.2 percent. The major cause of disability was disease at 36.4 percent.

The literacy rate for the population with disabilities in Eastern Province was 45.0 percent. Mambwe District had the highest proportion of the population with disabilities who were literate at 52.6 percent. Katete District had the lowest proportion of the population with disabilities who were literate at 36.2 percent.

The proportion of the population with disability that had never attended school was 47.4 percent. The highest level of education attained by the majority of the population with disabilities, whether male or female was primary education at 67.6 and 83.0 percent, respectively.

The proportion of the population with disabilities who were employed was 92.4 percent. Most of the population with disabilities had agricultural related occupations at 94.3 percent.

Chapter 11
Disability

11.1 Introduction

Disability is an experience with different parts and aspects. The concept of disability has been evolving. There has been a shift in the perception of disability from an individual and medical condition to a social perspective. The International Classification of Functioning, Disability and Health (ICF) classify disability in three areas that are inter-related:

- Impairments: problems in body function or changes in body structure such as blindness;

- Activity limitations: difficulties in doing certain activities such as walking or eating;

- Participation limitations: societal restrictions with regards, involvement in any area of life such as being discriminated against in employment or transportation.

Disability refers to problems faced in any or all three areas of functioning (WHO, 2011).

Zambia has been collecting data on the prevalence of disability through censuses and surveys. This information was collected in all of its five censuses (1969, 1980, 1990, 2000 and 2010). The set of impairments on which data is collected through censuses in Zambia has been increasing, from four to twelve disability categories between 1969 and 2010, as shown in the Table 11.1.

Table 11.1: Disability Categories used in Censuses, Zambia 1969-2010

1969	1980	1990	2000	2010
1. Blind	1. Blind	1. Blind	1. Blind	1. Blind
2. Deaf and/or mute	2. Deaf and/or mute	2. Deaf-Dumb	2. Partially sighted	2. Partially sighted
3. Loss of limb	3. Crippled, or loss of limb	3. Crippled	3. Deaf/Dumb	3. Deaf and Dumb
4. Sick	4. Mentally Retarded	4. Mentally Retarded	4. Hard of Hearing	4. Deaf
	5. Sick	5. Multiple Disabilities	5. Mentally ill	5. Hard of Hearing
	6. Combination of two or more categories		6. Ex- Mental	6. Dumb
			7. Mentally Retarded	7. Mentally ill
			8. Physically Handicapped	8. Intellectual
				9. Speech impairment
				10. Physically disabled
				11. Mentally Retarded
				12. Other

Sources: 1969, 1980, 1990, 2000 and 2010 Censuses of Population and Housing

The widening of responses on impairments overtime was meant to capture more people living with disabilities and hence improve the measurement of disability. However, this has made comparability between censuses difficult as some categories have not only changed but also increased.

11.2 Concepts and Definitions

Disability, in the 2010 Census, was defined as a limitation in the kind or amount of activities that an individual can do because of the on-going difficulties due to a long term physical condition, mental condition or health problem. Short term disabilities due to temporary conditions such as broken legs and illness were excluded.

The following concepts and definitions have been used to analyse data on disability.

11.2.1 Type of Disability:

Blind: Complete loss of sight in both eyes.

Partially Sighted: Loss of one eye or poor sight but does not mean complete blindness.

Deaf and Dumb: Complete loss of sense of hearing and speech. The lack or loss of the ability to hear and speak.

Deaf: Complete loss of sense of hearing. The lack or loss of the ability to hear.

Hard of Hearing: Partial loss of sense of hearing but not complete loss of sense of hearing e.g. the person who uses hearing aids.

Dumb: Complete lack of ability to speak.

Mental Illness: A condition of mental illness with a substantial, adverse and long-term effect on one's ability to carry out normal day-to-day activities.

Intellectual: Intellectual disability is a disability characterized by significant limitations both in intellectual functioning and in adaptive behavior, which covers many everyday social and practical skills. This disability originates before the age of 18.

Speech Impairment: This is a condition for people who fail to produce meaningful sound words.

Physically Disabled: Any person with a physical abnormality relating to the loss of bodily limbs or any deformity in the bodily stature. e.g. the epileptics and leper.

Mentally Retarded: Any individual that is either very slow to learn or has deficiency of mental intellect (slow in grasping things, difficulties in remembering things, very slow at responding).

Other: Any other disability not mentioned above.

11.3 Causes of Disability

The following responses to causes of disability were used in the questionnaire.

* *Congenital/Prenatal - these are disabilities which one is born with.*
* *Disease/Illness e.g. polio, leprosy, cataract.*
* *Injury/Accidents e.g. road accidents, injuries from accidental falls, fire etc.*
* *Spousal Violence – e.g. husband/wife battering.*
* *Other Violence- e.g. violence perpetrated by any other person such as boyfriend or girlfriend.*
* *Unknown –where the respondent did not know the cause of the disability.*
* *Other, e.g., unsuccessful medical operation, wrongful application of traditional and conventional medicine.*

11.4 Limitations of Disability Data

The method used in the collection of disability data determines the comprehensiveness and quality of the data. Countries using censuses to capture disability data report low prevalence of disability rates than those using surveys. This is so because a census is a huge data collection undertaking covering entire populations after long intervals and as such can only include few questions on disability. Specialised surveys can provide extensive information about disability because not only do they provide information on problems in body function and structure but also cover information on origins and impact of the impairments on functioning, service accessibility and unmet needs of the disabled (Altman BM and Barnartt SN, 2006).

The 2010 census did not include detailed questions on disability to be able to bring out the variations in the intensity of the disabilities. In addition, this data did not include the population living with disabilities in institutions.

11.5 General Characteristics

This section discusses the distribution and age structure of the population with disabilities. Types and causes of disability are also discussed in this section.

11.5.1 Distribution of the Disabled and Non–Disabled Population

Figure 11.1 shows the percent distribution of the population by disability status. The percentage of the population living with disabilities was 2.1 percent out of which 2.0 percent had one disability while 0.1 percent had more than one disability.

Figure 11.1: Percentage Distribution of the Population by Disabled and Non-Disabled, Eastern Province 2010
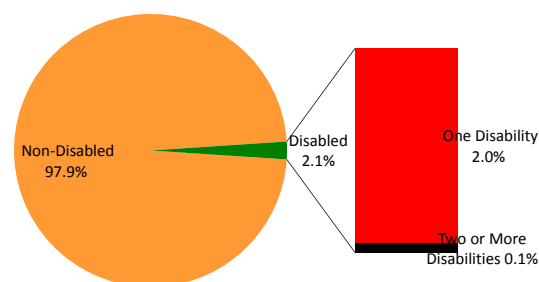
Source: 2010 Census of Population and Housing

11.5.2 Distribution of the Disabled

Figure 11.2 shows the percentage distribution of the disabled population. The percentage of the population living with disabilities was 2.1 percent. Rural areas had more persons living with disabilities than urban areas at 2.2 and 1.4 percent, respectively.

Figure 11.2: Percentage Distribution of the Population with Disability by Rural/Urban and District, Eastern Province 2010
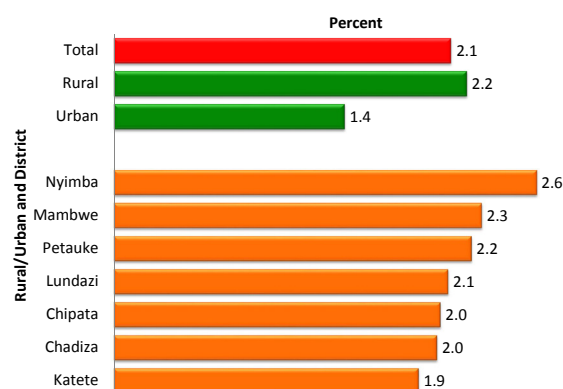
Source: 2010 Census of Population and Housing

Nyimba District had the highest percentage of persons with disabilities at 2.6 percent while Katete District had the lowest at 1.9 percent.

11.5.3 Disability by Sex

Figure 11.3 shows the percentage distribution of persons living with disabilities by sex and district. There were more males than females who were disabled at 2.2 and 1.9 percent, respectively. Nyimba District had the highest percentage of persons who were disabled at 2.8 percent for males and 2.5 percent for females. Katete District had the lowest percentage of persons living with disabilities at 2.0 percent for males and 1.8 percent for females.

Figure 11.3: Percentage Distribution of the Population with Disability by Sex and District, Eastern Province 2010
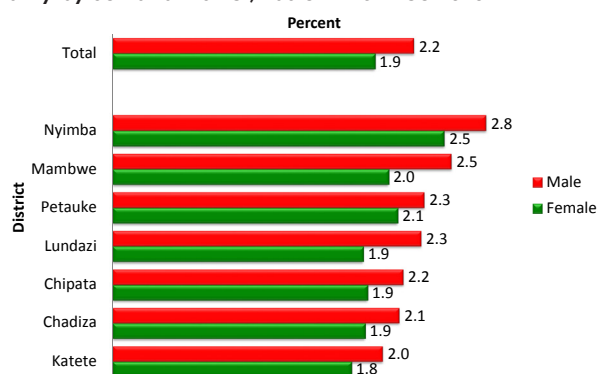
Source: 2010 Census of Population and Housing

11.5.4 Disability by Age

Figure 11.4 shows the percentage of the population with disability by age. The figure shows that disability increases with age, with the highest percentage in the age group 95 and older at 20.4 percent. The age group with the lowest percentage was 0-4 years at 0.7 percent.

Figure 11.4: Percentage Distribution of Persons with Disability by Age, Eastern Province 2010
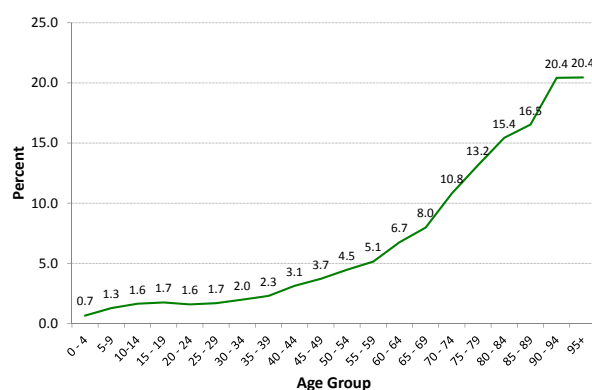
Source: 2010 Census of Population and Housing

Figure 11.5 shows the median age for the disabled and non-disabled population. The median age for the population with disability was 31.6 years. Females with disabilities had a higher median age than males with disability at 35.9 and 28.6 years, respectively.

Figure 11.5: Median Age of the Disabled and Non-Disabled Population by Sex, Eastern Province 2010
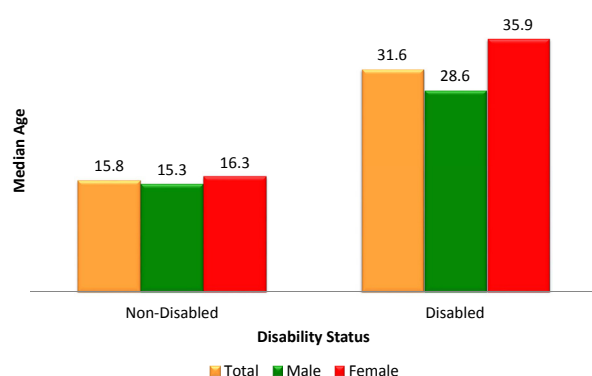
Source: 2010 Census of Population and Housing

Figure 11.6 shows the percentage of the population with disabilities who were heading households by sex and rural/urban. In Eastern Province, there were more female (5.1 percent) than male (2.9 percent) household heads living with disabilities. The proportions of female household heads with disabilities were higher than those of males in both rural and urban areas.

Figure 11.6 Percentage Distribution of Household Heads with Disabilities by Rural/Urban and District, Eastern Province 2010
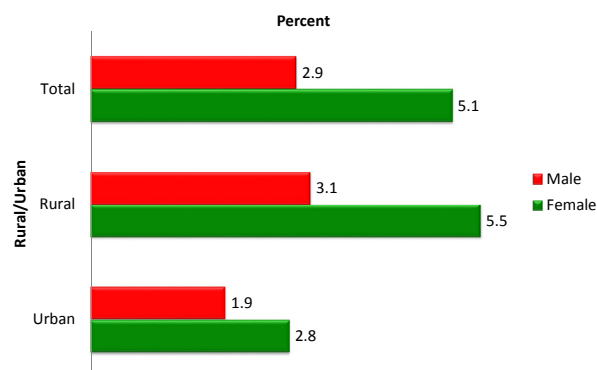
Source: 2010 Census of Population and Housing

11.5.5 Disability by Household Headship

Figure 11.7 shows the percentage distribution of disabled household heads by district. Nyimba District had the highest proportion of household heads living with disabilities at 4.9 percent. Katete District had the least proportion at 2.9 percent.

Figure 11.7: Percentage Distribution of Household Heads with Disabilities, by District, Eastern Province 2010
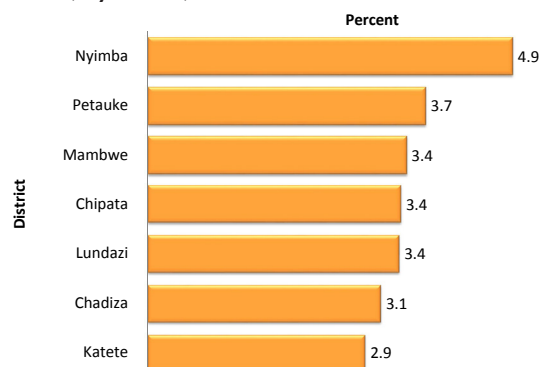
Source: 2010 Census of Population and Housing

11.5.6 Type of Disability

Figure 11.8 shows the percentage distribution of persons with disabilities by type of disability. Physical disability was the most prevalent type of disability (33.2 percent) followed by partially sighted (20.3 percent). The least common type of disability was intellectual at 1.2 percent.

Figure 11.8: Percentage of Persons with Disabilities by Type of Disability, Eastern Province 2010
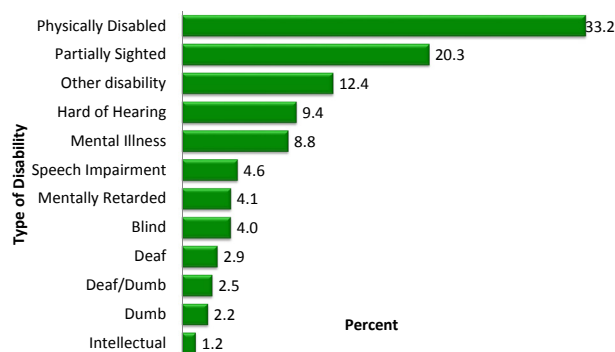
Source: 2010 Census of Population and Housing

11.5.7 Cause of Disability

This section discusses the most common causes of disability. However, the data did not allow for exploring the association between causes and specific types of disability. The various causes of disability were categorized as congenital, disease, injury, spousal violence, other and unknown. Respondents were asked to state if they had more than one cause of disability.

