

ZAMBIA

2010 CENSUS OF POPULATION AND HOUSING

COPPERBELT PROVINCE ANALYTICAL REPORT

Published by

Central Statistical Office
Nationalist Road
P.O. Box 31908
Lusaka

www.zamstats.gov.zm
email: info@zamstats.gov.zm

March, 2014

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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 the Copperbelt Province based on data from the 2010 Population and Housing Census. The report presents detailed analysis of issues of Population Size, Growth and Distribution; Education and Economic characteristics, Disability, 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) through the Central Statistical Office (CSO) during this mammoth national exercise.

I also extend my sincere gratitude to the people of Copperbelt Province and all the residents of Copperbelt 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 Copperbelt 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 Centralized 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 (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. Barbra Muyabi, Mr. Michelo Munzele and Mr. Siphon 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 goes 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.

Finally but not 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: COPPERBELT PROVINCE

Chapter 1

Profile: Copperbelt Province



1.0 Introduction

Copperbelt Province covers an area of 31,328 square kilometers, which is about 4.2 percent of the total area of Zambia. The province has the second smallest land area and the second highest concentration of people in Zambia.

1.1 Administration

Copperbelt Province is administratively divided into ten districts, namely: Chililabombwe, Chingola, Kalulushi, Kitwe, Luanshya, Lufwanyama, Masaiti, Mpongwe, Mufulira and Ndola. At the time of the 2010 Census, Copperbelt Province had 22 constituencies and 228 wards. The provincial administration offices are situated in Ndola.

1.2 Natural Resources

The Copperbelt vegetation is dominated by Miombo woodlands. The province has a tropical climate with three distinct seasons; the cool and dry season, the hot and dry season and the hot and wet season. The province records annual rainfall of about 1,400 millimeters. The Kafue River, tributary to the Zambezi River, traverses the province in a southward direction and swamps occur along the river. Broad areas of the plateaux are covered with an open mixture of shrubs, trees, and tall grasses.

The most urban and industrial parts of the province lack wildlife/national parks, except in the south-west where birdlife is well represented as well as the famed Chimfunshi Wildlife Orphanage west of Chingola. This is the largest chimpanzee sanctuary and rehabilitation centre in the world. The province is also endowed with various minerals such as cobalt, copper, precious metals and gemstones.

1.3 Languages

English is the official language of communication and instruction in Zambia. The main local languages of communication on the Copperbelt Province are Bemba, Lamba and Lala. However, there are a number of other local languages spoken in other parts of the country that are spoken across the province.

1.4 Religion

Zambia was declared a Christian nation in the 1996 constitution while upholding the right of every person to enjoy that person's freedom of conscience or religion.

1.5 Health

Health plays a critical role in the development of the country and no meaningful development can be attained without a sound health policy. Since 1991 the health sector has been making strides to improve the health delivery system in the country. Some of these efforts include a move from a strongly centralised health system in which the central structures provided support and national guidance to the peripheral structures to a more decentralized system.

In 2010, Copperbelt Province's health system had a total of 235 health facilities. This was an increase from 205 health facilities in 2000. The health system comprised 3 Specialised Hospitals, 9 General Hospitals, 8 District Hospitals, 190 Urban and Rural Health Centres and 25 Health Posts (National Health Strategic Plan, 2011).

Table 1: Number of Health Facilities by Facility Type, Ownership and District, Copperbelt Province 2010

Type of Facility	District										
	Total	Chilila-bombwe	Chingola	Kalulushi	Kitwe	Luanshya	Lufwan-yama	Masaiti	Mpon-gwe	Mufulira	Ndola
Level 3 Hospitals	3	0	0	0	1	0	0	0	0	0	2
Level 2 Hospitals	9	0	2	1	1	1	0	0	0	2	2
Level 1 Hospitals	8	1	0	0	1	2	0	0	2	1	1
Urban Health Centres	137	9	9	8	37	19	0	0	0	13	42
Rural Health Centres	53	1	4	3	0	0	11	17	11	5	1
Health Posts	25	0	2	3	3	0	7	4	2	4	0
Total	235	11	17	15	43	22	18	21	15	25	48
Type of Ownership											
GRZ Health Facilities	164	4	11	12	32	15	14	18	10	19	29
Mission Health Facilities	10	0	1	0	0	0	3	3	3	0	0
Private Health Facilities	61	7	5	3	11	7	1	0	2	6	19
Total	235	11	17	15	43	22	18	21	15	25	48

Source: Ministry of Health 2010

Zambia, like many Sub-Saharan countries, has high morbidity and mortality. According to the 2007 Zambia Demographic and Health Survey (ZDHS), HIV prevalence in adults aged 15-49 years was 17.0 percent on the Copperbelt Province. The infant mortality rate was 79 deaths per 1,000 live births while the under-five mortality rate was 133 deaths per 1000 live births.

1.6 Economy

Copperbelt Province is one of the most developed provinces in Zambia. Rich mineral resources, in particular copper and cobalt mines have attracted foreign exchange earnings to Zambia. Privatisation of the formally state-owned mines, along with several years of high demand and commodity prices for

copper, has seen a great deal of investment in the industry and an expansion in mineral production, with the establishment of new mines and the recapitalisation of existing ones. The drive to diversify its copper-dominated mining industry to invest in exploration and mine development in other minerals, such as cobalt, precious metals and gemstones is being encouraged (Zambia Review, 2011).

Copperbelt Province is one of the major suppliers of hardwood and softwood. The hardwood is used in building and construction, bee keeping, collection of forest products, and traditional medicines and herbs. Softwood is used in construction, mining and furniture making. Plantations which mostly support the mining industry are found near Ndola, Kalulushi and Mufulira. The province has well established forestry related activities such as saw milling, paper, pulp and furniture industries with the saw milling being the most developed industry. Non-wood forest products provide income for rural communities as well as for self-consumption. However, deforestation and forest degradation, soil erosion and fertility loss; and loss of biological diversity are ever present challenges (Zambia Review, 2011).

1.7 Education

Education is a powerful tool for economic development of an individual and the nation. The Sixth National Development Plan (SNDP) identifies education, training, science and technology as prime movers of Zambia's development.

Zambia has a three-tier education system consisting of seven-year primary education, followed by five-year secondary education and post secondary schooling. Government has in the past decade embarked on a number of initiatives to ensure universal access to education. The number of basic schools offering grades 1 to 9 on the Copperbelt Province increased from 902 in 2008 to 978 in 2010. An increase was also recorded in the number of high schools (Grade 10-12) which was attributed to the construction of new high schools in the province. With such measures in place, Copperbelt Province has recorded improvements in the education sector contributing to high enrolment levels of both girls and boys at primary, basic and high school levels (Ministry of Education, Educational Statistical Bulletin, 2010).

The continuous teacher recruitment programme introduced by the government resulted in additional teachers being recruited in 2010 leading to an improvement in the Pupil-Teacher Ratio at all levels of basic education in the province (Ministry of Education, Educational Statistical Bulletin, 2010).

Higher learning institutions on the Copperbelt Province offering Technical Education, Vocational and Entrepreneurship, Tertiary Education as well as University education also recorded an increase in their enrolment rates in 2010 (Ministry of Education, 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 equity and 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 in Copperbelt Province have remained low and recorded a decline between 2006 and 2010. The proportion of the population falling below the poverty line reduced from 37.3 percent in 2006 to 34.3 percent in 2010. The percentage of the extremely poor reduced from 19.5 percent to 18.3 percent.

Poverty on the Copperbelt Province has continued to be higher in rural than urban areas. The level of rural poverty is three times higher than that of urban areas. In 2010, rural poverty was estimated at 62.1 percent compared to urban levels at 27.2 percent.

Table 1.1: Overall and Extreme Poverty by Rural/Urban, Copperbelt Province 2006 and 2010

Rural/Urban	2006		2010	
	Overall Percent	Extreme Percent	Overall Percent	Extreme Percent
Total	37.3	19.5	34.3	18.3
Rural	66.9	43.1	62.1	40.3
Urban	29.7	13.4	27.2	12.6

Source: CSO: Living Conditions Monitoring Statistics, 2006 and 2010

1.10 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 censuses in 1969, 1980, 1990 and 2000.

The 2010 Census of Population and Housing was carried out from 16th October to 15th November, 2010. Field staff included school leavers who worked as Enumerators and Census Supervisors who were mostly teachers. Civil Servants from various government departments and ministries worked as Master Trainers, Assistant Master Trainers and Provincial Census Officers.

1.10.1 The Main Objectives of the Census of Population and Housing

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

- 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 Ward;*

- *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.*

1.10.2 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 areas were mapped using high resolution satellite imagery.

The 2010 Census used a single questionnaire to capture individual, household 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 the OMR technology only.

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

- *Deaths of Household Members during the 12 months period prior to the census enumeration, as well as cause of death for all reported deaths.*
- *Maternal deaths to women aged 12–49 years during the reference period (12 months prior to the Census).*
- *Albinism.*
- *Orphanhood and Fosterhood*

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

1.10.3 Presentation of Results

The analysis in this report is based on the geography that existed at the time of the census in 2010.

CHAPTER 2

POPULATION SIZE, GROWTH AND DISTRIBUTION

2.0 Summary

The population for Copperbelt Province in 2010 was 1,972,317. This was an increase from 1,581,221 in 2000.

The population grew at an average annual rate of 2.2 percent during the 2000-2010 inter-censal period. This average annual rate was higher than 0.8 percent recorded in the 1990-2000 inter-censal period.

In 2010, 80.9 percent of the population was residing in urban areas while 19.1 percent was residing in rural areas.

Kitwe District had the largest population at 517,543 followed by Ndola District with 451,246. Lufwanyama District had the smallest population at 78,503.

The province has a population density of 63.0 persons per square kilometre. Kitwe District was the most densely populated district in 2010 with a density of 666.1 persons per square kilometre while Lufwanyama District was the least densely populated with a density of 8.0 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 Copperbelt Province. Trends in the population size, growth and distribution are also presented using data from previous censuses.

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:

- a) *Foreign diplomatic personnel accredited to Zambia*
- b) *Zambian nationals accredited to foreign embassies and their family members who live with them abroad, and*
- c) *Zambian migrant workers and students in foreign countries who were not in the country at the time of the census.*

De jure Population

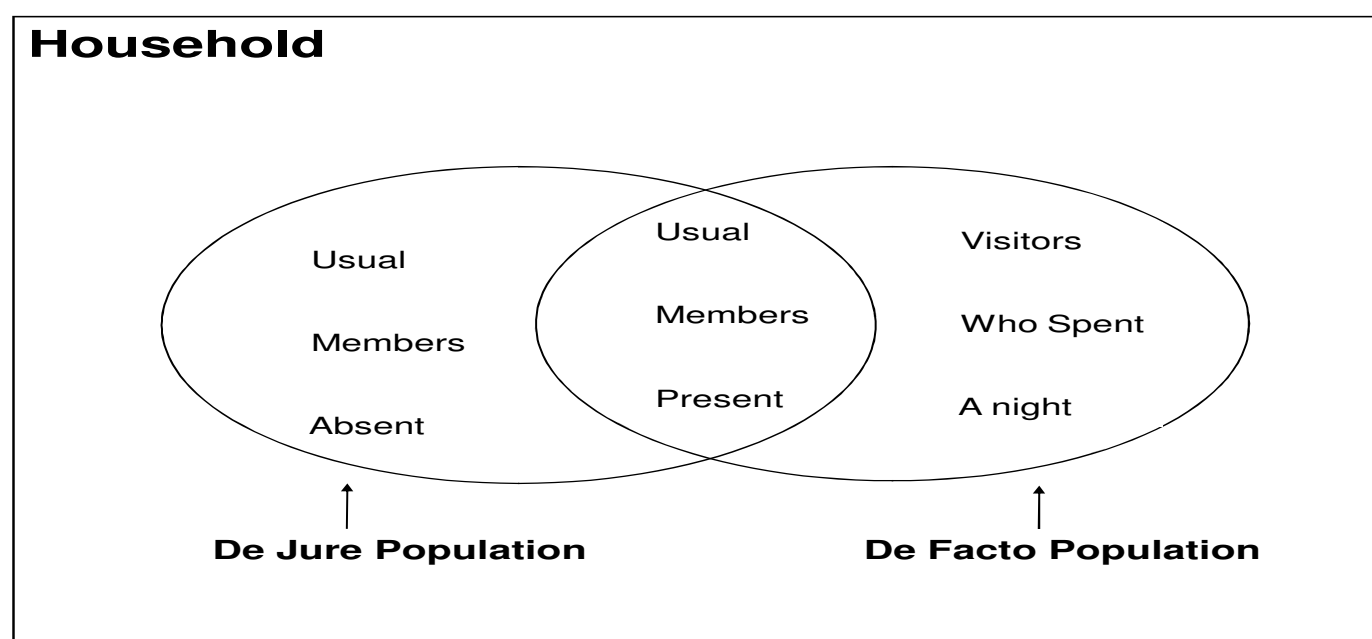
This refers to usual household members present and usual household members temporarily absent at the time of the census. In a de jure Census, institutional populations in places such as hospitals or health centres, prisons and academic institutions like universities, colleges and boarding schools are 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 e.g. deriving Gross and Net enrolment rates.

However, this type of population count does not include 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 the population size for Copperbelt Province by rural/urban from 1990-2010. The population increased from 1,458,459 in 1990 to 1,581,221 in 2000 and to 1,972,317 in 2010. This represented a percentage change of 8.4 in the 1990-2000 intercensal period and 24.7 percent in the 2000-2010 intercensal period.

Table 2.1: Population Size by Rural/Urban, Copperbelt Province 1990- 2010

Rural/Urban	1990-2000			2000-2010		
	1990 Population	2000 Population	Percent change	2000 Population	2010 Population	Percent Change
Total	1,458,459	1,581,221	8.4	1,581,221	1,972,317	24.7
Rural	219,396	350,093	59.6	350,093	376,861	7.6
Urban	1,239,063	1,231,128	-0.6	1,231,128	1,595,456	29.6

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

The population in rural areas increased from 350,093 in 2000 to 376,861 in 2010 while in the urban areas, it increased from 1,231,128 in 2000 to 1,595,456 in 2010. This represented a percentage change of 7.6 percent in the rural areas and 29.6 percent in urban areas.

Table 2.2 shows the percentage distribution of the population by sex and rural/urban for Copperbelt Province in 2010. Of the total population in 2010, there were 981,887 males and 990,430 females. Males constituted 49.8 percent and females 50.2 percent of the total population.

Table 2.2: Total Population (De jure) and Percent Distribution by Sex and Rural/Urban, Copperbelt Province 2010.

Rural/Urban	Both Sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	1,972,317	100	981,887	49.8	990,430	50.2
Rural	376,861	100	190,178	50.5	186,683	49.5
Urban	1,595,456	100	791,709	49.6	803,747	50.4

Source: 2010 Census of Population and Housing.

Table 2.3 shows the distribution of the population by sex, rural/urban and district for Copperbelt Province. Kitwe District had the largest population at 517,543, followed by Ndola District at

451,246. Lufwanyama District had the smallest population at 78,503.

Table 2.3: Total Population (De jure) by Sex, Rural/Urban and District, Copperbelt Province 2010

District	Both Sexes			Rural			Urban		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	1,972,317	981,887	990,430	376,861	190,178	186,683	1,595,456	791,709	803,747
Chililabombwe	91,833	46,792	45,041	14,015	7,154	6,861	77,818	39,638	38,180
Chingola	216,626	108,464	108,162	31,380	15,840	15,540	185,246	92,624	92,622
Kalulushi	100,381	50,164	50,217	24,366	12,552	11,814	76,015	37,612	38,403
Kitwe	517,543	256,740	260,803	16,183	8,331	7,852	501,360	248,409	252,951
Luanshya	156,059	77,368	78,691	22,691	11,711	10,980	133,368	65,657	67,711
Lufwanyama	78,503	39,182	39,321	76,482	38,198	38,284	2,021	984	1,037
Masaiti	103,857	52,017	51,840	101,763	50,977	50,786	2,094	1,040	1,054
Mpongwe	93,380	46,785	46,595	78,401	39,482	38,919	14,979	7,303	7,676
Mufulira	162,889	81,355	81,534	11,580	5,933	5,647	151,309	75,422	75,887
Ndola	451,246	223,020	228,226	-	-	-	451,246	223,020	228,226

Source: 2010 Census of population and Housing.

The most urbanised district was Kitwe with an urban population of 501,360, followed by Ndola District with 451,246 while Masaiti District was least urbanised with a population of 2,094. Masaiti District had the largest rural population at 101,763 while Mufulira District had the smallest rural population at 11,580.

Table 2.4 shows the distribution of the population by district and sex. In both 2000 and 2010, Kitwe District had the largest population at 376,124 and 517,543, respectively. Lufwanyama District recorded the least population in both years.

Table 2.4: Population (De Jure) by Sex and District, Copperbelt Province 2000 and 2010.

District	2000			2010		
	Total	Male	Female	Total	Male	Female
Total	1,581,221	799,402	781,819	1,972,317	981,887	990,430
Chililabombwe	67,533	34,391	33,142	91,833	46,792	45,041
Chingola	172,026	86,928	85,098	216,626	108,464	108,162
Kalulushi	75,806	38,786	37,020	100,381	50,164	50,217
Kitwe	376,124	189,650	186,474	517,543	256,740	260,803
Luanshya	147,908	74,963	72,945	156,059	77,368	78,691
Lufwanyama	63,185	32,198	30,987	78,503	39,182	39,321
Masaiti	95,581	48,892	46,689	103,857	52,017	51,840
Mpongwe	64,371	32,846	31,525	93,380	46,785	46,595
Mufulira	143,930	72,526	71,404	162,889	81,355	81,534
Ndola	374,757	188,222	186,535	451,246	223,020	228,226

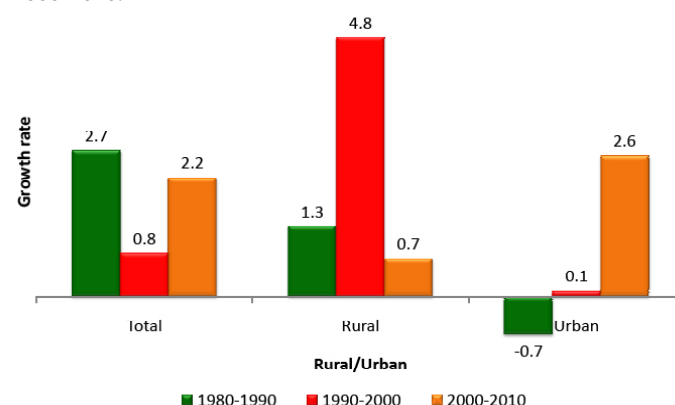
Source: 2000 and 2010 Censuses of Population and Housing.

2.4 Population Growth.

The population of Copperbelt Province has continued to grow over the past three decades. Figure 2.2 shows the average annual population growth rate for Copperbelt Province between 1980 and 2010. The province's population grew at an average rate of 2.2 percent per annum during the 2000-2010 intercensal period. This was an increase from an annual rate of 0.8 percent recorded during the 1990-2000 intercensal period. During the 1980-1990 intercensal period, the province had recorded a 2.7 percent growth rate.

The urban population grew at a rate of 2.6 percent per annum between 2000 and 2010. This was an increase of 2.5 percentage points from 0.1 percent recorded between 1990 and 2000. The rural population grew at a rate of 0.7 percent per annum between 2000 and 2010 intercensal period. This was a decrease from 4.8 percent recorded in the 1990-2000 inter censal period.

Figure 2.2: Percent Annual Average Rate of Population Growth by Rural/Urban, Copperbelt Province 1980-1990, 1990-2000 and 2000-2010.



Source: 1980, 1990, 2000 and 2010 Censuses of Population and Housing.

Table 2.5 shows the average annual population growth rate for Copperbelt Province by rural/urban and district during the 2000-2010 inter censal period.

Rural/Urban and District	Population Size 2000	Population Size 2010	Annual Growth Rate (2000-2010).
Total	1,581,221	1,972,317	2.2
Rural	350,093	376,861	0.7
Urban	1,231,128	1,595,456	2.6
District			
Chililabombwe	67,533	91,833	3.1
Chingola	172,026	216,626	2.3
Kalulushi	75,805	100,381	2.8
Kitwe	376,124	517,543	3.2
Luanshya	147,908	156,059	0.5
Lufwanyama	63,185	78,503	2.2
Masaiti	95581	103,857	0.8
Mpongwe	64371	93380	3.8
Mufulira	143930	162889	1.2
Ndola	374757	451246	1.9

Source: 2000 and 2010 Censuses of Population and Housing.

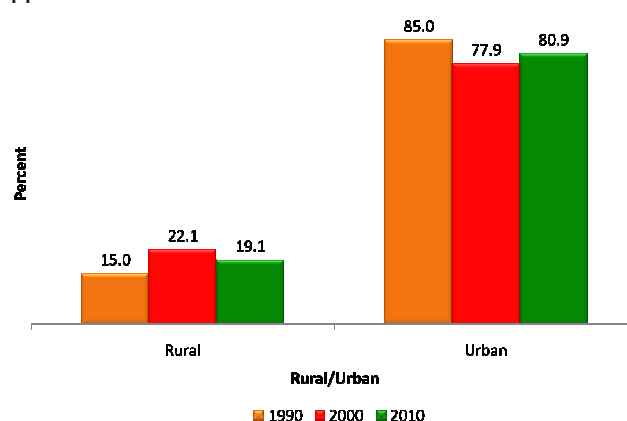
Mpongwe District had the highest average annual population growth rate at 3.8 percent while Luanshya District had the lowest growth rate of 0.5 percent in the 2000-2010 inter-censal period.

2.5 Population Distribution

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

Between 1990 and 2000, the rural population of Copperbelt Province increased from 15.0 percent to 22.1 percent and then declined to 19.1 percent in 2010. The urban population in 2010 increased to 80.9 percent from 77.9 percent in 2000. Between 1990 and 2000, the urban population declined from 85.0 percent to 77.9 percent.

Figure 2.3 Percent Distribution of Population by Rural/Urban, Copperbelt Province 1990-2010



Source: 1990, 2000 and 2010 Censuses of Population and Housing.

Table 2.6 shows the percentage distribution of the population by rural/urban and district from 2000–2010. Between 2000 and 2010, the contribution of Luanshya, Masaiti, Mufulira and

Ndola districts to the provincial population reduced while that of Lufwanyama remained unchanged. The contribution of the rest of the districts to the provincial population increased.

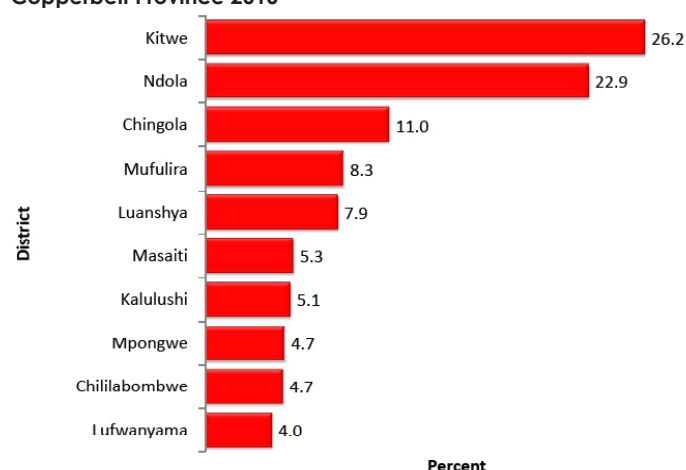
Table 2.6: Population Distribution (De jure) by Rural/Urban and District, Copperbelt Province, 2000 and 2010

Rural/Urban and District	2000		2010		Percent Point 2000-2010
	Population	Percent	Population	Percent	
Total	1,581,221	100.0	1,972,317	100.0	N/A
Rural	350,093	22.1	376,861	19.1	-3.0
Urban	1,231,128	77.9	1,595,456	80.9	3.0
District					
Chililabombwe	67,533	4.3	91,833	4.7	0.4
Chingola	172,026	10.9	216,626	11.0	0.1
Kalulushi	75,805	4.8	100,381	5.1	0.3
Kitwe	376,124	23.8	517,543	26.2	2.5
Luanshya	147,908	9.4	156,059	7.9	-1.4
Lufwanyama	63,185	4.0	78,503	4.0	0.0
Masaiti	95,581	6.0	103,857	5.3	-0.8
Mpongwe	64,371	4.1	93,380	4.7	0.7
Mufulira	143,930	9.1	162,889	8.3	-0.8
Ndola	374,757	23.7	451,246	22.9	-0.8

Source: 2000 and 2010 Censuses of Population and housing

Figure 2.4 shows the percentage distribution of the population by district in 2010. Kitwe District had the highest percentage of the population at 26.2 percent while Lufwanyama District had the lowest percentage of the population at 4.0 percent.

Figure 2.4: Percent Distribution of Population by District, Copperbelt Province 2010



Source: 2010 Census of Population and Housing.

2.6 Population Density

Population density is defined as the total number of persons per square kilometre. Table 2.7 shows Copperbelt Province's area and population density by district from 2000 to 2010. Copperbelt Province has a total surface area of 31,328 square kilometres. The province is sparsely populated with a population density of 63.0 persons per square kilometre representing an increase of 12.5 persons per square kilometre from 2000.

In 2010, Kitwe District had the highest population density of 666.1 persons per square kilometre. Ndola District was second with a population density of 409.1 persons per square kilometre. Lufwanyama was the least densely populated district with 8.0 persons per square kilometre.

Table 2.7: Area and Population Density (De Jure) by District, Copperbelt Province 2000-2010.

District	Area (Sq.Km)	Population	Population Density/Census Year (Population per Sq. Km)	
			2000	2010
Total	31,328	1,972,317	50.5	63.0
Chililabombwe	1026	91,833	65.8	89.5
Chingola	1,678	216,626	102.5	129.1
Kalulushi	725	100,381	104.6	138.5
Kitwe	777	517,543	484.1	666.1
Luanshya	811	156,059	182.4	192.4
Lufwanyama	9,849	78,503	6.4	8.0
Masaiti	5,383	103,857	17.8	19.3
Mpongwe	8,339	93,380	7.7	11.2
Mufulira	1,637	162,889	87.9	99.5
Ndola	1,103	451,246	339.8	409.1

Source: 2000 and 2010 Censuses of Population and Housing

CHAPTER 3

POPULATION COMPOSITION AND DEMOGRAPHIC CHARACTERISTICS

3.0 Summary

In 2010, Copperbelt Province had a young population with 40.9 percent of persons aged below 15 years.

The median age was 18.5 years. The median age was higher in urban areas at 18.8 years compared to 16.6 years in rural areas.

The Overall Dependency Ratio was recorded at 76.2 persons per 100 persons aged between 15 and 64 years. Child and Aged Dependency Ratios were 72.1 and 4.1 persons, respectively.

The overall sex ratio was 99.1 males per 100 females, while the sex ratio at birth was 102.4 males per 100 females.

Chapter 3

Population Composition And Demographic Characteristics



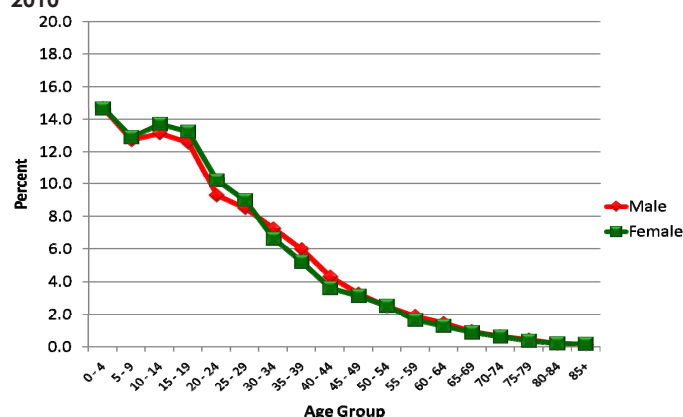
3.1 Population Composition

Information on the age and sex structure 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 of the population by sex for Copperbelt Province in 2010. The distribution shows higher percentages of the population in the younger ages. The percentage decreases with increase in age.

Figure 3.1: Percent Age Distribution by Sex, Copperbelt Province 2010

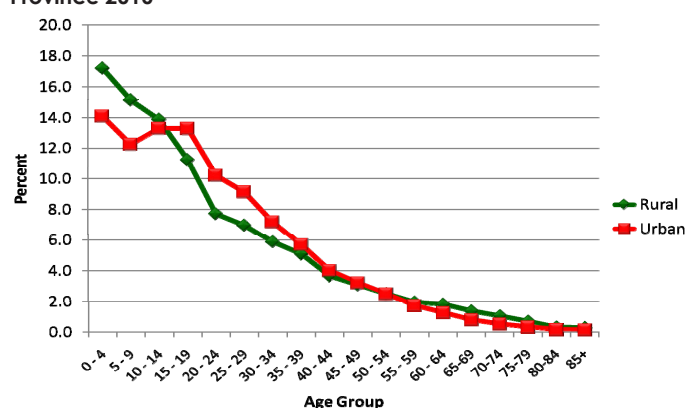


Source: 2010 Census of Population and Housing

A comparison between the sexes shows minimal differences in the percentage distribution with an exception of the population aged 5-29 years and 30-49 years. The age group 10-29 years had fewer males than females while the age group 30-49 years had fewer females.

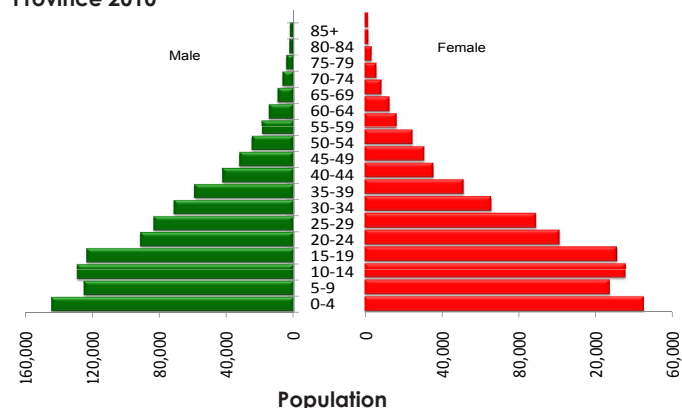
Figure 3.2 presents the age distribution by rural/urban. A comparison of the percentage distribution shows a higher percent of the population aged 0-14 years and 60 years and older in rural areas. However, the proportion of the population aged 15-39 years in urban areas was higher than that of rural areas.

Figure 3.2: Percent Age Distribution by Rural/Urban, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

Figure 3.2.1 Population Age and Sex Structure, Copperbelt Province 2010

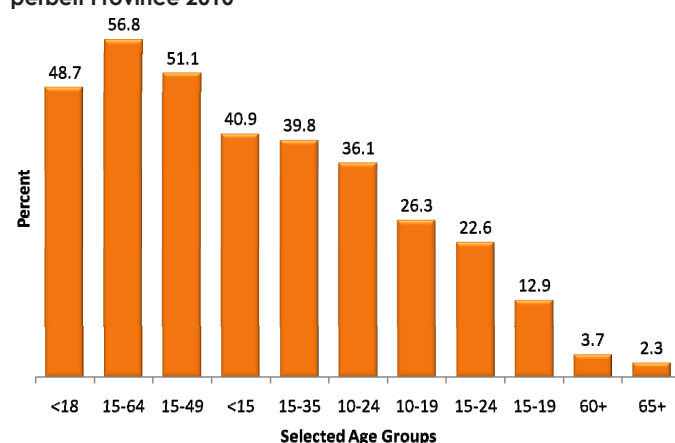


Source: 2010 Census of Population and Housing

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 below 18 years comprised 48.7 percent of the total population. The elderly population aged 65 years and older made up 2.3 percent of the total population. The population aged 15-24 and 15-35 had proportions of 22.6 and 39.8 percent, respectively.

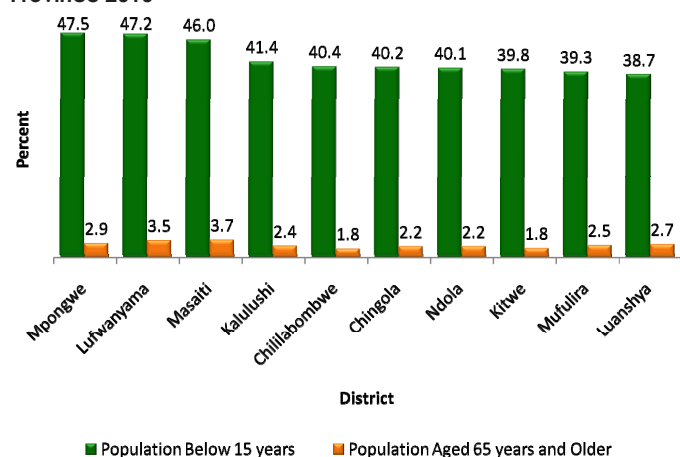
Figure 3.3: Population Proportions by Selected Age Groups, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

Figure 3.4 shows the percentage distribution of children aged below 15 years and the elderly (65 years and older) by district. Mpongwe District had the highest percentage of children below 15 years at 47.5 percent while Luanshya District had the lowest at 38.7 percent. Masaiti District had the highest percentage of the elderly aged 65 years and older at 3.7 percent while Kitwe and Chililabombwe each recorded the lowest at 1.8 percent.

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



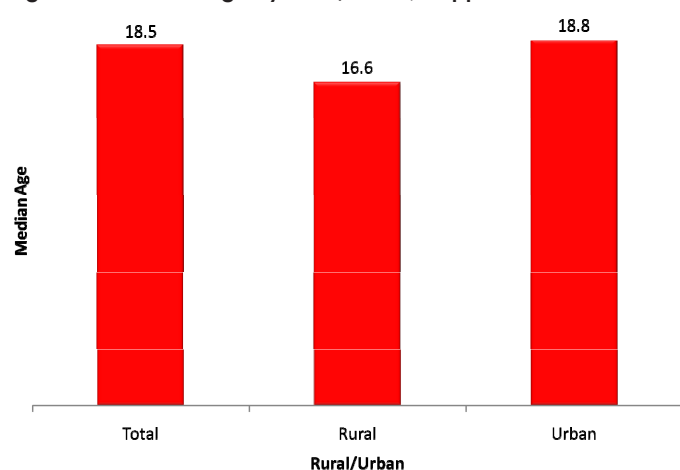
Source: 2010 Census of Population and Housing

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 half are older. A median age that is lower than 20 years shows a young population; that 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 for Copperbelt Province was recorded at 18.5 years. It was higher in urban areas at 18.8 years compared to 16.6 years in rural areas.

Figure 3.5: Median Age by Rural/Urban, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

Figure 3.6 shows the median age by sex and rural/urban. Generally, the median age for males was higher than that of females. Overall, the median age for males was 18.7 years and 18.2 years for females.

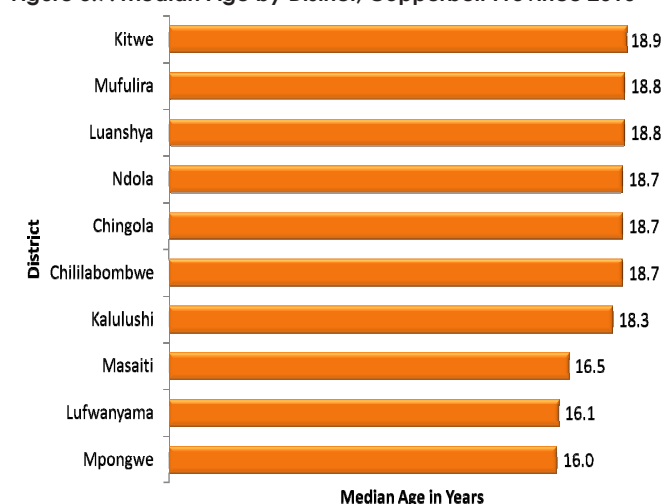
Figure 3.6: Median Age by Sex and Rural/Urban, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

Figure 3.7 shows the median age by district. The median age ranges from 16.0 years in Mpongwe district to 18.9 years in Kitwe district.

Figure 3.7: Median Age by District, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

3.4 Age Dependency Ratio

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

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

- Child Dependency Ratio:** The number of children aged below 15 years per 100 persons aged between 15 and 64 years
- Aged Dependency Ratio:** The number of persons aged 65 years and older per 100 persons aged between 15 and 64 years
- Overall Dependency Ratio:** The number of children below 15 years and elderly persons aged 65 and older years per 100 persons aged between 15 and 64 years.

Table 3.1 shows Age Dependency Ratio in 1990, 2000 and 2010. The Child Dependency Ratio has been declining over time while the Aged Dependency Ratio has been increasing. The Overall

Dependency Ratio declined from 85.1 in 2000 to 76.2 per 100 persons aged 15-64 years in 2010. The Aged Dependency Ratio increased from 2.2 in 1990 to 4.1 in 2010.

Table 3.1: Age Dependency Ratio, Copperbelt Province, 1990, 2000 and 2010

Province	Age Dependency Ratios	1990	2000	2010
Copperbelt Province	Overall Dependency Ratio	85.6	85.1	76.2
	Child Dependency Ratio	83.4	81.7	72.1
	Aged Dependency Ratio	2.2	3.4	4.1

Source: 2010 Census of Population and Housing

Table 3.2 shows the Overall, Child and Aged Dependency Ratios by district. Lufwanyama District had the highest Overall

Age Dependency Ratio with 103.1 persons while Luanshya District had the lowest with 70.7 persons.

Table 3.2: Overall, Child and Aged Dependency Ratio by District, Copperbelt Province 2010

District	Age Dependency Ratios		
	Overall	Child	Aged
Chililabombwe	73.1	70.0	3.1
Chingola	73.9	70.0	3.9
Kalulushi	77.7	73.6	4.2
Kitwe	71.5	68.3	3.2
Luanshya	70.7	66.0	4.6
Lufwanyama	103.1	96.0	7.1
Masaiti	98.7	91.5	7.3
Mpongwe	101.7	95.8	5.9
Mufulira	71.8	67.5	4.4
Ndola	73.5	69.6	3.9

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 analysed is sex ratio at birth, which is the ratio of males per 100 females at birth. The percent deficit male has been used to show the percent at which males are fewer than females. It is 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. Copperbelt Province had fewer males per 100 females, with a sex ratio of 99.1. This indicates a male deficit of 0.4 percent of the total population.

Chililabombwe District had the highest sex ratio at 103.9 males per 100 females, a 1.9 percent excess of males. Ndola District had the lowest sex ratio at 97.7 males per 100 females, translating into a 1.2 percent deficit of males.

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

Rural/Urban and District	Sex Ratio	Percent Male Deficit
Total	99.1	-0.4
Rural	101.9	0.9
Urban	98.5	-0.8
District		
Chililabombwe	103.9	1.9
Chingola	100.3	0.1
Kalulushi	99.9	-0.1
Kitwe	98.4	-0.8
Luanshya	98.3	-0.8
Lufwanyama	99.6	-0.2
Masaiti	100.3	0.2
Mpongwe	100.4	0.2
Mufulira	99.8	-0.1
Ndola	97.7	-1.2

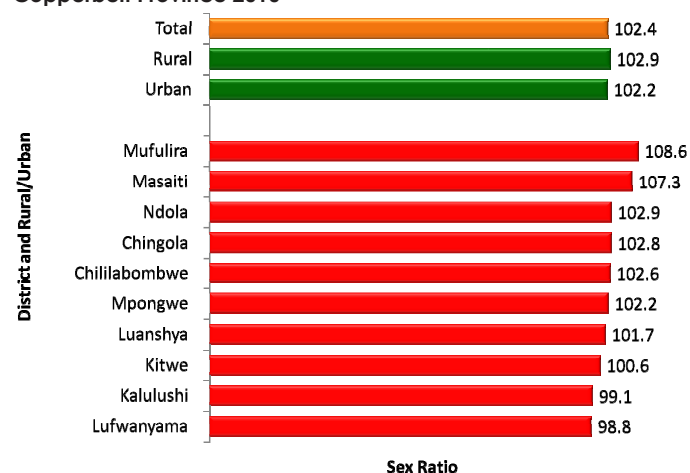
Source: 2010 Census of Population and Housing

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 ratio by rural/urban and district. The sex ratio at birth for Copperbelt Province was 102.4 males per 100 females. In rural and urban areas, the sex ratio at birth was 102.9 and 102.2 males per 100 females, respectively.

Mufulira District had the highest sex ratio at birth of 108.6 males per 100 females while Lufwanyama District had the lowest at 98.8 males per 100 females. Lufwanyama and Kalulushi were the only districts that had male deficits at birth.

Figure 3.8: Sex Ratio at Birth by Rural/Urban and District, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

CHAPTER 4

SOCIAL CHARACTERISTICS

4.0 Summary

In the 2010 census, Copperbelt Province recorded 1,125,478 persons aged 15 years and older. Of these, 47.5 percent were married. Rural areas had a higher proportion of the population aged 15 years and older who were married (56.0 percent) compared to urban areas (45.8 percent).

For the population aged 15 years and above, the median age at first marriage was 21.7 years. The median age at first marriage was lower in rural areas at 20.5 years compared to urban areas at 22.1 years. Males had a higher median age at first marriage than females at 25.5 years and 19.2 years, respectively.

In 2010, Copperbelt Province had 371,125 households. There were more households in urban (296,584) than rural areas (74,541). The average household size in 2010 was 5.3 persons. Male headed households had a larger average household size at 5.5 than female headed households with 4.8 persons.

In terms of Religious affiliation, Protestants and Catholics made 75.7 and 20.7 percent of the population, respectively. Muslims and other religious affiliation made up 2.4 percent of the population.

More than half (60.9 percent) of individuals aged below 18 years did not have birth certificates. Of the population aged 16 years and older, 87.7 percent had Green National Registration Cards.

Chapter 4

Social Characteristics

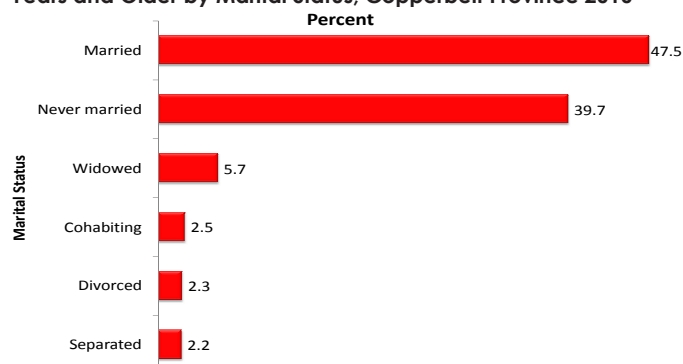


4.1 Marital Status

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 on the Copperbelt Province was 1,125,478. Of these 558,577 were males and 566,901 were females.

Figure 4.1 shows the percentage distribution of the Copperbelt Province population aged 15 years and older by marital status. The figure shows that 47.5 percent of the population aged 15 years and older was married and 39.7 percent was never married. The widowed and divorced made up 5.7 and 2.3 percent of the population aged 15 years and older, respectively while 2.5 percent was cohabiting and 2.2 percent was separated.

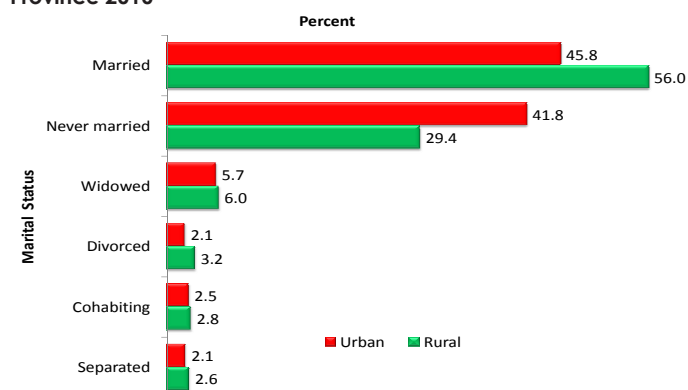
Figure 4.1: Percentage Distribution of the Population Aged 15 Years and Older by Marital Status, Copperbelt Province 2010



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 population was higher in rural areas at 56.0 percent compared to urban areas at 45.8 percent. Urban areas had a higher percentage of the population aged 15 years and older who had never married at 41.8 percent compared to rural areas at 29.4 percent.

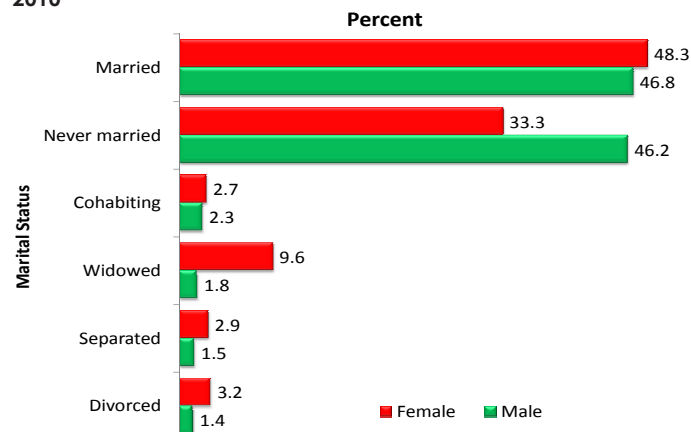
Figure 4.2: Percentage Distribution of the Population Aged 15 Years and Older by Marital Status and Rural/Urban, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

Figure 4.3 shows the percentage distribution of the population 15 years and older by marital status and sex. There were more males who had never been married at 46.2 percent compared to their female counterparts at 33.3 percent. More females were widowed (9.6 percent) compared to males at 1.8 percent.

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



Source: 2010 Census of Population and Housing

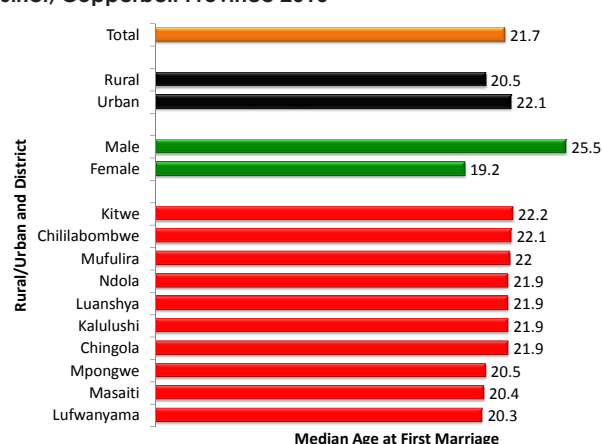
4.2 Median Age at First Marriage

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 reaching the median age.

Figure 4.4 shows the median age at first marriage by rural/urban, sex and district. The median age at first marriage for Copperbelt Province was 21.7 years for the population aged 15 years and older. The median age at first marriage was 20.5 years in rural areas and 22.1 years in urban areas. The median age for males was 25.5 years while that of females was 19.2 years.

Kitwe District had the highest median age at first marriage (22.2 years) while Lufwanyama District had the least with 20.3 years.

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



Source: 2010 Census of Population and Housing

4.3 Household Composition

Household composition is a derived variable that classifies all households according to the relationships among the people in them, and whether there is a family nucleus present or not.

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.

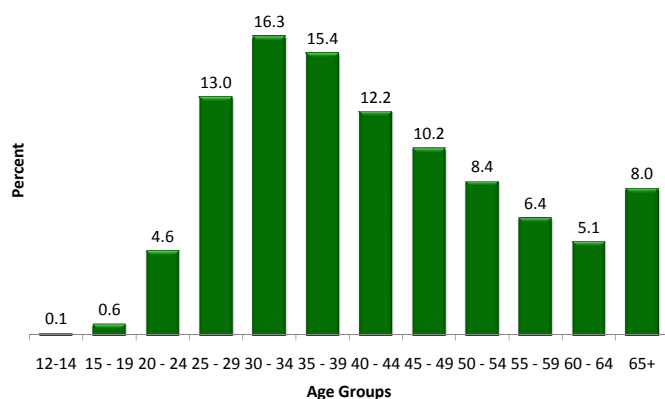
A Household head is a person all members of the household regard as the head. He or she makes day to day decisions governing the running of the household. In cases of one member households, the member is taken as the household head.

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, there were 371,125 households in Copperbelt Province. There were more households in urban areas (296,584) than rural areas (74,541). Household heads made up 18.8 percent of Copperbelt Province population. Figure 4.5 shows the distribution of household heads by age. The majority of household heads (56.9 percent) were aged between 25 and 44 years. Households headed by persons aged below 20 years made up a total of 0.7 percent of the number of heads.

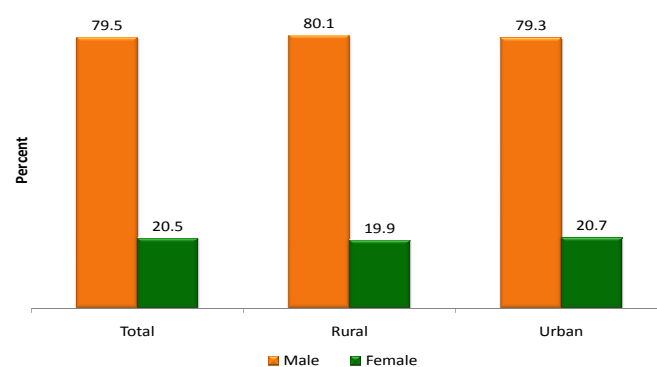
Figure 4.5 Percentage Distribution of Household Heads by Age, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

Figure 4.6 shows the percentage distribution of household heads by sex and rural/urban for Copperbelt Province. Overall, there were more male household heads at 79.5 percent compared to female household heads at 20.5 percent. A rural/urban comparison of male household heads shows that rural areas had more male household heads (80.1 percent) than in urban areas (79.3). A rural/urban comparison for female household heads shows the opposite.

Figure 4.6 Percentage Distribution of Household Heads by Sex and Rural/Urban, Copperbelt Province 2010

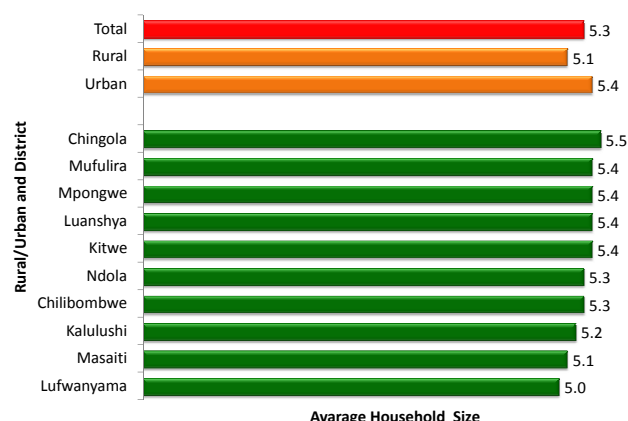


Source: 2010 Census of Population and Housing.

4.3.2 Household Size

Figure 4.7 shows the average household size by rural/urban and district. The average household size on the Copperbelt Province in 2010 was 5.3 persons. Urban areas had a higher average household size of 5.4 persons compared to 5.1 persons in the rural areas. Chingola District had the highest average household size of 5.5 persons and Lufwanyama District had the lowest at 5.0 persons.

Figure 4.7: Average Household Size by Rural/Urban and District, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

Figure 4.8 shows the Average household size by Sex of household head, rural/urban and district. Male headed households had a higher average household size of 5.5 than female headed households with 4.8 persons.

Figure 4.8: Average Household Size by Sex of the Household Head, Rural/Urban and District, Copperbelt Province 2010

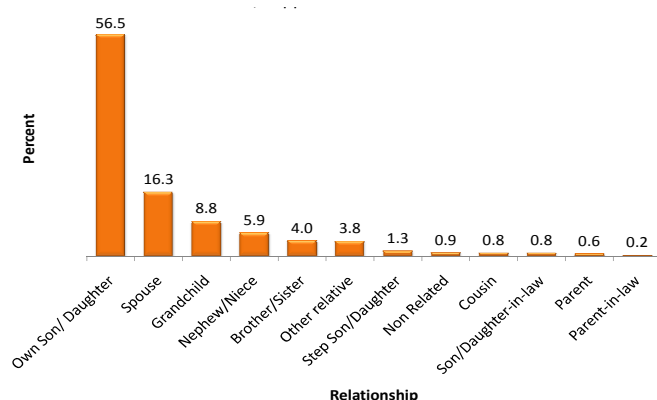


Source: 2010 Census of Population and Housing

4.3.3 Relationship to Head

Figure 4.9 shows the percentage distribution of the population by relationship to the household head. In 2010, 56.5 percent of the persons enumerated in the households were biological children to the household heads while 16.3 and 8.8 percent were spouses and grandchildren of the heads of households, respectively.

Figure 4.9 Percentage Distribution of the Population by Relationship to Household Head, Copperbelt Province 2010

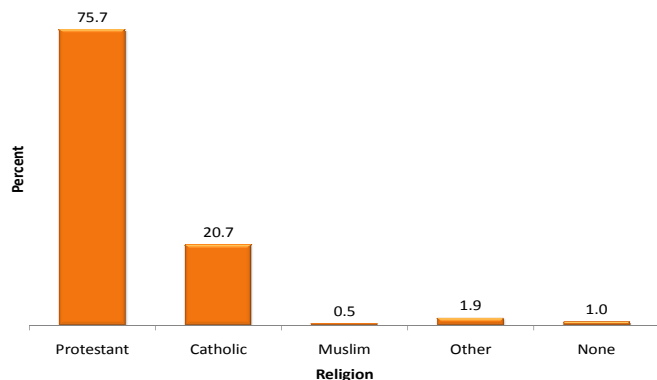


Source: 2010 Census of Population and Housing

4.4 Religion

Figure 4.10 shows the percentage distribution of the population by religious affiliation. In 2010, about three quarters (75.7 percent) of the population on the Copperbelt Province were Protestants, while 20.7 percent were Catholics.

Figure 4.10 Percentage Distribution of the Population by Religious Affiliation, Copperbelt Province 2010

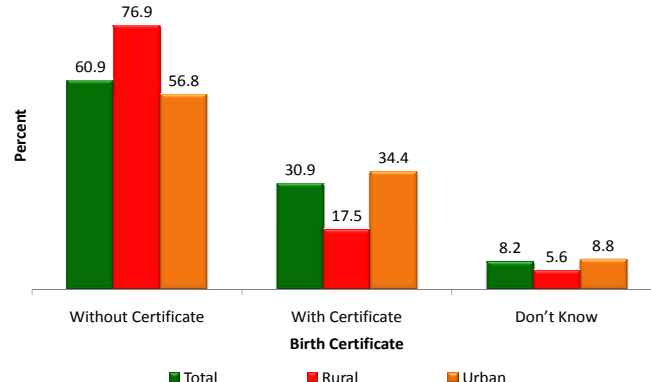


Source: 2010 Census of Population and Housing

4.5 Birth Certificates

Figure 4.11 shows the percentage distribution of the population aged below 18 years with or without birth certificates or who did not know whether they had birth certificates at all. In 2010, 60.9 percent of those aged below 18 years did not have birth certificates while 30.9 percent had birth certificates. The proportion of those without birth certificates was higher in rural areas at 76.9 percent than in urban areas at 56.8 percent.

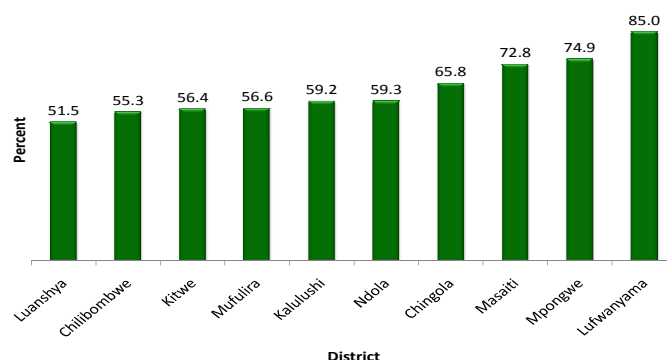
Figure 4.11 Percentage Distribution of the Population Aged below 18 Years With or Without Birth Certificate, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

Figure 4.12 shows the percentage distribution of the population aged below 18 years without birth certificates by district. Lufwanyama District had the highest proportion of persons without birth certificates at 85.0 percent while Luanshya District had the lowest at 51.5 percent.

Figure 4.12 Percentage Distribution of the Population Aged Below 18 Years Without Birth Certificates by District, Copperbelt Province 2010

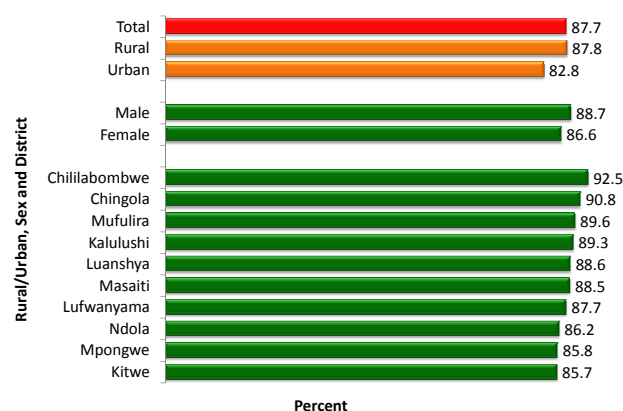


Source: 2010 Census of Population and Housing

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. Figure 4.13 shows the percentage distribution of people aged 16 years and older with green National Registration Cards by rural/urban, sex and district. In 2010, 1,069,122 citizens on the Copperbelt Province were aged 16 years and older. Of these, 87.7 percent had NRCs.

Figure 4.13 Percentage Distribution of Population (16 Years and Older) with Green National Registration Cards by Sex, Rural/Urban and District, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

Rural areas had a higher proportion of persons with Green National Registration Cards at 87.8 percent compared to urban areas at 82.8 percent. Chililabombwe District had the highest proportion of persons with green NRCs with 92.5 percent and Kitwe District had the lowest at 85.7 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 971,599 eligible voters (18 years and older) of which 642,210 (66.1 percent) were registered voters. Table 4.1 shows the population of eligible voters and registered voters by rural/urban and sex. In rural and urban areas 16.7 and 83.3 percent were registered voters, respectively. Males made up 52.6 percent while females made up 47.4 percent of the registered voters.

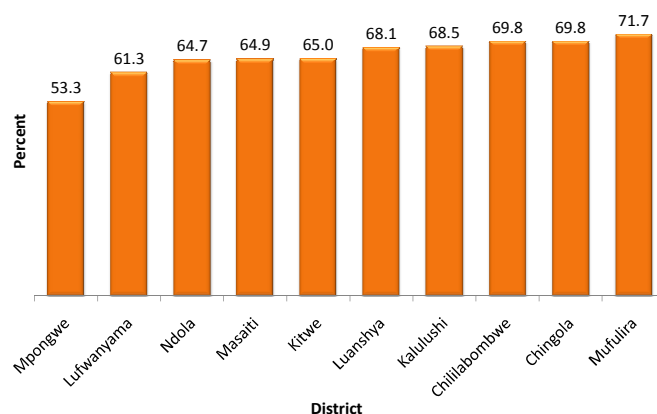
Table 4.1 Percentage Distribution of Eligible and Registered Voters (18 Years and Older) by Rural/Urban and Sex, Copperbelt Province 2010

Rural/Urban and Sex	Eligible Voters(18 Years and Older)	Registered Voter
Total	971,599	642,210
Rural	17.3	16.7
Urban	82.7	83.3
Sex		
Male	49.8	52.6
Female	50.2	47.4

Source: 2010 Census of Population and Housing

Figure 4.14 shows the percentage distribution of registered voters among eligible voters by district. Mufulira District had the highest proportion of registered voters at 71.7 percent and Mpongwe District had the lowest at 53.3 percent.

Figure 4.14 Percentage Distribution of Registered Voters among Eligible Voters by District, Copperbelt Province 2010



Source: 2010 Census of population and Housing

CHAPTER 5

EDUCATION CHARACTERISTICS

5.0 Summary

In 2010, Copperbelt Province had a literacy rate of 83.1 percent. Literacy rates for rural and urban areas were 69.5 and 86.2 percent, respectively. Males had a higher literacy rate (84.7 percent) than females (81.6 percent).

Of the population aged 5 years and older, 38.5 percent were currently attending school. The net primary and secondary school attendance rates were 80.2 and 62.3 percent, respectively.

The net primary school attendance rate was 74.6 percent in rural areas and 81.6 percent in urban areas. At secondary level, net secondary school attendance rate was 44.2 percent in rural areas and 65.9 percent in urban areas.

The Gender Parity Index was 1.00 indicating that there are no gender inequalities in school attendance for males and females. The rural and urban Gender Parity Index was 0.92 and 1.02, respectively.

Of the population aged 25 years and older, 31.5 percent had completed primary school, 48.2 percent had completed secondary school and 20.0 percent had completed tertiary education.

In rural areas, the completion rate was 60.0 percent, 33.0 percent and 6.6 percent for primary, secondary and tertiary education. In urban areas, the highest completion rate was for secondary at 51.1 percent followed by primary at 26.2 percent. Urban areas had the highest completion rate for tertiary education at 22.5 percent.

A higher percentage of females (41.1 percent) had completed primary education compared to males (22.9 percent). At secondary and tertiary levels, males had higher completion rates of 52.9 and 24.0 percent, respectively. Females had completion rates of 43.0 percent for secondary and 15.6 percent for tertiary.

Chapter 5

Education Characteristics



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, i.e to ensure that 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 Rate

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.

Education 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 education 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.

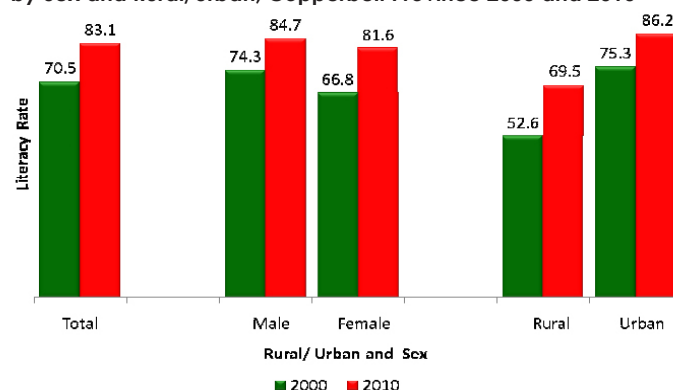
Gender Parity Index

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 for population aged 5 years and older by sex and rural/urban in 2000 and 2010. The percentage of persons aged 5 years and older that were literate was 83.1 percent. This was an increase of 12.6 percentage points from 70.5 percent in 2000. The literacy rate for males was higher (84.7 percent) than that of females (81.6 percent) in 2010. The literacy rate in rural and urban areas increased between 2000 and 2010.

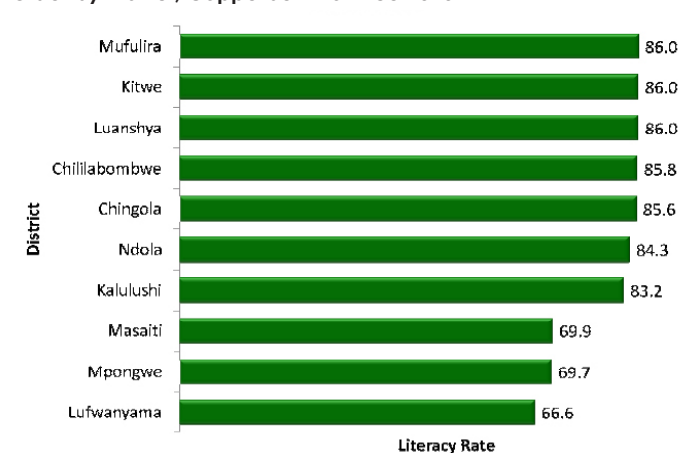
Figure 5.1: Literacy Rate for Population Aged 5 Years and Older by Sex and Rural/Urban, Copperbelt Province 2000 and 2010



Source: 2000 and 2010 Censuses of Population and Housing

Figure 5.2 shows literacy rate for the population aged 5 years and older by district. The districts with the highest literacy rates in 2010 were Mufulira, Kitwe and Luanshya at (86.0 percent). Lufwanyama District had the lowest literacy rate at 66.6 percent.

Figure 5.2: Literacy Rate for the Population aged 5 Years and Older by District, Copperbelt Province 2010

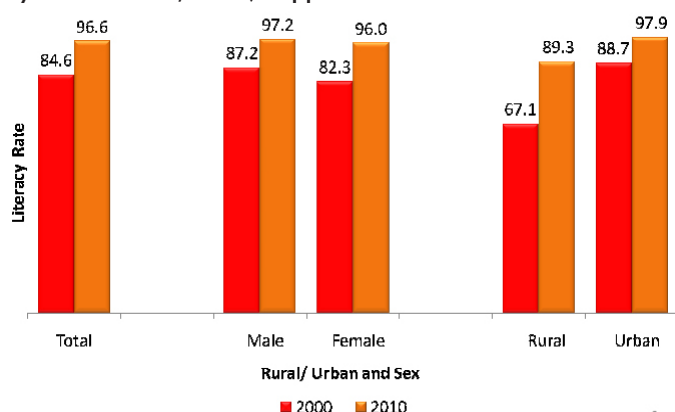


Source: 2010 Census of Population and Housing

5.3.1: Literacy Rates for 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 literacy rates for the population aged 15 to 24 years by sex and rural/urban. The youth literacy rate for Copperbelt Province was 96.6 percent in 2010. This was an increase from 84.6 percent in 2000. Between 2000 and 2010 male and female literacy rates increased by 10.0 and 13.7 percentage points, respectively. The literacy rates for both rural and urban areas increased between 2000 and 2010.

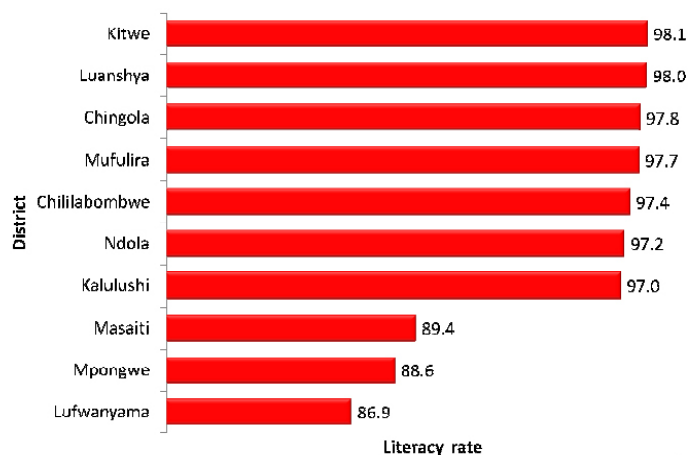
Figure 5.3: Literacy Rates for the Youth Population (15 to 24 years) by Sex and Rural/Urban, Copperbelt Province 2000 and 2010.



Source: 2000 and 2010 Censuses of Population and Housing

Figure 5.4 shows the levels in literacy rate for the population aged 15 to 24 years by district. Kitwe District had the highest youth literacy rate (98.1 percent) while Lufwanyama District had the lowest (86.9 percent).

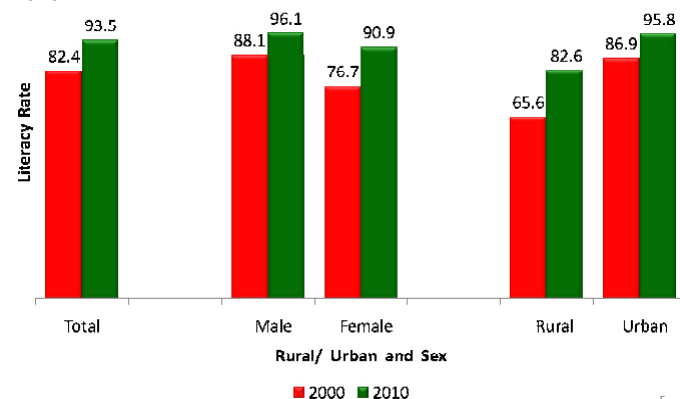
Figure 5.4: Literacy Rates for the Youth Population (15 to 24) by District, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

Figure 5.5 shows the literacy rate for Adult population (15 years and older) by sex and rural/urban. The Adult literacy rate for Copperbelt Province increased from 82.4 percent in 2000 to 93.5 percent in 2010. Adult literacy rates for both males and females improved between 2000 and 2010.

Figure 5.5: Literacy Rate for the Adult Population (15 years and older) by Sex and Rural/Urban, Copperbelt Province 2000 and 2010

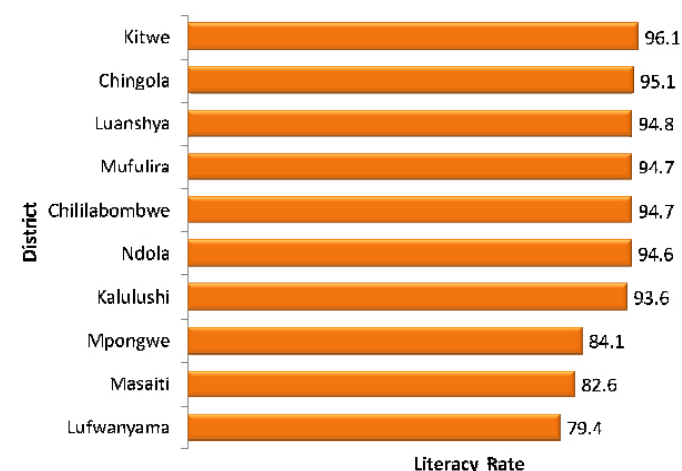


Source: 2000 and 2010 Censuses of Population and Housing

In 2010, the adult literacy rate for urban areas was higher (95.8 percent) than that of rural areas (82.6 percent). The percentage point increase in the adult literacy rate between 2000 and 2010 was higher in rural (17.0 percentage points) than urban areas (8.9 percentage points).

Figure 5.6 shows the literacy rate for adult population (15 years and older) by district. Kitwe District had the highest adult literacy rate at 96.1 percent. It was followed by Chingola District with 95.1 percent. Lufwanyama District had the lowest adult literacy rate at 79.4 percent.

Figure 5.6: Literacy Rate for the Adult Population (15 years and older) by District, Copperbelt Province 2010



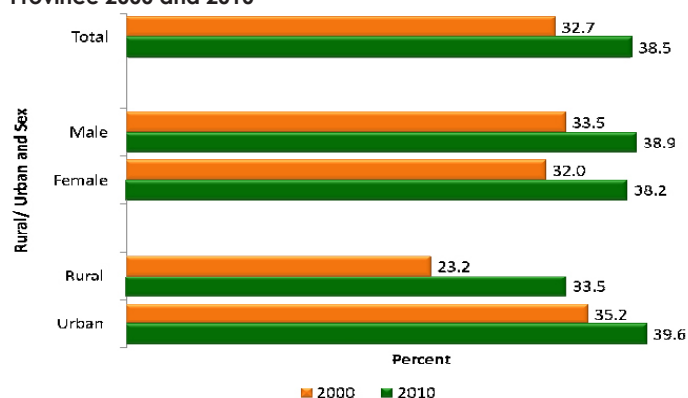
Source: 2010 Census of Population and Housing

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 grades 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, 38.5 percent of the population aged 5 years and older on the Copperbelt Province was currently attending school. This was an increase from 32.7 percent in 2000.

Figure 5.7: Percent of Population aged 5 Years and Older Currently Attending School by Sex and Rural/Urban, Copperbelt Province 2000 and 2010

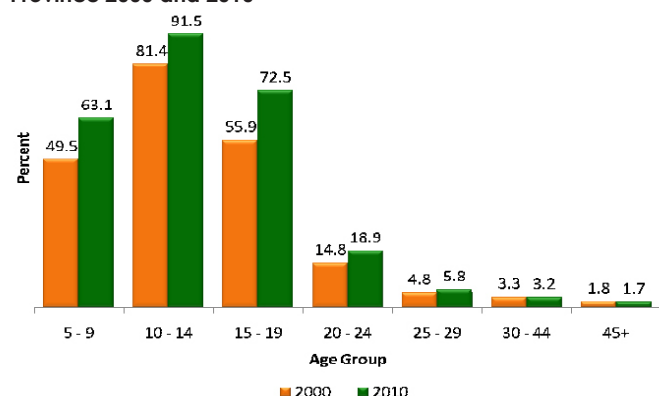


Source: 2000 and 2010 Censuses of Population and Housing

In rural and urban areas, the percentage of the population aged 5 years and older that was currently attending school in 2010 was 33.5 and 39.6 percent, respectively. This shows an increase of 10.3 percentage points in rural areas and 4.4 percentage points in urban areas. The percentage of males currently attending school increased from 33.5 percent in 2000 to 38.9 percent in 2010 while that of females increased from 32.0 percent in 2000 to 38.2 percent in 2010.