Figure 11.9 shows the percentage distribution of the population by cause of disability. The figure shows that 36.4 percent of the persons with disabilities reported disease as the cause of disability. This was followed by congenital with 14.2 percent. The least common cause of disability was spousal violence with 0.6 percent.

Figure 11.9: Percentage Distribution of Persons with Disabilities by Cause of Disability, Eastern Province 2010
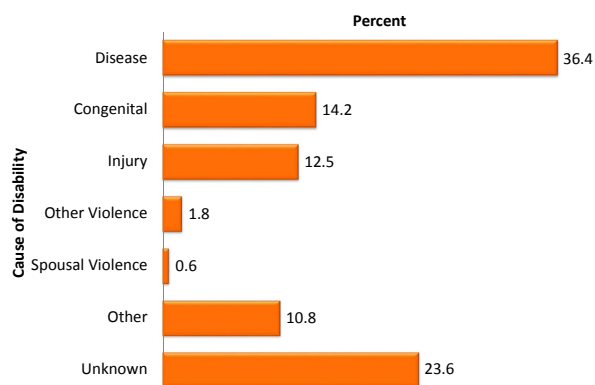
Source: 2010 Census of Population and Housing

11.6 Characteristics of the Population with Disabilities

This section presents the characteristics of the population with disability using education, economic activity and marital status indicators.

11.6.1 Literacy Levels among the Disabled

Figure 11.10 shows the percentage distribution of literate population aged 5 years and older by disability status and rural/urban. Literacy among persons with disabilities was 45.0 percent compared to 54.4 percent for persons without disability. The literacy levels for the persons with disabilities were higher in urban areas at 66.3 percent compared to 43.1 percent in rural areas.

Figure 11.10: Percentage Distribution of Literate Population (5 Years and Older) by Disability Status and Rural/Urban, Eastern Province 2010
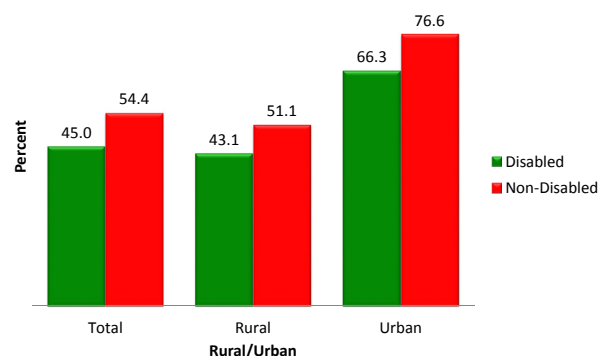
Source: 2010 Census of Population and Housing

Figure 11.11 shows the percentage distribution of the population (5 years and older) with disabilities who were literate by district. Mambwe District had the highest proportion of the disabled population who were literate at 52.6 percent while Katete District had the least at 36.2 percent.

Figure 11.11: Percentage Distribution of the Literate Population (5 Years and Older) with Disability by District, Eastern Province 2010
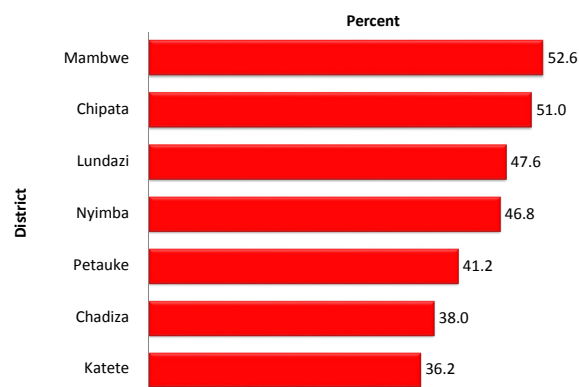
Source: 2010 Census of Population and Housing

11.6.2 School Attendance

The percentage distribution of population aged 5 years and older by disability status, school attendance and rural/urban is shown in Figure 11.12. The figure shows that there was a higher percentage of persons with disabilities who had never attended school at 47.4 percent compared to 34.0 percent for persons without disability. For population currently attending school, the percentage of the non-disabled was higher than that of the disabled at 27.4 and 13.9 percent, respectively.

In rural areas the proportion of persons with disabilities who were currently attending school was 13.4 percent and the non-disabled was 26.0 percent while in urban areas the disabled currently attending school was 19.1 percent and the non disabled was 36.3 percent. Similarly, there were more persons with disabilities who had never attended school than the non-disabled.

Source: 2010 Census of Population and Housing

Figure 11.12: Percentage Distribution of Disabled and Non-Disabled Populations (5 years and Older) by School Attendance and Rural/Urban, Eastern Province 2010
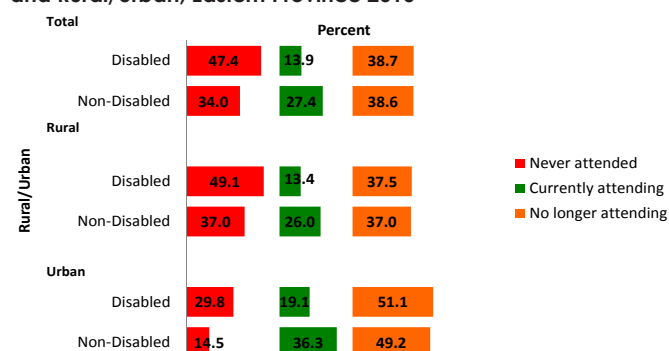
Source: 2010 Census of Population and Housing

11.6.3 Education Level among the Disabled

Figure 11.13 shows the percent distribution of persons, 25 years and older, with disabilities by the highest level of education completed. Of the population living with disabilities, 73.6 percent had attained primary education. More males had completed tertiary education than females at 9.8 and 4.5 percent, respectively.

Figure 11.13: Percentage Distribution of Persons with Disability (25 Years and Older) by Highest Level of Education Completed and Sex, Eastern Province 2010
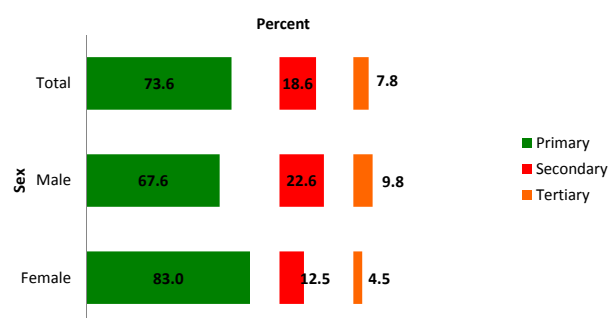
Source: 2010 Census of Population and Housing

11.7 Economic Activity

Persons living with disabilities are disadvantaged with regards engagement in economic activities. Literature suggests that, in developed as well as developing countries, persons living with disabilities face much lower employment rates and higher unemployment rates than persons without disabilities (WHO, 2011).

Figure 11.14 shows the percentage distribution of employed persons aged 12 years and older by disability status and rural/urban. The figure shows that 92.4 percent of persons with disabilities were employed compared to 91.2 percent of persons without disabilities. The percentages of the disabled who were employed were higher than the percentages for the non-disabled in both rural and urban areas.

Figure 11.14: Percentage Distribution of the Employed Population (12 years and older) by Disability Status and Rural/Urban, Eastern Province 2010
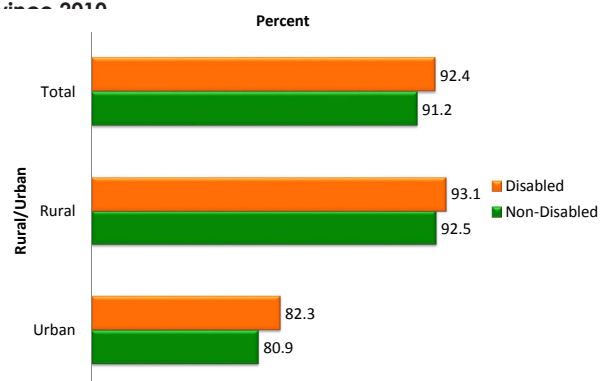
Source: 2010 Census of Population and Housing

11.7.1 Employment Status

Figure 11.15 shows employment status of persons with disabilities by rural/urban. Self-employed was the most common employment status at 73.2 percent while the least were employers at 0.5 percent.

Figure 11.15: Percent Distribution of Persons with Disabilities (12 Years and Older) by Employment Status and Rural/Urban, Eastern Province 2010
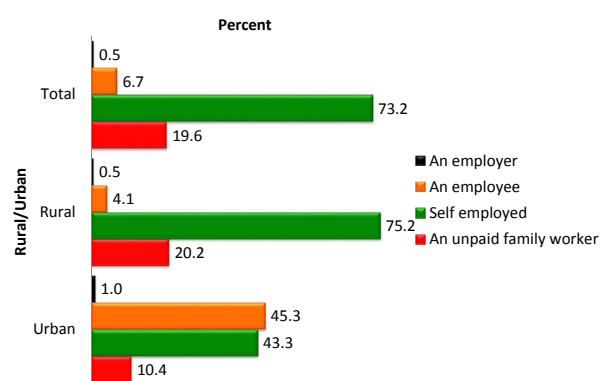
Source: 2010 Census of Population and Housing

11.7.2 Employment Status of Disabled Household Heads

Figure 11.16 shows the percent distribution of the disabled household heads by employment status. The largest proportion of household heads living with disabilities was self-employed (73.3 percent) while the least were employers (0.5 percent).

Figure 11.16: Percentage Distribution of Household Heads with Disabilities (12 Years and Older) by Employment Status, Eastern Province 2010
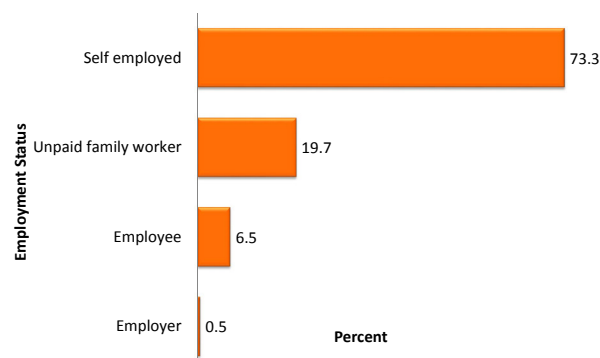
Source: 2010 Census of Population and Housing

11.7.3 Occupation Status

Occupation is described as the kind of work a person performs in his/her job or business. Figure 11.17 shows percent distribution of occupation by disability status. Among persons with disabilities, agricultural occupations were the most common while service occupations were the least common at 94.3 and 0.7 percent, respectively. Persons without disabilities were mostly engaged in agricultural occupations at 90.8 percent while the least occupation they were engaged in was service work at 1.3 percent.

Figure 11.17: Percent Distribution of the Disabled Population by Occupation and Disability Status, Eastern Province 2010
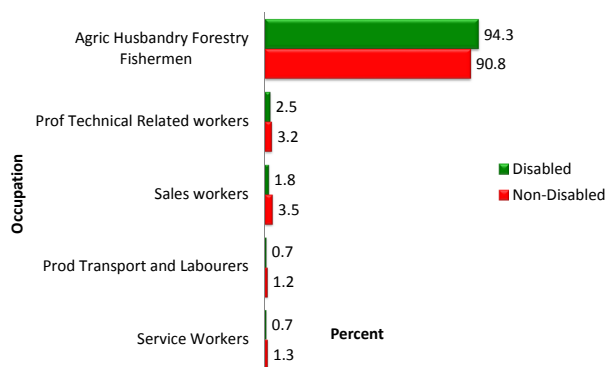
Source: 2010 Census of Population and Housing

11.8 Marital Status of the Disabled by Sex

Figure 11.18 shows percent distribution of persons with disabilities (15 years and older) by marital status and sex. There were more males than females living with disabilities who were married at 53.4 percent and 37.5 percent, respectively. Persons living with disabilities that were never married constituted 34.4 percent of males and 18.7 percent of females.

Figure 11.18: Percent Distribution of Persons with Disabilities (15 years and older) by Marital Status and Sex, Eastern Province 2010
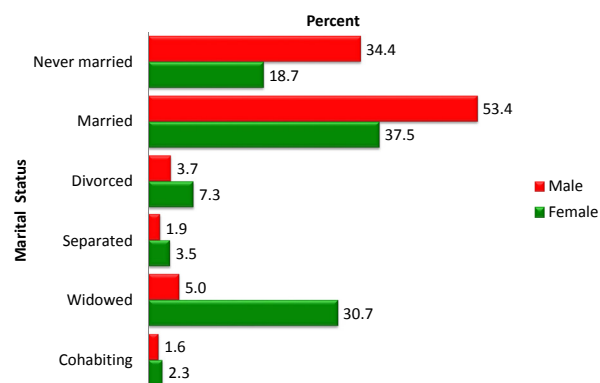
Source: 2010 Census of Population and Housing

CHAPTER 12
EVALUATION OF COVERAGE
AND CONTENT ERRORS

12.0 Summary

In 2010 the pattern of age composition, child woman ratio and dependency ratio in Eastern Province was in line with the observed fertility and mortality declines.

The Myers Index reduced from 7.7 in 2000 to 6.9 in 2010.

The most preferred digits for age data reporting were 0, 8 and 5.

The age-sex accuracy index for Eastern Province reduced from 31.1 in 2000 to 29.0 in 2010.

Chapter 12
Evaluation of Coverage and Content Errors

12.1 Introduction

Data evaluation is the assessment of the quality of data. It provides reliable standards for adjusting data if needed. The adjustment is done based on responses to the questions which were asked during the census on:

- *Sex*
- *Age (in completed years)*
- *Rural/Urban status of household*
- *Number of children still living, and*
- *Number of children dead*

12.2 Concepts and Definitions

The following concepts and definitions have been used in this chapter.

The Age-Sex Accuracy Index: Mean difference in sex ratios plus the mean deviations of male and female age ratios multiplied by three gives an indication of the quality of age data.

Age Ratio: 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).

Census Night: The night prior to the actual census count. In Zambia a rolling (varying) census night is used because enumeration is usually done over a period of about two-three weeks.

Census of Population: Total process of collecting, compiling, evaluating, analysing and publishing or otherwise dissemination of demographic, economic and social data pertaining, at a specified time, to all persons in a country or in a well-delimited part of a country, (UN, 2008).