Figure 5.8 shows the percentage distribution of the population aged 5 years and older currently attending school by 5 year age group. The figure shows that for all the age groups, there was an increase in the proportion of the population that was currently attending school. The age group 10-14 years had the highest proportion currently attending school at 91.5 percent in 2010. This shows an increase of 10.1 percentage points from 81.4 percent in 2000. The current school attendance rate for the population in the age group 15-19 years increased from 55.9 percent in 2000 to 72.5 percent in 2010.

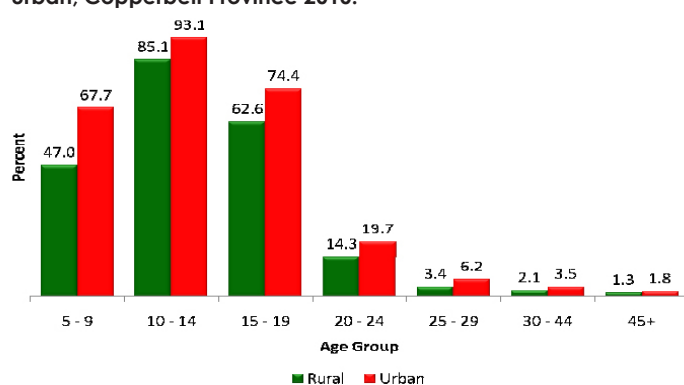
Figure 5.8: Percentage Distribution of the Population (5 Years and Older) Currently Attending School by Age Group, Copperbelt Province 2000 and 2010



Source: 2000 and 2010 Censuses of Population and Housing

Figure 5.9 shows the percent distribution of the population (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 than in rural areas. The age group 10-14 years had the highest proportion of the population currently attending school in both rural and urban areas at 85.1 and 93.1 percent, respectively.

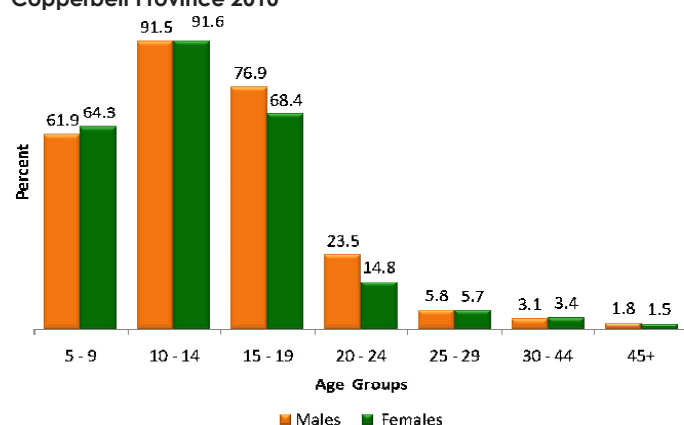
Figure 5.9: Percentage Distribution of the Population (5 Years and Older) Currently Attending School by Age Group and Rural/Urban, Copperbelt Province 2010.



Source: 2010 Census of Population and Housing

Figure 5.10 shows the percentage distribution of the population (5 years and older) currently attending school by sex and age group. There were more females currently attending school in younger age groups (5 – 14 years) than males. The age group 10-14 had the highest percentage of the population currently attending school for both males and females at 91.5 and 91.6 percent, respectively.

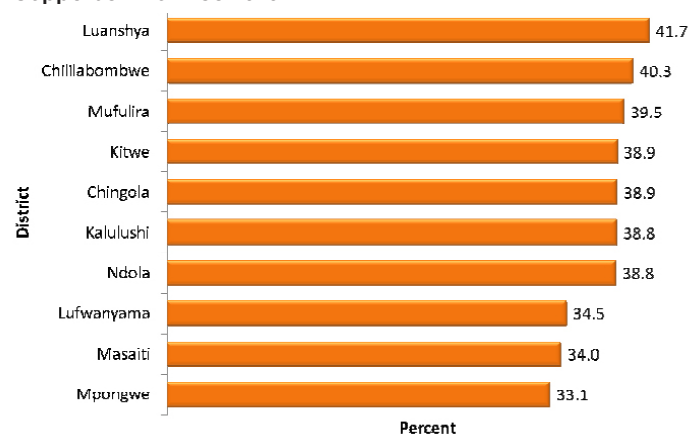
Figure 5.10: Percentage Distribution of the Population (5 Years and Older) Currently Attending School by Sex and Age Group, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

Figure 5.11 shows percent distribution of the population (5 years and older) that was currently attending school by district. Luanshya District had the highest proportion of the population that was currently attending school at 41.7 percent while Mpongwe District had the lowest at 33.1 percent.

Figure 5.11: Percentage Distribution of the Population aged 5 Years and Older Currently Attending School by District, Copperbelt Province 2010

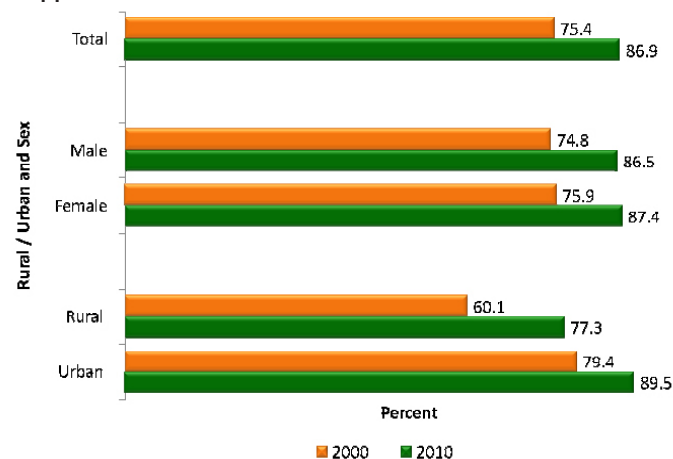


Source: 2010 Census of Population and Housing

5.4.1 Primary School Attendance

Figure 5.12 shows the percentage distribution of the population aged 7 to 13 years that were currently attending school by sex and rural/urban. Primary school attendance rate increased from 75.4 percent in 2000 to 86.9 percent in 2010. In 2010, 77.3 percent of the population aged 7-13 years was currently attending school in rural areas, compared to 89.5 percent in urban areas.

Figure 5.12: Percentage Distribution of the Population aged 7 to 13 Years Currently Attending Primary School by Sex and Rural/Urban, Copperbelt Province 2000 and 2010

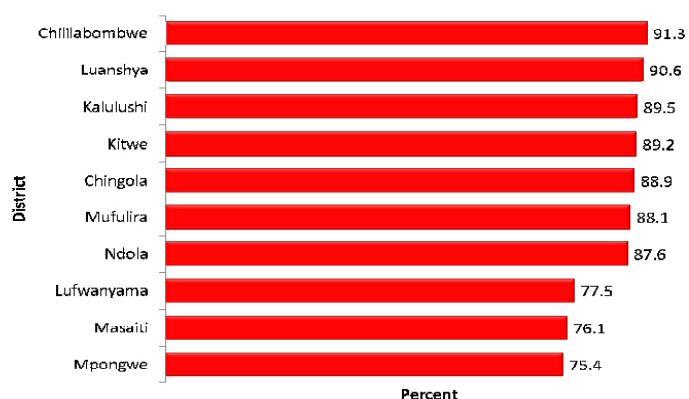


Source: 2000 and 2010 Census of Population and Housing

Male primary school attendance rate increased from 74.8 percent in 2000 to 86.5 percent in 2010 while female attendance rate increased from 75.9 percent in 2000 to 87.4 percent in 2010.

Current primary school attendance rate by district is shown in Figure 5.13. Chililabombwe District had the highest proportion of the population aged 7 to 13 years currently attending school (91.3 percent) while Mpongwe District had the lowest (75.4 percent).

Figure 5.13: Percentage Distribution of the Population Aged 7 to 13 Years Currently Attending Primary School by District, Copperbelt Province 2010

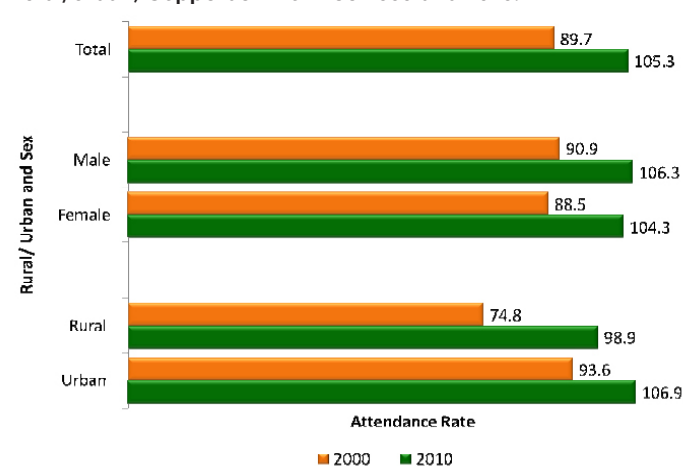


Source: 2010 Census of Population and Housing

5.4.2 Gross Primary School Attendance Rate

Figure 5.14 shows gross primary school attendance rate by sex and rural/urban. The gross primary school attendance rate increased from 89.7 percent in 2000 to 105.3 percent in 2010. The gross attendance rate was higher in urban areas (106.9 percent) than in rural areas (98.9 percent). Males had a higher gross primary school attendance rate at 106.3 percent compared to females at 104.3 percent.

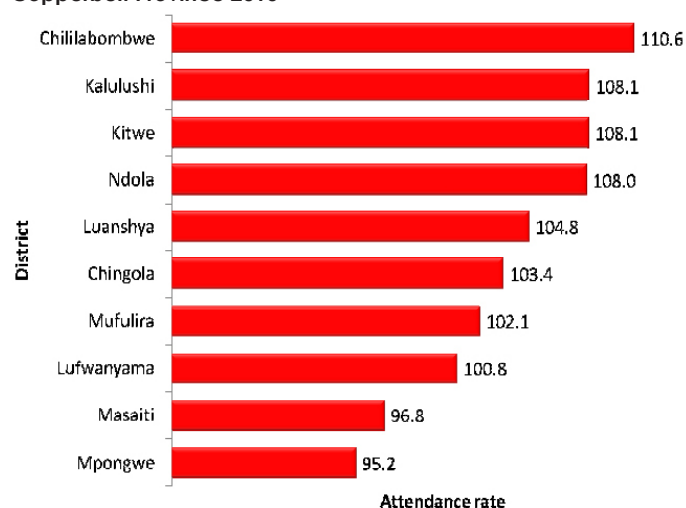
Figure 5.14: Gross Primary School Attendance Rate by Sex and Rural/Urban, Copperbelt Province 2000 and 2010.



Source: 2000 and 2010 Censuses of Population and Housing

Figure 5.15 shows the gross primary school attendance rates by district. Chililabombwe District had the highest gross primary school attendance rate at 110.6 percent followed by Kalulushi District at 108.1 percent. Mpongwe District had the lowest gross primary school attendance rate at 95.2 percent.

Figure 5.15: Gross Primary School Attendance Rate by District, Copperbelt Province 2010



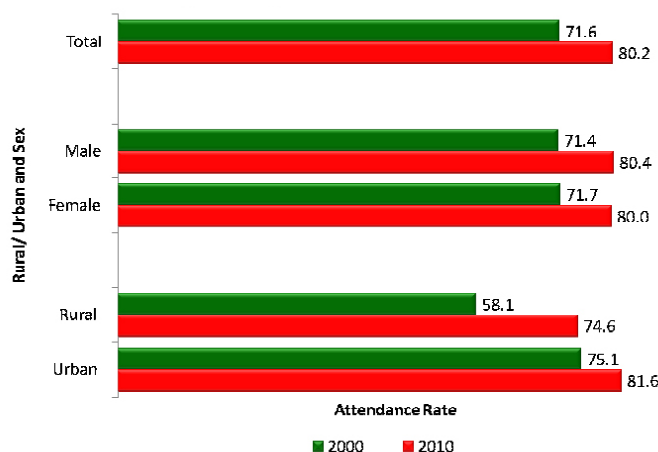
Source: 2010 Census of Population and Housing

5.4.3 Net Primary School Attendance Rate

Net primary school attendance rates show 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 rates by sex and rural/urban. The net primary school attendance rate increased from 71.6 percent in 2000 to 80.2 percent in 2010. The increase in net primary school attendance rates means that the percentage of eligible primary school age children not in school declined from 28.4 percent in 2000 to 19.8 percent in 2010.

In rural areas the net primary school attendance rate increased from 58.1 percent in 2000 to 74.6 percent in 2010 while that of urban areas increased from 75.1 to 81.6 percent during the same period. Between 2000 and 2010, the net primary school attendance rate for males increased from 71.4 percent to 80.4 percent and from 71.7 percent to 80.0 percent for females.

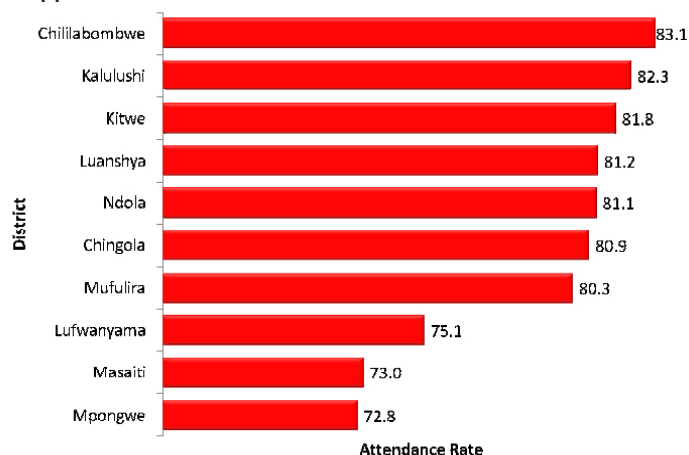
Figure 5.16: Net Primary School Attendance Rate by Sex and Rural/Urban, Copperbelt Province 2000 and 2010.



Source: 2000 and 2010 Censuses of Population and Housing

Figure 5.17 shows net primary school attendance rate by district. Chililabombwe District had the highest net primary school attendance rate at 83.1 percent while Mpongwe district had the lowest at 72.8 percent.

Figure 5.17: Net Primary School Attendance Rate by District, Copperbelt Province 2010.

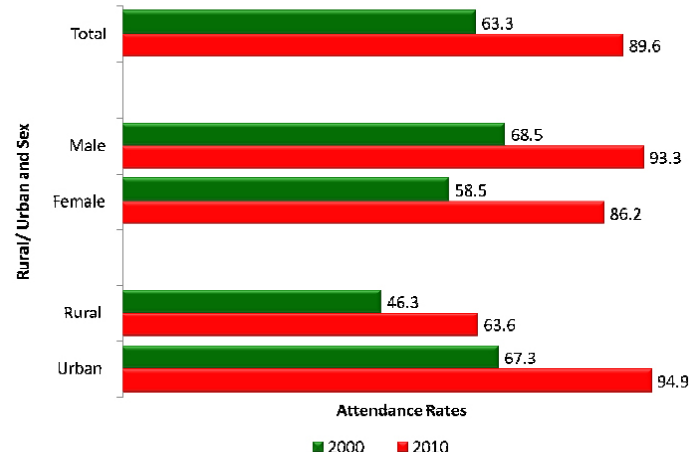


Source: 2010 Census of Population and Housing

5.4.4 Gross Secondary School Attendance Rate

In Zambia, the official secondary school age ranges from 14-18 years. Figure 5.18 shows gross secondary school attendance rates by sex and rural/urban. The overall gross secondary school attendance for the population aged 14-18 years increased from 63.3 percent in 2000 to 89.6 percent in 2010. In rural areas, secondary school attendance rate increased from 46.3 percent in 2000 to 63.6 percent in 2010 while in urban areas it increased from 67.3 percent in 2000 to 94.9 percent. The male gross attendance school rate increased from 68.5 percent in 2000 to 93.3 percent in 2010 while that of females increased from 58.5 percent to 86.2 percent during the same period.

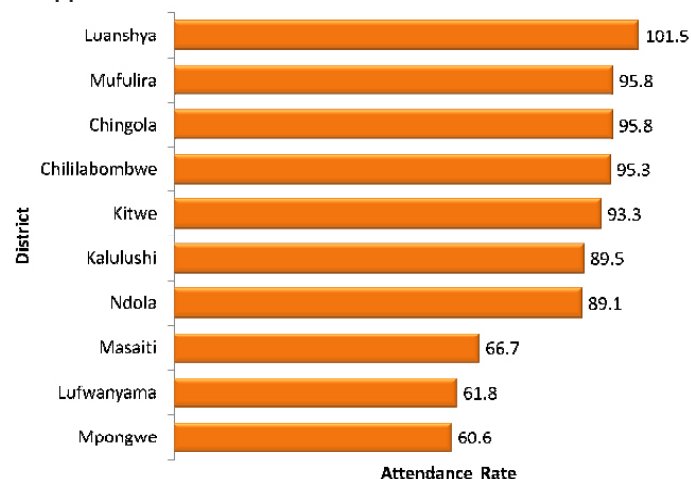
Figure 5.18: Gross Secondary School Attendance Rate by Sex and Rural/Urban, Copperbelt Province 2000 and 2010



Source: 2000 and 2010 Censuses of Population and Housing

Figure 5.19 shows gross secondary school attendance rate by district. Luanshya District had the highest gross secondary school attendance rate at 101.5 percent while Mpongwe district had the lowest 60.6 percent.

Figure 5.19: Gross Secondary School Attendance Rate by District, Copperbelt Province 2010.

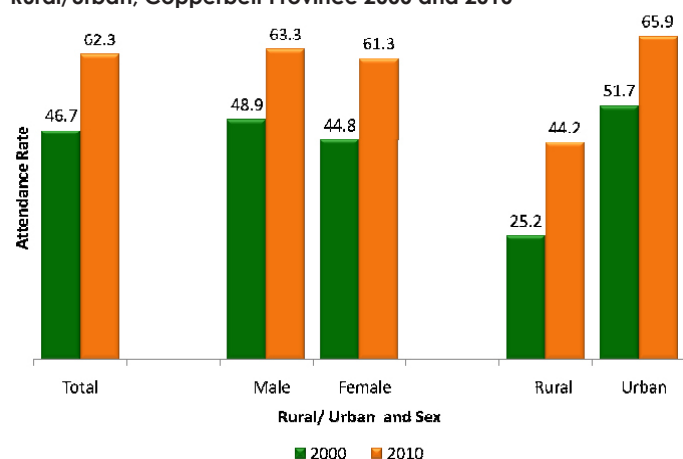


Source: 2010 Census of Population and Housing

5.4.5 Net Secondary School Attendance Rate

Net secondary school attendance rate show the percentage of the secondary school age population (14-18 years) currently attending secondary grades 8 to 12. Figure 5.20 shows net secondary school attendance rates by sex and rural/urban. The net secondary school attendance rate increased from 46.7 percent in 2000 to 62.3 percent in 2010. In 2000, the net secondary school attendance rate for rural areas was 25.2 percent while that of urban areas was 51.7 percent. In rural and urban areas, the net secondary school attendance in 2010 increased to 44.2 and 65.9 percent, respectively. More children in urban areas were attending secondary school than their rural counterparts.

Figure 5.20: Net Secondary School Attendance Rate by Sex and Rural/Urban, Copperbelt Province 2000 and 2010

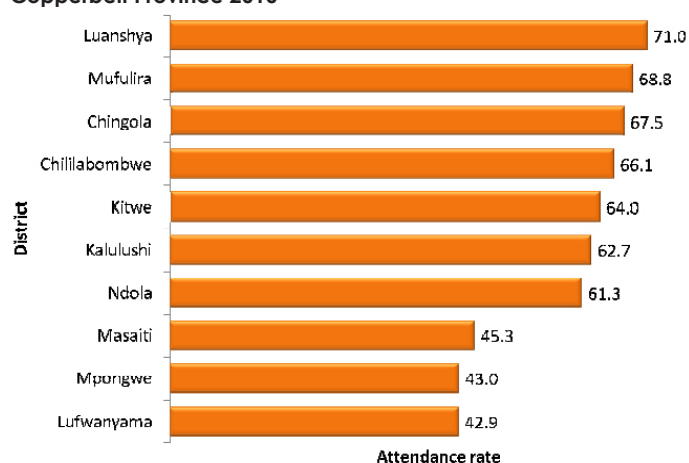


Source: 2000 and 2010 Census of Population and Housing

In both 2000 and 2010 the net secondary school attendance rate for males was higher than that of females. The net secondary school attendance rate for males increased from 48.9 percent in 2000 to 63.3 percent in 2010 while that of females increased from 44.8 percent in 2000 to 61.3 percent in 2010.

Figure 5.21 shows net secondary school attendance rate by district. Luanshya District had the highest net secondary school attendance rate at 71.0 percent while Lufwanyama District had the lowest at 42.9 percent in 2010.

Figure 5.21: Net Secondary School Attendance Rate by District, Copperbelt Province 2010

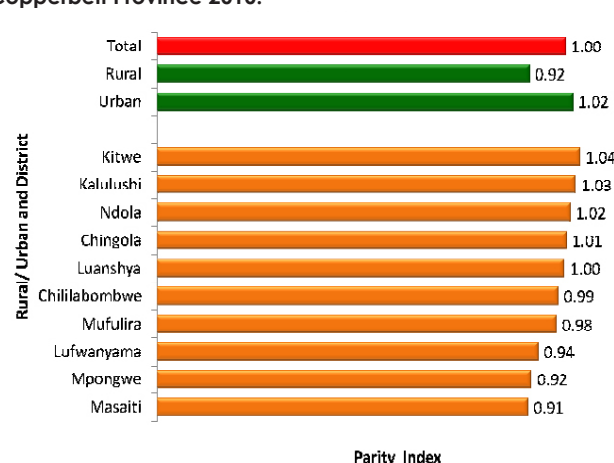


Source: 2010 Census of Population and Housing

5.5 Gender Parity Index

Gender Parity Index shows the disparities in education and helps in addressing unequal access to education among females in developing countries. Figure 5.22 shows the gender parity index by rural/urban and district. Overall, the gender parity index for those currently attending school was 1.00, implying that there was equal access of females and males currently attending school.

Figure 5.22: Gender Parity Index by Rural/Urban and District, Copperbelt Province 2010.

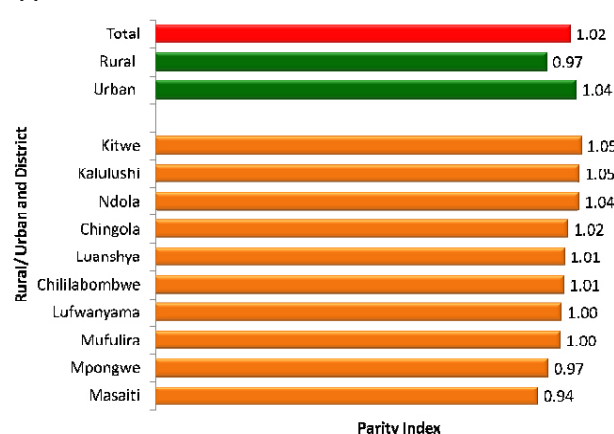


Source: 2010 Census of Population and Housing

The GPI for rural areas was 0.92 while that of urban areas was 1.02. Kitwe District had the highest GPI at 1.04 while Masaiti District had the lowest at 0.91.

Figure 5.23 shows the Gender Parity Index for the population currently attending primary school by rural/urban and district. The Gender Parity Index for those currently attending primary school was 1.02. The GPI for rural areas was 0.97 while that of urban areas was 1.04. Kitwe and Kalulushi Districts had the highest GPI of 1.05 while Masaiti District had the lowest at 0.94.

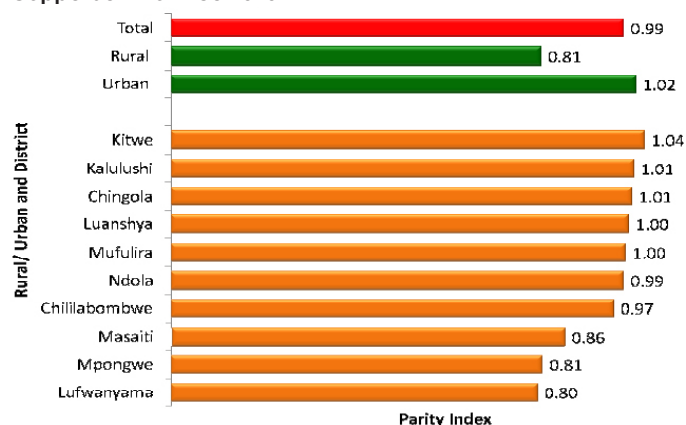
Figure 5.23: Gender Parity Index for the Population (Currently Attending Primary School) by Rural/Urban and District, Copperbelt Province 2010.



Source: 2010 Census of Population and Housing

Figure 5.24 shows the Gender Parity Index for the population currently attending secondary school by district and rural/urban. The GPI for those currently attending secondary school was 0.99. In rural areas the GPI was 0.81 while that of urban areas was 1.02 showing that there was more equality in access to secondary education in urban than rural areas. Kitwe District had the highest GPI at 1.04 and Lufwanyama District had the lowest at 0.80.

Figure 5.24: Gender Parity Index for the Population (Currently Attending Secondary School) by Rural/Urban and District, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

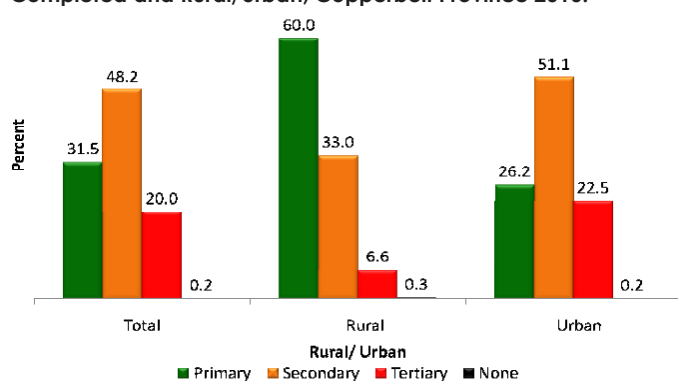
5.6 Highest Education Level Completed

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 below 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 population (25 years and older) that ever attended school by highest education level completed and rural/urban. In 2010, 31.5 percent had completed primary level, 48.2 percent had completed secondary and 20.0 percent had completed tertiary level.

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



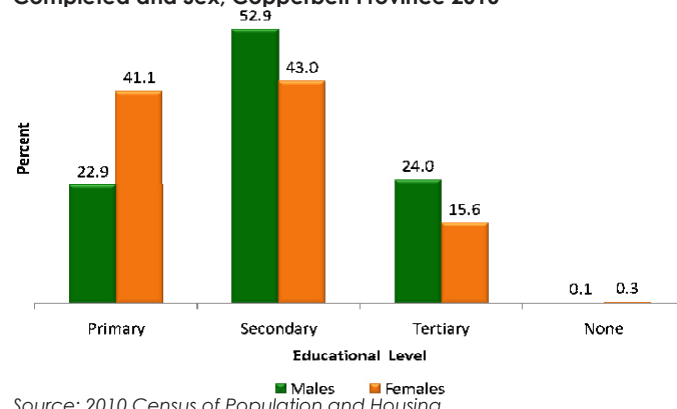
Source: 2010 Census of Population and Housing

In rural areas 60.0 percent of the population reported having completed primary education while 26.2 percent had completed the same level of education in urban areas. Secondary education was the highest level of education completed in urban areas

at 51.1 percent. The percentage of the population that had completed tertiary education was higher in urban areas (22.5 percent) than in rural areas (6.6 percent).

Figure 5.26 shows the percentage distribution of population (25 years and older) that ever attended school by highest education level completed and sex. There were more females (41.1 percent) who had primary education as the highest level completed than males (22.9 percent). The percentage of males who had secondary and tertiary as their highest level of education completed was higher than that of females.

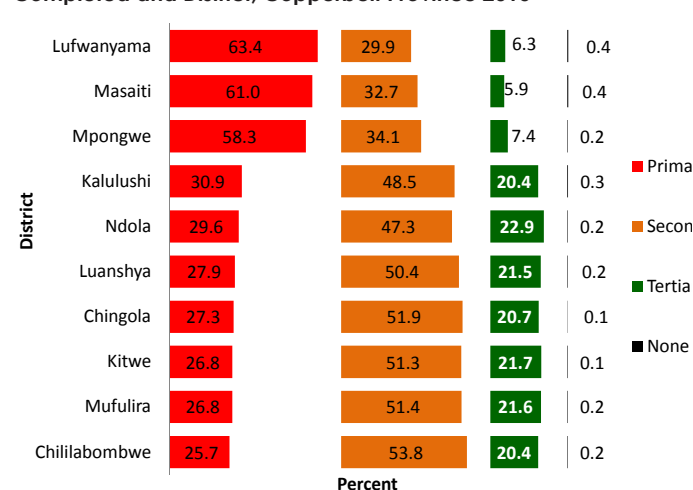
Figure 5.26: Percentage Distribution of Population (25 Years and Older) that Ever Attended School by Highest Education Level Completed and Sex, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

Figure 5.27 shows the percent distribution of the population (25 years and older) that ever attended school by highest education level completed and district. Ndola District had the highest percentage of the population with tertiary as their highest level of education completed at 22.9 percent. Masaiti District had the lowest completion of tertiary education at 5.9 percent.

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

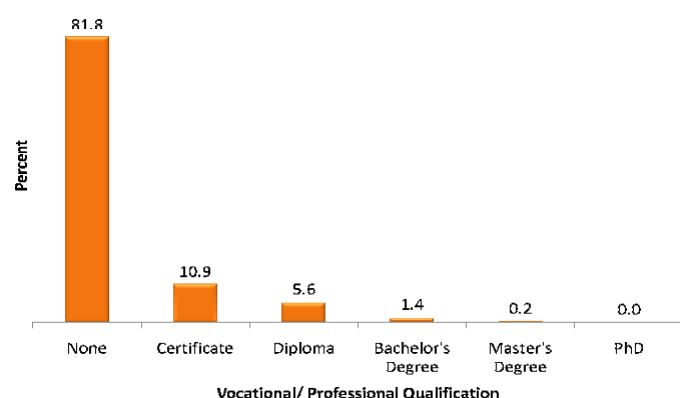


Source: 2010 Census of Population and Housing

5.7 Highest Professional/Vocational Qualification Completed

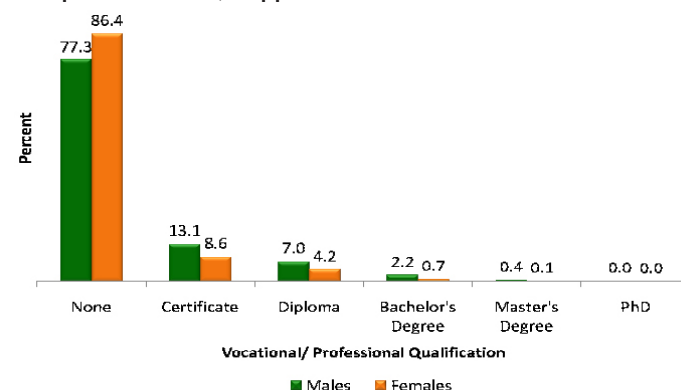
Figure 5.28 shows the percentage distribution of the population (25 Years and older) by highest professional/vocational qualification completed. Certificate holders constituted 10.9 percent followed by diploma holders at 5.6 percent. Less than one percent (0.0) of the people had doctorate degrees (PhD).

Figure 5.28: Percentage Distribution of Population (25 Years and Older) by Highest Professional/Vocational Qualification Completed, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

Figure 5.29: Percentage Distribution of Population (25 Years and older) by Highest Professional/Vocational Qualification Completed and Sex, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

Figure 5.29 shows the percent distribution of the population (25 years and older) by highest profession/vocational qualification completed and sex. In all professional and vocational qualification categories males had higher percentages compared to females. The highest percentage difference between males and females was recorded in the Certificate category where males accounted for 13.1 percent compared to 8.6 percent for females.

5.8 Field of Study

Table 5.1 shows the percent distribution of population (25 years and older) by field of study and sex. Teacher training was reported by 3.6 percent of the total population. Other notable fields of study included Mechanical engineering and business administration both at 1.4 percent.

Table 5.1: Percentage Distribution of Population (25 Years and Older) by Field of Study and Sex, Copperbelt Province 2010

Field of Study	Number	Percent of Population	Percent	
			Males	Females
Natural science (e.g. biological science, chemistry, geological programmes etc).	905	0.1	76.2	23.8
Civil engineering	1,383	0.2	96.2	3.8
Electrical and electronics engineering	8,750	1.3	92.6	7.4
Mechanical engineering	9,800	1.4	97.7	2.3
Chemical engineering	613	0.1	93.3	6.7
Mining engineering	2,677	0.4	97.6	2.4
Industrial engineering	831	0.1	95.1	4.9
Metallurgical engineering	792	0.1	96.7	3.3
Architectural and town planning engineering	389	0.1	91.3	8.7
Other engineering	3,439	0.5	95.6	4.4
Medicine and surgery	755	0.1	79.7	20.3
Pharmacy	495	0.1	64.6	35.4
Dentistry	188	0.0	67.6	32.4
Nursing	5,051	0.7	21.2	78.8
Medical technology	555	0.1	77.7	22.3
X-Ray technology	82	0.0	70.7	29.3
Veterinary	126	0.0	88.9	11.1
Statistics	83	0.0	83.1	16.9
Mathematics	192	0.0	71.9	28.1
Computer science/Economics	3,710	0.5	59.5	40.5
Accountancy	8,776	1.3	74.4	25.6
Teacher training	25,306	3.6	35.4	64.6
Law and jurisprudence (includes magistrates and judges)	1,241	0.2	78.5	21.5
Journalism	430	0.1	56.5	43.5
Fine arts	531	0.1	71.4	28.6
Physical education	91	0.0	59.3	40.7
Library science	201	0.0	47.8	52.2
Social welfare	1,860	0.3	38.5	61.5
Criminology	606	0.1	85.6	14.4
Business administration and related programmes	9,771	1.4	64.2	35.8
Secretarial training	3,824	0.5	4.8	95.2
shorthand typing	567	0.1	18.3	81.7
Clerical Typing	488	0.1	32.6	67.4
Operating of office machines	302	0.0	77.2	22.8
Service trade (e.g. cooking tourist trade etc.)	2,512	0.4	32.2	67.8
Radio and television broadcasting	116	0.0	70.7	29.3
Fire protection and fire fighting	314	0.0	91.1	8.9
Agriculture forestry and fishery	2,181	0.3	81.5	18.5
Food and drinks processing trades programmes	1,230	0.2	28.9	71.1
Wood working	2,082	0.3	97.6	2.4
Textile trades	2,256	0.3	16.6	83.4
Leather trades	142	0.0	22.5	77.5
Other programmes	23,340	3.3	74.2	25.8
None	568,402	81.5	48.0	52.0

Source: 2010 Census of Population and Housing

CHAPTER 6

ECONOMIC CHARACTERISTICS

6.0 Summary

The population aged 12 years and older was 1,278,711 on the Copperbelt province in 2010. Out of these, 17.3 percent were in rural areas while 82.7 percent were in urban areas. Males comprised 49.5 percent of total population aged 12 years and older while females comprised 50.5 percent.

Of the population aged 12 years and older, 643,903 were in the labour force, of which 22.2 percent were in rural areas and 77.8 percent were in urban areas.

The unemployment rate was 22.1 percent of the total labour force. Urban unemployment rate was 26.4 percent while rural unemployment rate was 7.2 percent. The unemployment rate for males was 20.8 percent compared to 24.2 percent for females.

The youth unemployment rate was 29.6 percent, of which urban youth unemployment rate was higher (34.7 percent) than the rural youth unemployment rate (9.2 percent). The unemployment rate for female youths was higher (27.6 percent) than that of male youths (32.8 percent).

Of the employed population, the highest proportion was that of employees (44.4 percent) and the lowest was that of employers (1.2 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:

Labour force 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 labour force who have no jobs, are available for work and are seeking work in a given reference period in the total labour force 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:

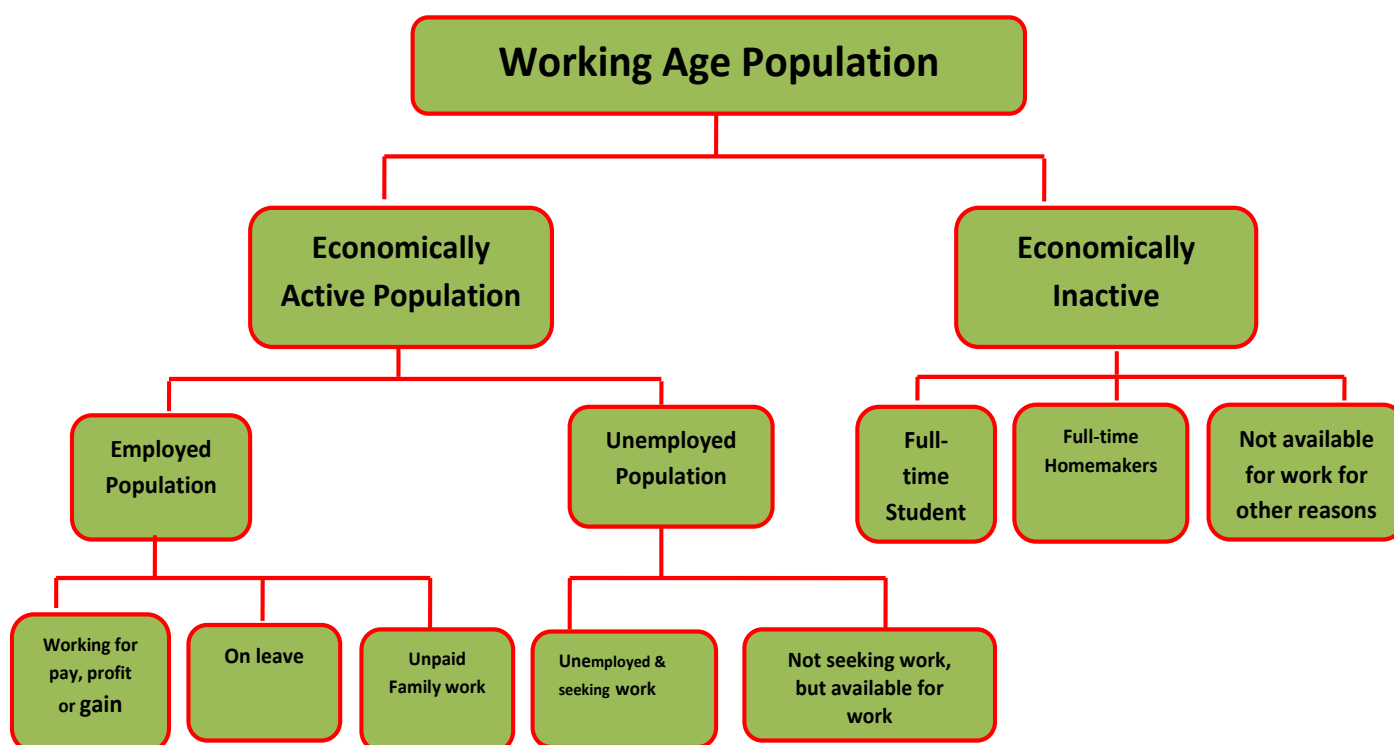
- i) Labour force participation
- ii) Economic dependency
- iii) Employment and unemployment
- iv) Employment status
- v) Occupation
- vi) Industry

6.3 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 above



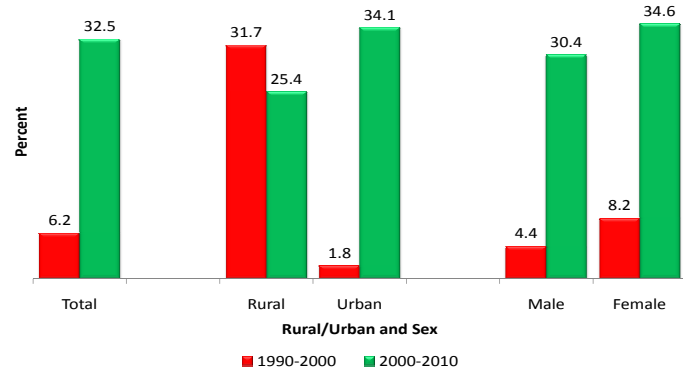
The question asked in the 2010 Census to determine the economic active status was 'What did (NAME) do in the last 7 days and last 12 months?' The reference period for the response categories was the last 7 days (Current activity status) and last 12 months (Usual activity status).

6.3.1 Percentage Change in the Population 12 Years and Older between 2000 and 2010, Copperbelt Province

In 2010, the population aged 12 years and older represented 66.6 percent of the total population of the Copperbelt Province while in 2000, it represented 61.0 percent. The population aged 12 years and older increased from 965,270 in 2000 to 1,278,711 in 2010, representing 32.5 percent increase.

Figure 6.2 shows the percentage change in the population 12 years and older (Working Age Population) of Copperbelt Province by rural/urban and sex. During the 1990-2000 and the 2000-2010 intercensal periods, the working age population in urban areas increased from 1.8 percent to 34.1 percent while in rural areas, it decreased from 31.7 to 25.4 percent. The percentage increase by sex was higher in the female working age population (34.6 percent) compared to the male working age population (30.4 percent) during the 2000-2010 intercensal period.

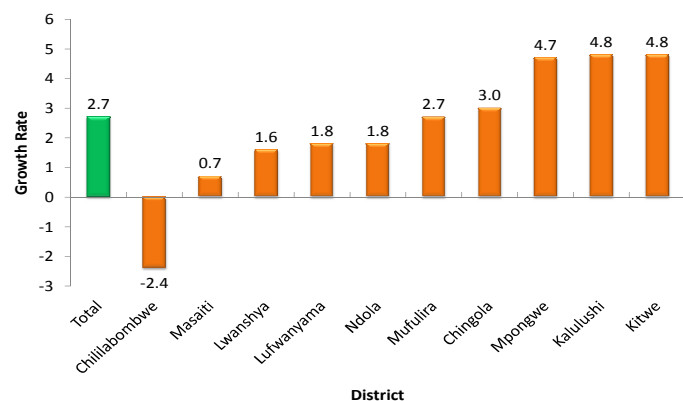
Figure 6.2 Percentage Change in the Population Aged 12 Years and Older (Working Age Population) by Rural/Urban and Sex, Copperbelt Province 1990-2000 and 2000 - 2010



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

Figure 6.3 shows the average annual growth rate of the labour force by district between 2000 and 2010 on the Copperbelt Province. The labour force average annual growth rate was 2.7 percent. This growth was lower than the national labour force average annual growth rate which was recorded at 3.0 percent.

Figure 6.3: Average Annual Growth Rate of the Labour force by District, Copperbelt Province 2000-2010



Source: 2000 and 2010 Censuses of Population and Housing

Kitwe and Kalulushi districts recorded the highest Labour Force average annual growth rate of 4.8 percent while Chililabobwe District recorded a negative average annual growth rate of -2.4 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).

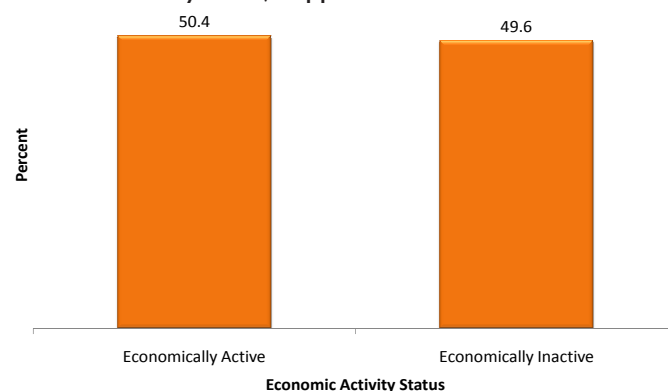
The analysis for the economic activity status is based on the current (in the 7 days prior to the census night) economic activity of the population. In 2010, the labour force was 643,903 on the Copperbelt Province. Of this, 400,235 were male and 243,668 were female.

6.4.2 Economically Inactive

The economically inactive population comprises people who, during the reference period, were outside the labour force. These included fulltime students, fulltime homemakers (i.e. fulltime housewives) and those not available for work for other reasons such as, not able to work due to illness, old age, beggar's among others.

Figure 6.4 shows the percent share of the population 12 years and older by economic activity status. Of the population 12 years and older, 50.4 percent were economically active while 49.6 percent were economically inactive.

Figure 6.4: Percentage of Population (12 Years And Older) by Economic Activity Status, Copperbelt Province 2010



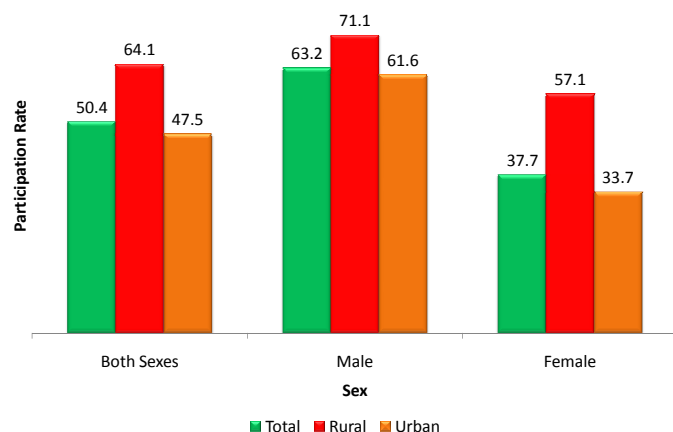
Source: 2010 Census of Population and Housing

6.5 Labour Force Participation Rate

The labour force participation rate shows how much of the population is economically active. Figure 6.5 shows participation rate for the population 12 years and older by sex and rural/urban. In 2010, labour force participation rate was 50.4 percent on the Copperbelt Province. Males had a higher participation rate at 63.2 percent compared to females at 37.7 percent.

Rural/urban analysis shows that labour force participation rate was higher in rural areas (64.1 percent) compared to urban areas (47.5 percent). The results also show that the labour force participation rates were higher for males than females in both rural and urban areas. The female participation rate was higher in rural (57.1 percent) than urban areas (33.7 percent).

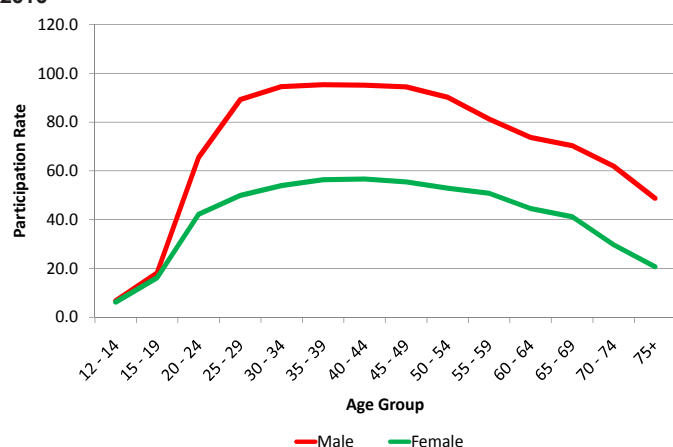
Figure 6.5: Labour Force Participation Rate for Population (12 Years and Older) by Sex and Rural/Urban, Copperbelt Province 2010



Sources: 2010 Census of Population and Housing

Figure 6.6 shows labour force participation rate for the population 12 years and older by age and sex. Labour force participation among males was higher than that of females in all age groups.

Figure 6.6: Labour Force Participation Rate for the Population (12 Years and Older) by Age Group and Sex, Copperbelt Province 2010

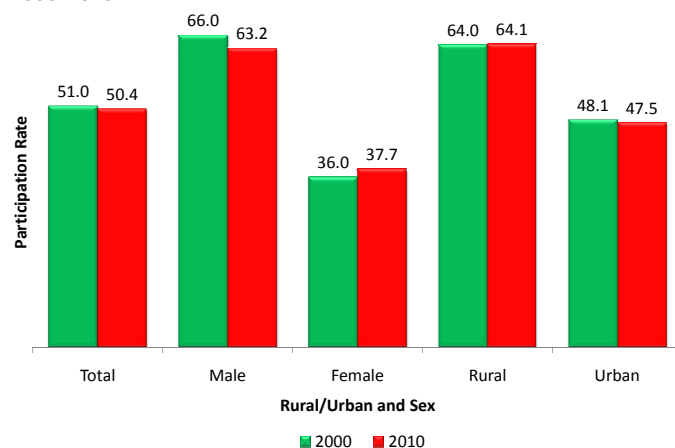


Sources: 2010 Census of Population and Housing

Figure 6.7 shows labour force participation rate for population aged 12 years and older by sex and rural/urban. The labour force participation rate was 51.0 and 50.4 percent in 2000 and 2010, respectively.

The labour force participation rate for males decreased from 66.0 percent in 2000 to 63.2 percent in 2010, representing a 2.8 percentage point decrease. The labour force participation rates for females increased by 1.7 percentage points from 36.0 percent in 2000 to 37.7 percent in 2010.

Figure 6.7: Labour Force Participation Rate for population (12 Years and older) by Sex and Rural/Urban, Copperbelt Province 2000-2010

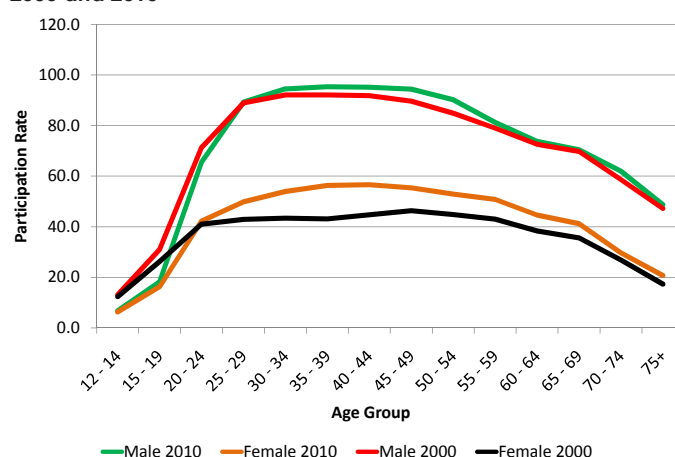


Sources: 2000 and 2010 Censuses of Population and Housing

The labour force participation rate was higher in rural areas (64.1 percent) than in urban areas (47.5 percent) in 2010. This pattern was also observed in 2000 where 64.0 percent labour force participation rate was recorded in rural areas compared to 48.1 percent in urban areas.

Figure 6.8 shows labour force participation rate for the population 12 years and older by age group and sex in 2000 and 2010. The labour force participation rate reduced in the younger ages for both males and females between 2000 and 2010.

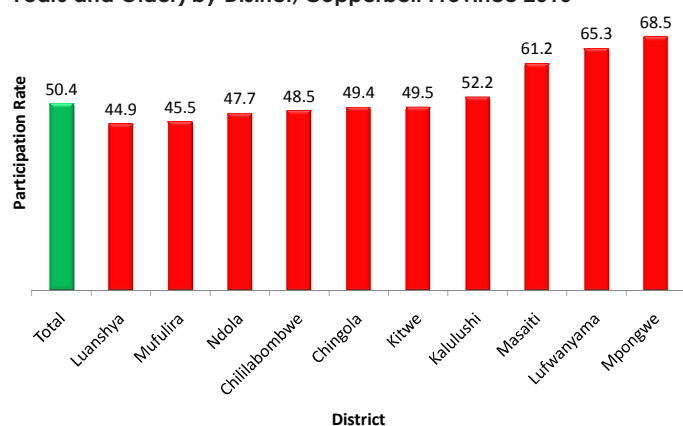
Figure 6.8: Labour Force Participation Rate for Population (12 Years and Older) by Age Group and Sex, Copperbelt Province, 2000 and 2010



Sources: 2000 and 2010 Censuses of Population and Housing

Figure 6.9 shows the labour force participation rates for the population 12 years and older by district. Mpongwe District had the highest participation rate at 68.5 percent while Luanshya District had the lowest at 44.9 percent.

Figure 6.9: Labour Force Participation Rate for the Population (12 Years and Older) by District, Copperbelt Province 2010



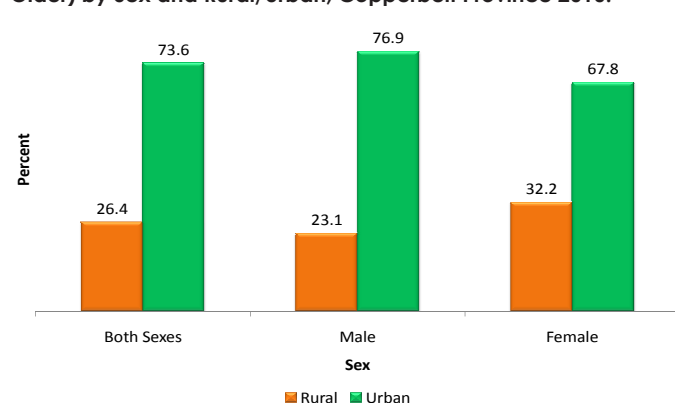
Sources: 2010 Census of Population and Housing

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 643,903 persons in the labour force, 501,483 persons were employed, representing 77.9 percent of the labour force. Out of the employed population, 63.2 percent were male and 36.8 percent were female.

Figure 6.10 shows the percentage share of employed population by sex and rural/urban. The results show that there were more employed persons in urban areas (73.6 percent) than in rural areas (26.4 percent). In urban areas, male employment accounted for 76.9 percent compared to 23.1 percent in rural areas. Female employment in urban areas accounted for 67.8 percent compared to 32.2 percent in rural areas.

Figure 6.10: Percentage of Employed Population (12 Years and Older) by Sex and Rural/Urban, Copperbelt Province 2010.



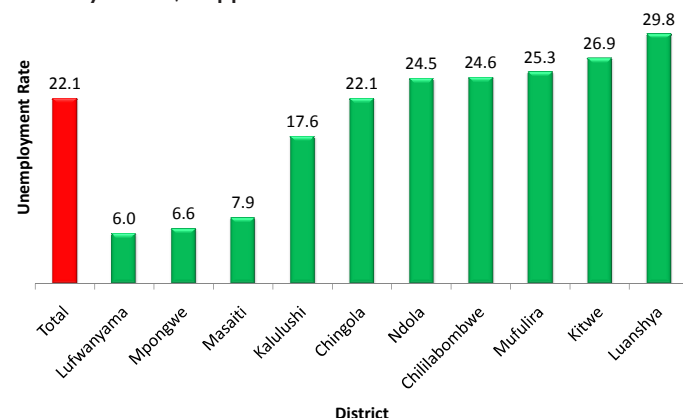
Sources: 2010 Census of Population and Housing

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 6.11 shows unemployment rate of the Copperbelt Province for the population 12 years and older by District. Of the 643,903 persons in the labour force, 142,420 (22.1 percent) were unemployed. Luanshya District had the highest unemployment rate at 29.8 percent and Lufwanyama District had the lowest unemployment rate at 6.0 percent.

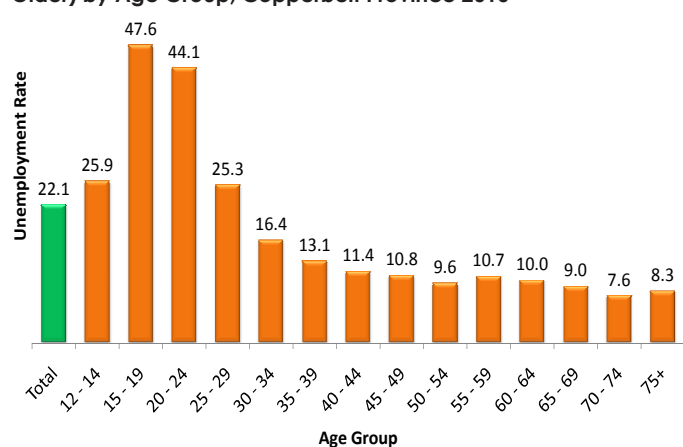
Figure 6.11: Unemployment Rates for the Population 12 Years and Older by District, Copperbelt Province 2010.



Sources: 2010 Census of Population and Housing

Figure 6.12 shows unemployment rate for the population (12 years and older) by age group. The highest unemployment rate was in the age group 15-19 years at 47.6 percent, followed by the age group 20-24 years at 44.1 percent. The lowest unemployment rate was in the age group 70-74 years at 7.6 percent.

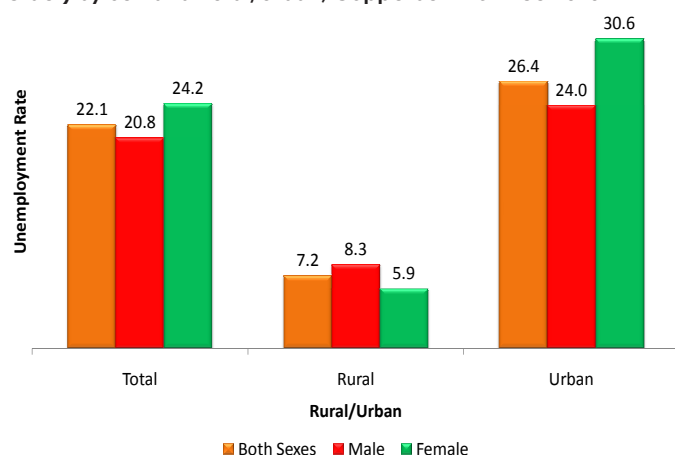
Figure 6.12: Unemployment Rate for the Population (12 Years and Older) by Age Group, Copperbelt Province 2010



Sources: 2010 Census of Population and Housing

Figure 6.13 shows unemployment rate of population (12 years and older) by sex and rural/urban. Unemployment rate for Copperbelt Province was 20.8 percent for males and 24.2 percent for females. Unemployment was higher in urban areas (26.4 percent) than in rural areas (7.2 percent). In rural areas, males had a higher unemployment rate (8.3 percent) than females (5.9 percent). Males recorded lower unemployment rate (24.0 percent) than females (30.6 percent) in urban areas.

Figure 6.13: Unemployment Rate for the Population (12 Years and Older) by Sex and Rural/Urban, Copperbelt Province 2010



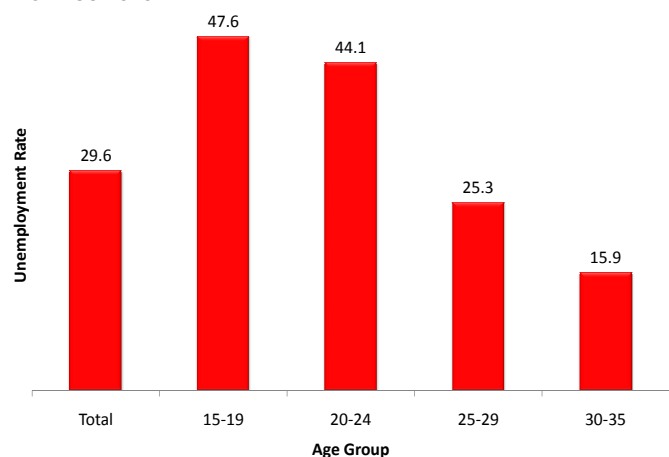
Sources: 2010 Census of Population and Housing

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 376,312 representing 58.4 percent of the total labour force. Of these, 60.8 percent were male while 39.2 percent were female. Rural areas comprised 20.1 percent of the youth labour force while urban areas comprised 79.9 percent.

The youth unemployment rate by age group is shown in Figure 6.14. Out of the 376,312 youths in the labour force, 29.6 percent were unemployed. The highest youth unemployment rate was in the age group 15-19 years at 47.6 percent while the lowest youth unemployment rate was in the age group 30-35 years at 15.9 percent.

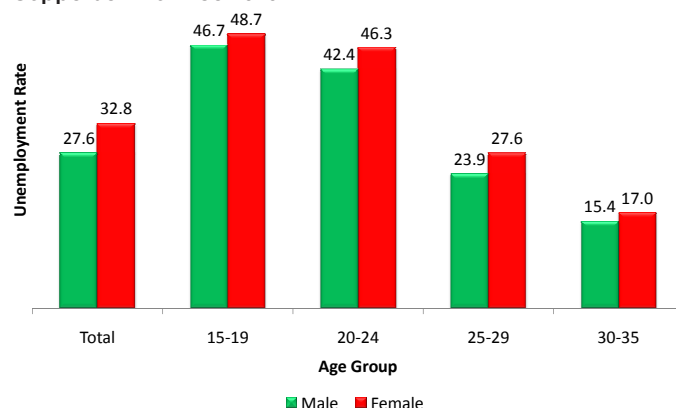
Figure 6.14: Youth Unemployment Rate by Age Group, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

Figure 6.15 shows the youth unemployment rate by age group and sex. Overall, unemployment rates for female youths were higher in all age groups. The total youth unemployment rate for females was 32.8 percent compared to males at 27.6 percent. The age group with the highest disparity between males and females was 20-24 years with 42.4 percent for males and 46.3 percent for females.

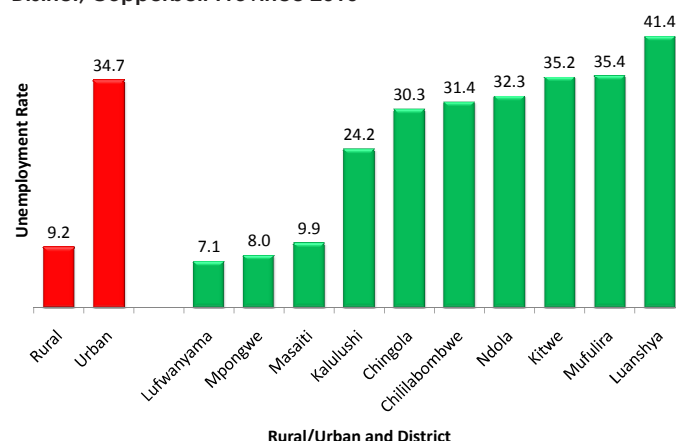
Figure 6.15: Youth Unemployment Rate by Age Group and Sex, Copperbelt Province 2010



Sources: 2010 Census of Population and Housing

Figure 6.16 shows the youth unemployment rate by rural/urban and district. The youth unemployment rate was higher in urban areas (34.7 percent) than in rural areas (9.2 percent). Luanshya District had the highest youth unemployment rate of 41.4 percent and Lufwanyama District had the lowest at 7.1 percent.

Figure 6.16: Youth Unemployment Rate by Rural/Urban and District, Copperbelt Province 2010



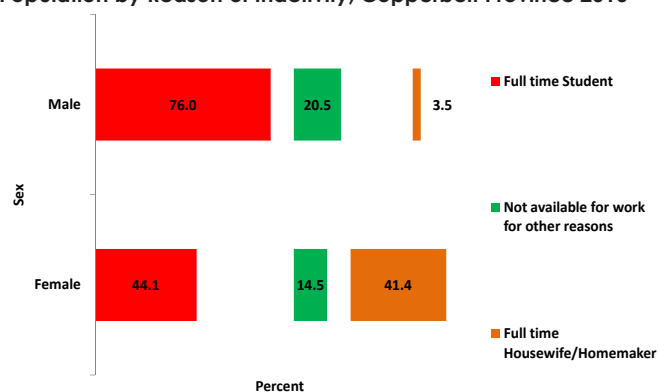
Source: 2010 Census of Population and Housing

6.8 Economically Inactive Population

The economically inactive population refers to persons who reported to be either full-time homemakers (i.e 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 6.17 shows the percentage distribution of the economically inactive population by reason of inactivity. The highest proportion of the economically inactive population for both males and females were full time students with 76.0 percent and 44.1 percent, respectively. Among females, full time home maker/housewife constituted 41.4 percent of the economically inactive population.

Figure 6.17: Percent Distribution of the Economically Inactive Population by Reason of Inactivity, Copperbelt Province 2010



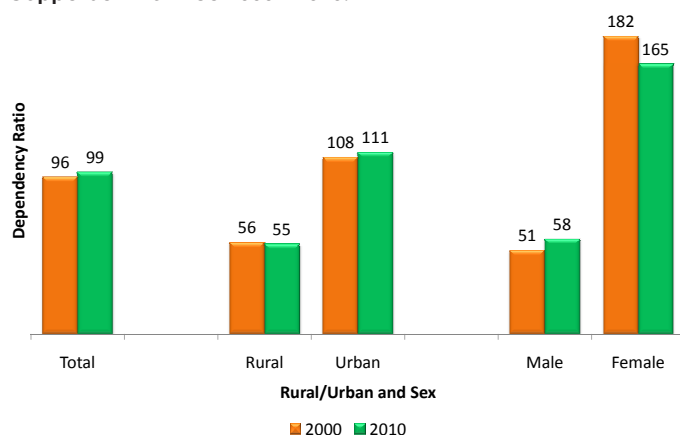
Source: 2010 Census of Population and Housing

6.9 Economic Dependency Ratio

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 6.18 shows the economic dependency ratio by sex and rural/urban. The economic dependency ratio increased from 96 persons in 2000 to 99 persons in 2010. This means that the number of the inactive people that depended on the economically active people increased by three (3). The economic dependency ratio for males increased from 51 persons in 2000 to 58 persons in 2010 while that of the females decreased from 182 persons in 2000 to 165 persons in 2010. The economic dependency ratio for the rural areas decreased from 56 persons in 2000 to 55 persons in 2010 and increased in urban areas from 108 persons in 2000 to 111 persons in 2010.

Figure 6.18 Dependency Ratio by Sex and Rural/Urban, Copperbelt Province 2000 - 2010.



Source: 2000 and 2010 Censuses of Population and Housing

6.10 Employment Status, Occupation and Industrial Classification

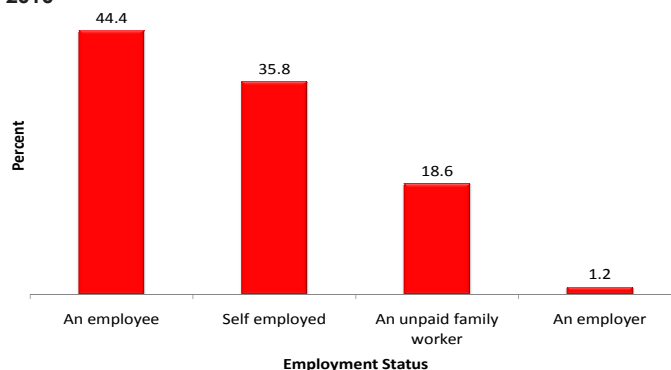
The employment status, occupational and industrial structure of the province's workforce reflects the level of its economic development and the efficiency with which it uses and allocates its resources. The analysis that follows is based on the usually working population, (i.e. those that were working 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 6.19 shows the percentage distribution of usually working population (12 years and older) by employment status. The results show that the highest proportion of the usually working population were employees at 44.4 percent, followed by the self employed at 35.8 percent. The lowest proportion was for employers at 1.2 percent.

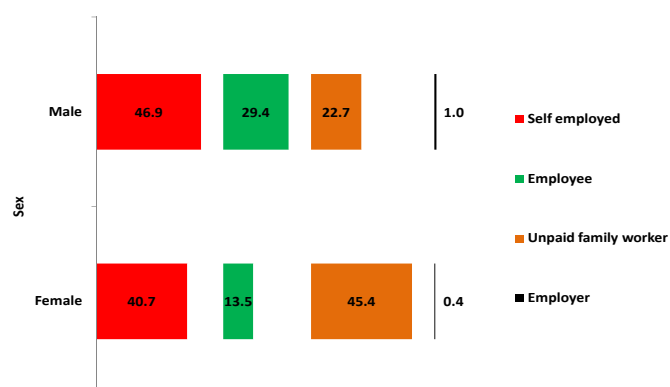
Figure 6.19: Percentage Distribution of Usually Working Population (12 Years and Older) by Employment Status, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

The distribution of the usually working population by employment status and sex is shown in Figure 6.20. The figure shows that 46.9 percent of males were self-employed followed by employees at 29.4 percent. The highest proportion of females (45.4 percent) was unpaid family workers followed by self-employed (40.7 percent).

Figure 6.20: Percentage Distribution of Usually Working Population (12 Years and Older) by Employment Status and Sex, Copperbelt Province 2010



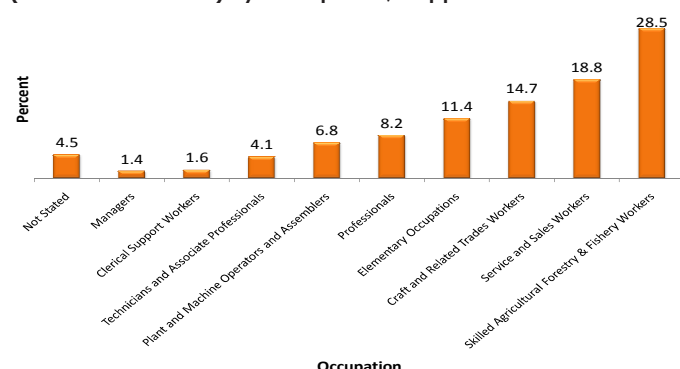
Source: 2010 Census of Population and Housing

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 6.21 shows the percentage distribution of the usually working population (12 years and older) by occupation. The main occupation among the usually working population was the Skilled agricultural, forestry and fishing at 28.5 percent, followed by the Service and sales workers at 18.8 percent. The lowest proportion was that of Managers accounting for 1.4 percent of the total working age population.

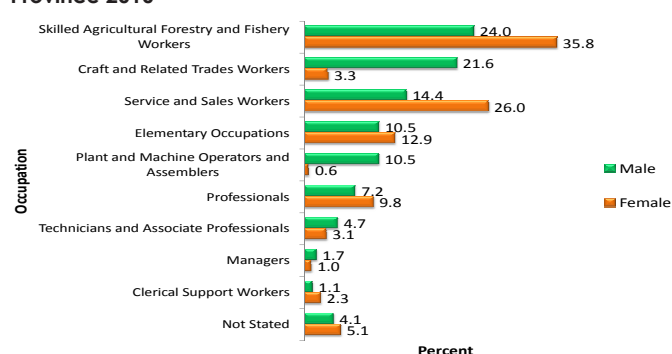
Figure 6.21: Percentage Distribution of Usually Working Population (12 Years and Older) by Occupation, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

Figure 6.22 shows the percentage distribution of the usually working population (12 years and older) by occupation and sex. The highest percentage of the usually working population for both male and female was Skilled agriculture, forestry and fishing at 24.0 and 35.8 percent, respectively.

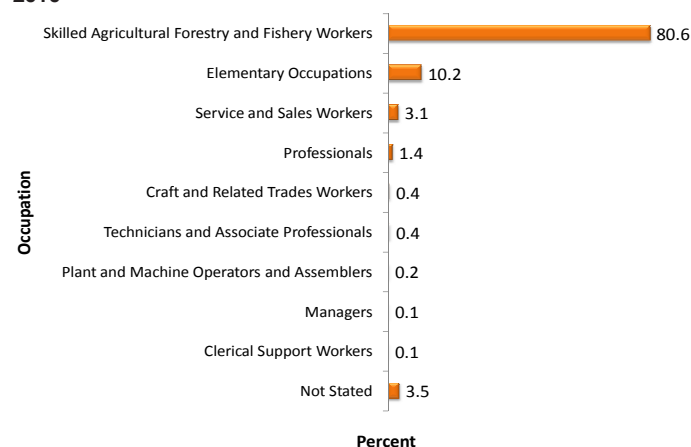
Figure 6.22: Percentage Distribution of Usually Working Population (12 Years and Older) by Occupation and Sex, Copperbelt Province 2010



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 occupation for rural and urban areas, respectively. The highest proportion of the usually working population in rural areas was in the skilled agriculture, forestry and fishing occupation (80.6 percent), followed by Elementary occupations (10.2 percent). Managers and Clerical support workers had the lowest proportion with 0.1 percent in either case.

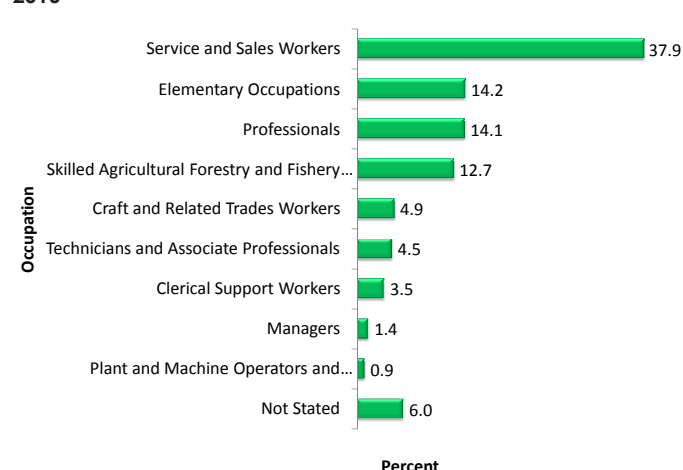
Figure 6.23: Percentage Distribution of Usually Working Population (12 Years and Older) by Occupation, Rural, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

In urban areas the highest proportion of the usually working population was in the Services and sales occupation (37.9 percent), followed by those in Elementary occupations (14.2 percent). The lowest percentage of stated occupations in urban areas was for Plant and Machine Operators and Assemblers at 0.9 percent.