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

Cohort Survival Ratio: The survival ratio of the population in a given age group to the next age.

Content Error: Error made in the recorded information in the census questionnaire either because the respondent provided incorrect information or the interviewer recorded incorrect information

Coverage Error: Under or over-enumeration in a population census due to either omission or duplication of an individual, household, or housing unit.

Data Smoothing: This is the use of an approximating function to capture important patterns in the data and removing the noise or outliers. For example, smoothing is done to help reduce the negative consequences of digit preference.

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

Digit Preference: Reporting of age by respondents often ending in certain preferred digits such as zero or five. This results in heaping of population in ages ending with certain digits.

Population Pyramid: A graphical illustration that shows the distribution of various age groups in a population

Sex Ratio: Number of males per 100 females in a population (Masculinity ratio).

Overall Survival Ratio: The ratio of the population of age, say, 10 years and older that will survive to 15 years and older.

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

In the analysis of the coverage and content errors, the de facto population was used.

12.4 Methods of Evaluation

There are numerous checks and controls directed at minimising errors in the census, during enumeration. Despite instituting data control measures, some errors can occur in the census data. For instance, some people may be omitted, others may be enumerated more than once, or some characteristics of an individual such as age, sex, fertility and economic activity may be incorrectly reported or recorded. In general, two approaches are used to evaluate the quality of data: direct and indirect methods.

The direct method involves the carrying out of the 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 (both in terms of scope and questionnaire content). These are later compared with the data 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.

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, for example, using the Myers index to check for accuracy of age reporting. 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 collected by the Ministry of Education.

12.5 Coverage Error

This type of error occurs when there is omission or duplication of individuals, households, or housing units resulting in under or over enumeration. Some factors which contribute to coverage errors are lack of accessibility or cooperation from respondents,

difficulties in communication and lack of proper boundary descriptions on maps. Coverage errors can be measured by examining certain statistics such as growth rate, age composition, child woman ratio and dependency ratio.

15.6 Age Composition

Examining age composition over time can help assess the coverage error in census data. The percentage for each group should not vary much from one census to another except where there had been major changes to the population. Fertility and

mortality effects would normally result into marginal changes to the percentage of the broad age groups.

Table 12.1 shows population composition of Eastern Province by broad age groups for 1990, 2000 and 2010. The percentage of children aged 0-14 years increased from 45.9 percent in 1990 to 47.5 percent in 2000. The percentage of children later increased to 48.1 percent in 2010. The percentage of adults aged 15-64 years declined from 51.7 percent in 1990 to 48.6 percent in 2010. Population distribution by broad age groups remained stable in all the three censuses.

Table 12.1: Population Distribution by Broad Age Groups, Eastern Province 1990, 2000 and 2010						
Age Group	Population					
	1990	Percent	2000	Percent	2010	Percent
0-4	158,264	16.6	232,160	18.9	280,797	18.4
5-9	146,884	15.4	197,189	16.1	239,952	15.7
10-14	132,332	13.9	153,701	12.5	212,911	14.0
0-14*	437,480	45.9	583,050	47.5	733,660	48.1
15-64	493,590	51.7	599,807	48.9	740,758	48.6
65+	23,494	2.5	43,910	3.6	50,705	3.3
Total	954,564	100	1,226,767	100	1,525,123	100

Sources: 1990, 2000 and 2010 Censuses of Population and Housing

* not part of total

12.7. Child-Woman Ratio

Figure 12.1 shows child woman ratio for census years 1990, 2000 and 2010. Between 1990 and 2000, there was an increase in the child woman ratio and the percentage of children aged 0-4 years. The child-woman ratio increased from 702 in 1990 to 842 children aged 0-4 years per 1000 women aged 15-49 years in 2000. In 2010, it declined to 820 children aged 0-4 years per 1000 women aged 15-49 years. The observed changes in child woman ratios were in line with the observed changes in the percentage of the population in the age group 0-4 years.

Figure 12.1: Child Woman Ratio, Eastern Province 1990, 2000 and 2010

Note: Child-Woman Ratio is the number of children aged 0-4 years in a population to every 1000 women aged 15-49 years
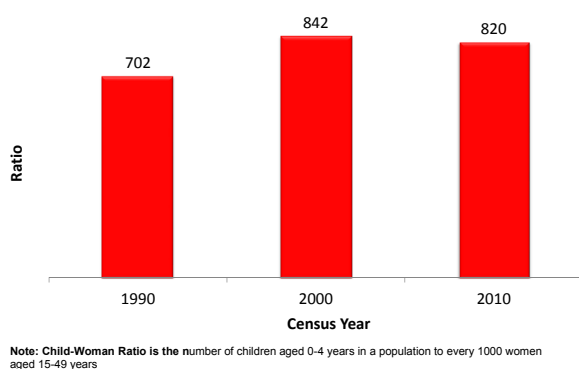
Sources: 1990, 2000 and 2010 Censuses of Population and Housing

12.8. Dependency Ratio

The consistency in the coverage for the three censuses can be further explored through dependency ratios. Figure 12.2 shows dependency ratio for census years 1990, 2000 and 2010.

Figure 12.2: Dependency Ratio, Eastern Province 1990, 2000 and 2010

Note: Overall Dependency Ratio - Number of children aged 0-14 and the elderly aged 65 years and older, per 100 persons in the age-group 15-64 years
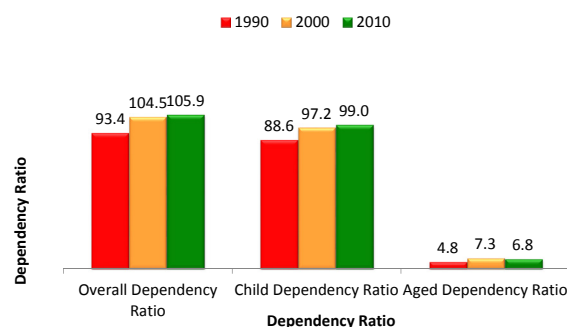
Sources: 1990, 2000 and 2010 Censuses of Population and Housing

The overall dependency ratio for the population of Eastern Province in 1990, 2000 and 2010 Censuses were 93.4, 104.5 and 105.9 persons, respectively. This means that in 2010 for every 100 persons in the age group 15-64 years, there were 105.9 dependants in the age groups 0-14 and 65 years and older. Child dependency ratio increased from 88.6 persons in 1990 to 99.0 persons in 2010. Aged dependency ratio increased from 4.8 persons to 7.3 persons between 1990 and 2000 and later reduced to 6.8 persons in 2010.

12.9. Content Error

Content errors 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 2010 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.

12.9.1. Digit Preference

Digit preference is mostly 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).

In this analysis, the Myers' Index was used to investigate age heaping. Figure 12.3 shows the Myers' Index by rural/urban for 2000 and 2010. The maximum value of Myers' Index is 90 and the minimum value is 0. A high Myers' Index implies poor age reporting whereas a low Myers' Index indicates good age reporting.

The Myers' index for Eastern Province reduced from 7.7 in 2000 to 6.9 in 2010. In rural areas, the Myer's index declined from 8.0 in 2000 to 7.0 in 2010. In urban areas, it reduced from 8.6 to 6.5 between 2000 and 2010. It was observed that much improvement on age data reporting was in urban areas compared to rural areas. Generally, the quality of age data reporting improved in 2010 compared to 2000.

Figure 12.3: Myers' Index by Rural/Urban, Eastern Province 2000 and 2010

Note: 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 while the minimum value is 0
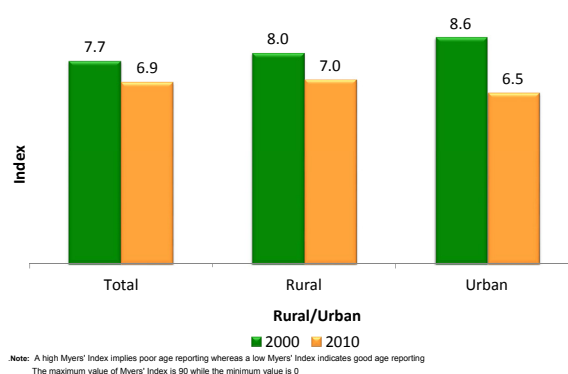
Sources: 2000 and 2010 Censuses of Population and Housing

Digit preference can also be explored by looking at age heaping. Table 12.2 shows the most preferred digits by sex and rural/urban for 2000 and 2010. The most preferred digits are presented in decreasing order of preference. Both sexes preferred digits 0, 5, and 8 in 2000 and 0, 8, and 5 in 2010, respectively.

Table 12.2: Most Preferred Digits by Sex and Rural/Urban, Eastern Province 2000 and 2010			
Rural/Urban	**Most Preferred Digits and Census Year**		
	Sex	**2000**	**2010**
Total	**Both Sexes**	**0, 5, 8**	**0, 8, 5**
	Male	0, 5, 8	0, 8, 5
	Female	0, 8	0, 8, 5
Rural	**Both Sexes**	**0, 5, 8**	**0, 8, 5**
	Male	0, 5, 8	0, 5, 8
	Female	0, 5, 8	0, 8, 5
Urban	**Both Sexes**	**0, 5, 8**	**0, 8, 5**
	Male	0, 5, 8	0, 8, 5
	Female	0, 5, 8	0, 8, 5
Sources: 2000 and 2010 Censuses of Population and Housing			

For both sexes in rural and urban areas, digit preference of 0, 5, and 8 was observed in 2000 while digit preference of 0, 8, and 5 was observed in 2010.

Errors in age data reporting are also presented in Figures 12.4 and 12.5. The figures show population distribution in single years for 2000 and 2010. The peaks on the curves indicate the most preferred ages in reporting while the troughs indicate the under reported ages.

Figure 12.4: Population Distribution in Single Years, Eastern Province 2000
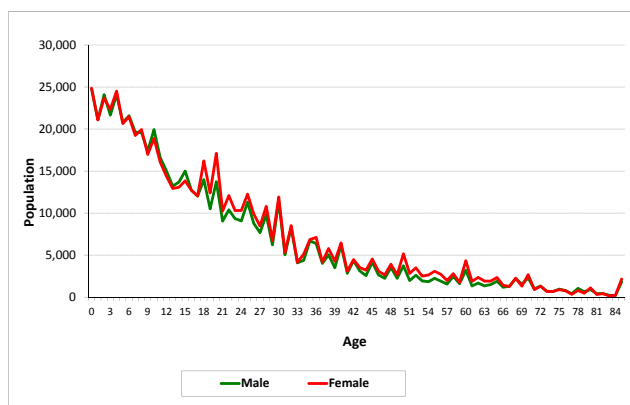
Source: 2000 Census of Population and Housing

Figure 12.5: Population Distribution in Single Years, Eastern Province 2010

Source: 2010 Census of Population and Housing

A comparison of Figures 12.4 and 12.5 shows that the peaks and troughs were more pronounced for ages reported below 55 years in both censuses. The differences in the peaks and troughs for ages reported after 55 years were not that pronounced. This may suggest that both males and females tend to misreport their ages before age 55.

When single year age data is grouped into five year age groups, irregularities in age data arising from age misreporting tend to disappear. Figure 12.6 and 12.7 show population distribution in 5 year age groups for 2000 and 2010. The figures show smoothened curves after the single age data was grouped for both censuses.

Figure 12.6: Population Distribution by 5 Year Age Groups, Eastern Province 2000
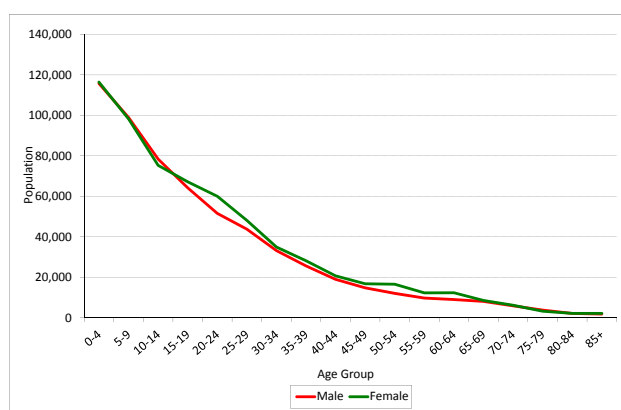
Source: 2000 Census of Population and Housing

Figure 12.7: Population Distribution by 5 Year Age Groups, Eastern Province 2010
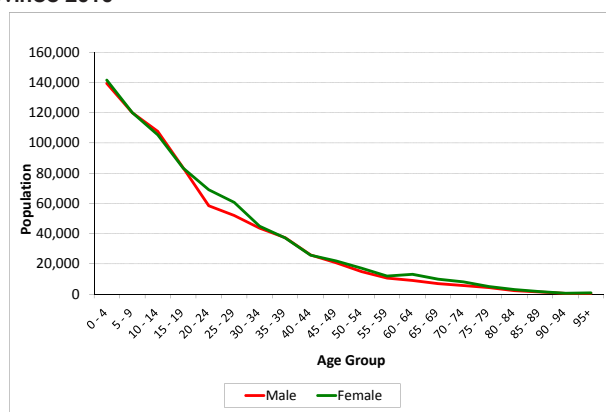
Source: 2010 Census of Population and Housing

12.9.2. Sex Ratios

The presence of omission errors, age misreporting and out migration may be detected by looking at the pattern of sex ratios. 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. In the absence of big fluctuations in births, deaths and migration, the sex ratios are expected to be high at infant ages. 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 male mortality. Figure 12.8 shows sex ratios by rural/urban for 1990, 2000 and 2010.

Figure 12.8: Sex Ratio by Rural/Urban, Eastern Province 1990, 2000 and 2010
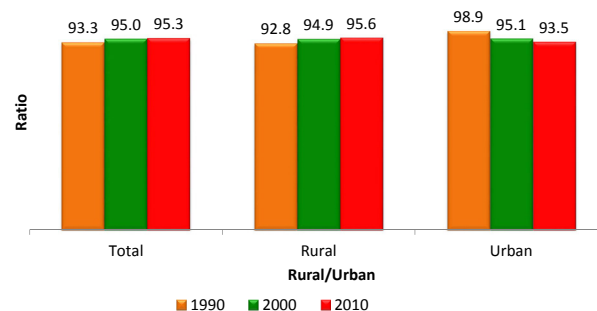
Sources: 1990, 2000 and 2010 Censuses of Population and Housing

Sex ratio for Eastern Province increased from 93.3 in 1990 to 95.0 males per 100 females in 2000. In 2010, sex ratio increased to 95.3 males per 100 females. In rural areas, sex ratios increased from 92.8 in 1990 to 95.6 males per 100 females in 2010. In urban areas, sex ratios dropped from 98.9 in 1990 to 93.5 males per 100 females in 2010. Sex ratio results for Eastern Province show that there were more females than males in the province.