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



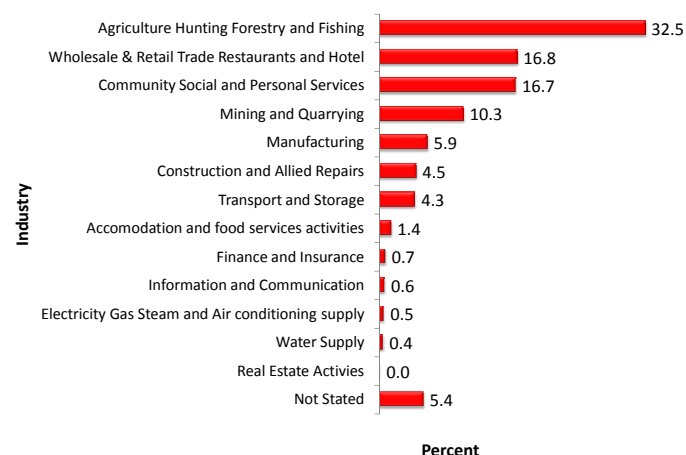
Source: 2010 Census of Population and Housing

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 6.25. The agriculture industry accounted for 32.5 percent of the usually working population. Other industries with notable proportions of the usually working population were; Wholesale and retail trade and Community, social and personal services with 16.8 percent and 16.7 percent, respectively.

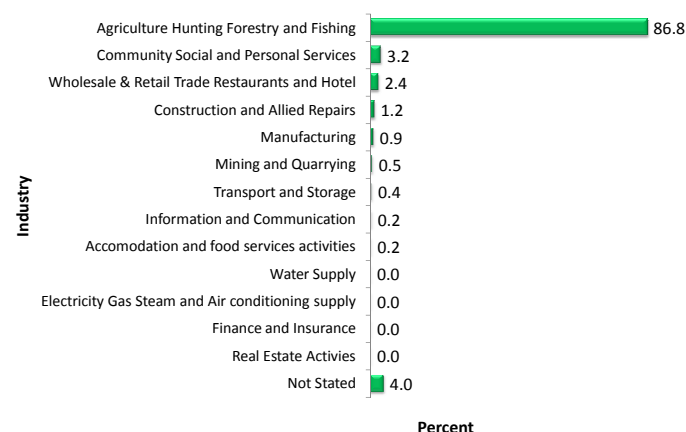
Figure 6.25: Percentage Distribution of Usually Working Population (12 Years and Older) by Industry, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

Figures 6.26 and 6.27 show the percentage distribution of the usually working population (12 years and older) by industry in rural and urban areas, respectively. In rural areas, the Agriculture industry accounted for 86.8 percent of the usually working population. Community, social and personal services; wholesale and retail trade; Construction and Manufacturing; collectively accounted for 7.7 percent.

Figure 6.26: Percentage Distribution of Usually Working Population (12 Years and Older) by Industry, Rural, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

In urban areas, Wholesale and retail trade industry accounted for 22.4 percent of the usually working population followed by Community, social and personal services at 21.8 percent. Real estate activities had the lowest proportion at 0.1 percent.

Figure 6.27: Percentage Distribution of Usually Working Population (12 Years and Older) by Industry, Urban, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

CHAPTER 7: FERTILITY CHARACTERISTICS

7.0 Summary

The Total Fertility Rate (TFR) for Copperbelt Province was 5.0. The TFR in rural areas was 6.9 and 4.6 in urban areas. Mpongwe District recorded the highest TFR at 7.1 and Luanshya District had the lowest at 4.5.

The Crude Birth Rate (CBR) in 2010 was 29 live births per 1000 mid-year population. Rural areas had a higher CBR of 35 compared to urban areas at 27 live births per 1000 mid-year population.

The Child Woman Ratio (CWR) for Copperbelt Province in 2010 was 587 children (0-4 years) per 1000 women. The CWR for rural areas was 816 compared with 543 in urban areas.

The General Fertility Rate (GFR) was recorded at 112. Rural areas had a GFR of 161 and urban areas had 103.

The completed family size was 6.5 children; 6.5 for both rural and urban areas.

The Gross Reproduction Rate (GRR) was 1.8. The GRR for rural and urban areas were 2.5 and 1.6, respectively.

The Net Reproduction Rate (NRR) was 1.3. The NRR for rural and urban areas were 1.8 and 1.2 respectively. The mean age at child bearing for the year 2010 was 29.2 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 on 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, also broken down by whether these children were still alive or not.

7.2 Concepts and Definitions

The following concepts have been used in the analysis of fertility in this chapter.

Age Specific Fertility Rate (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 years and older.

Crude Birth Rate (CBR): Is the annual number of live births per thousand 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 thousand women of childbearing age.

Gross Reproduction Rate (GRR): Refers to the average number of female births that a woman would give birth to by the time she reached the end of her reproduction if she experienced age specific fertility rates prevailing in that year.

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 Rates (ASFRs), Total Fertility Rates (TFR), Gross Reproduction Rates (GRRs) and Net Reproduction Rates (NRRs) 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: $(P_2)/(P_4/P_3)^4 = (1.342) (3.859/2.623)^4 = 7.897$. 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).

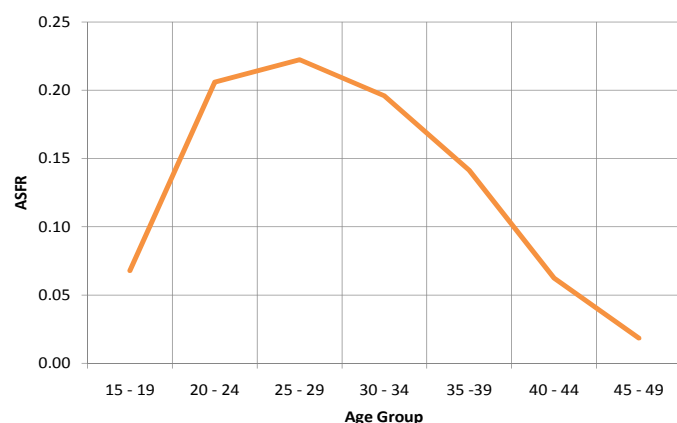
The 2010 Census therefore applied the P/F Ratio Technique, which uses children ever born data to adjust fertility data for under reporting in number of births that occurred in the last 12 months prior to the census (Arriaga et al 2005). The P/F Ratio Technique is based on cumulating fertility (represented 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 (ASFR)

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

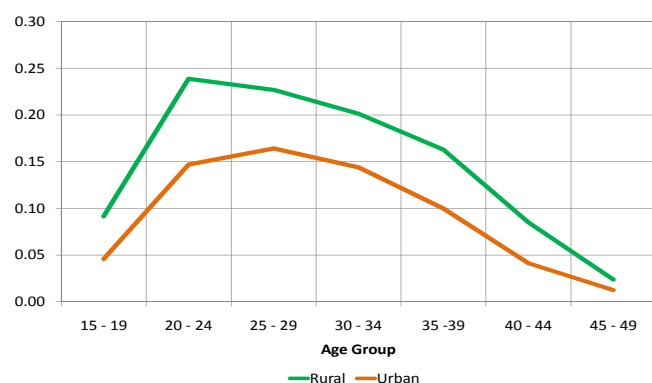
Figure 7.1: Adjusted Age Specific Fertility Rate by Age Group, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

Figure 7.2 shows the Adjusted Age Specific Fertility Rates by rural/urban. Results show that child bearing starts early in rural areas compared to urban areas. The peak for child bearing in the rural areas was in the 20-24 age group, while in urban areas the peak was in the 25 – 29 age group.

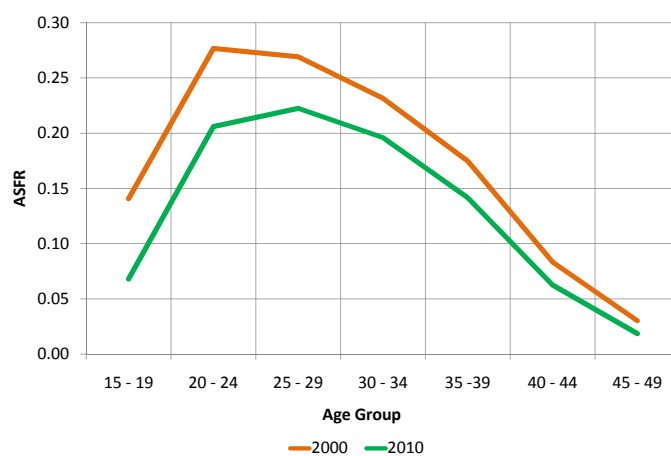
Figure 7.2: Adjusted Age Specific Fertility Rate by Age Group and Rural/Urban, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

Figure 7.3 shows trends in the adjusted ASFR for Copperbelt Province for the years 2000 and 2010. Results show that the peak of child bearing in 2000 was in the age group 25-29 years. In 2010, the peak was in the 20-24 age group.

Figure 7.3: Adjusted Age Specific Fertility Rate by Age Group, Copperbelt Province 2000 – 2010

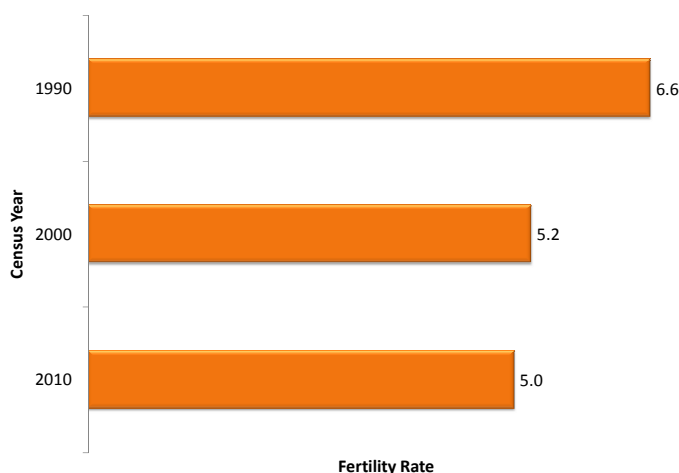


Source: 2000 and 2010 Censuses of Population and Housing

7.5.2. Total Fertility Rate (TFR)

Figure 7.4 shows trends in Total Fertility Rate (TFR) for Copperbelt Province from 1990 to 2010. Results show that, between 1990 and 2010, the TFR declined from 6.6 to 5.0.

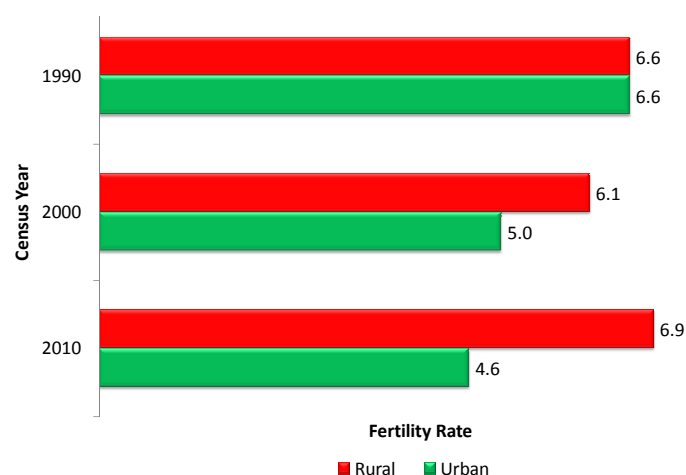
Figure 7.4: Total Fertility Rate, Copperbelt province 1990, 2000 and 2010



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

7.5.2.1 Total Fertility Rate by Rural/Urban

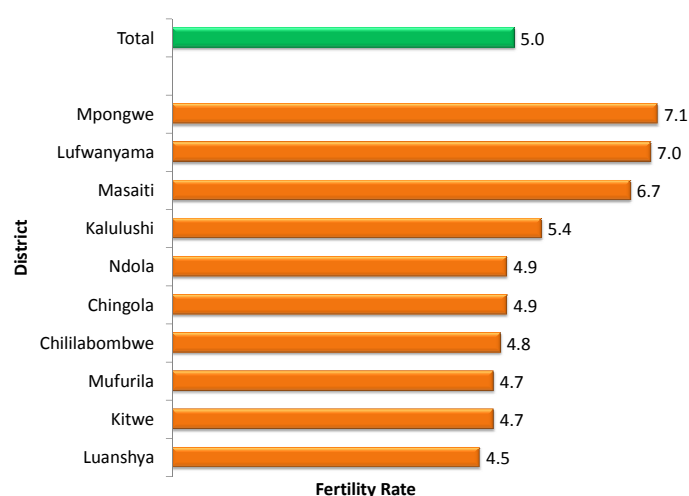
Figure 7.5 shows the trends in Total Fertility Rate by rural/urban from 1990 to 2010. There were some variations in TFR at rural/urban level. Results show that, in 2010 the TFR for rural areas on the Copperbelt Province was 6.9, an increase from 6.1 in 2000. Further, the TFR in urban areas declined from 5.0 in 2000 to 4.6 in 2010.

Figure 7.5: Trends in Total Fertility Rate by Rural/Urban, Copperbelt Province 1990, 2000 and 2010

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

7.5.2.2 Total Fertility Rate by District

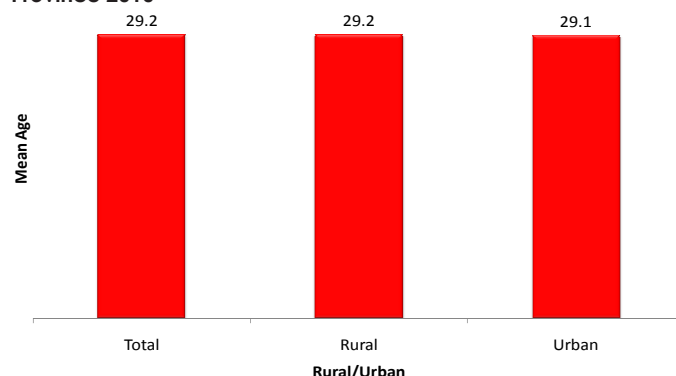
Figure 7.6 shows total fertility rate by District. In 2010, Luanshya District recorded the lowest TFR of 4.5, and Mpongwe District had the highest at 7.1. Mpongwe, Lufwanyama, Masaiti, and Kalulushi districts recorded a TFR above the Provincial estimate while the rest of the districts recorded a TFR below the Provincial estimate.

Figure 7.6: Total Fertility Rate by District, Copperbelt Province 2010

Source: 2010 Census of Population and Housing

7.5.3 Mean Age at Child Bearing (MACB)

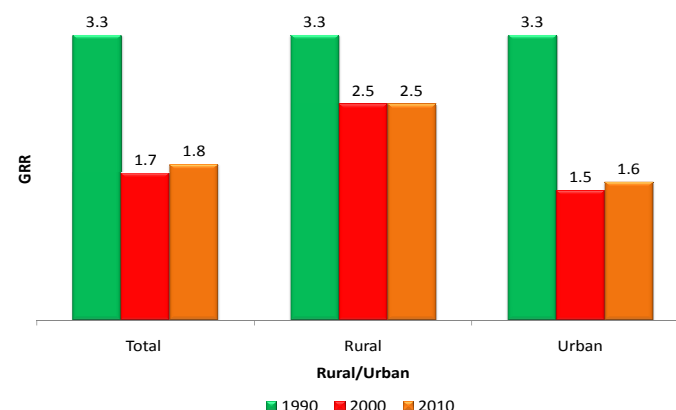
Figure 7.7 shows the Mean Age at Child Bearing (MACB) by rural/urban. In 2010, the MACB for Copperbelt Province was 29.2 years. There was minimal difference in the MACB between rural (29.2) and urban areas (29.1).

Figure 7.7 Mean Age at Child Bearing by Rural/Urban, Copperbelt Province 2010

Source: 2010 Census of Population and Housing

7.5.4 Gross Reproduction Rate (GRR)

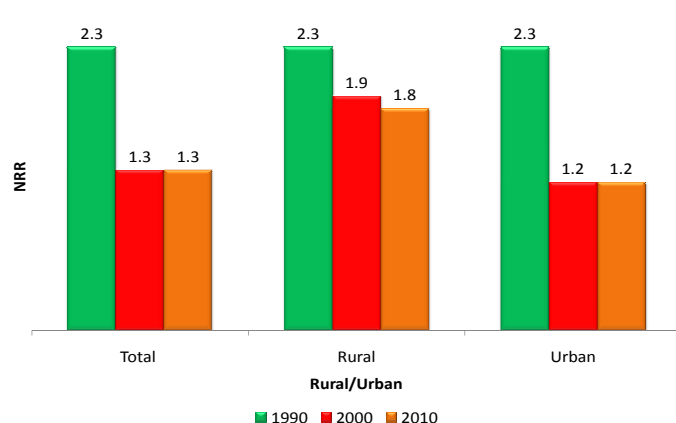
Figure 7.8 shows trends in the Gross Reproduction Rate by rural/urban in 1990, 2000 and 2010. The GRR declined from 3.3 in 1990 to 1.7 in 2000 then increased to 1.8 in 2010. The GRR was higher in rural areas at 2.5 compared to 1.6 in urban areas in 2010.

Figure 7.8: Trends in Gross Reproduction Rate by Rural/Urban, Copperbelt Province 1990, 2000 and 2010

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

7.5.5 Net Reproduction Rate (NRR)

Figure 7.9 shows trends in the Net Reproduction Rate by rural/urban in 1990, 2000 and 2010. The NRR declined from 2.3 in 1990 to 1.3 in 2000 and remained at 1.3 in 2010. The NRR was higher in rural areas at 1.8 compared to 1.2 in urban areas in 2010.

Figure 7.9: Trends in Net Reproduction Rate by Rural/Urban, Copperbelt Province 1990, 2000 and 2010

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

7.5.6 Other Fertility Indicators

Several other indices of fertility can also be measured from data on births and population (Arriaga et al., 2005). These include the Crude Birth Rate (CBR), Child-Woman Ratio (CWR), Completed Family Size (CFS) and the General Fertility Rate

(GFR). Table 7.1 shows a summary of fertility indicators by rural/urban and district. In 2010 the CBR was at 29 per 1000 mid-year population, while the CWR was at 587 per 1000 women aged 15-49 years. Other indicators such as the GFR and CFS were at 112 and 6.5, respectively.

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

Rural/Urban and District	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)
Total	5.0	6.5	29	587	112	1.8	1.3
Rural	6.9	6.5	35	816	161	2.5	1.8
Urban	4.6	6.5	27	543	103	1.6	1.2
District							
Chililabombwe	4.8	6.2	30	592	118	1.8	1.4
Chingola	4.9	6.1	27	575	104	1.6	1.2
Kalulushi	5.4	6.5	30	607	118	1.9	1.4
Kitwe	4.7	6.6	29	557	109	1.7	1.3
Luanshya	4.5	6.6	24	511	92	1.5	1.1
Lufwanyama	7.0	6.1	35	844	162	2.7	2.0
Masaiti	6.7	6.3	31	766	138	2.2	1.5
Mpongwe	7.1	6.5	41	838	187	2.9	2.1
Mufulira	4.7	6.5	25	539	97	1.5	1.1
Ndola	4.9	6.6	28	105	550	1.6	1.2

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 District and Religious Affiliation of Women Aged 15-49 Years

Table 7.2 below shows fertility levels by religious affiliation of women. Muslim women recorded the highest Total Fertility Rate at 5.7 followed by protestant women at 5.1. The lowest Total Fertility Rate was among the Hindus at 1.3.

Table 7.2: Total Fertility Rate by Religious Affiliation of Women Aged 15-49 Years and District, Copperbelt Province 2010

District	All Women	Religious Affiliation					
		Catholics	Protestants	Muslims	Hindus	Other	None
Total	5.0	4.6	5.1	5.7	1.3	4.3	4.4
Chililabombwe	4.8	4.3	4.9	9.5	-	4.2	7.9
Chingola	4.9	4.4	5.0	8.5	-	4.2	3.1
Kalulushi	5.4	4.7	5.5	5.5	-	6.2	6.0
Kitwe	4.7	4.4	4.8	5.2	2.0	4.1	4.4
Luanshya	4.5	4.3	4.6	10.2	0.8	4.4	3.8
Lufwanyama	7.0	6.0	7.2	13.6	-	5.7	9.8
Masaiti	6.7	6.2	6.8	6.7	-	10.1	4.0
Mpongwe	7.0	6.7	7.1	24.4	-	5.4	22.3
Mufulira	4.7	4.6	4.7	6.0	1.5	3.9	3.5
Ndola	4.8	4.5	4.9	4.8	1.0	3.7	3.9

Source: 2010 Census of Population and Housing

7.6.2 Total Fertility Rate by Education Attainment of Women Aged 15-49 years

Table 7.3 below shows the total fertility rate for women by their education attainment and district. Total fertility rate was higher

among women with primary education (6.7), followed by women with no education (6.4). Women with tertiary education had the lowest total fertility rate at 2.8.

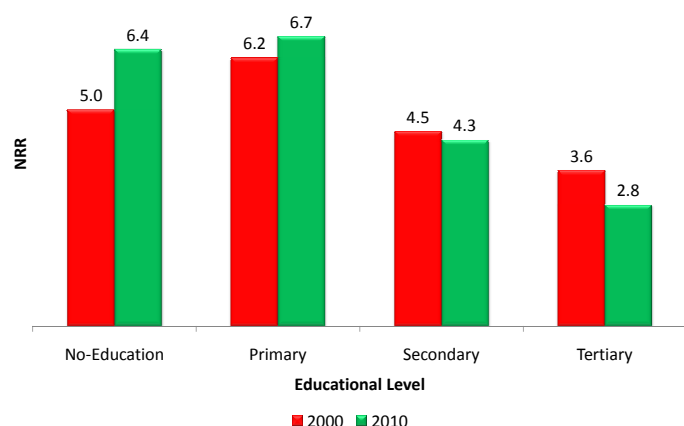
Table 7.3: Total Fertility Rate by Education Attainment of Women Aged 15-49 Years and District, Copperbelt Province 2010

District	All Women	Education Level Attainment			
		No-Education	Primary	Secondary	Tertiary
Total	5.0	6.4	6.7	4.3	2.8
Chililabombwe	4.8	5.9	6.4	4.3	3.2
Chingola	4.9	6.0	7.0	4.2	2.8
Kalulushi	5.4	6.2	7.4	4.8	2.6
Kitwe	4.7	5.9	6.4	4.3	2.9
Luanshya	4.5	6.1	6.7	3.9	3.4
Lufwanyama	7.0	6.8	7.4	5.9	4.5
Masaiti	6.7	6.7	7.5	5.1	3.1
Mpongwe	7.1	7.7	7.7	5.8	3.0
Mufulira	4.7	6.2	6.2	4.3	3.8
Ndola	4.8	6.5	6.3	4.3	2.6

Source: 2010 Census of Population and Housing

Figure 7.10 shows trends in TFR by women's education attainment for the 2000 and 2010 censuses. The results show that women with primary education had the highest total fertility rate in both 2000 and 2010. The lowest total fertility rate was among women with Tertiary Education in both census years.

Figure 7.10: Total Fertility Rate by Education Attainment of Women Aged 15-49 Years, Copperbelt Province 2000-2010

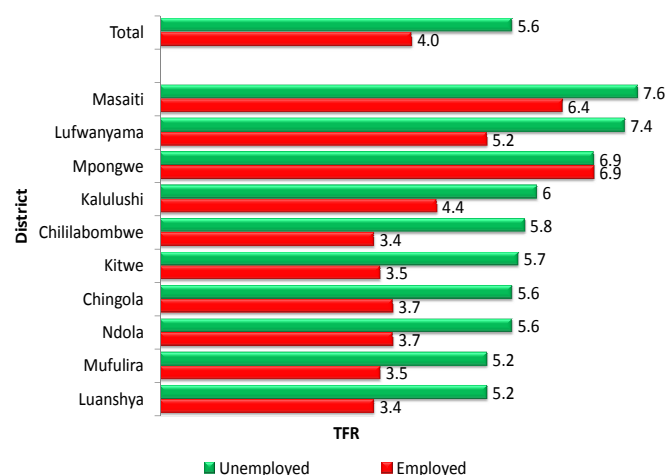


Source: 2000 and 2010 Censuses of Population and Housing

7.6.3 Total Fertility Rate by Economic Activity Status of Women Aged 15-49 Years

Figure 7.11 shows the total fertility rate by economic activity status of women aged 15-49 years and district. The total fertility rate was higher among unemployed women (5.6) than that of the economically active women (4.0). The same pattern was observed for all the districts except in Mpongwe District where both the employed and unemployed women had the same TFR at 6.9.

Figure 7.11: Total Fertility Rate by Employment Status of Women Aged 15-49 Years and District, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

CHAPTER 8

CHILDHOOD MORTALITY CHARACTERISTICS

8.0 Summary

The infant mortality rate (IMR) declined from 110.0 deaths per 1000 live births in 1990 to 92.0 deaths per 1,000 live births in 2000 and declined further to 65.7 deaths per 1000 live births in 2010.

The child mortality rate (CMR) declined from 82.0 deaths per 1000 live births in 1990 to 63.0 deaths per 1000 live birth in 2000 and declined further to 52.9 deaths per 1000 live births in 2010.

The under-5 mortality rate (U5MR) declined from 183.0 deaths per 1000 live births in 1990 to 149.0 deaths per 1000 live births in 2000 and declined further to 118.0 deaths per 1000 live births in 2010.

Chapter 8

Childhood Mortality



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 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 major 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.

8.2 Concepts and Definitions

The following concepts and definitions have been used in this analysis:

Mortality: Refers to the occurrence of deaths in a population.

Age Specific Death Rates (ASDR): Refer 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 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 children 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 by sex. 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

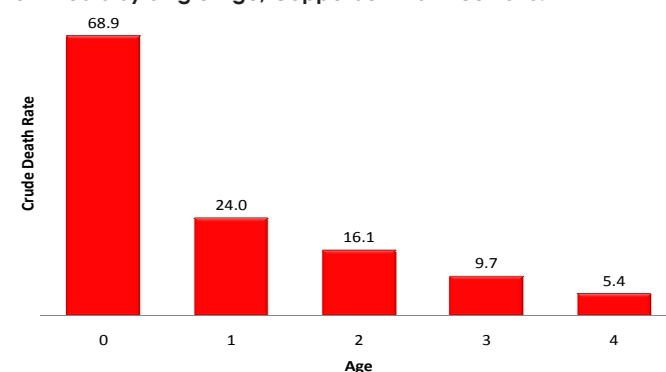
It is well known that the proportions of children ever born who have died are indicators of child mortality and can yield robust estimates of childhood mortality (UN, 1983). However, it is equally well known that children ever born data sometimes suffers from under reporting of dead children, especially 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 rates for the population aged 0-4 years are shown in Figures 8.1 and 8.2 and Table 8.1.

The observed CDR presented in Figure 8.1 shows that childhood mortality was higher among infants with 68.9 deaths per 1000 population aged less than one year. The observed CDR declined with increasing age of the child, reaching the level of 5.4 deaths per 1000 population at age four.

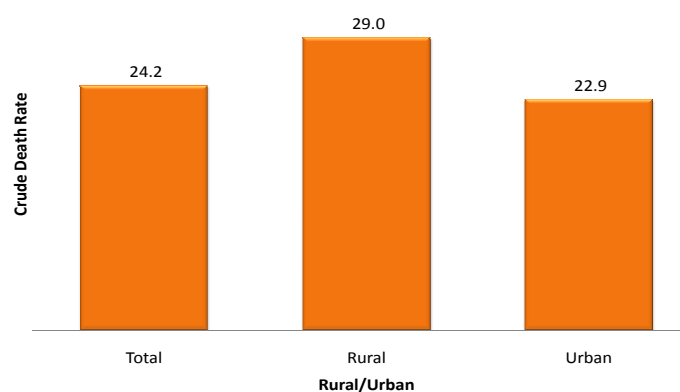
Figure 8.1: Observed Crude Death Rate per 1000 Population Aged 0-4 Years by Single Age, Copperbelt Province 2010.



Source: 2010 Census of Population and Housing

Figure 8.2 shows observed crude death rate by rural/urban. The observed crude death rate was 24.2 deaths per 1,000 population aged 0-4. It was higher in rural areas, 29.0 deaths per 1,000 population aged 0-4 years compared to 22.9 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, Copperbelt Province 2010.



Source: 2010 Census of Population and Housing

Table 8.1 shows crude death rate by rural/urban, sex and single age for the population aged 0-4 years. The analysis of the crude death rate presented in Table 8.1 provide proxy indications of the expected levels of infant, child and under five mortality rates. The information in the table shows an infant mortality rate of 69, a child mortality rate of 55 and an under five mortality rate of 124 for Copperbelt Province.

Similarly, the information in the table approximates the infant mortality rate of 75 for rural areas and 67 for urban areas, a child mortality rate of 74 for rural areas and 49 for urban areas and an under five mortality rate of 116 for urban and 149 for rural. These proxy estimates of child mortality based on the observed crude death rates would be plausible for Copperbelt Province at the time of the 2010 census.

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

Age in Years	Total			Rural			Urban		
	Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females
0	0.069	0.072	0.066	0.075	0.081	0.070	0.067	0.070	0.065
1	0.024	0.024	0.024	0.030	0.029	0.031	0.022	0.023	0.022
2	0.016	0.017	0.015	0.022	0.024	0.020	0.014	0.015	0.013
3	0.010	0.010	0.009	0.015	0.015	0.015	0.008	0.009	0.007
4	0.005	0.006	0.005	0.007	0.006	0.007	0.005	0.005	0.005

Source: 2010 Census of Population and Housing

Direct estimation procedures were used to generate child hood 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 Copperbelt Province for the period 12 months prior to the census. In 2010, the IMR was 65.7 deaths per 1000 live births. In rural areas the IMR was 71.6 deaths per 1000 live births and 64.0 deaths per 1000 live births in urban areas. Estimated IMR was higher for male children than female children in both urban and rural areas.

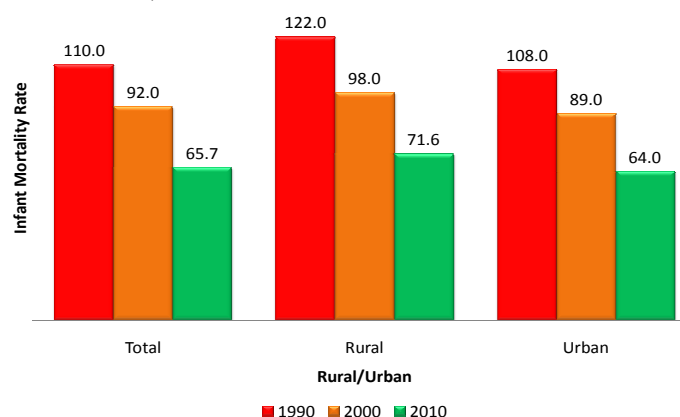
Table 8.2: Infant Mortality Rate (IMR) by Sex and Rural/Urban, Copperbelt Province 2010

Rural/Urban	Both Sexes	Males	Females
Total	65.7	68.6	62.8
Rural	71.6	76.8	66.4
Urban	64.0	66.4	61.7

Source: 2010 Census of Population and Housing

The infant mortality rate presented in Figure 8.3 shows declining trends since 1990. The IMR declined from 110.0 deaths per 1,000 live births in 1990 to 65.7 deaths per 1,000 live births in 2010. The decline in IMR occurred in both rural and urban areas since 1990.

Figure 8.3: Infant Mortality Rate (IMR) by Rural/Urban, Copperbelt Province 1990, 2000 and 2010



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

Infant mortality rate (IMRs) by district is presented in Figure 8.4. Masaiti, Mpongwe, Ndola and Mufulira districts had infant mortality rates above the provincial average of 65.7 infant deaths per 1,000 live births in 2010. The highest Infant mortality rate was in Masaiti District at 77.4 infant deaths per 1000 live births while the lowest was in Chingola District at 58.4 infant deaths per 1,000 live births.

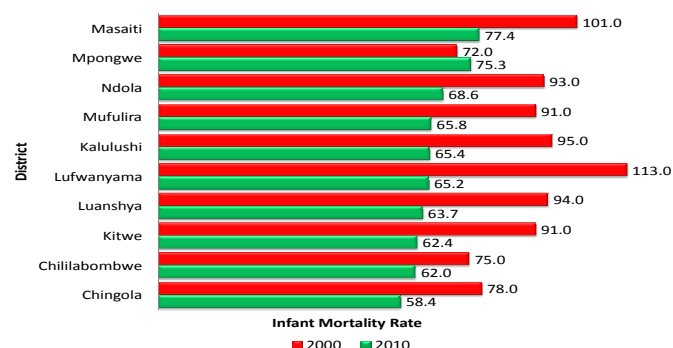
Figure 8.4: Infant Mortality Rate (IMR) by District, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

Figure 8.5 shows the infant mortality rate by district in 2000 and 2010. The figure shows that infant mortality declined in all the districts during the period 2000 and 2010. The highest decline in IMR occurred in Lufwanyama District from 113.0 deaths per 1,000 live births in 2000 to 65.2 deaths per 1,000 live births in 2010.

Figure 8.5: Infant Mortality Rate (IMR) By District, Copperbelt Province 2000 and 2010



Source: 2000 and 2010 Censuses of Population and Housing

8.6 Child Mortality Rate

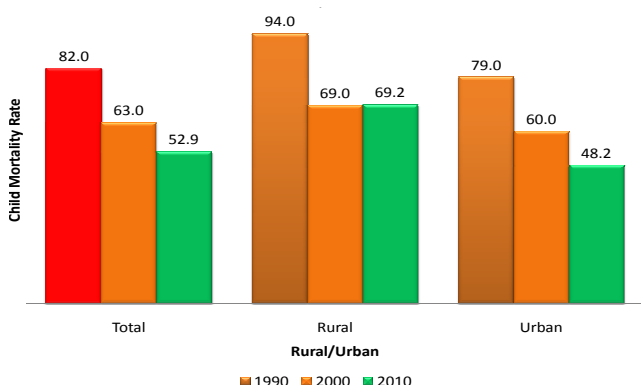
Table 8.3 shows Child Mortality Rates (CMR) by sex and rural/urban in 2010. The CMR for Copperbelt Province was 52.9 deaths per 1,000 live births. In rural areas, the CMR was 69.2 deaths per 1,000 live births and 48.2 deaths per 1,000 live births in urban areas. The CMR was higher for male than female children in both rural and urban areas.

Rural/Urban	Both Sexes	Males	Females
Total	52.9	55.0	50.8
Rural	69.2	70.0	68.4
Urban	48.2	50.6	45.8

Source: 2010 Census of Population and Housing

Figure 8.6 shows Child Mortality Rate (CMR) by rural/urban in 1990, 2000 and 2010. The figure suggests improvements in child survival on the Copperbelt Province as depicted by declining child mortality rate during the two inter-censal periods. Child mortality rate declined in rural areas from 94.0 deaths per 1,000 live births in 1990 to 69.2 deaths per 1,000 live births in 2010. Similarly, child mortality rate declined in urban areas from 79.0 deaths per 1,000 live births in 1990 to 48.2 deaths per 1,000 live births in 2010.

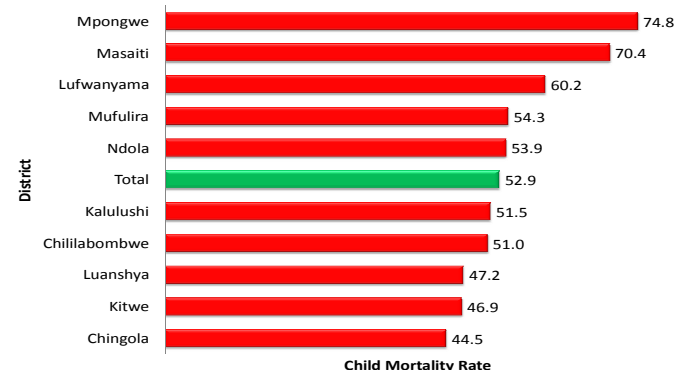
Figure 8.6: Child Mortality Rate (CMR) by Rural/Urban, Copperbelt Province 1990, 2000 and 2010



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

The child mortality rate (CMR) by district is presented in Figure 8.7. In 2010, the child mortality rate for Mpongwe, Masaiti, Lufwanyama and Mufulira districts were above the provincial average of 52.9 deaths per 1,000 live births. Mpongwe District had the highest child mortality rate at 74.8 deaths per 1,000 live births while Chingola District had the lowest child mortality rate at 44.5 deaths per 1,000 live births.

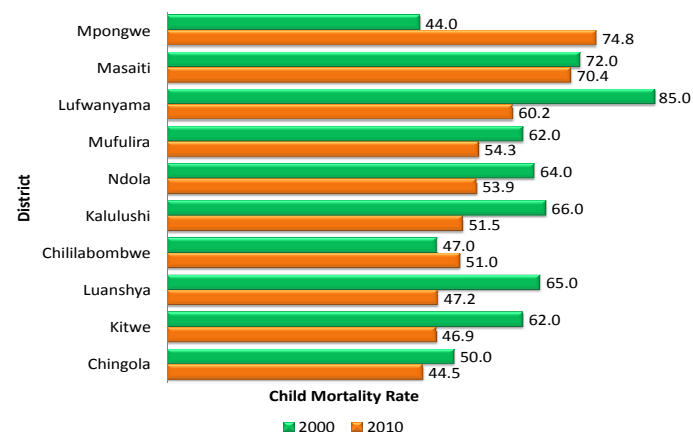
Figure 8.7: Child Mortality Rate (CMR) by District, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

Figure 8.8 shows child mortality rate by district in 2000 and 2010. Information presented in the figure shows that Child mortality declined in 8 districts. However, Lufwanyama District had the highest decline in child mortality rate during the inter-censal period from 85.0 deaths per 1,000 live births in 2000 to 60.2 deaths per 1,000 live births in 2010. Mpongwe and Chililabombwe districts had an increase in child mortality rate during the 2000 to 2010 inter-censal period.

Figure 8.8: Child Mortality Rate (CMR) by District, Copperbelt Province 2000 and 2010



Source: 2000 and 2010 Censuses 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 for Copperbelt Province was 118.6 deaths per 1,000 live births. The U5MR in rural areas was 140.8 deaths per 1,000 live births and 112.2 deaths per 1,000 live births in urban areas.

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

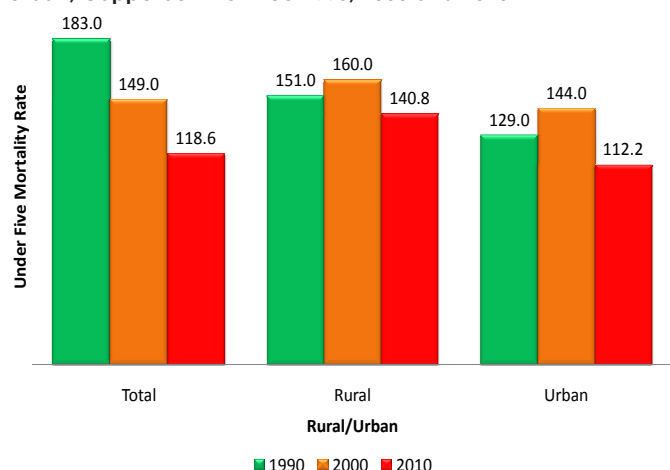
Rural/Urban	Both Sexes	Males	Females
Total	118.6	123.6	113.6
Rural	140.8	146.8	134.8
Urban	112.2	117.0	107.5

Source: 2010 Census of Population and Housing

Figure 8.9 shows Under-five Mortality Rate by rural/urban in 1990, 2000 and 2010. The figure shows that under-five mortality declined from 183.0 deaths per 1,000 live births in 1990 to 149.0 deaths per 1,000 live births in 2000. In 2010 the under-five mortality rate further declined to 118.6 deaths per 1,000 live births.

Under-five Mortality rate declined in both rural and urban areas from 1990 to 2010. In rural areas, Under-five Mortality Rate declined from 151.0 deaths per 1,000 live births in 1990 to 140.8 deaths per 1,000 live births in 2010. A decline was also observed in urban areas from 129.0 deaths per 1,000 live births in 1990 to 112.2 deaths per 1,000 live births in 2010.

Figure 8.9: Levels in Under five Mortality Rates (U5MRs) by Rural/Urban, Copperbelt Province 1990, 2000 and 2010



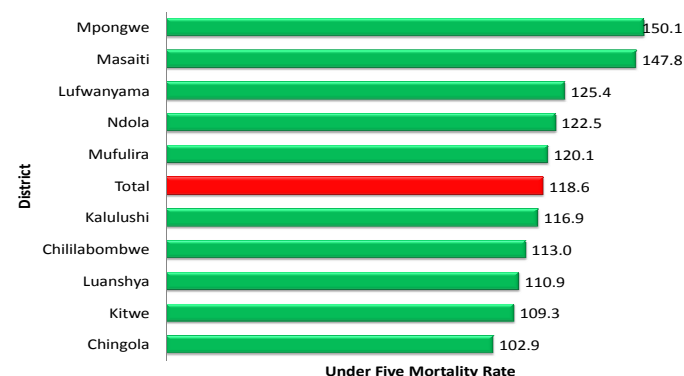
Source: 1990, 2000 and 2010 Censuses of Population and Housing

Note: 1990 and 2000 figures were revised using QFIVE

Figure 8.10 shows Under Five Mortality Rate by district. Mpongwe, Masaiti, Lufwanyama, Ndola and Mufulira districts had Under five Mortality Rate above the provincial average of 118.6 deaths per 1,000 live births while the other five districts

were below the provincial average. Under five Mortality Rate was lowest in Chingola District at 102.9 deaths per 1,000 live births while Mpongwe District had the highest at 150.1 deaths per 1,000 live births.

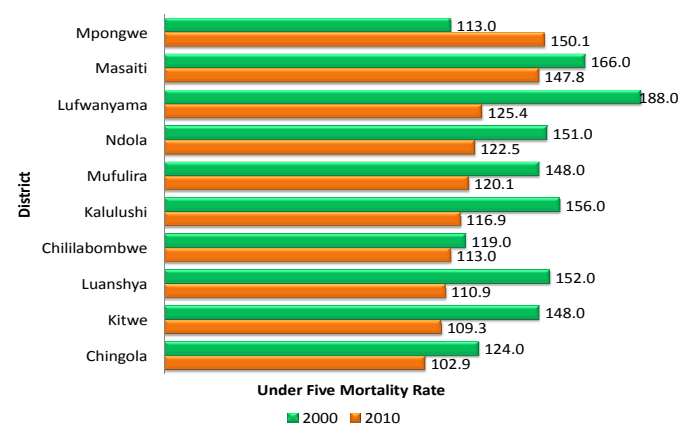
Figure 8.10: Under Five Mortality Rate (U5MR) by District, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

Figure 8.11 shows under five mortality rate by district in 2000 and 2010. Lufwanyama District had the highest decline in Under five Mortality Rate during the inter-censal period 2000-2010 from 188.0 deaths per 1,000 live births to 125.4 deaths per 1,000 live births, respectively.

Figure 8.11: Under Five Mortality Rate (U5MR) by District, Copperbelt Province 2000 and 2010



Source: 2000 and 2010 Censuses of Population and Housing

CHAPTER 9

GENERAL AND MATERNAL MORTALITY CHARACTERISTICS

9.0 Summary

The Crude Death Rate (CDR) in 2010 was 13.4 deaths per 1,000 population; 14.5 deaths per 1,000 population for males and 12.4 deaths per 1,000 population for females. Rural areas had a higher CDR at 15.1 deaths compared to 13.0 deaths per 1,000 population for urban areas.

The age group with the highest percentage of reported adult deaths was the age group 30-34 for both sexes. For ages below 30 years, the percentages of the reported adult deaths were higher among females than males.

The life expectancy at birth was 48.4 years, 47.3 years in rural areas and 48.7 years in urban areas. Females had a higher life expectancy at birth of 50.0 years compared to 47.0 years for males.

The most common cause of death was illness/disease accounting for 80.7 percent of all reported causes.

Chapter 9

General and Maternal Mortality Characteristics



9.1 Introduction

Mortality data are useful in assessing the performance of national health programmes, 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 census and surveys affect 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 analysing 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.

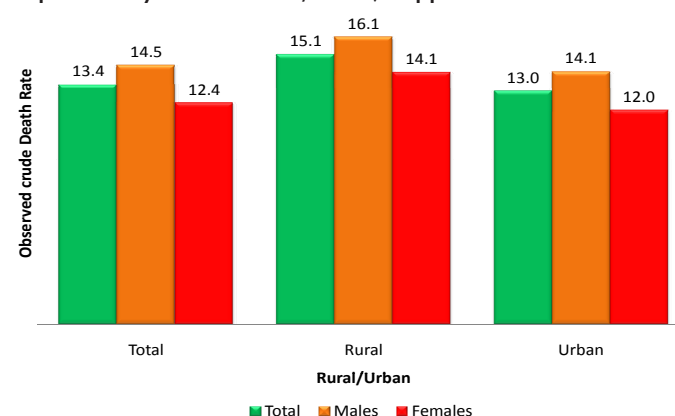
9.4 General Mortality

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 Copperbelt Province by sex and rural/urban. The Crude Death Rate was 13.4 deaths per 1,000 population; 14.5 deaths per 1,000 males and 12.4 deaths per 1,000 females. Overall, males had higher mortality than females in both rural and urban areas. The CDR was higher in rural areas, 15.1 deaths per 1,000 population than 13.0 deaths per 1,000 population in urban areas.

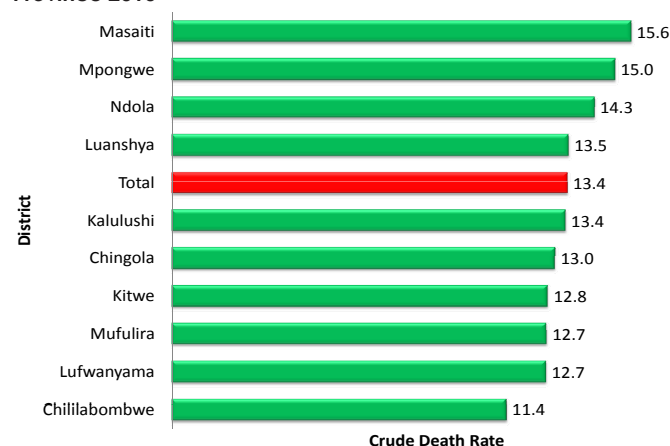
Figure 9.1: Observed Crude Death Rate (CDR) per 1,000 Population by Sex and Rural/Urban, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

Figure 9.2 shows Crude Death Rate by district. The figure shows that Masaiti, Mpongwe, Ndola and Luanshya districts had Crude Deaths Rates above the provincial average of 13.4 deaths per 1,000 population.

Figure 9.2: Crude Death Rate (CDR) by District, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

The highest Crude Death Rate was in Masaiti district at 15.6 deaths per 1,000 population and the lowest was in Chililabombwe district at 11.4 deaths per 1000 population.

Table 9.1 shows the observed Crude Death Rate by sex and district. In all the districts, the observed CDR was higher for males than females.

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

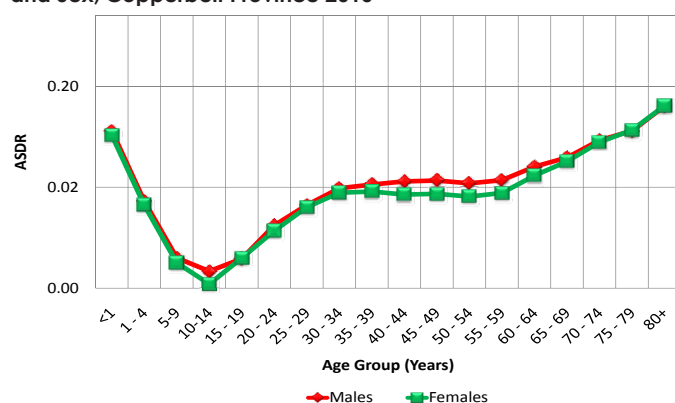
District	Male	Female
Chililabombwe	11.7	11.0
Chingola	14.0	12.0
Kalulushi	13.9	12.9
Kitwe	13.9	11.7
Luanshya	14.5	12.4
Lufwanyama	13.1	12.3
Masaiti	17.1	14.1
Mpongwe	16.2	13.9
Mufulira	13.8	11.6
Ndola	15.7	13.0

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 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 Rates for Copperbelt 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 Copperbelt Province. Further, the figure shows increasing mortality in both males and females after age 15 years, levelling off in the mid-thirties for both males and females.

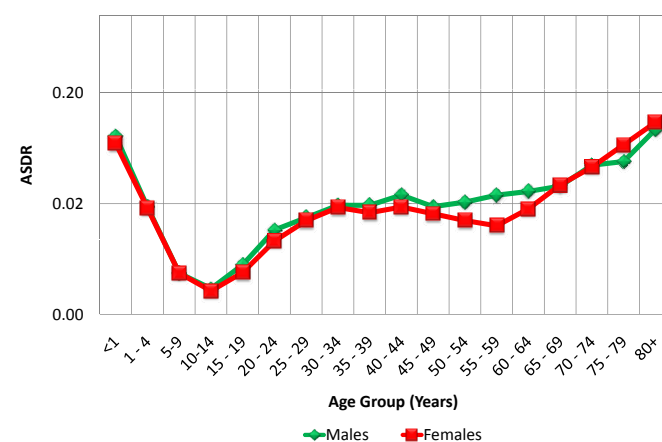
Figure 9.3: Observed Age-Sex Specific Death Rate by Age Group and Sex, Copperbelt Province 2010

Source: 2010 Census of Population and Housing

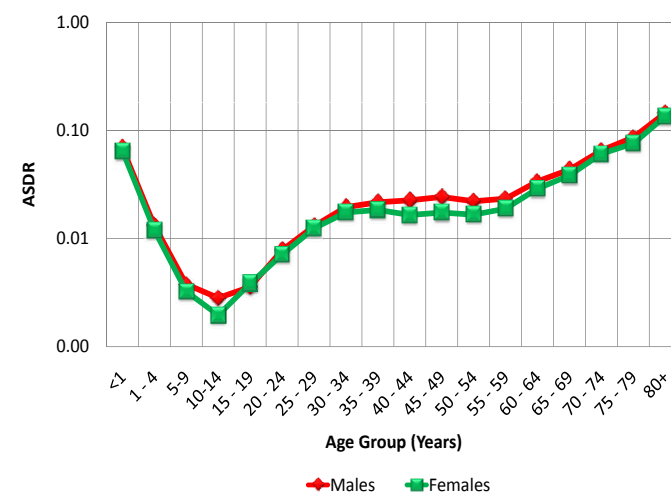
Copperbelt Province follows the typical u-shaped age specific death rates pattern, starting off high in early childhood, declining to the lowest at the age group 10-14 years and increasing with age. There is a “bump” set off by rising mortality after age 15. The figure also shows higher mortality among males than females, especially in early childhood and 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 (30s) for females and in the late 40s 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.

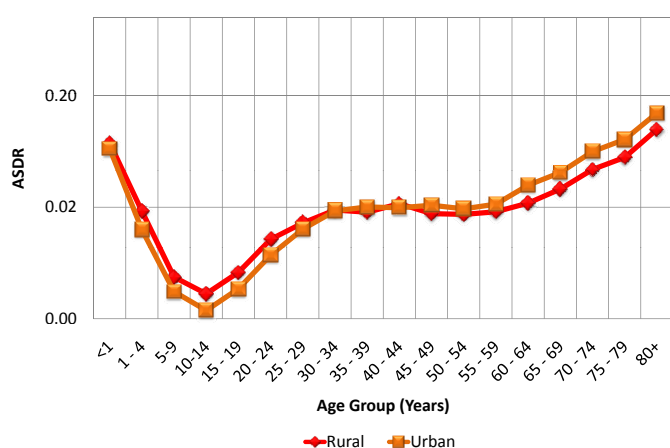
Figure 9.4: Observed Age-Sex Specific Death Rate by Age Group and Sex, Copperbelt Province Rural 2010

Source: 2010 Census of Population and Housing

Figure 9.5: Observed Age-Sex Specific Death Rate by Age Group and Sex, Copperbelt Province Urban, 2010

Source: 2010 Census of Population and Housing

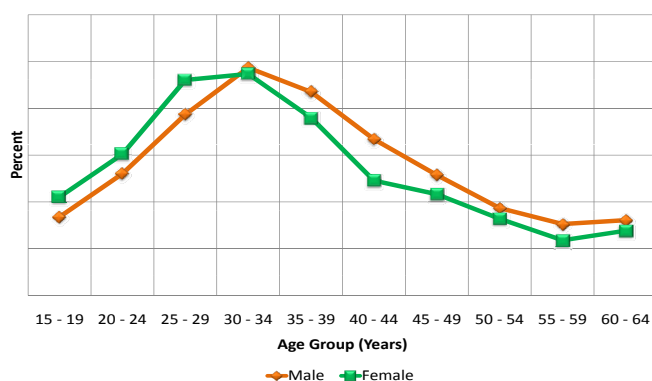
Figure 9.6 shows Observed Age-Specific Death Rate by rural/urban for Copperbelt Province. The figure shows that above the age of 30 years, mortality is higher in urban than in rural areas.

Figure 9.6: Observed Age Specific Death Rate by Age Group and Rural/Urban, Copperbelt 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 Copperbelt Province. The age groups with the highest percentage of reported adult deaths were the age groups 30-34 for both sexes. 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 those aged 35 years and older.

Figure 9.7: Percent Reported Adult Deaths by Age Group and Sex, Copperbelt Province 2010

Source: 2010 Census of Population and Housing

9.5 Life Expectancy

Life expectancy refers to the average number 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 (e_0), which refers to the average number of years expected to be lived by a birth cohort, based on prevailing age specific mortality rates.

Unadjusted data on household deaths was used to generate abridged life tables for Copperbelt 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 Copperbelt Province in 2010.

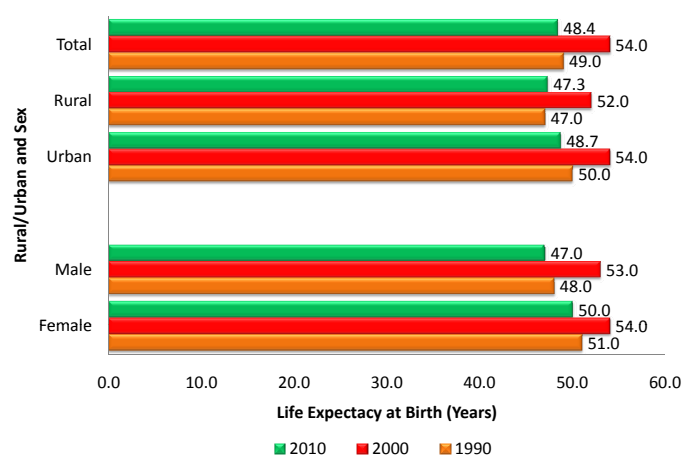
Table 9.2: Life Expectancy at Birth by Sex and Rural/Urban, Copperbelt Province 2010

Rural/Urban	Both Sexes	Males	Females
Total	48.4	47.0	50.0
Rural	47.3	47.2	50.2
Urban	48.7	48.8	51.7

Source: 2010 Census of Population and Housing

In 2010, the life expectancy at birth was 48.4 years. The life expectancy at birth for rural areas was lower (47.3 years) than in urban areas (48.7 years). In both rural and urban areas, females had higher life expectancy at birth than males.

Figure 9.8 shows life expectancy at birth by sex and rural/urban in 1990, 2000 and 2010. Life expectancy at birth decreased from 49.0 years in 1990 to 48.4 years in 2010. In rural areas, life expectancy at birth increased from 47.0 years in 1990 to 47.3 years in 2010 while in urban areas it reduced from 50.0 years in 1990 to 48.7 years in 2010.

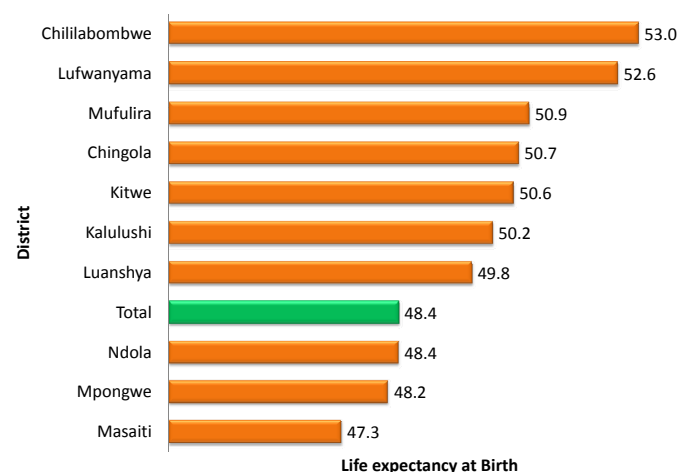
Figure 9.8: Life Expectancy at Birth by Sex and Rural/Urban, Copperbelt Province 1990, 2000 and 2010

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

For males, life expectancy at birth reduced from 48.0 years in 1990 to 47.0 years in 2010. The life expectancy at birth for females reduced from 51.0 years in 1990 to 50.0 years in 2010.

Figure 9.9 shows life expectancy at birth by district. In 2010, Ndola, Mpongwe and Masaiti districts had life expectancy at birth lower than the provincial average of 48.4 years. Chililabombwe District had the highest life expectancy at birth of 53.0 years and Masaiti District had the lowest life expectancy at birth of 47.3 years.

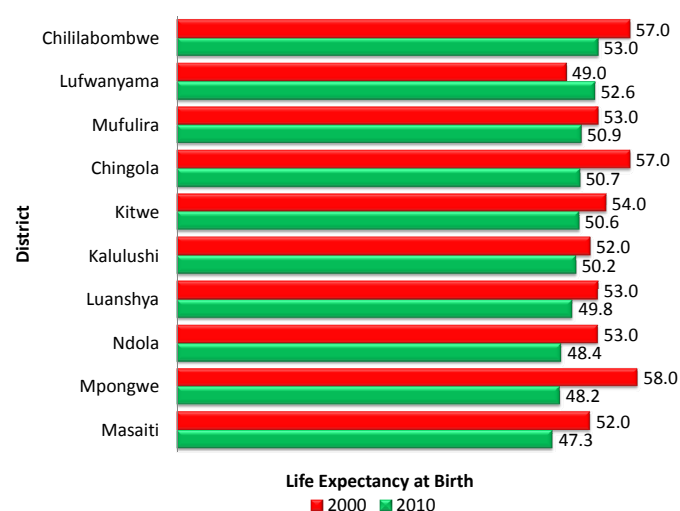
Figure 9.9: Life Expectancy at Birth by District, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

Figure 9.10 shows life expectancy at birth by district for 2000 and 2010. Caution should also be taken in comparing the estimates for 2000 and 2010 as they are based on different methodologies. The 2000 estimates were based on indirect estimation based on the North Model Life Table, while the 2010 estimates are based on empirical data on household deaths collected during the 2010 Census. Some districts had an increase while others had a decline in life expectancy at birth between 2000 and 2010.

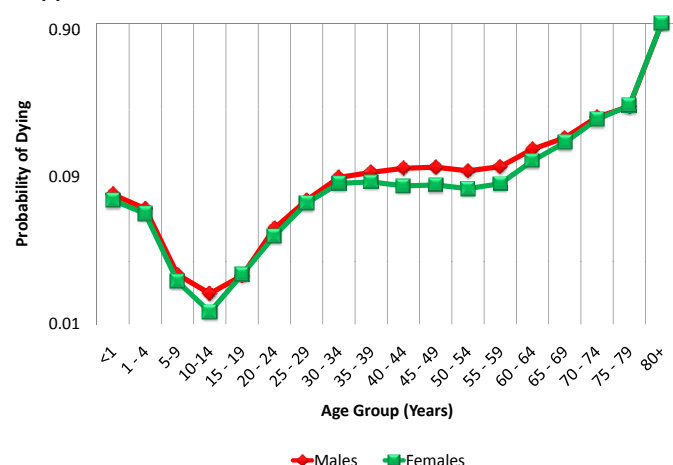
Figure 9.10: Life Expectancy at Birth by District, Copperbelt Province 2000 and 2010



Sources: 2000 and 2010 Censuses of Population and Housing

Figure 9.11 shows the life table function nqx (probability of dying between exact n and $n+x$). This is presented by age and sex due to the variability of mortality by age and sex.

Figure 9.11: Life Table Probability of Dying (nqx) by Age and Sex, Copperbelt Province 2010



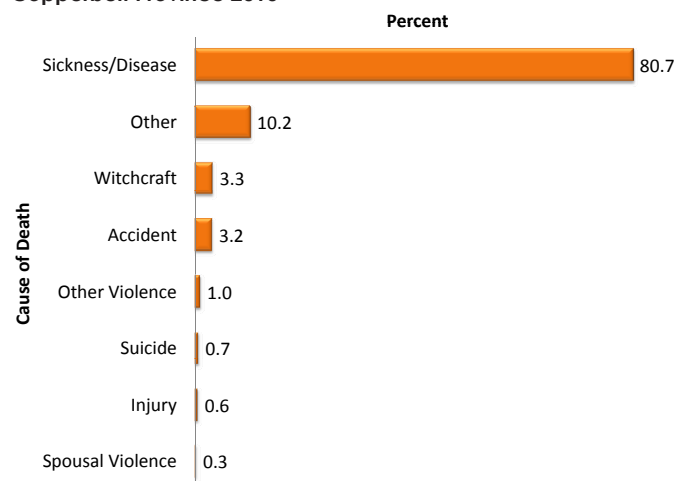
Source: 2010 Census of Population and Housing

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 9.12 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 80.7 percent of all reported household deaths. Accidents were cited as a cause of death in 3.2 percent of deaths reported, while other causes were cited in 10.2 percent of reported deaths. Spousal violence, suicide and injury accounted for less than one percent each.

Figure 9.12: Percent Reported Cause of Death for Deceased Household Members that Died 12 Months Prior to the Census, Copperbelt Province 2010

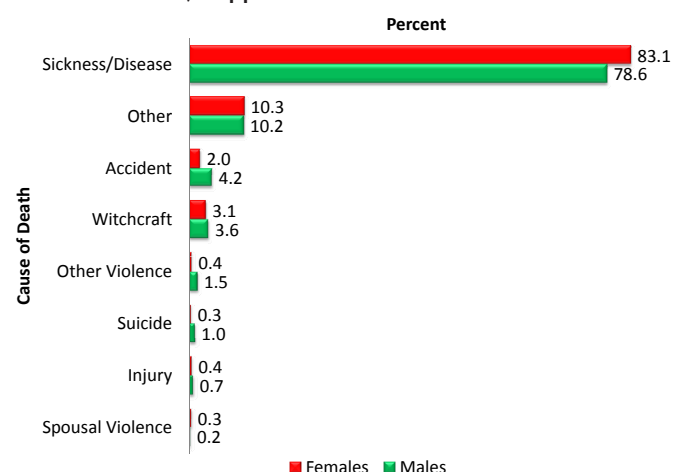


Source: 2010 Census of Population and Housing

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 9.13 presents information on cause of death by sex of deceased persons reported in the census.

Illness/disease was the major cause of mortality among males and females in Copperbelt Province. The percentage for females was higher (83.1 percent) than that for males (78.6 percent). However, the percentages of male deaths attributed to witchcraft, accident, violence, suicide and injury were higher than those of females.

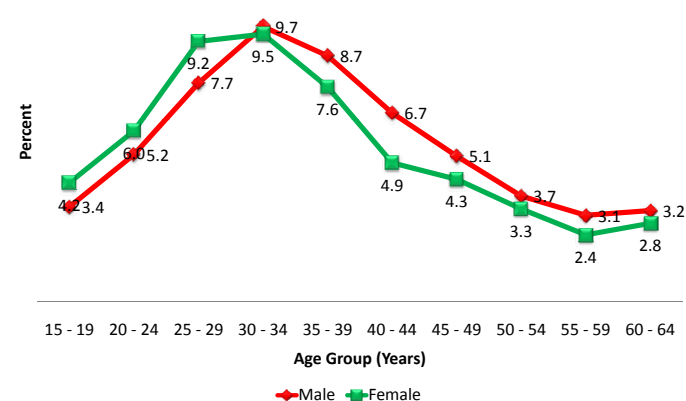
Figure 9.13: Percent Reported Cause of Death for Deceased Household Members that Died 12 Months Prior to the Census by Sex of Deceased, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

Figure 9.14 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 15-29, while the percentage of males dying from illness/disease was higher than females for ages over 30 years.

Figure 9.14: Percent Reported Adult Deaths Due to Illness/Disease by Age and Sex of Deceased Person, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

CHAPTER 10

LANGUAGE AND ETHNICITY

10.0 Summary

Bemba was the widely used language of communication, spoken by 83.9 percent of the population on the Copperbelt Province. This was followed by Lamba at 9.2 percent.

Bemba was spoken by a higher proportion of the population in seven districts of Copperbelt Province, namely, Chililambombwe District (91.9 percent), Chingola District (93.3 percent), Kalulushi District (92.0 percent), Kitwe District (95.4 percent), Luanshya District (93.2 percent), Mufulira District (92.9 percent) and Ndola District (89.7 percent). Lamba was widely spoken in the following districts; Lufwanyama District (58.3 percent), Masaiti District (64.1 percent) and Mpongwe District (64.5 percent).

Over the past three censuses, languages from the Bemba group had remained the most widely used from 83.8 percent in 1990 to 93.7 percent in 2010.

Bemba was the largest ethnic group at 35.9 percent of the population on the Copperbelt 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 predominant language of communication and ethnicity. Predominant 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. On the other hand, 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 20 most spoken languages on the Copperbelt Province by rural/urban. The widely spoken language of communication on the Copperbelt Province in the year 2010 was Bemba (83.9 percent). In rural areas, Lamba was the most spoken language (45.4 percent) followed by Bemba at 44.8 percent. In urban areas, Bemba was widely spoken by 92.8 percent of the population.

Table 10.1: Percent Distribution of the population by Widely Spoken Language of Communication and Rural/urban, Copperbelt Province 2010

Widely spoken Language of Communication	Total	Rural	Urban
Bemba	83.9	44.8	92.8
Lunda (Luapula)	0.1	0.2	0.1
Lala	0.3	1.1	0.1
Ushi	0.1	0.2	0.1
Lamba	9.2	45.4	1.0
Tonga	0.8	2.4	0.4
Lenje	0.1	0.1	0.0
Luvale	0.3	0.5	0.2
Lunda (N /Western)	0.3	0.7	0.2
Chokwe	0.1	0.4	0.1
Kaonde	0.7	2.1	0.3
Lozi	0.3	0.1	0.3
Chewa	0.1	0.1	0.1
Nsenga	0.1	0.1	0.1
Ngoni	0.1	0.1	0.1
Nyanja	0.7	0.4	0.8
Tumbuka	0.2	0.1	0.2
Mambwe	0.1	0.0	0.1
Namwanga	0.2	0.1	0.2
English	2.1	0.2	2.5
Other Languages	0.3	0.6	0.3
Total Percent	100.0	100.0	100.0
Total Population	1,741,192	321,985	1,419,207

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 predominant language of communication.

10.3.1 Language Groups

In this analysis, seven language groups had been identified according to the criteria described in the introduction (10.1). These are (in alphabetical order) Barotse, Bemba, Mambwe, North Western, Nyanja, Tonga and Tumbuka. Table 10.2 shows the percentage distribution of the population by major language groups and rural/urban. Languages in the Bemba group were

spoken by 93.7 percent of the population. Of the rural and urban population, 92.1 and 94.1 percent spoke a language from the Bemba group, respectively. Languages from the North Western group were the second most widely spoken in rural areas (3.9 percent) while English was the second most widely spoken in urban areas (2.5 percent).

Table 10.2: Percentage Distribution of the Population by Major Language Group and Rural/Urban, Copperbelt Province 2010

Language Group	Total	Rural	Urban
Bemba	93.7	92.1	94.1
Tonga	0.9	2.6	0.5
North Western	1.4	3.9	0.9
Barotse	0.3	0.1	0.3
Mambwe	0.2	0.2	0.2
Nyanja	1.1	0.7	1.2
Tumbuka	0.2	0.2	0.2
English	2.1	0.2	2.5
Other	0.1	0.1	0.1
Total Percent	100.0	100.0	100.0
Total Population	1,741,192	321,985	1,419,207

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 widely used language of communication by sex and rural/urban. The table shows that Bemba was the most widely used language of communication for both males and females at 84.0 and 83.8 percent, respectively. A similar pattern was observed in urban

areas where most males and females reported Bemba as their widely used language of Communication at 92.8 and 92.7 percent, respectively. In rural areas, Bemba was widely used by males at 46.0 percent while Lamba was the widely used language by females at 46.4 percent.

Table 10.3: Percentage Distribution of Widely Used language of Communication by Sex and Rural/Urban, Copperbelt Province 2010

Widely Spoken Language of Communication	Total			Rural			Urban		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Bemba	83.9	84.0	83.8	44.8	46.0	43.7	92.8	92.8	92.7
Lunda (Luapula)	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1
Lala	0.3	0.3	0.3	1.1	1.2	1.1	0.1	0.1	0.1
Ushi	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1
Lamba	9.2	9.1	9.3	45.4	44.4	46.4	1.0	1.0	1.0
Tonga	0.8	0.8	0.8	2.4	2.4	2.4	0.4	0.4	0.4
Lenje	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
Luvale	0.3	0.3	0.3	0.5	0.5	0.5	0.2	0.2	0.2
Lunda (North Western)	0.3	0.3	0.3	0.7	0.7	0.8	0.2	0.2	0.2
Chokwe	0.1	0.1	0.2	0.4	0.4	0.5	0.1	0.1	0.1
Kaonde	0.7	0.6	0.7	2.1	2.0	2.2	0.3	0.3	0.3
Lozi	0.3	0.3	0.3	0.1	0.1	0.1	0.3	0.3	0.3
Chewa	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Nsenga	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Ngoni	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Nyanja	0.7	0.7	0.7	0.4	0.4	0.4	0.8	0.8	0.8
Tumbuka	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2
Mambwe	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.1
Namwanga	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2
English	2.1	2.1	2.1	0.2	0.2	0.2	2.5	2.6	2.5
Other Languages	0.3	0.3	0.3	0.6	0.6	0.7	0.3	0.3	0.3
Total Population	1,741,192	860,995	880,197	321,985	161,885	160,100	1,419,207	699,110	720,097
Total Percent	100	100	100	100	100	100	100	100	100

Source: 2010 Census of Population and Housing

10.3.3 Widely Used Language of Communication by District

Table 10.4 shows the Percentage distribution of widely used language of communication by district. Bemba was the widely spoken language by a higher proportion of the population in seven districts of Copperbelt Province, namely, Chililambombwe

(91.9 percent), Chingola (93.3 percent), Kalulushi (92.0 percent), Kitwe (95.4 percent), Luanshya (93.2 percent), Mufulira (92.9 percent) and Ndola (89.7 percent). Lamba was widely used in Lufwanyama (58.3 percent), Masaiti (64.1 percent) and Mpongwe districts (64.5 percent).

Table 10.4 Percentage Distribution of the Widely Used Language of Communication by District, Copperbelt Province 2010

Widely Spoken Language of Communication	Total	Chilila-bombwe	Chingola	Kalulushi	Kitwe	Luanshya	Lufwanyama	Masaiti	Mpongwe	Mufulira	Ndola
Bemba	83.9	91.9	93.3	92.0	95.4	93.2	29.1	27.9	24.8	92.9	89.7
Lunda - Luapula	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.1
Lala	0.3	0.1	0.0	0.1	0.0	0.2	0.1	3.4	0.5	0.1	0.3
Ushi	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.3	0.1	0.2	0.1
Lamba	9.2	3.4	1.0	2.1	0.2	0.9	58.3	64.1	64.5	0.6	0.8
Tonga	0.8	0.2	0.2	0.4	0.2	0.6	1.8	1.1	6.7	0.5	0.7
Lenje	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.4	0.0	0.1
Luvala	0.3	0.5	0.5	0.4	0.1	0.2	0.5	0.3	0.2	0.4	0.2
Lunda - N/Western	0.3	0.4	0.6	0.5	0.1	0.3	0.9	0.4	0.3	0.2	0.2
Chokwe	0.1	0.2	0.2	0.3	0.0	0.0	1.1	-	0.3	0.2	0.0
Kaonde	0.7	0.5	1.3	0.7	0.2	0.3	6.7	0.2	0.2	0.4	0.4
Lozi	0.3	0.2	0.1	0.2	0.2	0.4	0.1	0.1	0.1	0.5	0.5
Chewa	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.2
Nsenga	0.1	0.1	0.1	0.1	0.1	0.2	0.0	0.2	0.1	0.1	0.3
Ngoni	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.2
Nyanja	0.7	0.5	0.3	0.5	0.6	0.9	0.2	0.6	0.3	0.7	1.4
Tumbuka	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.0	0.2	0.3
Mambwe	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.1
Namwanga	0.2	0.2	0.2	0.2	0.1	0.2	0.0	0.1	0.1	0.2	0.2
English	2.1	1.1	1.7	1.6	2.4	1.5	0.1	0.1	0.1	1.9	3.7
Other Languages	0.3	3.5	3.9	4.1	2.0	4.1	12.3	4.3	10.0	4.3	5.4
Total Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total Population	1,741,192	80,736	190,746	87,982	459,599	138,470	66,396	90,138	79,184	144,802	403,139

Source: 2010 Census of Population and Housing

10.3.4 Major Language Groups 1990, 2000 and 2010

Table 10.5 shows the percentage distribution of the population by major language groups from 1990 to 2010. The proportion of

the population speaking languages in the Bemba language group increased while the rest of the language groups reduced between 1990 and 2010.