Figure 12.9 shows sex ratio by five year age groups for 1990, 2000 and 2010. An analysis of age-specific sex ratios for 1990 shows more females than males in age groups 0-4 and 15-69 years. An analysis for 2000 shows more females than males in age group 0-4 and 15-74 years. In 2010, an analysis of age-specific sex ratios shows more females than males in age groups 0-9, 20-34 and above 45 years.

Figure 12.9: Sex Ratio by 5 Year Age Group and Census Year, Eastern Province 1990, 2000 and 2010

Sources: 1990, 2000 and 2010 Censuses of Population and Housing

Table 12.3 shows sex ratio by age and rural/urban for 1990, 2000 and 2010. Sex ratios were over 100 for age groups 5-14 and above 70 years in 1990. In 2000, sex ratios more than 100 were observed in age groups 5-14 years. In 2010, sex ratios over 100 were observed in age groups 10-19 and 35-44 years.

The pattern of sex ratio for all the three censuses suggest under enumeration of children since sex ratio is supposed to be high at age groups 0-4 and 5-9 years.

Table 12.3: Sex Ratio by Age and Rural/Urban, Eastern Province 1990, 2000 and 2010									
Age Group	1990			2000			2010		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
0-4	98.5	98.4	98.9	99.4	99.6	96.8	98.4	98.4	98.2
5-9	100.4	100.6	98.5	100.7	101.3	94.4	99.9	100.4	95.8
10-14	105.8	107.3	92.9	104.1	105.9	88.3	102.2	104.2	89.1
15-19	99.8	100.8	91.0	95.6	95.9	92.9	100.3	101.6	92.7
20-24	85.6	85.6	86.1	85.9	85.8	86.7	84.7	85.8	78.9
25-29	85.2	85.0	87.0	91.0	90.5	95.2	85.7	86.4	81.9
30-34	89.8	88.2	102.4	94.9	94.2	102.5	97.2	96.2	102.4
35-39	83.8	80.7	111.7	91.0	90.0	100.5	100.4	97.7	117.9
40-44	70.2	65.7	127.6	91.7	90.8	100.1	100.6	98.4	116.1
45-49	72.0	68.3	129.7	88.1	86.8	102.6	94.3	93.7	99.0
50-54	69.3	65.9	147.4	72.7	69.5	125.0	86.9	86.0	94.3
55-59	88.4	85.5	167.3	79.1	76.4	137.4	88.8	87.4	100.3
60-64	86.3	85.1	129.8	72.9	71.7	106.5	68.8	67.1	88.2
65-69	98.1	97.1	132.3	94.5	94.0	105.6	70.2	69.4	79.8
70-74	102.1	101.6	126.3	95.7	95.6	99.1	70.1	68.9	90.0
75+	116.0	115.6	133.2	102.7	103.5	79.3	81.0	82.0	68.1
Sources: 1990, 2000 and 2010 Censuses of Population and Housing									

12.9.3. Age Ratios

The quality of age data can also be evaluated by examining age ratios. 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. Calculations and comparison of age ratios have been done and the results disaggregated by sex are given in Figure 12.10.

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.

Figure 12.10: Age Ratios by Sex, Eastern Province 2010
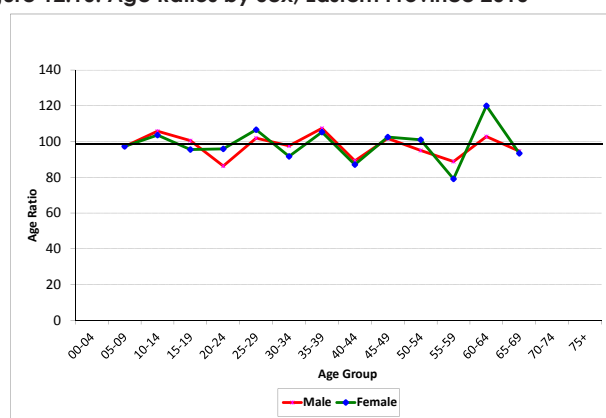
Source: 2010 Census of Population and Housing

The Age-Sex Accuracy Index describes the quality of age data. The United Nations defines age data as "accurate, inaccurate and highly inaccurate" if the Age-Sex Accuracy Index lies below 20, between 20-40, and 40 and above, respectively. Figure 12.11 shows the Age Sex Accuracy Indexes for 1990, 2000 and 2010.

Figure 12.11: Age-Sex Accuracy Index, Eastern Province 1990, 2000 and 2010
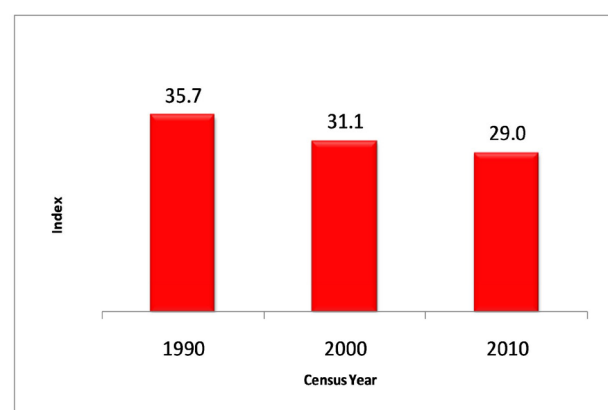
Source: 2010 Census of Population and Housing

There had been an improvement in the quality of data as depicted by the declining Age-Sex Accuracy Index for Eastern Province. The Age-Sex Accuracy Index declined from 35.7 in 1990 to 31.1 in 2000 and later to 29.0 in 2010. Despite these improvements on age data reporting, using the UN interpretation of the age-sex accuracy index, the data falls in the inaccurate category.

12.9.4. Survival Ratios

Survival ratio is the probability that individuals of the same birth cohort or group of cohorts will still be living 10 years later. Survival ratios have been used to evaluate the quality of data and sex data from two censuses. This assumes that the population is closed to migration and influence of abnormal mortality due to wars, disasters and diseases over a 10 year period. Figure 12.12 shows cohort survival ratio by age and sex for 2000-2010.

Figure 12.12: Cohort Survival Ratio by Age Group and Sex, Eastern Province 2000-2010
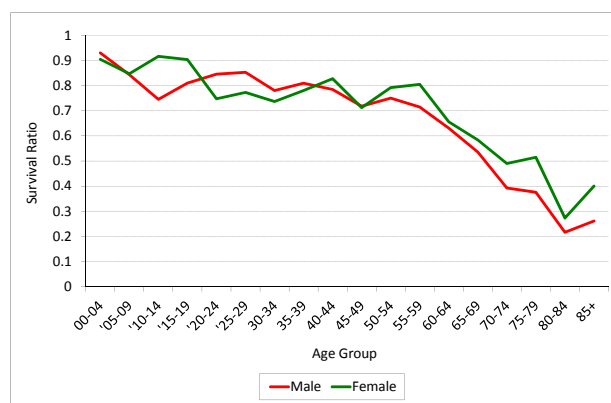
Sources: 2000 and 2010 Censuses of Population and Housing

The figure shows fluctuations in the cohort survival ratios rather than the expected systematic continuous decline 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.

Generally, female ratios are expected to be higher than the male ratios because females normally have lower mortality compared to males. However, figure 12.12 shows higher survival ratios for males than females in age groups 0-4, 20-39 and 45-49 years.

Figure 12.13 shows overall survival ratios by age and sex for 2000-2010. The overall survival ratios show a continued decline with increase in age. Females had higher survival ratios across all age groups except for the age groups 25+ (25-29), 30+ (30-34) and 35+(35-39) were males had higher survival ratios.

Figure 12.13: Overall Survival Ratio by Age Group and Sex, Eastern Province 2000-2010
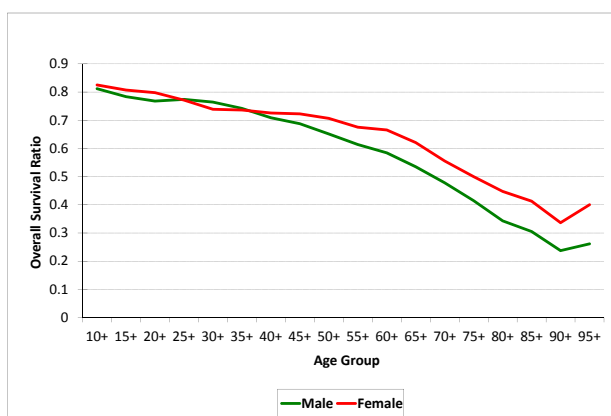
Sources: 2000 and 2010 Censuses of Population and Housing

12.9.5. Population Pyramids

Irregularities in the reported age data was analysed using population pyramids. Inaccuracies in census age data are easily spotted when data is distributed in single years than in five year age groups. The population pyramids for the 2010 Census data given in figure 12.14, 12.15 and 12.16, show age misreporting with preference for ages ending with 0 and 5. Figure 12.14 shows the population distribution by single age for 2010.

Figure 12.14: Population Distribution by Single Years, Eastern Province 2010
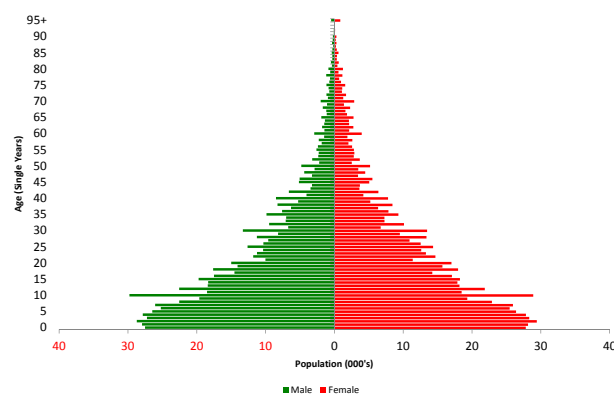
Source: 2010 Census of Population and Housing

Figures 12.15 and 12.16, shows the population distribution by age and rural/urban.

Figure 12.15: Population Distribution in Single Years, Eastern Province Rural 2010
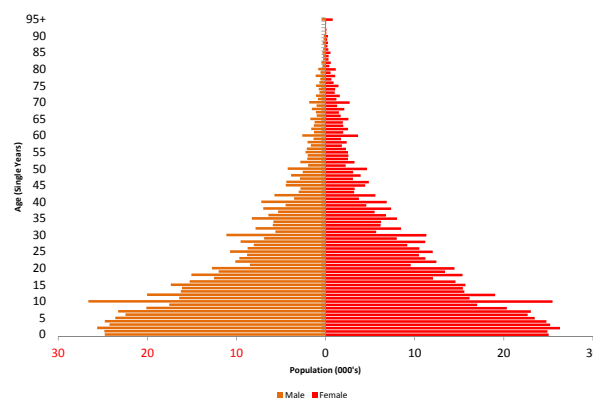
Source: 2010 Census of Population and Housing

Figure 12.16: Population Distribution in Single Years, Eastern Province Urban 2010
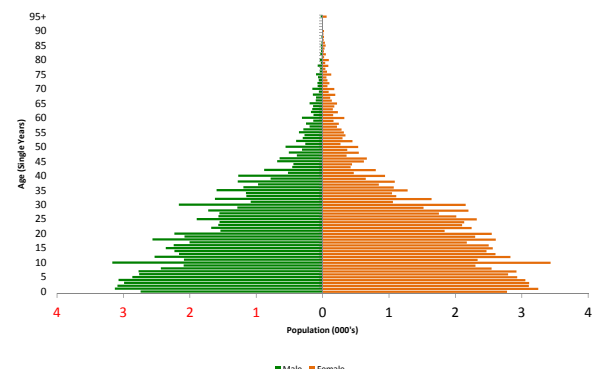
Source: 2010 Census of Population and Housing

Figures 12.17 and 12.18, shows the reported and smoothed population by age and sex.

Smoothing the age data using selected techniques for light smoothing of the population show that the irregularities in the structure were not severe to consider smoothing.

Figure 12.17: Reported and Smoothed Population for Males by Age Group and Smoothing Technique, Eastern Province 2010
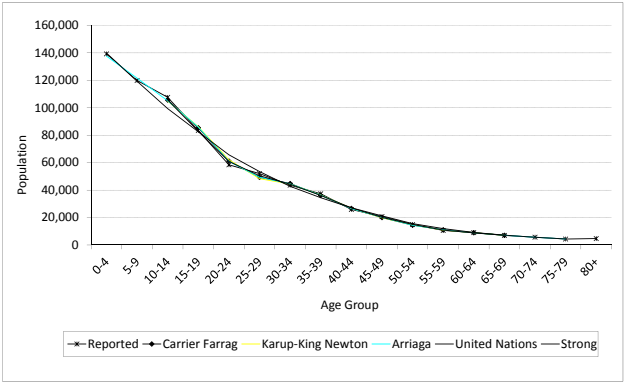
Source: 2010 Census of Population and Housing

Figure 12.18: Reported and Smoothed Population for Females by Age Group and Smoothing Technique, Eastern Province 2010
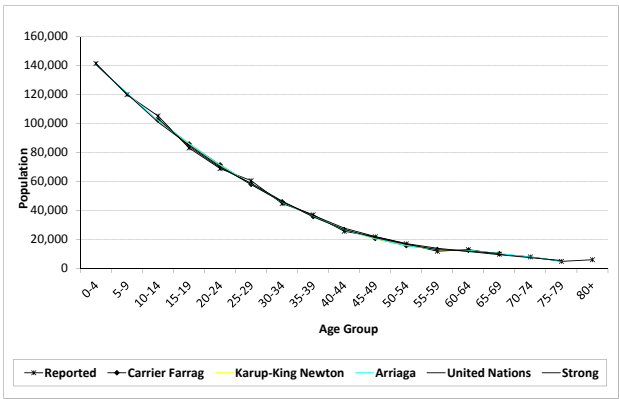
Source: 2010 Census of Population and Housing

Given that the irregularities were not severe, the age sex data used for analysis in the 2010 Census was not smoothened.

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ANNEX TABLES AND REFERENCES

Annex A: Population Composition and Demographic Characteristics

A1: Percent Distribution of the Population (De jure) by Age Group, Sex and Rural/Urban, Eastern Province 2010

Age Group	Total			Rural			Urban		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
0 - 4	17.9	18.0	17.8	18.3	18.4	18.2	15.2	15.5	15.0
5 - 9	15.5	15.7	15.3	15.8	16.0	15.5	13.5	13.5	13.5
10 - 14	13.9	14.3	13.6	14.0	14.4	13.5	13.5	13.0	13.9
15 - 19	11.3	11.5	11.1	11.1	11.3	10.8	12.7	12.6	12.8
20 - 24	8.6	8.2	9.0	8.3	8.0	8.6	10.4	9.7	11.1
25 - 29	7.4	7.1	7.7	7.2	6.9	7.4	9.3	8.7	9.9
30 - 34	5.8	6.0	5.7	5.6	5.7	5.5	7.4	7.8	7.1
35 - 39	4.9	5.1	4.7	4.8	4.9	4.7	5.7	6.4	5.0
40 - 44	3.4	3.6	3.3	3.4	3.5	3.3	3.5	3.9	3.1
45 - 49	2.8	2.9	2.8	2.9	2.9	2.9	2.7	2.8	2.6
50 - 54	2.1	2.1	2.2	2.1	2.1	2.2	2.0	2.0	1.9
55 - 59	1.5	1.5	1.5	1.5	1.5	1.6	1.3	1.3	1.2
60 - 64	1.5	1.2	1.7	1.5	1.3	1.8	1.0	1.0	1.0
65 - 69	1.1	0.9	1.3	1.2	1.0	1.3	0.7	0.6	0.7
70 - 74	0.9	0.8	1.0	1.0	0.8	1.1	0.5	0.5	0.5
75 - 79	0.6	0.6	0.6	0.6	0.6	0.7	0.3	0.3	0.3
80 - 84	0.3	0.3	0.4	0.4	0.3	0.4	0.2	0.1	0.2
85+	0.4	0.3	0.4	0.4	0.3	0.4	0.2	0.1	0.2
Total Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total Population	1,592,661	784,680	807,981	1,392,338	686,577	705,761	200,323	98,103	102,220

Source: 2010 Census of Population and Housing

A2: Percent Distribution of the Population by Selected Age Groups and Rural/Urban, Eastern Province 2010

Age Group	2010 Census		
	Total	Rural	Urban
10-19 (Adolescents ,WHO)	25.2	25.0	26.2
10-24 (Young People, UN)	33.8	33.4	36.6
<15 (Children)	47.3	48.0	42.2
<18 (Children)	39.0	41.6	20.9
15-19 (Middle and later Adolescence)	11.3	11.1	12.7
15-24 (Youths, UN)	19.9	19.4	23.1
15-49 (Reproductive Age Group)	44.3	43.2	51.8
15-35 (Youths, Zambia)	34.4	33.4	41.4
15-64 (Labour force Age group)	49.4	48.4	56.0
60+ (Elderly)	4.8	5.0	2.8
65+ (Elderly)	3.3	3.5	1.8
Total Population	1,592,661	1,392,338	200,323

Source: 2010 Census of Population and Housing

Annex B: Social Characteristics

B1: Percent Distribution of Heads by Age Group and Sex, Eastern Province 2010

Age group of House-hold Head	Total Number of Household heads	Number of Male Headed Households	Percent of Male headed Households	Number of Female Headed Households	Percent of Female Headed Households
Total	305,198	236,449	100	68,749	100
12-14	125	75	*	50	0.1
15 - 19	2,254	1,557	0.7	697	1
20 - 24	23,068	19,940	8.4	3,128	4.5
25 - 29	45,184	39,286	16.6	5,898	8.6
30 - 34	46,520	39,578	16.7	6,942	10.1
35 - 39	43,043	35,668	15.1	7,375	10.7
40 - 44	32,150	25,365	10.7	6,785	9.9
45 - 49	27,462	20,639	8.7	6,823	9.9
50 - 54	21,203	14,893	6.3	6,310	9.2
55 - 59	15,580	10,590	4.5	4,990	7.3
60 - 64	14,901	8,880	3.8	6,021	8.8
65+	33,708	19,978	8.4	13,730	20

Source: 2010 Census of Population and Housing

B 2: Relationship to Household Head by Rural/Urban, Eastern Province 2010.

Relationship to head	Total	Percent	Rural	Percent	Urban	Percent
Total	1,592,661	100	1,392,338	100	200,323	100
Head	305,198	19.2	265,783	19.1	39,415	19.7
Spouse	230,300	14.5	202,321	14.5	27,979	14
Own Son/ Daughter	804,704	50.5	714,304	51.3	90,400	45.1
Step Son/Daughter	20,203	1.3	17,748	1.3	2,455	1.2
Parent	10,009	0.6	9,036	0.6	973	0.5
Brother/Sister	23,939	1.5	17,237	1.2	6,702	3.3
Nephew/Niece	32,769	2.1	23,075	1.7	9,694	4.8
Son/Daughter-in-law	14,240	0.9	13,060	0.9	1,180	0.6
Grandchild	109,810	6.9	97,806	7	12,004	6
Parent-in-law	2,327	0.1	2,012	0.1	315	0.2
Cousin	4,652	0.3	3,104	0.2	1,548	0.8
Other relative	26,901	1.7	21,123	1.5	5,778	2.9
Non Related	7,609	0.5	5,729	0.4	1,880	0.9

Source: 2010 Census of Population and Housing

Annex C: Education

C 1: Population 5 Years and Older by Age (Single and 5 Year Groups), Sex and Literacy Status, and Rural/Urban, Eastern Province 2010

Age (Single and 5 Year Groups)	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total	54.4	58.3	50.7	51.1	55.3	47.2	76.4	78.9	74.2
5	2.7	2.6	2.7	2.1	2.1	2.1	7.3	7.1	7.4
6	4.1	3.9	4.4	3.2	2.9	3.5	11.8	11.5	12.1
7	7.8	7.2	8.5	6.4	6.0	6.8	19.7	17.6	21.7
8	14.3	13.5	15.1	11.9	11.2	12.6	33.8	32.7	34.9
9	25.5	23.4	27.5	22.2	20.4	24.0	51.1	48.4	53.5
5 - 9	10.0	9.3	10.7	8.4	7.8	8.9	23.2	21.8	24.5
10	38.2	35.1	41.3	34.7	31.8	37.7	65.6	63.0	68.0
11	54.8	50.7	58.9	51.2	47.0	55.6	81.1	80.3	81.8
12	65.6	61.8	69.4	62.7	58.8	66.7	86.6	85.4	87.6
13	72.9	69.1	76.8	70.3	66.3	74.4	90.5	90.2	90.8
14	77.9	75.0	80.9	75.7	72.5	79.0	92.9	93.1	92.7
10 - 14	59.5	56.0	63.1	56.4	52.8	60.1	82.2	81.0	83.2
15	78.7	76.3	81.2	76.4	73.9	79.1	94.2	94.2	94.1
16	80.6	79.7	81.4	78.3	77.5	79.2	94.6	94.5	94.8
17	80.5	81.3	79.6	78.0	79.0	76.9	95.2	95.8	94.7
18	78.6	80.9	76.3	76.0	78.5	73.5	94.2	95.6	92.8
19	75.8	80.4	71.7	72.7	77.7	68.3	93.6	95.8	91.6
15 - 19	78.9	79.6	78.1	76.3	77.1	75.5	94.4	95.1	93.6
20 - 24	70.4	76.6	65.1	66.9	73.7	61.0	89.9	93.4	87.2
25 - 29	64.7	72.4	58.2	60.4	68.9	53.1	87.7	91.6	84.5
30 - 34	65.4	72.3	58.6	61.0	68.4	53.8	88.6	92.3	84.7
35 - 39	64.7	72.6	56.8	60.9	69.0	53.0	87.3	91.9	81.9
40 - 44	65.3	73.9	56.7	62.1	71.1	53.2	87.1	91.3	82.2
45 - 49	65.4	75.3	56.1	62.6	72.9	52.8	86.5	91.9	81.2
50 - 54	63.5	76.7	52.1	60.8	74.6	48.9	84.6	92.3	77.4
55 - 59	60.3	74.6	47.5	57.6	72.3	44.8	81.8	92.1	71.5
60 - 64	48.0	70.4	32.5	45.6	68.2	30.4	72.7	89.9	57.6
65 +	39.2	62.1	22.2	37.8	60.7	20.9	57.1	79.9	39.4

Source: 2010 Census of Population and Housing

C2: Population 5 Years and Older by Age, Sex, and School Attendance and Rural/Urban, Eastern Province 2010

Age (Single and 5 Year Groups)	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total	27.5	29.3	25.9	26.1	28.0	24.4	37.0	38.4	35.6
5	6.7	6.4	7.0	5.0	4.7	5.4	20.5	20.6	20.5
6	13.8	12.4	15.1	11.6	10.4	12.8	31.6	28.8	34.4
7	30.6	27.8	33.4	27.8	24.9	30.7	53.1	51.5	54.7
8	46.5	43.3	49.7	43.2	39.9	46.5	73.5	71.5	75.4
9	59.7	56.3	63.1	56.7	53.2	60.4	82.7	82.3	83.0
5 - 9	29.5	27.4	31.6	26.9	24.8	29.0	50.2	48.5	51.8
10	65.1	61.3	69.1	62.6	58.6	66.8	85.2	84.3	86.1
11	70.4	66.5	74.4	68.0	63.7	72.4	88.4	88.4	88.4
12	73.4	70.2	76.7	71.3	67.8	74.9	88.7	89.1	88.4
13	74.9	72.4	77.4	72.8	70.1	75.6	88.9	89.7	88.2
14	73.8	72.2	75.3	71.6	69.9	73.4	88.0	89.1	87.1
10 - 14	70.9	67.8	74.1	68.6	65.3	72.1	87.7	87.8	87.5
15	69.7	69.5	69.8	67.3	67.1	67.4	85.9	87.0	84.9
16	65.7	69.7	61.6	63.0	67.4	58.3	82.8	85.4	80.5
17	57.1	65.8	48.1	53.8	63.1	44.2	76.2	82.9	70.0
18	45.9	58.1	33.9	42.7	55.3	30.2	64.8	74.3	55.5
19	34.5	49.5	21.0	31.4	46.8	17.6	52.4	64.9	41.2
15 - 19	55.3	63.1	47.5	52.5	60.6	44.2	72.6	79.0	66.7
20 - 24	14.8	22.8	8.1	13.5	21.2	6.8	22.5	32.1	14.9
25 - 29	3.5	4.3	2.8	3.1	4.0	2.3	5.7	6.0	5.4
30 - 34	2.0	2.1	1.9	1.7	1.9	1.5	3.5	3.2	4.0
35 - 39	1.7	1.8	1.6	1.5	1.5	1.4	3.1	3.0	3.2
40 - 44	1.5	1.7	1.3	1.3	1.6	1.1	2.3	2.6	2.1
45 - 49	1.4	1.5	1.3	1.3	1.4	1.2	2.1	1.9	2.2
50 - 54	1.4	1.6	1.3	1.3	1.5	1.2	2.1	2.3	1.8
55 - 59	1.2	1.4	1.0	1.1	1.3	0.9	1.8	2.2	1.5
60 - 64	1.1	1.4	0.9	1.0	1.3	0.9	2.0	2.4	1.6
65 +	1.2	1.4	1.0	1.1	1.3	0.9	2.0	2.4	1.7

Source: 2010 Census of Population and Housing

Annex D: Economic Characteristics

D1: The Usually Working Population (12 years and Older) By District, Rural/Urban and Sex Eastern Province 2010.

	Total	Percent	Chadiza	Percent	Chipata	Percent	Katete	Percent	Lundazi	Percent	Mambwe	Percent	Nyimba	Percent	Petauke	Percent
Total	**572,288**	**100**	**43,052**	**7.5**	**149,515**	**26.1**	**102,351**	**17.9**	**113,955**	**19.9**	**20,294**	**3.5**	**29,982**	**5.2**	**113,139**	**19.8**
Rural	524,461	100	42,349	8.1	122,407	23.3	96,288	18.4	110,415	21.1	18,717	3.6	28,183	5.4	106,102	20.2
Urban	47,827	100	703	1.5	27,108	56.7	6,063	12.7	3,540	7.4	1,577	3.3	1,799	3.8	7,037	14.7
Male	292,678	100	20,892	7.1	80,318	27.4	49,537	16.9	57,316	19.6	10,629	3.6	15,399	5.3	58,587	20.0
Female	279,610	100	22,160	7.9	69,197	24.7	52,814	18.9	56,639	20.3	9,665	3.5	14,583	5.2	54,552	19.5
The Usually Working Population (12 years and Older) By Employment Status																
Employer	2,072	0.4	77	0.2	842	0.6	172	0.2	295	0.3	98	0.5	84	0.3	504	0.4
Employee	39,291	6.9	1,663	3.9	18,420	12.3	4,246	4.1	5,179	4.5	2,543	12.5	2,066	6.9	5,174	4.6
Self employed	293,732	51.3	18,671	43.4	77,068	51.5	55,137	53.9	60,346	53.0	7,849	38.7	13,202	44.0	61,459	54.3
Unpaid family worker	237,193	41.4	22,641	52.6	53,185	35.6	42,796	41.8	48,135	42.2	9,804	48.3	14,630	48.8	46,002	40.7
The Usually Working Population (12 years and Older) By Occupation																
Managers	1,036	0.2	23	0.1	487	0.3	121	0.1	181	0.2	48	0.2	44	0.1	132	0.1
Professionals	10,439	1.8	646	1.5	4,030	2.7	1,429	1.4	1,578	1.4	570	2.8	610	2.0	1,576	1.4
Technicians and Associate Professionals	4,785	0.8	202	0.5	1,925	1.3	518	0.5	838	0.7	244	1.2	250	0.8	808	0.7
Clerical Support Workers	1,530	0.3	67	0.2	825	0.6	131	0.1	257	0.2	65	0.3	56	0.2	129	0.1
Service and Sales Workers	19,302	3.4	516	1.2	8,920	6.0	2,606	2.5	2,804	2.5	840	4.1	892	3.0	2,724	2.4
Skilled Agricultural Forestry and Fishery Workers	441,931	77.2	39,961	92.8	109,617	73.3	89,794	87.7	64,156	56.3	15,892	78.3	24,789	82.7	97,722	86.4
Craft and Related Trades Workers	13,397	2.3	445	1.0	5,238	3.5	1,707	1.7	2,036	1.8	750	3.7	879	2.9	2,342	2.1
Plant and Machine Operators and Assemblers	5,741	1.0	197	0.5	2,552	1.7	836	0.8	819	0.7	190	0.9	214	0.7	933	0.8
Elementary Occupations	55,623	9.7	355	0.8	9,606	6.4	2,445	2.4	39,049	34.3	870	4.3	1,356	4.5	1,942	1.7
Not Stated	18,504	3.2	640	1.5	6,315	4.2	2,764	2.7	2,237	2.0	825	4.1	892	3.0	4,831	4.3
The Usually Working Population (12 years and Older) By Industry																
Agriculture Hunting Forestry and Fishing	487,087	85.1	39,914	92.7	114,626	76.7	90,703	88.6	101,515	89.1	16,321	80.4	25,628	85.5	98,380	87.0
Mining and Quarrying	742	0.1	8	0.0	225	0.2	36	0.0	132	0.1	183	0.9	76	0.3	82	0.1
Manufacturing	7,246	1.3	222	0.5	2,431	1.6	1,023	1.0	1,256	1.1	444	2.2	407	1.4	1,463	1.3
Electricity Gas Steam and Air conditioning supply	248	0.0	14	0.0	132	0.1	21	0.0	23	0.0	15	0.1	14	0.0	29	0.0
Water Supply	262	0.0	8	0.0	134	0.1	23	0.0	40	0.0	10	0.0	13	0.0	34	0.0
Construction and Allied Repairs	7,442	1.3	266	0.6	3,145	2.1	1,016	1.0	1,051	0.9	395	1.9	525	1.8	1,044	0.9
Wholesale & Retail Trade Restaurants and Hotel	18,681	3.3	455	1.1	8,644	5.8	2,526	2.5	3,180	2.8	262	1.3	810	2.7	2,804	2.5
Transport and Storage	4,524	0.8	78	0.2	2,733	1.8	606	0.6	404	0.4	106	0.5	99	0.3	498	0.4
Accomodation and food services activities	2,086	0.4	42	0.1	841	0.6	206	0.2	325	0.3	281	1.4	83	0.3	308	0.3
Information and Communication	1,181	0.2	28	0.1	436	0.3	193	0.2	178	0.2	75	0.4	42	0.1	229	0.2
Finance and Insurance	546	0.1	34	0.1	313	0.2	40	0.0	52	0.0	14	0.1	8	0.0	85	0.1
Real Estate Activies	22	0.0	1	0.0	18	0.0	1	0.0	-	0.0	-	0.0	1	0.0	1	0.0
Community Social and Personal Services	20,470	3.6	1,014	2.4	9,259	6.2	2,513	2.5	2,813	2.5	1,207	5.9	1,059	3.5	2,605	2.3
Not Stated	21,751	3.8	968	2.2	6,578	4.4	3,444	3.4	2,986	2.6	981	4.8	1,217	4.1	5,577	4.9