Table 10.5: Percentage Distribution the Population of Major Language Groups, Copperbelt Province 1990, 2000 and 2010

Language Group	Percentage of Total Population		
	1990	2000	2010
Bemba	83.8	84.4	93.7
Tonga	1.5	1.4	0.9
North Western	4.7	3.5	1.4
Barotse	1	0.7	0.3
Mambwe	1.6	0.9	0.2
Nyanja	4.2	2.4	1.1
Tumbuka	1.5	0.8	0.2
English	1.3	2.5	2.1
Others	0.4	3.4	0.1
Total Percent	100	100	100.0
Total Population	1,350,634	1,439,298	1,741,192

Source: 1990, 2000 and 2010 Censuses 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 Copperbelt Province as captured in the 2010 Census. The rest of the ethnic groups were lumped under the “other” category.

10.4.1. Ethnicity by Rural and Urban

Table 10.6 shows the percent distribution of the population by ethnic groups and rural/urban. The Bemba ethnic group had the highest percentage of the provincial population at 35.9 percent, followed by the Lamba ethnic group at 9.6 percent. In rural areas, the highest percentage of the population was Lamba (34.3 percent) while Bemba (40.1 percent) had the highest percentage of the population in urban areas.

Table 10.6: Percentage Distribution of the Population by Ethnicity and Rural/Urban, Copperbelt Province 2010

Ethnicity	Total	Rural	Urban
Bemba	35.9	18.1	40.1
Lunda - Luapula	1.7	1.2	1.8
Lala	4.8	5.2	4.7
Bisa	1.3	0.6	1.5
Ushi	2.7	1.9	2.9
Chishinga	0.3	0.1	0.3
Ngumbo	0.7	0.3	0.8
Lamba	9.6	34.3	3.9
Kabende	0.1	0.0	0.1
Tabwa	0.2	0.1	0.2
Swaka	0.2	0.4	0.2
Lima	0.1	0.4	0.0
Tonga	3.5	5.1	3.1
Lenje	1.2	1.8	1.0
Soli	0.2	0.2	0.2
Ila	0.2	0.1	0.2
Toka-Leya	0.1	0.0	0.1
Luvale	2.4	3.2	2.2
Lunda - N/Western	2.7	3.8	2.5
Mbunda	0.2	0.3	0.1
Luchazi	0.2	0.2	0.2
Chokwe	1.1	2.2	0.8
Kaonde	4.8	7.5	4.2
Lozi	2.1	1.3	2.3
Nkoya	0.1	0.1	0.1
Chewa	2.4	1.2	2.7
Nsenga	3.5	1.6	4.0
Ngoni	3.2	1.4	3.6
Nyanja	0.4	0.4	0.4
Kunda	0.4	0.1	0.4
Chikunda	0.1	0.0	0.1
Tumbuka	4.6	1.9	5.2
Senga	0.5	0.3	0.5
Lungu	0.3	0.1	0.3
Mambwe	2.1	0.8	2.4
Namwanga	4.2	1.8	4.8
English	0.0	0.0	0.0
Ethnicity Not Stated	0.4	0.4	0.4
Major racial groups	0.8	0.6	0.8
Other Ethnic Groups	0.9	1.1	0.8
Total Percent	100.0	100.0	100.0
Total Population	1,920,611	361,652	1,558,959

Source: 2010 Census of Population and Housing

10.4.2. Ethnicity by Sex and Rural/Urban

Ethnicity was analysed by sex and rural/urban as shown in Table 10.7. The Bemba ethnic group had the largest population of males and females at 35.7 and 36.1 percent, respectively. The

table shows that there were no major differences by sex in the proportion of the population for all ethnic groups in both rural and urban areas.

Table 10.7: Percentage Distribution of the Population by Ethnicity, Sex and Rural/Urban, Copperbelt Province 2010

Ethnicity	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Bemba	35.9	35.7	36.1	18.1	18.5	17.7	40.1	39.8	40.3
Lunda Luapula	1.7	1.7	1.6	1.2	1.3	1.2	1.8	1.8	1.7
Lala	4.8	4.7	4.9	5.2	5.2	5.2	4.7	4.6	4.8
Bisa	1.3	1.3	1.3	0.6	0.6	0.6	1.5	1.4	1.5
Ushi	2.7	2.7	2.7	1.9	1.9	1.9	2.9	2.9	2.9
Chishinga	0.3	0.3	0.3	0.1	0.1	0.1	0.3	0.3	0.4
Ngumbo	0.7	0.7	0.7	0.3	0.3	0.3	0.8	0.8	0.8
Lamba	9.6	9.4	9.9	34.3	33.0	35.7	3.9	3.8	4.0
Kabende	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1
Tabwa	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.3	0.2
Swaka	0.2	0.2	0.3	0.4	0.3	0.4	0.2	0.2	0.2
Lima	0.1	0.1	0.1	0.4	0.3	0.4	0.0	0.0	0.0
Tonga	3.5	3.6	3.4	5.1	5.3	4.9	3.1	3.1	3.1
Lenje	1.2	1.1	1.2	1.8	1.8	1.7	1.0	1.0	1.0
Soli	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Ila	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2
Toka-Leya	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1
Luvale	2.4	2.4	2.3	3.2	3.2	3.1	2.2	2.2	2.2
Lunda N/Western	2.7	2.8	2.7	3.8	3.9	3.7	2.5	2.5	2.5
Mbunda	0.2	0.2	0.2	0.3	0.3	0.3	0.1	0.1	0.1
Luchazi	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Chokwe	1.1	1.1	1.1	2.2	2.2	2.2	0.8	0.8	0.8
Kaonde	4.8	4.8	4.8	7.5	7.3	7.7	4.2	4.2	4.2
Lozi	2.1	2.2	2.0	1.3	1.4	1.2	2.3	2.3	2.2
Nkoya	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Chewa	2.4	2.4	2.4	1.2	1.3	1.1	2.7	2.7	2.7
Nsenga	3.5	3.5	3.6	1.6	1.6	1.5	4.0	3.9	4.1
Ngoni	3.2	3.2	3.2	1.4	1.6	1.3	3.6	3.6	3.6
Nyanja	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Kunda	0.4	0.4	0.4	0.1	0.1	0.1	0.4	0.4	0.4
Chikunda	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1
Tumbuka	4.6	4.7	4.5	1.9	2.0	1.8	5.2	5.4	5.1
Senga	0.5	0.5	0.5	0.3	0.3	0.3	0.5	0.5	0.5
Lungu	0.3	0.3	0.2	0.1	0.1	0.1	0.3	0.3	0.3
Mambwe	2.1	2.1	2.1	0.8	0.9	0.8	2.4	2.4	2.4
Namwanga	4.2	4.2	4.2	1.8	1.9	1.8	4.8	4.8	4.8
English	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethnicity Not Stated	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Major racial groups	0.8	0.9	0.7	0.6	0.6	0.5	0.8	0.9	0.8
Other Ethnic Groups	0.9	0.9	0.9	1.1	1.1	1.1	0.8	0.9	0.8
Total Percent	100	100	100	100	100	100	100	100	100
Total Population	1,920,611	950,775	969,836	361,652	181,734	179,918	1,558,959	769,041	789,918

Source: 2010 Census of Population and Housing

CHAPTER 11

DISABILITY

11.0 Summary

The proportion of the population with disability on the Copperbelt Province was 1.6 percent. The proportion in rural areas was higher at 2.4 percent than urban areas at 1.4 percent. Masaiti District had the highest proportion of the population with disability at 2.4 percent while Chililabombwe District had the lowest at 1.2 percent.

The median age for the population with disability was 37 years. Physical disability was the most common type of disability at 32.4 percent. The major cause of disability was disease at 31.3 percent.

The literacy rate for the population with disability on the Copperbelt Province was 73.0 percent. Kitwe District had the highest proportion of the population with disabilities who were literate at 77.9 percent while Lufwanyama District had the lowest proportion of the population with disabilities who were literate at 60.2 percent.

The proportion of the population with disability who were no longer attending school was 60.1 percent. Generally, the highest level of education attained by the majority of the population with disabilities regardless of sex was primary education.

The proportion of the population with disabilities who were employed was 83.7 percent. Most of the population with disabilities had agricultural related occupations at 59.0 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

Source: 1969, 1980, 1990, 2000 and 2010 Censuses

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 of 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 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.

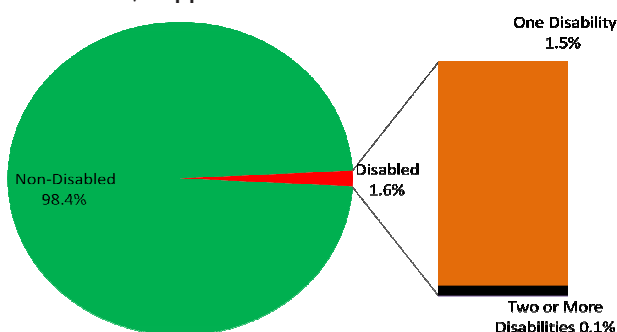
11.5 General Characteristics

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 percentage distribution of the population by disability status. The percentage of the population living with disabilities was 1.6 percent of which 1.5 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, Copperbelt Province 2010

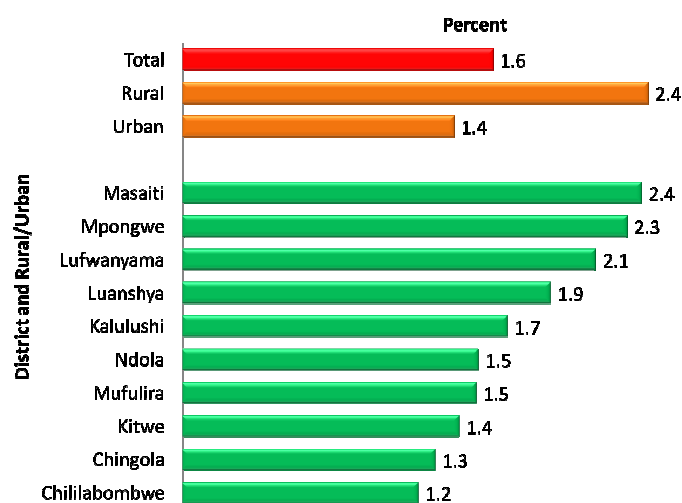


Source: 2010 Census of Population and Housing

11.5.2 Disability by Rural/Urban and District

Figure 11.2 shows the percentage distribution of persons with disabilities by rural/urban and district. The percentage of the population living with disabilities was 1.6 percent. Rural areas had more persons living with disabilities (2.4 percent) than urban areas (1.4 percent).

Figure 11.2: Percentage distribution of the Population with Disability by Rural/Urban and District, Copperbelt Province 2010



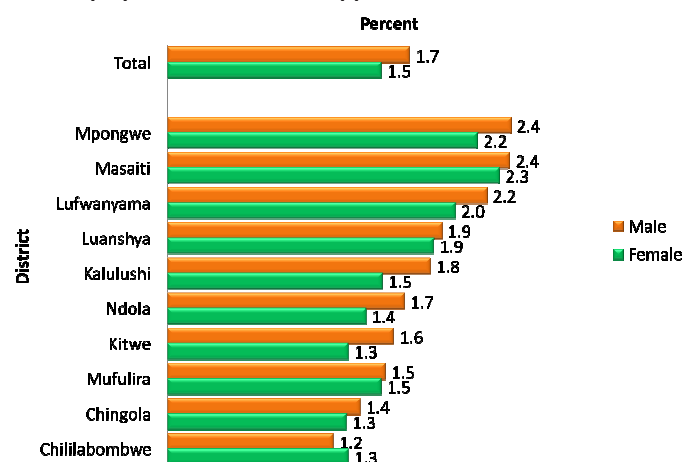
Source: 2010 Census of Population and Housing

Masaiti District had the highest percentage of persons with disabilities at 2.4 percent while Chililabombwe District had the lowest at 1.2 percent.

11.5.3 Disability by Sex

Figure 11.3 shows the percentage distribution of persons living with disabilities by sex and district. On the Copperbelt Province, there were more males than females who were living with disabilities. Masaiti and Mpongwe Districts both had the highest percentage of males who were disabled at 2.4 percent and 2.2 and 2.3 percent for females, respectively. Chililabombwe District had the lowest percentage of persons living with disabilities at 1.2 percent for males.

Figure 11.3: Percentage Distribution of the Population with Disability by Sex and District, Copperbelt Province 2010

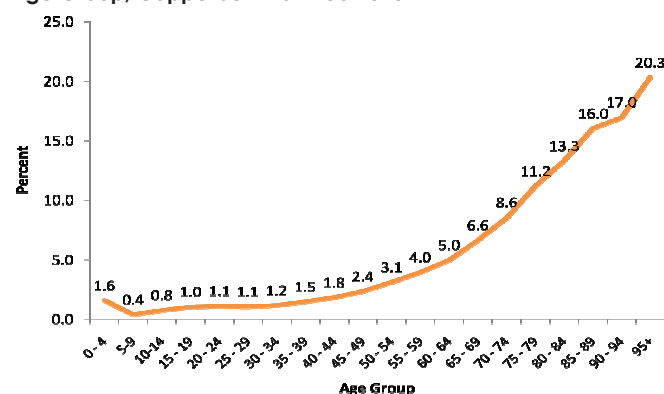


Source: 2010 Census of Population and Housing

11.5.4 Disability by Age

Figure 11.4 shows the percentage distribution of the population with disability by age. The figure shows that the proportion of the population with disability increases with age. The highest percentage of the population with disabilities was in the age group 95 years and older at 20.3 percent, followed by the age group 90-94 years at 17.0 percent. The age group with the lowest percentage of persons living with disabilities was 5-9 years at 0.4 percent.

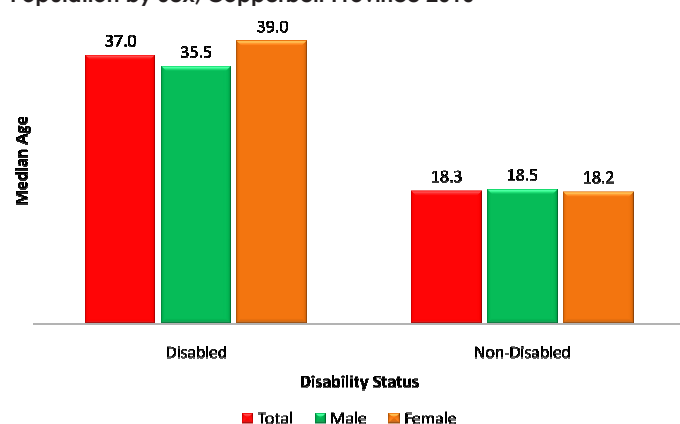
Figure 11.4: Percentage Distribution of Persons with Disability by Age Group, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

Figure 11.5 shows the median age for the disabled and non-disabled population on the Copperbelt Province. The median age for the population with disability was 37.0 years while the non-disabled population had a median age of 18.3 years.

Figure 11.5: Median Age of the Disabled and Non-Disabled Population by Sex, Copperbelt Province 2010

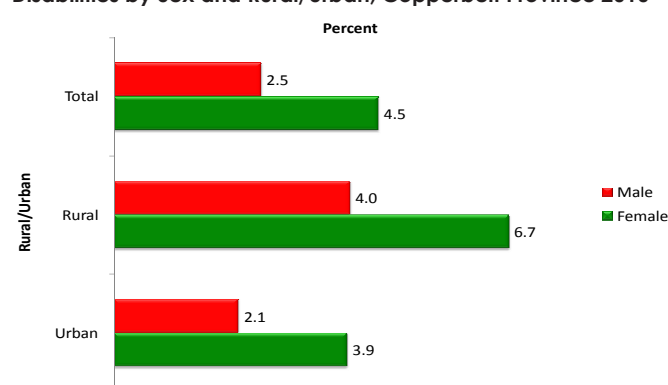


Source: 2010 Census of Population and Housing

11.5.5 Disability by Household Headship

Figure 11.6 shows the percentage of the population with disabilities who were household heads by sex and rural/urban. On the Copperbelt Province, there was a high proportion of female household heads living with disabilities (4.5 percent) than males (2.5 percent). The proportion of female household heads with disabilities in both rural and urban areas was higher than that of males.

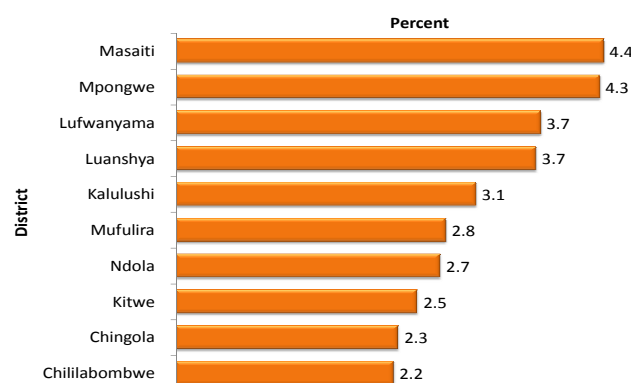
Figure 11.6: Percentage Distribution of Household Heads with Disabilities by Sex and Rural/Urban, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

Figure 11.7 shows the percentage distribution of disabled household heads by district. Masaiti District had the highest proportion of household heads living with disabilities at 4.4 percent. Chililabombwe District had the least proportion at 2.2 percent.

Figure 11.7: Percentage Distribution of Household Heads with Disabilities by District, Copperbelt Province 2010

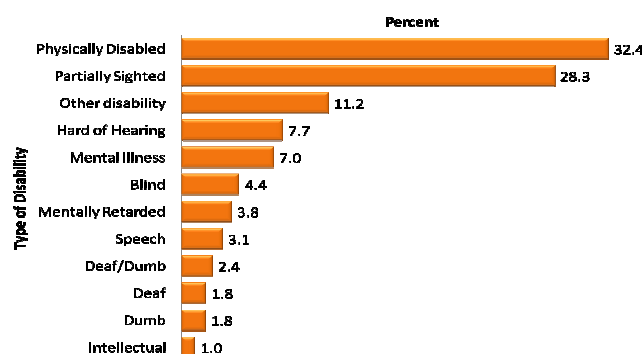


Source: 2010 Census of Population and Housing

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 (32.4 percent) followed by partially sighted at 28.3 percent. The least common type was intellectual disability at 1.0 percent.

Figure 11.8: Percentage Distribution of Persons with Disabilities by Type of Disability, Copperbelt Province 2010



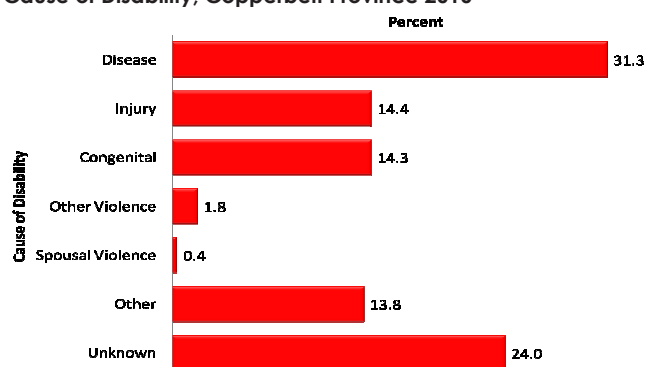
Source: 2010 Census of Population and Housing

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 Disabled Population by cause of disability. The figure shows that 31.3 percent of the persons with disabilities reported disease as the cause of disability. This was followed by those who reported injury as a cause of disability at 14.4 percent. The least common cause of disability was spousal violence at 0.4 percent.

Figure 11.9: Percentage Distribution of Disabled Population by Cause of Disability, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

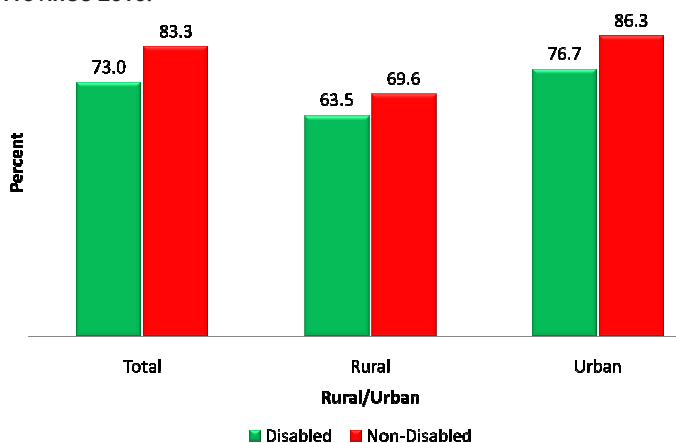
11.6 Characteristics of the Population with Disability

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

11.6.1 Literacy Levels among the Disabled and Non-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 disability was 73.0 percent compared to 83.3 percent for persons without disability. The literacy levels for the persons with disability were higher in urban areas at 76.7 percent compared to 63.5 percent in rural areas.

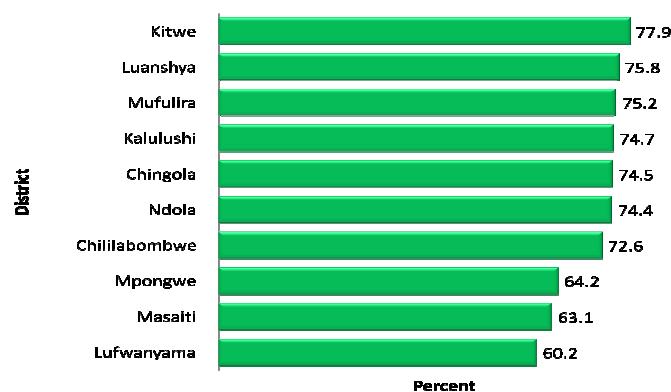
Figure 11.10: Percentage Distribution of Literate Population (5 Years and Older) by Disability Status and Rural/Urban, Copperbelt Province 2010.



Source: 2010 Census of Population and Housing

Figure 11.11 shows the percentage distribution of literate population aged 5 years and older with disability by district. Kitwe District had the highest proportion of the literate population with disability at 77.9 percent. Lufwanyama District had the least proportion at 60.2 percent.

Figure 11.11: Percentage Distribution of Literate Population Aged 5 Years and Older with Disability by District, Copperbelt Province 2010.



Source: 2010 Census of Population and Housing

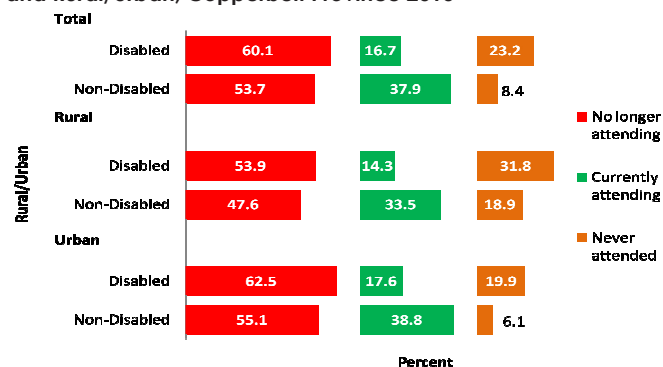
11.6.2 School Attendance

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 disability who were no longer attending school (60.1 percent) compared to 53.7 percent for persons without disability. For those that never attended school, the percentage of the disabled was higher than that of the non-disabled, 23.2 and 8.4 percent, respectively. Only 16.7 percent of disabled persons were currently attending school.

In rural areas the proportion of persons with disabilities who were no longer attending school was 53.9 percent and the non-disabled was 47.6 percent. In urban areas, the proportion with disabilities no longer attending school was 62.5 percent and the non-disabled was 55.1 percent. Similarly, there were more persons with disability who had never attended school than the non-disabled in both rural and urban areas. Both rural and urban areas recorded low proportions of disabled persons who were currently attending school compared to the non-disabled.

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

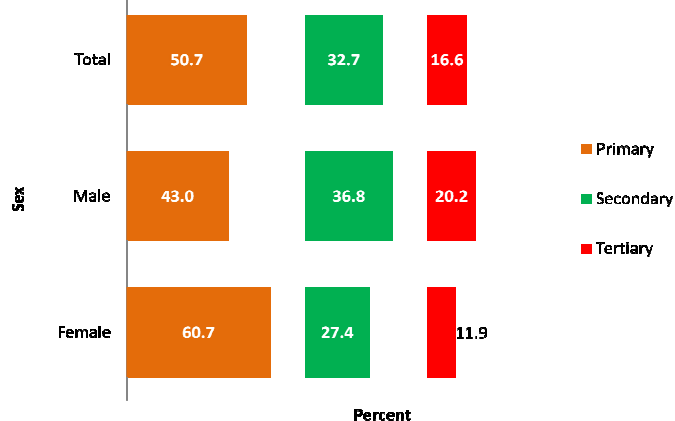


Source: 2010 Census of Population and Housing

11.6.3. Education Level among the Disabled

Figure 11.13 shows the percentage distribution of persons with disability (25 years and older) by highest level of education completed and sex. On the Copperbelt Province, 50.7 percent of the population with disabilities had attained primary education and 16.6 percent had attained tertiary education. A higher percentage of males had completed tertiary education at 20.2 percent compared to 11.9 percent for females.

Figure 11.13: Percentage Distribution of Persons with Disability, 25 years and older, by Highest Level of Education Completed and Sex, Copperbelt Province 2010



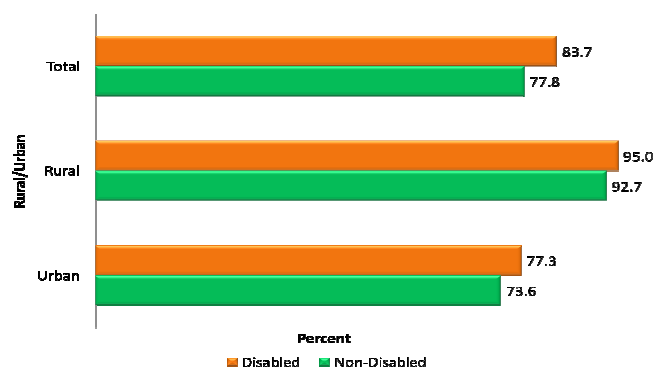
Source: 2010 Census of Population and Housing

11.7 Economic Activity

Persons living with disabilities are disadvantaged with regards to 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 83.7 percent of persons with disabilities were employed compared to 77.8 percent of persons without disabilities. The percentage of the disabled persons who were employed was higher than the corresponding percentage for the non-disabled in both rural and urban areas.

Figure 11.14: Percentage Distribution of Employed Population (12 Years and Older) by Disability Status and Rural/Urban, Copperbelt Province 2010

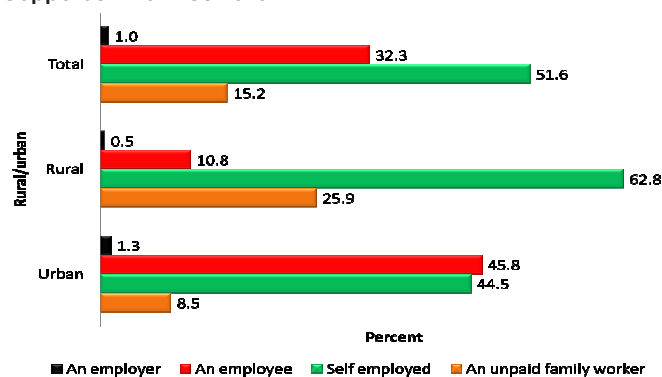


Source: 2010 Census of Population and Housing

11.7.1 Employment Status

Figure 11.15 shows employment status of persons with disability by rural/urban. Self-employed was the most common employment status at 51.6 percent while employer was the least with 1.0 percent. There were more persons with disabilities working as unpaid family workers in rural areas (25.9 percent) than urban areas (8.5 percent). The figure also shows that the proportion of persons with disabilities who were employees was higher in urban areas at 45.8 percent than in rural areas at 10.8 percent.

Figure 11.15: Percent Distribution of Persons with disability Aged 12 Years and Older by Employment Status and Rural/Urban, Copperbelt Province 2010

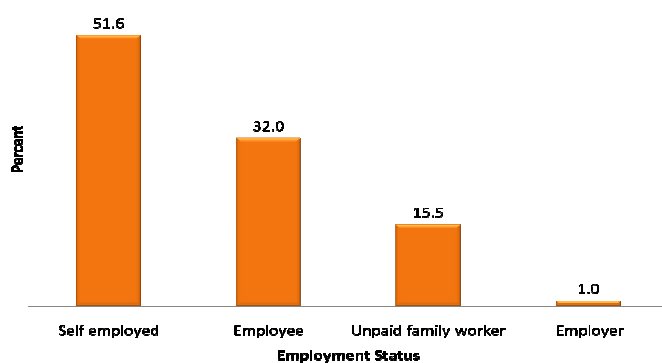


Source: 2010 Census of Population and Housing

11.7.2 Employment Status of Disabled Household Heads

Figure 11.16 shows the percentage distribution of household heads with disabilities aged 12 years and older by employment status. The largest proportion of household heads with disabilities was self-employed (51.6 percent) while the least was that of employers (1.0 percent).

Figure 11.16: Percentage Distribution of Household Heads with Disabilities (12 years and older) by Employment Status, Copperbelt Province 2010

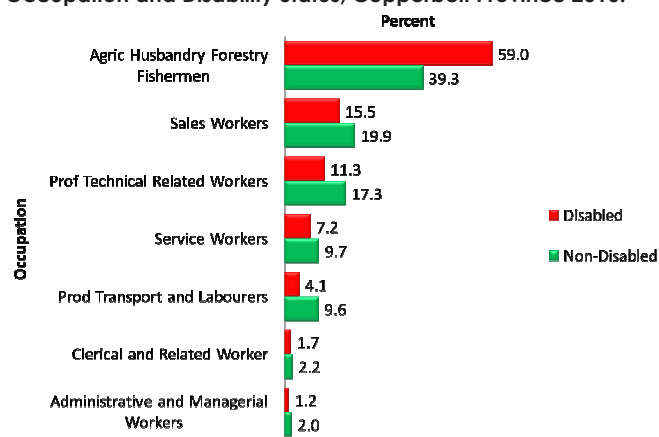


Source: 2010 Census of Population and Housing

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 the percentage distribution of disabled population by occupation and disability status. Among persons with disabilities, agricultural occupations were the most common at 59.0 percent while administrative and managerial occupations were the least common at 1.2 percent. Persons without disabilities made up 39.3 percent of agricultural occupations while 2.0 percent made up managerial occupations.

Figure 11.17: Percent Distribution of the Disabled Population by Occupation and Disability Status, Copperbelt Province 2010.



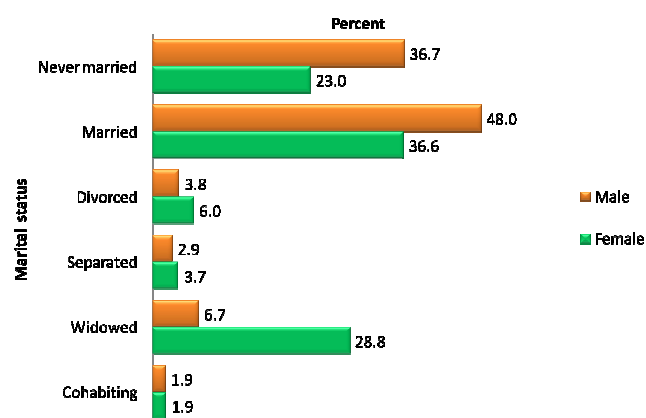
Source: 2010 Census of Population and Housing

11.8 Marital Status of the Disabled by Sex

Figure 11.18 shows percent distribution of persons with disabilities (15 years and older) by sex and marital status. There were more males with disabilities who were married (48.0 percent) than females (36.6 percent). Among the population

of persons living with disabilities who had never married, 36.7 percent were males while 23.0 percent were females. The proportion of widowed females with disabilities was higher at 28.8 percent compared to males at 6.7 percent.

Figure 11.18: Percent Distribution of Persons with Disabilities (15 years and Older) by Sex and Marital Status, Copperbelt 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 on the Copperbelt Province was in line with the observed fertility and mortality declines.

The Myers Index reduced from 7.0 in 2000 to 6.5 in 2010.

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

The age-sex accuracy index for Copperbelt Province reduced from 32.7 in 2000 to 30.9 in 2010.

Chapter 12

Evaluation of Coverage and Content Errors



12.1. Introduction

Data evaluation is the assessment of the quality of the 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 with 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.

12.6. 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 the population composition of Copperbelt Province by broad age groups for 1990, 2000 and 2010. The percentage of children aged 0-14 years reduced from 45.0 percent in 1990 to 44.1 percent in 2000 and further declined to 41.4 percent in 2010. The percentage of both the adults and the old in the age groups 15-64 years and 65 years and older increased with succeeding censuses, respectively. The population distribution by broad age groups shows consistency of coverage in all the three censuses.

Age Group	Population					
	1990	Percent	2000	Percent	2010	Percent
0-4	220,603	15.5	240,133	15.7	288,184	15.0
5-9	215,640	15.1	235,357	15.4	248,404	12.9
10-14	204,912	14.4	198,557	13.0	258,545	13.5
*0-14	*641,155	45.0	*674,047	44.1	*795,133	41.4
15-64	769,186	53.9	825,089	54.0	1,079,915	56.2
65+	17,205	1.2	28,158	1.8	45,563	2.4
Total	1,427,545	100	1,527,294	100	1,920,611	100

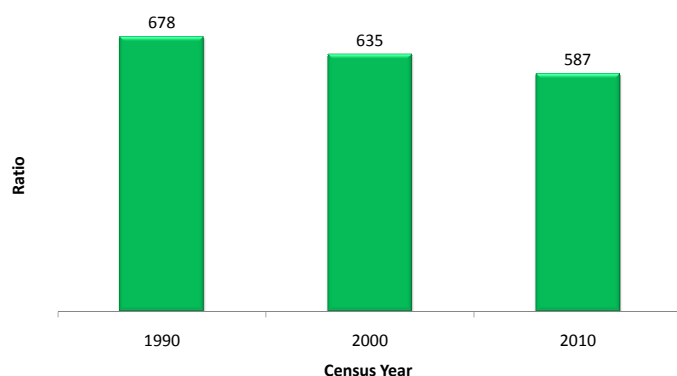
Sources: 1990, 2000 and 2010 Censuses of Population and Housing

*Note: Not included in the total.

12.7. Child-Woman Ratio

Figure 12.1 shows child woman ratio for census years 1990, 2000 and 2010. The child-woman ratio reduced from 678 in 1990 to 635 children aged 0-4 years per 1,000 women aged 15-49 years. Between 2000 and 2010, there was a decline in the child woman ratio and the percentage of children aged 0-4 years. The child-woman ratio declined from 635 in 2000 to 587 children aged 0-4 years per 1,000 women aged 15-49 years in 2010. The results show that between 2000 and 2010, the changes in the child woman ratios were in line with the changes in percentage of the population in the age group 0-4 years.