Source: 2010 Census of Population and Housing

Annex E: Fertility Levels, Patterns and Trends

E1: Adjusted ASFRs and TFRs by District, Eastern Province 2010

Age Group	Eastern	Chadiza	Chipata	katete	Lundazi	Mambwa	Nyimba	Petauke
15-19	0.1597	0.1321	0.1230	0.1372	0.1585	0.1233	0.1421	0.1348
20-24	0.3196	0.3585	0.2907	0.3233	0.3572	0.2909	0.3096	0.3237
25-29	0.2901	0.3466	0.2658	0.3089	0.3172	0.2727	0.2841	0.3148
30-34	0.2443	0.2912	0.2167	0.2584	0.2779	0.2133	0.2539	0.2790
35-39	0.1884	0.2352	0.1769	0.1896	0.2208	0.1811	0.2105	0.2005
40-44	0.0971	0.1363	0.0884	0.0995	0.1322	0.0886	0.1097	0.1096
45-49	0.0297	0.0457	0.0332	0.0287	0.0443	0.0302	0.0433	0.0431
TFR	6.6	7.5	6.1	6.6	7.0	6.4	6.8	6.7

Source: 2010 Census of Population and Housing

E2: Observed and Adjusted ASFR, TFR and Mean Age at Childbearing (MACB), Eastern Province 1990 – 2010

Age Group	1990* Observed ASFR	1990* Adjusted ASFR	2000* Observed ASFR	2000* Adjusted ASFR	2010 Observed ASFR	2010 Adjusted ASFR
15-19	0.0879	0.0940	0.0928	0.1407	0.1064	0.1597
20-24	0.2501	0.2674	0.2118	0.2768	0.2503	0.3196
25-29	0.2746	0.2936	0.2116	0.2692	0.2332	0.2901
30-34	0.2543	0.2719	0.1846	0.2317	0.1981	0.2443
35-39	0.2112	0.2258	0.0420	0.1748	0.1550	0.1884
40-44	0.1203	0.1286	0.0710	0.0833	0.0842	0.0971
45-49	0.0549	0.0587	0.0290	0.0301	0.0297	0.0297
Obs. TFR	6.3		4.7		5.3	
Adj. TFR		6.7		6.0		6.6
MACB					30.6	

Sources: 1990, 2000 and 2010 Censuses of Population and Housing

E4: GRR and NRR by Rural/Urban, Eastern Province 1990 - 2010

Age Group	Total ASFR(f)	Total Survival Ratios	Total ASFR at Current Mortality Rates	Rural ASFR(f)	Rural Survival Ratios	Rural ASFR at Current Mortality Rates	Urban ASFR(f)	Urban Survival Ratios	Urban ASFR at Current Mortality Rates
15 - 19	0.0527	3.8523	0.2601	0.0567	3.8151	0.2138	0.0289	4.1697	0.1200
20 - 24	0.1242	3.7373	0.5933	0.1328	3.7058	0.4889	0.0784	4.0189	0.3162
25 - 29	0.1131	3.5982	0.5300	0.1206	3.5714	0.4288	0.0736	3.8493	0.2852
30 - 34	0.0984	3.4041	0.4250	0.1040	3.3832	0.3518	0.0680	3.6163	0.2496
35 - 39	0.0762	3.2015	0.3094	0.0806	3.1883	0.2561	0.0471	3.3567	0.1610
40 - 44	0.0414	3.0122	0.1561	0.0448	3.0043	0.1332	0.0160	3.1248	0.0502
45 - 49	0.0148	2.8393	0.0512	0.0162	2.8410	0.0448	0.0043	2.8750	0.0123
GRR 2010	2.6			2.8			1.6		
NRR 2010			1.8	1.9					1.2

Sources: 1990, 2000 and 2010 Censuses of Population and Housing

Annex F: Mortality

F1: Proportion Distribution of Reported Deaths by Age Group, District and Rural/Urban, Eastern Province 2010

Age Group	Total	Rural	Urban	Chadiza	Chipata	Katete	Lundazi	Mambwe	Nyimba	Petauke
0 - 4	0.501	0.518	0.353	0.552	0.455	0.502	0.629	0.398	0.447	0.469
5-9	0.072	0.075	0.050	0.068	0.068	0.082	0.072	0.079	0.073	0.070
10-14	0.028	0.028	0.024	0.027	0.022	0.034	0.028	0.022	0.025	0.033
15 - 19	0.027	0.026	0.036	0.021	0.026	0.033	0.025	0.027	0.027	0.030
20 - 24	0.033	0.030	0.060	0.036	0.036	0.031	0.022	0.032	0.033	0.041
25 - 29	0.039	0.036	0.065	0.033	0.043	0.041	0.026	0.059	0.045	0.042
30 - 34	0.045	0.041	0.079	0.038	0.049	0.044	0.025	0.053	0.063	0.051
35 - 39	0.043	0.040	0.070	0.030	0.052	0.036	0.025	0.059	0.056	0.049
40 - 44	0.031	0.028	0.050	0.022	0.039	0.022	0.017	0.042	0.043	0.034
45 - 49	0.027	0.026	0.044	0.022	0.032	0.023	0.019	0.044	0.036	0.027
50 - 54	0.022	0.021	0.031	0.022	0.027	0.018	0.013	0.027	0.025	0.026
55 - 59	0.017	0.016	0.024	0.016	0.020	0.018	0.010	0.022	0.015	0.018
60 - 64	0.021	0.020	0.025	0.017	0.022	0.027	0.014	0.029	0.015	0.023
65 - 69	0.018	0.017	0.023	0.022	0.021	0.018	0.014	0.019	0.016	0.017
70 - 74	0.023	0.023	0.023	0.025	0.026	0.026	0.018	0.031	0.027	0.021
75+	0.052	0.053	0.043	0.049	0.064	0.044	0.044	0.055	0.053	0.051

Source: 2010 Census of Population and Housing

Annex H: Disability

H1: Disabled Population by Sex, Rural/Urban and District, Eastern Province 2010

Sex and District	Disabled Population Total	Disabled Population Rural	Disabled Population Urban	Percent Disabled Total	Percent Disabled Rural	Percent Disabled Urban
Total	**31838**	**29105**	**2733**	**2.1**	**2.2**	**1.4**
Male	16656	15196	1460	2.2	2.3	1.6
Female	15182	13909	1273	1.9	2.0	1.3
District						
Chadiza	2045	2019	26	2.0	2.0	1.0
Chipata	8827	7248	1579	2.0	2.2	1.4
Katete	4422	4227	195	1.9	2.0	1.0
Lundazi	6378	6196	182	2.1	2.1	1.2
Mambwe	1472	1342	130	2.3	2.3	2.3
Nyimba	2119	1987	132	2.6	2.7	1.9
Petauke	6575	6086	489	2.2	2.3	1.7

Source: 2010 Census of Population and Housing

H2: Disabled Population by Age and Sex, Eastern Province 2010

Age Group	Disabled Population			Percent Disabled		
	Total	Male	Female	Total	Male	Female
Total	31,838	16,656	15,182	2.1	2.2	1.9
0 - 4	1,842	1,107	735	0.7	0.8	0.5
5-9	3,059	1,723	1,336	1.3	1.4	1.1
10-14	3,497	1,944	1,553	1.6	1.8	1.5
15 - 19	2,906	1,636	1,270	1.7	2.0	1.5
20 - 24	2,019	1,137	882	1.6	1.9	1.3
25 - 29	1,900	1,034	866	1.7	2.0	1.4
30 - 34	1,750	961	789	2.0	2.2	1.8
35 - 39	1,704	901	803	2.3	2.4	2.2
40 - 44	1,617	893	724	3.1	3.4	2.8
45 - 49	1,585	889	696	3.7	4.3	3.2
50 - 54	1,430	699	731	4.5	4.7	4.3
55 - 59	1,161	580	581	5.1	5.5	4.9
60 - 64	1,494	638	856	6.7	7.1	6.5
65 - 69	1,343	548	795	8.0	7.9	8.0
70 - 74	1,487	570	917	10.8	10.1	11.3
75 - 79	1,224	571	653	13.2	13.2	13.1
80 - 84	824	386	438	15.4	16.7	14.5
85 - 89	509	237	272	16.5	16.7	16.4
90 - 94	214	96	118	20.4	20.9	20.0
95+	273	106	167	20.4	22.2	19.5

Source: 2010 Census of Population and Housing

Annex I: Evaluation Of Coverage And Content Errors

I1: Population by Age Group, Sex, Age Ratio and Sex Ratio, Eastern Province 1990

Age Group	Population		Age Ratio		Deviation from 100		Sex Ratio	Difference
	Male	Female	Male	Female	Male	Female		
0-4	78,527	79,737	-	-	-	-	98.5	-
5-9	73,594	73,290	100.4	101.8	0.4	1.8	100.4	1.9
10-14	68,039	64,293	102.4	96.9	2.4	-3.1	105.8	5.4
15-19	59,251	59,390	109.8	107.1	9.8	7.1	99.8	-6.1
20-24	39,904	46,604	89.4	98.6	-10.6	-1.4	85.6	-14.1
25-29	29,981	35,169	93.8	95.9	-6.2	-4.1	85.2	-0.4
30-34	24,008	26,,743	103.6	97.8	3.6	-2.2	89.8	4.5
35-39	16,370	19524	85.5	82.9	-14.5	-17.1	83.8	-5.9
40-44	14,283	20,357	98.3	109.7	-1.7	9.7	70.2	-13.7
45-49	12,679	17,603	96.1	93.1	-3.9	-6.9	72.0	1.9
50-54	12,098	17,451	105.2	119.2	5.2	19.2	69.3	-2.7
55-59	10,316	11,674	96.2	82.6	-3.8	-17.4	88.4	19.0
60-64	9,353	10,832	110.9	118.1	10.9	18.1	86.3	-2.0
65-69	6,546	6,672	-	-	0.0	0.0	98.1	11.8
70-74	5,192	5,084	-	-	-	-	102.1	-
75+			-	-	-	-	-	-
Total	460141	494423	-	-				
Mean	-	-	-	-	6.1	9.0	-	6.9

Source: 1990 Census of Population and Housing

Age-Sex Accuracy Index = 3 times mean difference in sex ratio plus mean
Deviations of males and females age ratios.
3 x 6.9 + 6.1 + 9.0
= 35.7

I2: Population by Age Group, Sex, Age Ratio and Sex Ratio, Eastern Province 2000

Age Group	Population		Age Ratio		Deviation from 100		Sex Ratio	Difference
	Male	Female	Male	Female	Male	Female		
0-4	115,718	116,442					99.4	
5-9	98,935	98,254	101.9	102.5	1.9	2.5	100.7	1.3
10-14	78,404	75,297	96.1	91.0	-3.9	-9.0	104.1	3.4
15-19	64,203	67,176	98.8	99.3	-1.2	-0.7	95.6	-8.6
20-24	51,545	60,008	95.5	104.1	-4.5	4.1	85.9	-9.7
25-29	43,752	48,088	103.3	101.3	3.3	1.3	91.0	5.1
30-34	33,176	34,943	95.7	91.7	-4.3	-8.3	94.9	4.0
35-39	25,604	28,151	98.2	101.2	-1.8	1.2	91.0	-4.0
40-44	18,970	20,696	93.9	92.1	-6.1	-7.9	91.7	0.7
45-49	14,782	16,783	95.4	90.1	-4.6	-9.9	88.1	-3.6
50-54	12,028	16,553	98.2	113.8	-1.8	13.8	72.7	-15.4
55-59	9,724	12,298	92.5	85.1	-7.5	-14.9	79.1	6.4
60-64	8,994	12,333	101.1	118.4	1.1	18.4	72.9	-6.1
65-69	8,066	8,533	108.3	92.3	8.3	-7.7	94.5	21.6
70-74	5,901	6,165	-	-	0.0	0.0	95.7	1.2
75+	7,724	7,521	-	-	-	-	102.7	-
Total	597,526	629,241	-	-				
Mean	-	-	-	-	3.9	7.7		6.5

Source: 2000 Census of Population and Housing

Age-Sex Accuracy Index = 3 times mean difference in sex ratio plus mean
deviations of males and females age ratios.
3 x 6.5 + 3.9 + 7.7
= 31.1

I3: Population by Age Group, Sex, Age Ratio and Sex Ratio, Eastern Province 2010								
Age Group	Population		Age Ratio		Deviation from 100		Sex Ratio	Difference
	Male	Female	Male	Female	Male	Female		
0-4	139,282	141,515					98.4	
5-9	119,932	120,020	97.2	97.3	-2.8	-2.7	99.9	1.5
10-14	107,614	105,297	105.8	103.6	5.8	3.6	102.2	2.3
15-19	83,450	83,226	100.5	95.5	0.5	-4.5	100.3	-1.9
20-24	58,428	69,000	86.3	95.9	-13.7	-4.1	84.7	-15.6
25-29	51,998	60,690	101.9	106.6	1.9	6.6	85.7	1.0
30-34	43,583	44,858	97.6	91.7	-2.4	-8.3	97.2	11.5
35-39	37,319	37,164	107.4	105.3	7.4	5.3	100.4	3.3
40-44	25,887	25,745	89.2	87.1	-10.8	-12.9	100.6	0.1
45-49	20,727	21,969	101.7	102.5	1.7	2.5	94.3	-6.2
50-54	14,882	17,126	95.0	101.0	-5.0	1.0	86.9	-7.4
55-59	10,614	11,957	88.8	79.1	-11.2	-20.9	88.8	1.9
60-64	9,023	13,112	102.8	120.0	2.8	20.0	68.8	-20.0
65-69	6,949	9,896	94.6	93.4	-5.4	-6.6	70.2	1.4
70-74	5,671	8,087	-	-	0.0	0.0	70.1	-0.1
75+	8,995	11,105	-	-	-	-	81.0	-
Total	744,354	780,767	-	-			-	
Mean	-	-	-	-	5.5	7.6	-	5.3

Source: 2010 Census of Population and Housing

Age-Sex Accuracy Index = 3 times mean difference in sex ratio plus mean
deviations of males and females age ratios.
3 x 5.3 + 5.5 + 7.6
= 29.0

Life Tables

Table 1: Abridged Life Table for Both Sexes, Eastern Province 2010

Age	Width,	nMx	nax	nqx	lx	ndx	nLx	5Px	Tx	ex
0	1	0.1040	0.3	0.0970	100,000	9,696	93,213	0.8658	4,906,435	49.1
1	4	0.0273	0.4	0.0993	90,304	8,968	339,693	0.9232	4,813,222	53.3
5	5	0.0071	0.5	0.0345	81,336	2,807	399,663	0.9750	4,473,530	55.0
10	5	0.0031	0.5	0.0152	78,529	1,195	389,659	0.9828	4,073,866	51.9
15	5	0.0039	0.5	0.0192	77,334	1,482	382,967	0.9756	3,684,207	47.6
20	5	0.0061	0.5	0.0298	75,852	2,262	373,607	0.9652	3,301,240	43.5
25	5	0.0083	0.5	0.0400	73,590	2,940	360,602	0.9518	2,927,633	39.8
30	5	0.0120	0.5	0.0568	70,650	4,010	343,226	0.9393	2,567,031	36.3
35	5	0.0138	0.5	0.0650	66,640	4,330	322,377	0.9344	2,223,805	33.4
40	5	0.0141	0.5	0.0662	62,310	4,125	301,239	0.9312	1,901,428	30.5
45	5	0.0153	0.5	0.0715	58,185	4,163	280,518	0.9257	1,600,189	27.5
50	5	0.0166	0.5	0.0773	54,022	4,177	259,668	0.9205	1,319,671	24.4
55	5	0.0177	0.5	0.0819	49,845	4,081	239,023	0.9090	1,060,004	21.3
60	5	0.0222	0.5	0.1010	45,764	4,624	217,261	0.8933	820,981	17.9
65	5	0.0252	0.5	0.1130	41,140	4,651	194,075	0.8595	603,720	14.7
70	5	0.0406	0.5	0.1715	36,490	6,258	166,804	0.8172	409,645	11.2
75	5	0.0477	0.5	0.1965	30,232	5,940	136,310	0.4387	242,841	8.0
80	+	0.0738	0.5	1.0000	24,292	24,292	106,532		106,532	4.4

Source: 2010 Census of Population and Housing

Table 2: Abridged Life Table for Males, Eastern Province 2010

Age	Width,	nMx	nax	nqx	lx	ndx	nLx	5Px	Tx	ex
0	1	0.1134	0.3	0.1051	100,000	10,506	92,646	0.8345	4,568,884	45.7
1	4	0.0285	0.4	0.1035	89,494	9,266	324,619	0.9309	4,476,238	50.0
5	5	0.0073	0.5	0.0352	80,228	2,824	388,432	0.9817	4,151,619	51.7
10	5	0.0033	0.5	0.0163	77,404	1,265	381,328	0.9828	3,763,186	48.6
15	5	0.0035	0.5	0.0173	76,139	1,320	374,754	0.9725	3,381,859	44.4
20	5	0.0059	0.5	0.0286	74,819	2,140	364,466	0.9591	3,007,105	40.2
25	5	0.0088	0.5	0.0423	72,679	3,072	349,570	0.9439	2,642,639	36.4
30	5	0.0122	0.5	0.0578	69,607	4,020	329,945	0.9314	2,293,069	32.9
35	5	0.0149	0.5	0.0699	65,587	4,586	307,295	0.9270	1,963,125	29.9
40	5	0.0157	0.5	0.0734	61,000	4,478	284,849	0.9151	1,655,829	27.1
45	5	0.0187	0.5	0.0863	56,522	4,879	260,653	0.9100	1,370,980	24.3
50	5	0.0197	0.5	0.0904	51,643	4,670	237,198	0.9032	1,110,327	21.5
55	5	0.0214	0.5	0.0975	46,973	4,582	214,244	0.8711	873,129	18.6
60	5	0.0301	0.5	0.1327	42,391	5,626	186,636	0.8650	658,885	15.5
65	5	0.0308	0.5	0.1352	36,764	4,972	161,449	0.7887	472,249	12.8
70	5	0.0552	0.5	0.2211	31,793	7,028	127,336	0.7851	310,800	9.8
75	5	0.0530	0.5	0.2140	24,764	5,300	99,974	0.4551	183,464	7.4
80	+	0.0804	0.5	1.0000	19,465	19,465	83,490		83,490	4.3

Source: 2010 Census of Population and Housing

Table 3: Abridged Life Table for Females, Eastern Province 2010

Age	Width,	nMx	nax	nqx	lx	ndx	nLx	5Px	Tx	ex
0	1	0.0948	0.3	0.0889	100,000	8,888	93,778	0.8540	4,992,994	49.9
1	4	0.0260	0.4	0.0952	91,112	8,669	333,239	0.9359	4,899,215	53.8
5	5	0.0070	0.5	0.0339	82,443	2,794	399,642	0.9839	4,565,976	55.4
10	5	0.0028	0.5	0.0141	79,649	1,120	393,204	0.9797	4,166,334	52.3
15	5	0.0043	0.5	0.0210	78,529	1,648	385,229	0.9701	3,773,130	48.0
20	5	0.0063	0.5	0.0309	76,881	2,372	373,729	0.9628	3,387,902	44.1
25	5	0.0079	0.5	0.0380	74,509	2,828	359,817	0.9461	3,014,173	40.5
30	5	0.0117	0.5	0.0558	71,681	3,999	340,407	0.9405	2,654,356	37.0
35	5	0.0127	0.5	0.0599	67,681	4,057	320,149	0.9409	2,313,949	34.2
40	5	0.0125	0.5	0.0590	63,624	3,756	301,219	0.9426	1,993,801	31.3
45	5	0.0121	0.5	0.0572	59,868	3,425	283,929	0.9352	1,692,581	28.3
50	5	0.0140	0.5	0.0657	56,443	3,706	265,541	0.9327	1,408,652	25.0
55	5	0.0144	0.5	0.0676	52,738	3,563	247,657	0.9231	1,143,111	21.7
60	5	0.0168	0.5	0.0780	49,175	3,836	228,614	0.9059	895,454	18.2
65	5	0.0210	0.5	0.0960	45,339	4,353	207,108	0.8721	666,840	14.7
70	5	0.0299	0.5	0.1319	40,986	5,405	180,610	0.8248	459,732	11.2
75	5	0.0432	0.5	0.1807	35,582	6,430	148,972	0.4663	279,122	7.8
80	+	0.0687	0.5	1.0000	29,151	29,151	130,151		130,151	4.5

Source: 2010 Census of Population and Housing

Table 4: Abridged Life Table for Both Sexes, Eastern Province Rural 2010

Age	Width,	nMx	nax	nqx	lx	ndx	nLx	5Px	Tx	ex
0	1	0.1071	0.3	0.0996	100,000	9,963	93,026	0.8394	4,776,704	47.8
1	4	0.0285	0.4	0.1033	90,037	9,299	326,673	0.9307	4,683,678	52.0
5	5	0.0074	0.5	0.0360	80,738	2,909	390,603	0.9821	4,357,005	54.0
10	5	0.0032	0.5	0.0158	77,830	1,226	383,630	0.9811	3,966,402	51.0
15	5	0.0039	0.5	0.0193	76,603	1,479	376,362	0.9723	3,582,771	46.8
20	5	0.0059	0.5	0.0286	75,125	2,148	365,954	0.9617	3,206,409	42.7
25	5	0.0082	0.5	0.0395	72,976	2,879	351,925	0.9463	2,840,455	38.9
30	5	0.0117	0.5	0.0554	70,097	3,884	333,009	0.9374	2,488,530	35.5
35	5	0.0134	0.5	0.0634	66,213	4,198	312,175	0.9364	2,155,521	32.6
40	5	0.0135	0.5	0.0636	62,015	3,944	292,325	0.9322	1,843,346	29.7
45	5	0.0146	0.5	0.0683	58,071	3,965	272,509	0.9255	1,551,021	26.7
50	5	0.0161	0.5	0.0752	54,105	4,070	252,211	0.9218	1,278,511	23.6
55	5	0.0169	0.5	0.0786	50,035	3,931	232,488	0.9047	1,026,300	20.5
60	5	0.0213	0.5	0.0973	46,104	4,485	210,339	0.8945	793,812	17.2
65	5	0.0236	0.5	0.1065	41,619	4,433	188,148	0.8409	583,473	14.0
70	5	0.0389	0.5	0.1657	37,186	6,160	158,211	0.8065	395,325	10.6
75	5	0.0479	0.5	0.1972	31,026	6,117	127,604	0.4618	237,114	7.6
80	+	0.0714	0.5	1.0000	24,909	24,909	109,510		109,510	4.4

Source: 2010 Census of Population and Housing

Table 5: Abridged Life Table for Both Sexes, Eastern Province Urban 2010

Age	Width,	nMx	nax	nqx	lx	ndx	nLx	5Px	Tx	ex
0	1	0.0765	0.3	0.0726	100,000	7,258	94,920	0.8876	4,874,345	48.7
1	4	0.0176	0.4	0.0661	92,742	6,133	348,890	0.9560	4,779,425	51.5
5	5	0.0046	0.5	0.0224	86,609	1,943	424,302	0.9876	4,430,535	51.2
10	5	0.0023	0.5	0.0113	84,666	956	419,027	0.9824	4,006,233	47.3
15	5	0.0037	0.5	0.0183	83,710	1,531	411,660	0.9653	3,587,206	42.9
20	5	0.0076	0.5	0.0366	82,179	3,005	397,371	0.9580	3,175,546	38.6
25	5	0.0089	0.5	0.0426	79,174	3,373	380,688	0.9384	2,778,175	35.1
30	5	0.0135	0.5	0.0638	75,800	4,836	357,239	0.9269	2,397,487	31.6
35	5	0.0159	0.5	0.0742	70,964	5,263	331,140	0.9169	2,040,248	28.8
40	5	0.0182	0.5	0.0841	65,702	5,527	303,636	0.9062	1,709,108	26.0
45	5	0.0208	0.5	0.0950	60,174	5,714	275,157	0.9067	1,405,473	23.4
50	5	0.0203	0.5	0.0931	54,460	5,072	249,476	0.8935	1,130,316	20.8
55	5	0.0240	0.5	0.1082	49,388	5,342	222,902	0.8654	880,840	17.8
60	5	0.0315	0.5	0.1379	44,046	6,074	192,898	0.8275	657,938	14.9
65	5	0.0421	0.5	0.1770	37,972	6,720	159,623	0.7707	465,040	12.2
70	5	0.0600	0.5	0.2364	31,253	7,387	123,022	0.8065	305,418	9.8
75	5	0.0450	0.5	0.1872	23,866	4,468	99,223	0.4560	182,395	7.6
80	+	0.1081	0.5	1.0000	19,398	19,398	83,173		83,173	4.3

Source: 2010 Census of Population and Housing

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2010 CENSUS OF POPULATION AND HOUSING QUESTIONNAIRE

REPUBLIC OF ZAMBIA

CENTRAL STATISTICAL OFFICE

2010 CENSUS OF POPULATION AND HOUSING

IDENTIFICATION

Province

District

Constituency

Ward

Region: Rural 1   Urban 2

CSA No.

SEA No.

Census Building No. (CBN)

Housing Unit No. (HUN)

Household No. (HHN)

Village/Locality Name

Residential Address

Chief's Area

INTERVIEW STATUS

Completed (occupied)
Non-contact (occupied)
Not interviewed (vacant)
Non residential
Refused
Other

MARK HERE IF MORE THAN ONE QUESTIONNAIRE

Questionnaire ___ of ___

SECTION P - QUESTIONS ON POPULATION FOR ALL MEMBERS OF THE HOUSEHOLD

P1 NAMES of usual residents and visitors

P2 Membership status?
- Usual member Present (1)
- Usual member Absent (2)
- Visitor (3)

P3 What is (NAME'S) relationship to the head of household?
- Head of Household (1)
- Spouse (2)
- Own Son/Daughter (3)
- Step Son/Daughter (4)
- Parent (5)
- Brother/Sister (6)
- Nephew/Niece (7)
- Son/Daughter-in-Law (8)
- Grandchild (9)
- Parent-in-Law (10)
- Cousin (11)
- Other Relative (12)
- Unrelated (13)

P4 Is (NAME) male or female?
- Male (1)
- Female (2)

P5 How old was (NAME) at his/her last birthday? *If less than 1 year enter "00"* In Years

P6 PLACE OF BIRTH Where was (NAME) born? *Write District/Country name then code*

P7 Was this part of the district rural or urban at the time of birth?
- Rural (1)
- Urban (2)
- Outside Zambia (3)

P8 If Zambian, skip to P11

Is (NAME) Zambian? (1)

P9 If non-Zambian, code here then write name of country (2)

P10 What is the main purpose of your stay in Zambia?
- Employment (1)
- Family formation/reunification (2)
- Education/training (3)
- Settlement (4)
- Refugee/Asylum (5)
- Investor (6)
- Tourist (7)
- Other (8)

P11 What is (NAME'S) religion?
- Catholic (1)
- Protestant (2)
- Muslim (3)
- Hindu (4)
- Buddist (5)
- Bahai faith (6)
- Other (7)
- None (8)

99080946 (82)

ENUMERATOR Name _____ Date _____

SUPERVISOR Name _____ Date _____

99080946 (82)

M6193

HOUSEHOLD SUMMARY COUNT

	Usual members present	Usual members absent	Visitors
Male		Male	Male
Female		Female	Female
Total		Total	Total

INSTITUTIONAL

Summary Count

	Male
	Female
	Total

Type of Collective Quarters

Hotel/Motel/Lodge [1]
Hostel/Guest House/Inn [2]
Hospital [3]
Learning Institution [4]
Prison [5]
Police Cell [6]
Refugee Camp [7]
Other (specify below) [8]

FOR ALL MEMBERS PRESENT

ONLY FOR PERSONS LESS THAN 18 YEARS OLD

ONLY FOR PERSONS AGED 5 YEARS AND OLDER

Person Number: [1] [2] [3] [4] [5] [6] [7] [8]

P12 What is (NAME'S) ethnicity? — Write and record code for ethnicity

P13 What is (NAME'S) predominant language of communication? — Write name of predominant language then code

P14 Where was (NAME) residing in October 2009? — Record code for district or code for foreign country

P15 How long has (NAME) been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)? — YEARS / MONTHS — Same as Head of Household

P16 Is (NAME) disabled in any way? — Yes [1] / No [2] Go to P19

P17 What is (NAME'S) disability? Mark all those that apply — Blind [1] Partially sighted [2] Deaf and Dumb [3] Deaf [4] Hard of hearing [5] Dumb [6] Mental illness [7] Intellectual [8] Speech impairment [9] Physically disabled [10] Mentally retarded [11] Other [12]

P18 What is the cause of (NAME'S) disability? Mark all those that apply — Congenital/pre-natal [1] Disease/illness [2] Injury/Accident [3] Spousal violence [4] Other violence [5] Unknown [6] Other [7]

P19 Is (NAME) an albino? — Yes [1] / No [2]

P20 Is (NAME'S) biological mother alive? — Yes [1] / No [2] Go to P22 / Don't know [8]

P21 Does (NAME'S) biological mother live in this household? — Yes [1] / No [2]

P22 Is (NAME'S) biological father alive? — Yes [1] / No [2] Go to P24 / Don't know [8]

P23 Does (NAME'S) biological father live in this household? — Yes [1] / No [2]

P24 Does (NAME) have a birth certificate? — Yes seen [1] / Yes not seen [2] / No [3] / Don't know [8]

P25 Can (NAME) read and write in any language? — Yes [1] / No [2]

P26 Has (NAME) ever attended school? — Yes [1] Go to P29 / No [2]

P27 Is (NAME) currently attending school? — Yes [1] / No [2]

P28 What highest level of education has (NAME) completed? — Enter code from manual

ONLY FOR PERSONS AGED 5 YEARS AND OLDER

P29 What is the highest professional or vocational qualification (NAME) has completed?

None, Certificate, Diploma, Bachelors Degree, Masters Degree, PhD

P30 What is the field of study for the highest professional or vocational qualification completed?

Write field of study and enter code.

ONLY FOR PERSONS AGED 12 YEARS OR OLDER

P31 What did (NAME) do in the last 7 days?

Worked - Paid non seasonal, Worked - Unpaid non seasonal, Worked - Paid seasonal, Worked - Unpaid seasonal, On leave, Unpaid work on household holding or business, Unemployed and seeking work, Not seeking work but available for work, Full time Housewife/homemaker, Full time student, Not available for work for other reasons

P32 What did (NAME) do in the last 12 months?

Worked - Paid non seasonal, Worked - Unpaid non seasonal, Worked - Paid seasonal, Worked - Unpaid seasonal, On leave, Unpaid work on household holding or business, Unemployed and seeking work, Not seeking work but available for work, Full time Housewife/homemaker, Full time student, Not available for work for other reasons → Go to P36

P33 What was (NAME'S) employment status in the last 12 months?

An employee, An employer, Self employed, An unpaid family worker

P34 What kind of work did (NAME) do in his/her main job or business during the last 12 months?

Write main occupation and enter code.

ONLY FOR PERSONS AGED 12 YEARS AND OLDER

P35 What kind of business/service was mainly carried out by (NAME'S) employer/establishment/business in the last 12 months?

Write name of industry and enter code.

P36 What is (NAME'S) marital status?

Never married → Go to P38, Married, Divorced, Separated, Widowed, Cohabiting

P37 How old was (NAME) when he/she first got married or started cohabiting?

Age at first marriage

FEMALES 12 YEARS AND OLDER

P38 Have you ever had a live birth (including babies who died after birth?

Yes, No → Go to P46

P39 Living with you now? Male / Female

P40 Living elsewhere? Male / Female

P41 Dead? Male / Female

Of the children born to you alive how many are....?

FEMALES 12 - 49 YEARS OLD

P42 Did you have any live births in the last 12 months?

Yes, No → Go to P46

P43 Living with you now? Male / Female

P44 Living elsewhere? Male / Female

P45 Dead? Male / Female

Of the children born to you alive in the last 12 months how many are....

PERSONS 16 YEARS+

P46 Do you have a Zambian National Registration card? Yes / No

P47 Are you a registered (Green National) voter? Yes / No

Person Number

ENUMERATOR: GO TO THE NEXT PAGE TO CONTINUE WITH THE LIST OF THE HOUSEHOLD'S MEMBERS. IF THE PERSON IS THE LAST MEMBER OF THE HOUSEHOLD, PROCEED TO SECTION D

SECTION A – AGRICULTURE

A1 Has your household engaged directly in any of the following agricultural activities, that is: crop growing, livestock and poultry raising, fish farming and game ranching since 1st October 2009?

Yes [1]
No [2] → M1

A2 On your holding, which of the following crops did you grow since 1st October 2009?

	Yes	No
Maize	[1]	[2]
Sorghum	[1]	[2]
Millet	[1]	[2]
Rice	[1]	[2]
Cassava	[1]	[2]
Sweet potatoes	[1]	[2]
Irish potatoes	[1]	[2]
Groundnuts	[1]	[2]
Mixed beans	[1]	[2]
Cow peas	[1]	[2]
Wheat	[1]	[2]
Cotton	[1]	[2]
Burley tobacco	[1]	[2]
Virginia tobacco	[1]	[2]
Sunflower	[1]	[2]
Soya beans	[1]	[2]
Paprika	[1]	[2]
Sugar cane	[1]	[2]
Cashew Nuts	[1]	[2]
Vegetables	[1]	[2]
Orchard	[1]	[2]
Coffee	[1]	[2]
Velvet beans	[1]	[2]
Bambara nuts	[1]	[2]
Pineapple	[1]	[2]
Other crop	[1]	[2]

A3 On your holding, which of the following livestock/poultry have you raised since 1st October 2009?

	Yes	No
Cattle	[1]	[2]
Goats	[1]	[2]
Pigs	[1]	[2]
Sheep	[1]	[2]
Donkeys	[1]	[2]
Chickens	[1]	[2]
Other Poultry	[1]	[2]
Other Livestock	[1]	[2]

A4 Has your agriculture holding included fish farming since 1st October 2009?
Yes [1]
No [2]

A5 Has your agriculture holding included game ranching since 1st October 2009?
Yes [1]
No [2]

SECTION M: GENERAL AND MATERNAL DEATHS

Please record information on the deaths that occurred in the household during the last 12 months. Do not forget the children.

M1 Is there any member of the household who died since October 2009?
Yes [1]
No [2] → End

Death Number	M2 What was the sex of the deceased?		M3 What was the age of the deceased? Age in completed years. (Record 00 if less than 1 year)	M4 What was the cause of death?								If death of Woman aged 12-49					
				Accident Injury	Suicide	Spousal Violence	Other Violence	Sickness/Disease	Witchcraft	Other		M5 Did the death occur while pregnant?		M6 Did the death occur during childbirth?		M7 Did the death occur during the 6 weeks period following the end of pregnancy, irrespective of the way the pregnancy ended?	
	Male	Female										Yes	No	Yes	No	Yes	No
[1]	[1]	[2]	▢	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[1] →End	[2]	[1] →End	[2]	[1] →End	[2]
[2]	[1]	[2]	▢	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[1] →End	[2]	[1] →End	[2]	[1] →End	[2]
[3]	[1]	[2]	▢	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[1] →End	[2]	[1] →End	[2]	[1] →End	[2]
[4]	[1]	[2]	▢	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[1] →End	[2]	[1] →End	[2]	[1] →End	[2]
[5]	[1]	[2]	▢	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[1] →End	[2]	[1] →End	[2]	[1] →End	[2]
[6]	[1]	[2]	▢	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[1] →End	[2]	[1] →End	[2]	[1] →End	[2]

SECTION H – HOUSING CHARACTERISTICS

H1 Type of housing unit
- Traditional [1]
- Improved traditional [2]
- Mixed [3]
- Conventional flat [4]
- Conventional house [5]
- Mud [6]
- Part of commercial building [7]
- Improvised/Makeshift [8]
- Collective/Institutional quarters [9]
- Unintended [10]
- Other [96]

H2 What is the main type of material used for the roof?
- Thatch/Palm Leaf [1]
- Rustic Mat [2]
- Palm/Bamboo [3]
- Wood Planks [4]
- Cardboard [5]
- Metal/Iron Sheets [6]
- Wood [7]
- Asbestos [8]
- Ceramic Tiles/Harvey Tiles [9]
- Cement [10]
- Roofing Shingles [11]
- Mud Tiles [12]
- Other [96]

H3 What are the walls of this housing unit mainly made of?
- Burnt bricks [1]
- Mud bricks [2]
- Compressed mud [3]
- Compressed cement bricks [4]
- Concrete blocks/slab [5]
- Cement blocks [6]
- Stone [7]
- Iron sheets [8]
- Asbestos/hardboard/wood [9]
- Pole and dagga/mud [10]
- Grass [11]
- Other [96]

H4 What is the floor of this housing unit mainly made of?
- Concrete [1]
- Cement [2]
- Brick [3]
- Tiles [4]
- Mud [5]
- Wood (not wooden tiles) [6]
- Marble [7]
- Terrazzo [8]
- Other [9]

H5 Type of Occupancy?
- Single household [1]
- One household in several housing units [2]
- Shared [3]
- Vacant [4]
- Non-contact [5]
- Non-residential [6]

H6 (If shared) what is the number of households?
▢

H7 What is the main source of water supply for…

	Household use	Drinking
Piped water inside the housing unit	[1]	[1]
Piped water outside housing unit within stand/plot	[2]	[2]
Communal tap	[3]	[3]
Protected well	[4]	[4]
Unprotected well	[5]	[5]
Protected borehole	[6]	[6]
Unprotected borehole	[7]	[7]
River/Dam/Stream	[8]	[8]
Rain Water Tank	[9]	[9]
Other tap	[10]	[10]
Water Kiosk	[11]	[11]
Water Vendor	[12]	[12]
Mineral/bottled water	[13]	[13]
Other	[96]	[96]

H8 How many living rooms and bedrooms does this housing unit have?
LIVING ▢
BEDROOMS ▢

H9 How many persons usually sleep in the housing unit(s)?
▢

H10 Does this housing unit have a kitchen?
Yes [1]
No [2]

HH3 How is the household refuse disposed?
- Regularly collected [1]
- Irregularly collected [2]
- Burnt [3]
- Roadside dumping [4]
- Other dumping [5]
- Burying/pit [6]
- Other [7]

HH4 What is the main type of toilet used by members of this household?
- Flush Private connected to water sewer system [1]
- Flush Private connected to stand alone soak away [2]
- Flush Communal [3]
- Pit Latrine [4]
- Ventilated Improved Pit Latrine (VIP) [5]
- Bucket [6]
- Other [7]
- No toilet facility [8] → HH7

HH5 Is this toilet inside or outside this housing unit?
Inside [1]
Outside [2]

HH6 Is this toilet exclusively used by members of this household?
Yes [1]
No [2]

HH7 Is this housing unit owned by any member of this household?
Yes [1]
No [2] → HH9

HH8 How was this housing unit acquired?
- Purchased [1]
- Mortgage [2]
- Freely [3]
- Inherited [4]
- Self built [5]
- Other [6] → A1

HH9 Is this housing unit provided free by the employer, friend or relative of any member of this household?
- Yes, Employer [1] → HH11
- Yes, By friend or relative [2] → A1
- No [3]

HH10 Is this housing unit rented from the employer of any member of this household?
Yes [1]
No [2] → HH12

HH11 Is this employer …
- The Central Government? [1]
- The Local Government? [2]
- Parastatal? [3]
- A private Organisation? [4]
- An individual? [5] → All skip to A1

HH12 Is this housing unit rented from …
- The Central Government? [1]
- The Local Government? [2]
- Parastatal? [3]
- A private Organisation? [4]
- An individual? [5] → HH7

SECTION HH – HOUSEHOLD CHARACTERISTICS

HH1 What is the main source of energy used for…

	Lighting	Cooking	Heating
Electricity	[1]	[1]	[1]
Gas	[2]	[2]	[2]
Wood	[3]	[3]	[3]
Candle	[4]	[4]	[4]
Paraffin	[5]	[5]	[5]
Cowdung	[6]	[6]	[6]
Charcoal	[7]	[7]	[7]
Coal	[8]	[8]	[8]
Solar	[9]	[9]	[9]
Bio fuel	[10]	[10]	[10]
Diesel	[11]	[11]	[11]
None	[12]	[12]	[12]
Other	[96]	[96]	[96]

HH2 Does your household have?

	Yes	No
A Radio	[1]	[2]
A Television	[1]	[2]
Refrigerator/freezer	[1]	[2]
A Telephone	[1]	[2]
A Bicycle	[1]	[2]
A Motor vehicle	[1]	[2]
An Internet facility	[1]	[2]
A Computer/Laptop	[1]	[2]
A Motorcycle	[1]	[2]
A Plough	[1]	[2]
A Boat/Canoe	[1]	[2]
A Scotch Cart	[1]	[2]
A Donkey	[1]	[2]
A Mobile Phone	[1]	[2]
Oxen	[1]	[2]
A Wheelbarrow	[1]	[2]

Key Persons Involved in the Production of the Report

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Mr. Peter Mukuka - Deputy Director

Mr. Daniel Daka - Deputy Director

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