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



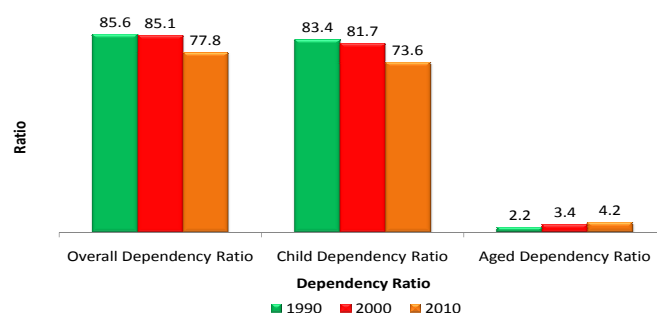
Note: Child-Woman Ratio is the number of children aged 0-4 years in a population to every 1000 women aged 15-49 years

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, Copperbelt 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 ratios 1990, 2000 and 2010 Censuses were 85.6, 85.1 and 77.8, respectively. This means that for every 100 persons in the age group 15-64 years, there were 77.8 dependants in the age groups 0-14 years and 65 years and older in 2010. Child dependency ratio declined from 83.4 persons in 1990 to 73.6 persons in 2010. However, the Aged dependency ratio increased from 2.2 persons in 1990 to 4.2 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.

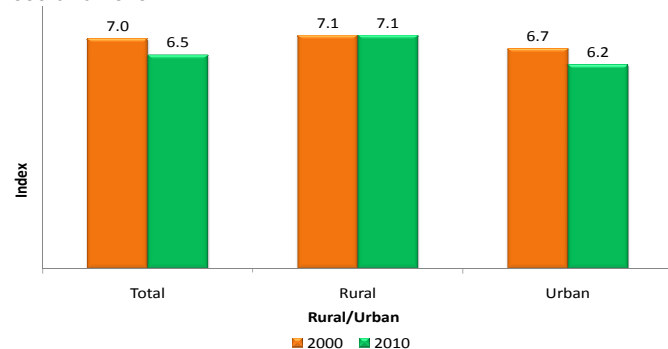
12.9.1. Digit Preference

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.

Figure 12.3: Myers' Index by Rural/Urban, Copperbelt 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

There was a decrease in the Myers' index for Copperbelt Province from 7.0 in 2000 to 6.5 in 2010. This suggests an improvement in the quality of age data reporting in 2010 compared to 2000. In rural areas, the Myer's index remained the same between 2000 and 2010 at 7.1. In urban areas it reduced from 6.7 in 2000 to 6.2 in 2010.

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. There was age heaping in 2000 and 2010 censuses. The most preferred digits are presented in decreasing order of preference. In the 2000 census the most preferred digits were 0 and 8. In 2010, the most preferred digits were 0, 8 and 5.

Table 12.2: Most Preferred Digits by Sex and Rural/Urban, Copperbelt Province 2000 and 2010

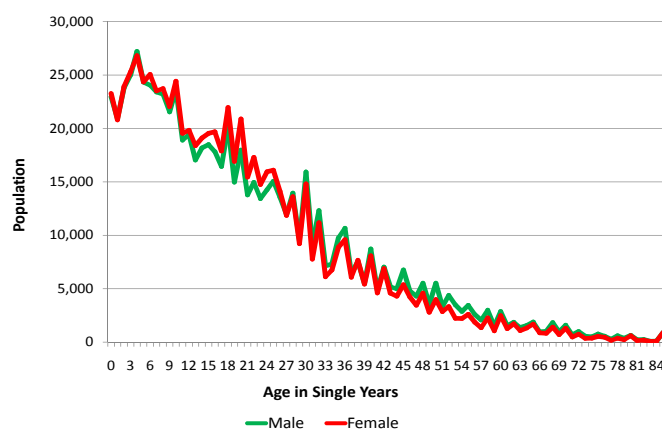
Rural/Urban	Most Preferred Digits and Census Year		
	Sex	2000	2010
Total	Both Sexes	0, 8	0, 8, 5
	Male	0, 8, 5	0, 8, 5
	Female	0, 8	0, 8, 5
Rural	Both Sexes	0, 8, 5	0, 8, 5
	Male	0, 8, 5	0, 5, 8
	Female	0, 8	0, 8, 5
Urban	Both Sexes	0, 8, 2	0, 8, 5
	Male	0, 8	0, 8, 5
	Female	0, 8, 2	0, 8, 5

Sources: 2000 and 2010 Censuses of Population and Housing

In rural areas, preference for digits 0, 8 and 5 were observed in both 2000 and 2010 Censuses. In urban areas, the most preferred digits were 0, 8 and 2 in 2000 and 0, 8 and 5 in 2010, respectively.

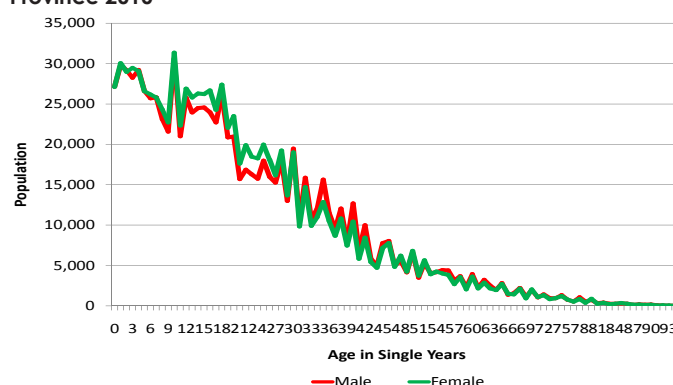
Errors in age data reporting are also presented in Figures 12.4 and 12.5. The figures show population distribution in single years for 2000 and 2010. The peaks on the curves indicate the most preferred ages in reporting while the troughs indicate the under reported ages

Figure 12.4: Population Distribution in Single Years, Copperbelt Province 2000



Source: 2000 Census of Population and Housing

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

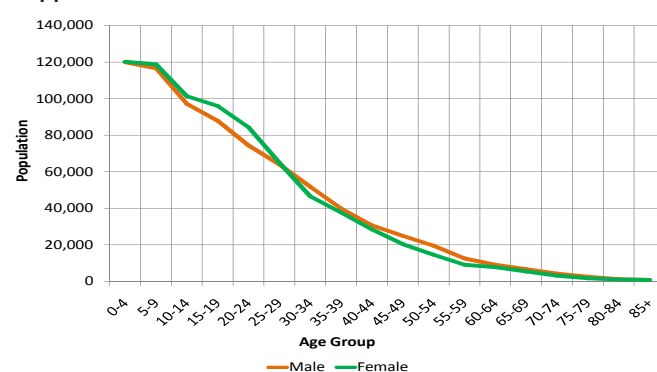


Source: 2010 Census of Population and Housing

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 Group, Copperbelt Province 2000



Source: 2000 Census of Population and Housing

Figure 12.7: Population Distribution by 5 Year Age Group, Copperbelt Province 2010

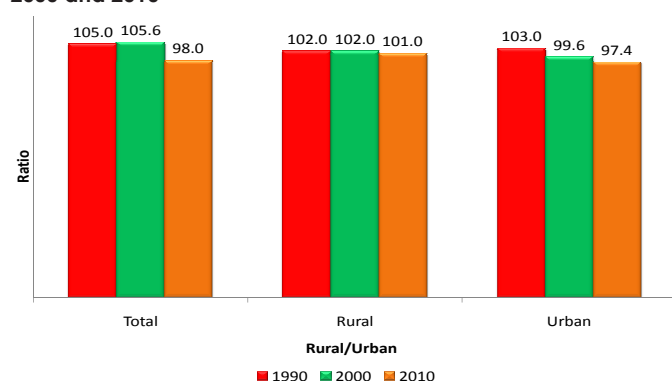


Source: 2010 Census of Population and Housing

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 the male mortality. Figure 12.8 shows sex ratio by rural/urban for 1990, 2000 and 2010.

Figure 12.8: Sex Ratio by Rural/Urban, Copperbelt Province 1990, 2000 and 2010

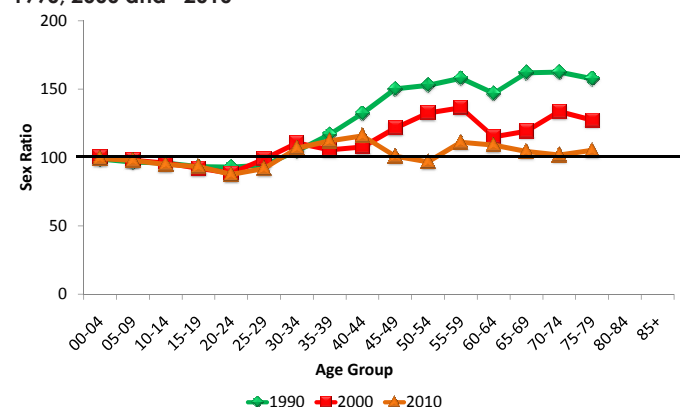


Sources: 1990, 2000 and 2010 Censuses of Population and Housing

The sex ratio for Copperbelt Province declined from 105.6 in 2000 to 98.0 males per 100 females in 2010. The sex ratio in rural areas remained the same between 1990 and 2000 at 102.0, but it reduced to 101.0 males per 100 females in 2010. In urban areas, the sex ratio declined from 103.0 in 1990 to 97.4 males per 100 females in 2010. Overall, Copperbelt Province had more females than males in 2010 compared to previous censuses when there were more males than females. However, in rural areas there were more males than females in all the census years.

Figure 12.9 shows sex ratio by five year age groups for 1990, 2000 and 2010. An analysis of age-specific sex ratios shows a similar pattern in all the three censuses. There were more females than males in age group 0-29 years in both 1990 and 2000. An analysis for 2010 shows more females than males in age groups 0-29 and 50-54 years.

Figure 12.9: Sex Ratio by 5 Year Age Group, Copperbelt 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 over 100 were observed in the age groups above 30 years in all the three censuses except for the age group 50-54 years in 2010. The 2010 pattern of sex ratio seems to be consistent with the 1990 and 2000 pattern.

The pattern of sex ratio for all the three censuses suggest under enumeration of children since the 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, Copperbelt Province 1990, 2000 and 2010

Age Group	1990			2000			2010		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
00-04	98.9	97.7	99.1	99.9	98.2	97.4	99.2	99.6	99.1
05-09	96.5	98.8	96.2	98.0	98.6	92.5	97.8	101.0	96.9
10-14	95.8	104.2	94.6	95.9	101.0	89.3	94.9	102.3	93.2
15-19	93.3	95.9	92.9	92.0	104.1	86.0	93.3	100.4	92.0
20-24	93.0	99.5	92.0	88.4	94.1	100.9	87.5	87.6	87.5
25-29	94.3	102.0	93.1	98.9	94.2	112.3	91.9	90.4	92.2
30-34	104.7	108.7	104.2	110.6	113.2	107.5	106.8	105.6	107.1
35-39	116.9	100.4	119.4	105.5	130.8	110.2	112.1	116.1	111.3
40-44	132.1	91.1	140.9	107.7	137.4	122.1	115.8	119.6	115.0
45-49	150.1	91.8	166.9	121.5	131.0	134.0	100.9	101.7	100.8
50-54	152.8	99.4	173.7	132.6	128.8	139.0	96.8	94.1	97.5
55-59	157.9	120.4	175.6	136.4	134.8	108.8	111.1	98.9	114.6
60-64	146.8	130.4	155.0	115.0	130.5	110.6	109.1	94.9	114.2
65-69	161.9	174.2	155.7	119.3	116.6	108.5	104.4	106.9	103.5
70-74	162.4	174.3	155.6	133.5	102.0	111.7	101.8	122.9	93.5
75+	157.8	206.2	137.5	127.3	104.3	101.0	105.2	139.0	92.5

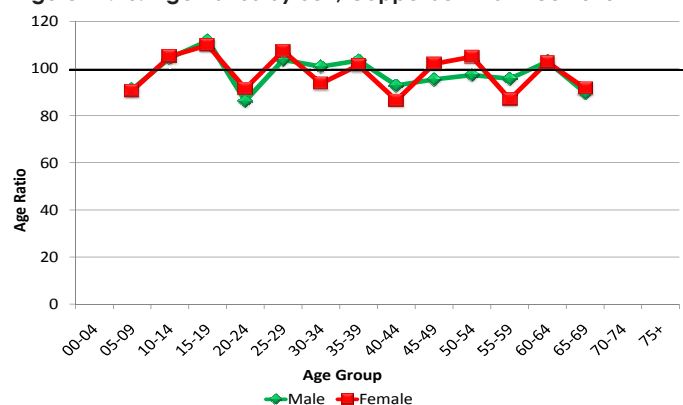
Sources: 1990, 2000 and 2010 Censuses of Population and Housing

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.

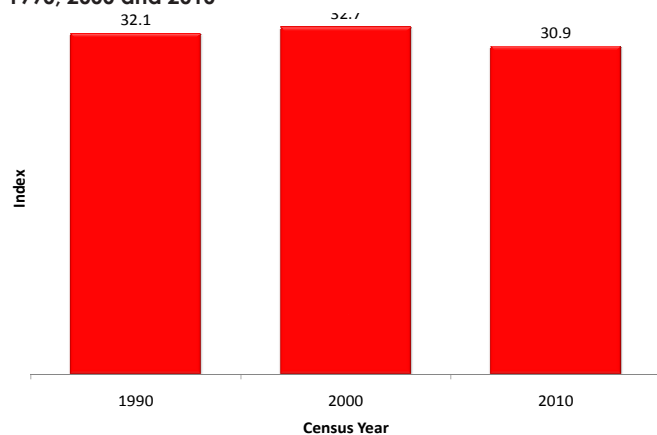
Figure 12.10: Age Ratios by Sex, Copperbelt Province 2010



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 above 40, respectively. Figure 12.11 shows the Age-Sex Accuracy Indexes for 1990, 2000 and 2010.

Figure 12.11: Age-Sex Accuracy Index, Copperbelt Province 1990, 2000 and 2010



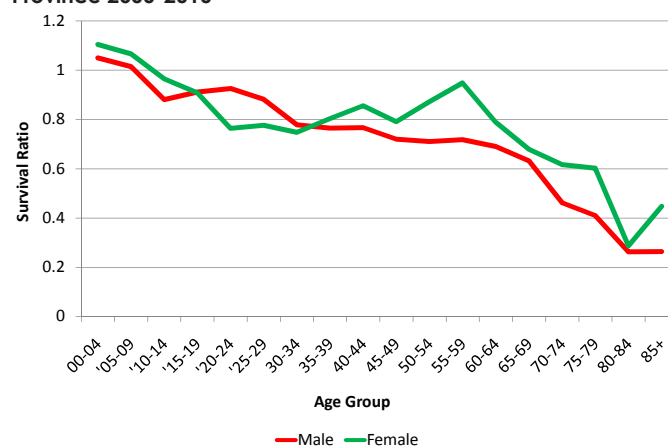
Source: 1990, 2000 and 2010 Census of Population and Housing

The Age-Sex Accuracy Index increased from 32.1 in 1990 to 32.7 in 2000. This implies deterioration in the quality of age data reporting in 2000. However, there was an improvement in the quality of age data reporting as depicted by the decline in the Age-Sex Accuracy Index from 32.7 in 2000 to 30.9 in 2010. Using the UN interpretation of the age-sex accuracy index, despite the improvement in 2010 census data on age reporting, it would still be defined as “inaccurate”.

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 and Sex, Copperbelt Province 2000-2010



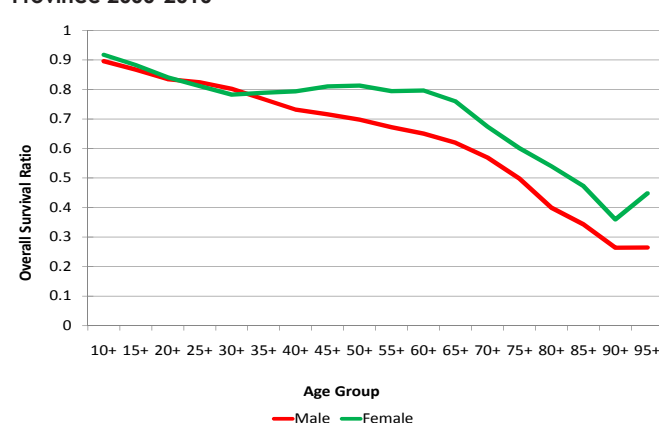
Sources: 2000 and 2010 Censuses of Population and Housing

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.

Female ratios are generally expected to be higher than the male ratios because females normally have lower mortality compared to males. Figure 12.12 shows more female survival ratios except for age group 15-34 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+ and 30+ where males had higher survival ratios.

Figure 12.13: Overall Survival Ratio by Age and Sex, Copperbelt Province 2000-2010

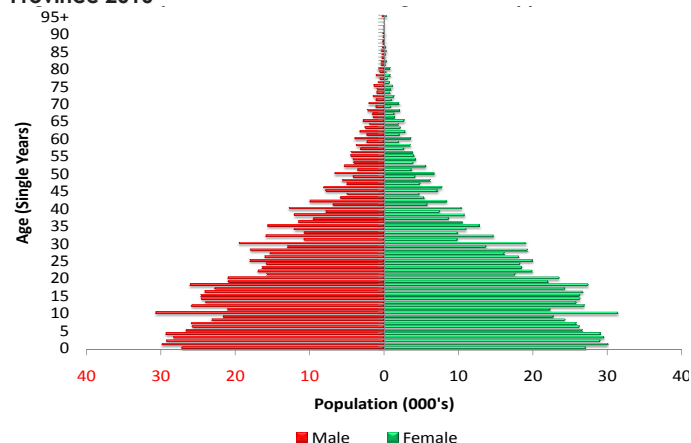


Sources: 2000 and 2010 Censuses of Population and Housing

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 year than in five year age groups. The population pyramids for the 2010 Census data given in figures 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 Copperbelt Province in 2010.

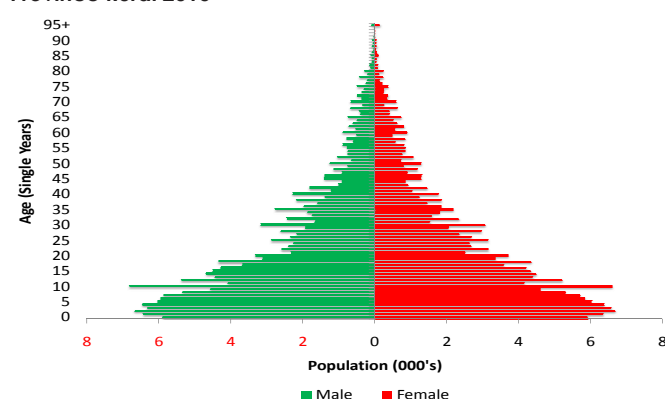
Figure 12.14: Population Distribution in Single Years, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

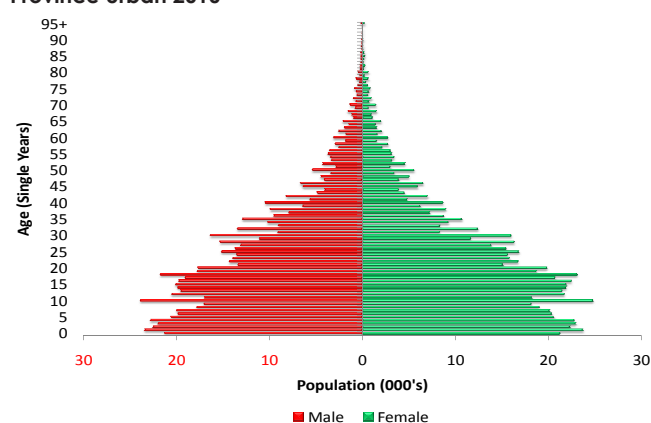
Figures 12.15 and 12.16, shows the population distribution by age and rural/urban for 2010. The population pyramids show age misreporting with preference for ages ending with 0, 8 and 5.

Figure 12.15: Population Distribution in Single Years, Copperbelt Province Rural 2010



Source: 2010 Census of Population and Housing

Figure 12.16: Population Distribution in Single Years, Copperbelt Province Urban 2010

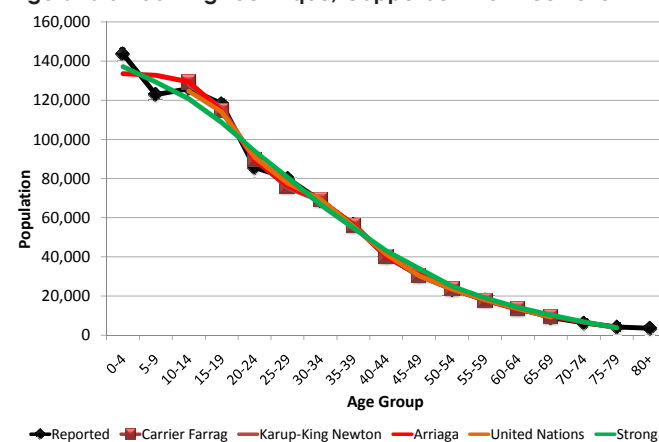


Source: 2010 Census of Population and Housing

Figures 12.17 and 12.18, shows the reported and smoothed population by age and sex for 2010.

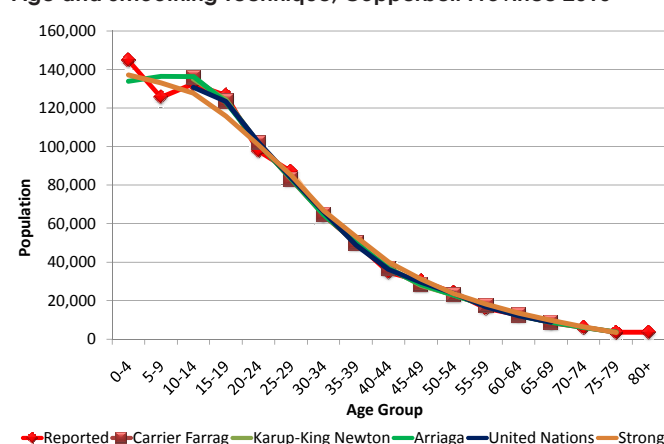
Smoothing the age data using selected techniques for light smoothing of the population (Eduardo E. Arriaga: November 1994), show that the irregularities in the structure were not severe to consider smoothing.

Figure 12.17: Reported and Smoothed Population for Males by Age and Smoothing Technique, Copperbelt Province 2010



Source: 2010 Census of Population and Housing

Figure 12.18: Reported and Smoothed Population for Females by Age and Smoothing Technique, Copperbelt 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 smoothed.

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, Copperbelt Province 2010									
Age Group	Total			Rural			Urban		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
0 - 4	14.7	14.7	14.7	17.2	17.0	17.4	14.1	14.1	14.0
5 - 9	12.8	12.7	12.9	15.1	15.1	15.2	12.2	12.2	12.3
10 - 14	13.4	13.1	13.7	13.9	13.9	13.9	13.3	12.9	13.7
15 - 19	12.9	12.6	13.2	11.2	11.2	11.2	13.3	12.9	13.7
20 - 24	9.8	9.3	10.2	7.7	7.3	8.2	10.2	9.8	10.7
25 - 29	8.7	8.5	9.0	7.0	6.6	7.3	9.2	9.0	9.4
30 - 34	6.9	7.3	6.6	5.9	6.0	5.7	7.2	7.6	6.9
35 - 39	5.6	6.0	5.2	5.1	5.5	4.7	5.7	6.1	5.3
40 - 44	3.9	4.3	3.6	3.7	4.0	3.3	4.0	4.4	3.7
45 - 49	3.2	3.3	3.1	3.1	3.1	3.1	3.2	3.3	3.2
50 - 54	2.5	2.5	2.5	2.5	2.4	2.6	2.5	2.5	2.5
55 - 59	1.8	1.9	1.7	2.0	1.9	2.0	1.7	1.9	1.6
60 - 64	1.4	1.5	1.3	1.8	1.8	1.9	1.3	1.4	1.2
65 - 69	0.9	1.0	0.9	1.4	1.4	1.3	0.8	0.8	0.8
70 - 74	0.6	0.7	0.6	1.1	1.2	1.0	0.5	0.5	0.5
75 - 79	0.4	0.4	0.4	0.7	0.9	0.6	0.3	0.3	0.3
80 - 84	0.2	0.2	0.2	0.3	0.4	0.3	0.2	0.2	0.2
85+	0.2	0.2	0.2	0.3	0.3	0.3	0.1	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	1,972,317	981,887	990,430	376,861	190,178	186,683	1,595,456	791,709	803,747

Source: 2010 Census of Population and Housing

A2: Percent Age Distribution of the Population by Selected Age Groups and Rural/Urban, Copperbelt Province 2010			
Age Group	2010 Census		
	Total	Rural	Urban
10-19 (Adolescents ,WHO)	26.3	25.1	26.6
10-24 (Young People, UN)	36.1	32.8	36.8
<15 (Children)	40.9	46.2	39.6
<18 (Children)	48.7	53.1	47.6
15-19 (Middle and later Adolescence)	12.9	11.2	13.3
15-24 (Youths, UN)	22.6	19.0	23.5
15-49 (Reproductive Age Group)	51.1	43.7	52.8
15-35 (Youths, Zambia)	39.8	33.2	41.4
15-64 (Labour force Age group)	56.8	50.0	58.4
60+ (Elderly)	3.7	5.6	3.3
65+ (Elderly)	2.3	3.8	2.0
Total Population	1,972,317	376,861	1,595,456

Source: 2010 Census of Population and Housing

Annex B: Social Characteristics

B1: Percent Distribution of Household Heads by Age Group and Sex, Copperbelt Province 2010					
Age group of Household 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	371,125	295,018	100	76,107	100
12-14	232	135	*	97	0.1
15 - 19	2,042	1,342	0.5	700	0.9
20 - 24	16,914	13,800	4.7	3,114	4.1
25 - 29	48,191	41,247	14	6,944	9.1
30 - 34	60,465	51,656	17.5	8,809	11.6
35 - 39	57,068	47,828	16.2	9,240	12.1
40 - 44	45,130	36,401	12.3	8,729	11.5
45 - 49	37,698	28,876	9.8	8,822	11.6
50 - 54	31,075	22,624	7.7	8,451	11.1
55 - 59	23,802	17,360	5.9	6,442	8.5
60 - 64	18,880	13,287	4.5	5,593	7.3
65+	29,628	20,462	6.9	9,166	12

Source: 2010 Census of Population and Housing

B 2: Relationship to Household Head by Rural/Urban, Copperbelt Province 2010						
Relationship to Head	Total	Percent	Rural	Percent	Urban	Percent
Total Population	1,972,317	100	376,861	100	1,595,456	100
Head	371,125	18.8	74,541	19.8	296,584	18.6
Spouse	261,311	13.2	53,514	14.2	207,797	13
Own Son/ Daughter	905,224	45.9	183,061	48.6	722,163	45.3
Step Son/Daughter	21,014	1.1	5,330	1.4	15,684	1
Parent	9,401	0.5	1,501	0.4	7,900	0.5
Brother/Sister	63,299	3.2	6,843	1.8	56,456	3.5
Nephew/Niece	94,909	4.8	9,474	2.5	85,435	5.4
Son/Daughter-in-law	13,227	0.7	2,509	0.7	10,718	0.7
Grandchild	141,374	7.2	28,625	7.6	112,749	7.1
Parent-in-law	3,434	0.2	551	0.1	2,883	0.2
Cousin	13,355	0.7	1,276	0.3	12,079	0.8
Other relative	60,652	3.1	7,400	2	53,252	3.3
Not Related	13,992	0.7	2,236	0.6	11,756	0.7

Source: 2010 Census of Population and Housing

Annex C: Education

C1: Population 5 Years and Older by Age (Single and 5 Year Groups), Sex and Literacy Status, and Rural/Urban, Copperbelt Province 2010

Age (Single and 5 Year Groups)	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total	83.1	84.7	81.6	69.5	72.9	66.0	86.2	87.4	85.0
5	10.5	10.2	10.8	3.6	3.6	3.6	12.5	12.1	12.9
6	15.9	15.5	16.3	5.6	5.0	6.1	19.0	18.6	19.3
7	26.1	25.6	26.6	11.5	11.5	11.6	30.3	29.7	30.8
8	40.7	39.3	42.0	22.4	21.2	23.7	45.9	44.8	47.1
9	61.4	60.1	62.6	40.6	40.1	41.0	66.8	65.5	68.1
5 - 9	29.7	28.8	30.6	15.5	15.0	15.9	33.8	32.8	34.7
10	76.2	75.1	77.3	60.0	58.1	61.9	80.7	80.0	81.4
11	88.3	87.5	89.1	75.8	73.8	77.7	91.3	90.8	91.7
12	92.8	92.4	93.3	84.4	83.5	85.4	94.9	94.7	95.1
13	95.7	95.5	95.9	89.6	89.2	90.1	97.0	96.9	97.1
14	96.6	96.5	96.7	91.1	90.7	91.6	97.8	97.9	97.8
10 - 14	89.4	88.8	90.0	78.6	77.4	79.8	92.0	91.6	92.3
15	97.0	96.9	97.1	92.1	91.7	92.6	98.0	98.1	98.0
16	97.4	97.4	97.3	92.2	92.6	91.7	98.4	98.4	98.4
17	97.5	97.6	97.3	92.2	92.8	91.6	98.4	98.6	98.3
18	97.1	97.5	96.7	90.6	92.2	89.0	98.3	98.5	98.1
19	96.9	97.6	96.2	89.7	92.0	87.6	98.2	98.6	97.8
15 - 19	97.2	97.4	97.0	91.4	92.3	90.6	98.3	98.4	98.1
20 - 24	95.8	96.9	94.8	86.1	89.8	82.9	97.5	98.2	96.9
25 - 29	94.9	96.6	93.4	83.3	88.1	78.9	97.0	98.0	96.0
30 - 34	95.0	96.6	93.3	83.8	87.9	79.5	97.1	98.2	95.9
35 - 39	94.6	96.5	92.4	84.1	88.8	78.7	96.7	98.2	95.1
40 - 44	94.0	96.6	91.0	83.1	89.3	75.8	96.3	98.1	94.2
45 - 49	92.8	96.3	89.4	81.0	88.2	73.6	95.5	98.1	92.9
50 - 54	90.8	96.1	85.7	78.5	88.1	69.4	93.7	97.9	89.7
55 - 59	88.6	95.8	80.5	76.4	88.3	64.7	91.7	97.7	84.9
60 - 64	80.9	93.6	67.0	68.5	84.9	52.9	85.0	96.2	72.2
65 +	66.4	84.0	48.1	57.8	75.9	35.7	70.2	88.0	52.9

Source: 2010 Census of Population and Housing

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

Age and Sex	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total	38.5	38.9	38.2	33.5	34.8	32.3	39.6	39.8	39.5
5	32.5	31.1	33.9	13.0	12.2	13.8	38.2	36.7	39.8
6	47.5	46.0	49.1	28.4	26.7	30.2	53.1	51.7	54.5
7	70.7	70.0	71.4	55.8	55.5	56.0	75.0	74.2	75.8
8	82.8	81.8	83.7	69.7	67.9	71.6	86.5	86.0	87.1
9	88.3	87.8	88.8	78.2	77.9	78.4	91.0	90.5	91.5
5 - 9	63.1	61.9	64.3	47.0	46.0	48.0	67.7	66.5	68.9
10	90.1	89.8	90.3	82.8	82.7	83.0	92.1	91.9	92.3
11	92.1	91.9	92.4	84.8	83.6	85.9	93.9	93.8	93.9
12	92.3	92.3	92.3	86.6	86.5	86.8	93.7	93.8	93.6
13	92.5	92.5	92.4	86.9	86.5	87.4	93.6	93.9	93.4
14	91.1	91.3	90.9	85.0	85.1	85.0	92.4	92.7	92.1
10 - 14	91.5	91.5	91.6	85.1	84.8	85.4	93.1	93.2	93.0
15	88.4	89.1	87.8	80.8	82.2	79.5	90.0	90.7	89.5
16	84.7	86.9	82.8	74.6	78.9	70.4	86.7	88.6	85.1
17	77.3	81.4	73.5	64.4	72.8	55.9	79.7	83.1	76.6
18	62.5	69.6	55.7	49.9	60.7	39.0	64.9	71.4	58.8
19	46.4	55.0	38.3	37.2	50.2	25.1	48.1	55.8	40.7
15 - 19	72.5	76.9	68.4	62.6	70.1	55.2	74.4	78.3	70.9
20 - 24	18.9	23.5	14.8	14.3	20.0	9.3	19.7	24.2	15.8
25 - 29	5.8	5.8	5.7	3.4	3.9	3.0	6.2	6.1	6.2
30 - 34	3.7	3.4	4.0	2.3	2.6	2.0	4.0	3.6	4.3
35 - 39	3.1	2.9	3.4	2.0	2.0	2.1	3.4	3.1	3.6
40 - 44	2.6	2.6	2.5	1.7	1.9	1.5	2.8	2.8	2.8
45 - 49	2.0	2.2	1.8	1.5	1.8	1.2	2.1	2.3	1.9
50 - 54	1.7	1.9	1.5	1.4	1.5	1.2	1.7	2.0	1.5
55 - 59	1.5	1.5	1.4	1.4	1.5	1.3	1.5	1.5	1.4
60 - 64	1.3	1.4	1.2	1.2	1.4	1.0	1.3	1.3	1.3
65 +	1.5	1.6	1.4	1.2	1.5	0.9	1.7	1.7	1.6

Source: 2010 Census of Population and Housing

Annex D: Economic Characteristics

D1: The Usually Working Population (12 years and Older) By District, Copperbelt Province 2010

	Total	Chililabombwe	Chingola	Kalulushi	Kiwe	Luanshya	Lufwanyama	Masaiti	Mpongwe	Mufurila	Ndola
Total	512,184	21,315	52,425	27,079	123,444	32,826	28,175	37,681	44,469	36,778	107,992
Rural	142,284	3,855	10,841	8,955	5,720	7,385	27,387	36,986	37,414	3,741	-
Urban	369,900	17,460	41,584	18,124	117,724	25,441	788	695	7,055	33,037	107,992
Male	318,536	15,007	34,337	16,993	81,159	20,893	14,649	19,987	22,265	23,893	69,353
Female	193,648	6,308	18,088	10,086	42,285	11,933	13,526	17,694	22,204	12,885	38,639
The Usually Working Population (12 years and Older) By Employment Status, Copperbelt Province 2010											
Employer	6,113	273	766	225	1,975	436	75	114	97	518	1,634
Employee	227,400	13,329	28,571	12,232	69,102	16,319	1,982	2,406	4,356	19,411	59,692
Self employed	183,554	5,890	15,729	8,202	45,691	11,375	12,281	18,417	14,759	12,359	38,851
Unpaid family worker	95,117	1,823	7,359	6,420	6,676	4,696	13,837	16,744	25,257	4,490	7,815
The Usually Working Population (12 years and Older) By Occupation, Copperbelt Province 2010											
Managers	7,247	155	685	213	2,679	418	33	85	82	361	2,536
Professionals	41,888	2,045	4,984	2,103	13,074	3,637	561	707	753	3,660	10,364
Technicians and Associate Professionals	21,025	1,120	2,644	1,149	6,838	1,475	112	261	263	1,895	5,268
Clerical Support Workers	8,158	337	772	307	2,802	487	28	26	82	480	2,837
Service and Sales Workers	96,388	3,952	9,748	4,305	34,848	7,087	416	737	2,016	6,871	26,408
Skilled Agricultural Forestry and Fishery Workers	145,868	3,792	9,831	7,857	9,738	6,785	20,447	30,950	37,406	6,676	12,386
Craft and Related Trades Workers	75,254	6,700	10,656	4,578	24,355	5,121	463	556	1,022	6,676	15,127
Plant and Machine Operators and Assemblers	34,794	1,453	4,662	1,746	10,545	2,261	117	188	474	3,132	10,216
Elementary Occupations	58,492	1,146	5,902	3,644	13,803	4,190	4,847	2,785	1,771	4,669	15,735
Not Stated	23,070	615	2,541	1,177	4,762	1,365	1,151	1,386	600	2,358	7,115
The Usually Working Population (12 years and Older) By Industry, Copperbelt Province 2010											
Agriculture Hunting Forestry and Fishing	166,416	3,896	11,757	9,800.0	10,966	8,663	24,777	33,258	39,270	9,058	14,971
Mining and Quarrying	52,508	8,339	11,683	4,507.0	14,711	3,475	259	52	63	6,916	2,503
Manufacturing	30,001	462	2,569	1,053.0	10,133	2,424	161	197	281	1,861	10,860
Electricity Gas Steam and Air conditioning supply	2,718	59	248	105.0	1,038	230	15	5	20	195	803
Water Supply	2,157	115	246	115.0	604	211	3	18	13	191	641
Construction and Allied Repairs	22,860	676	2,492	1,357.0	7,548	1,545	226	417	535	1,315	6,749
Wholesale & Retail Trade Restaurants and Hotel	86,152	3,093	7,846	4,079.0	32,337	5,860	308	633	1,559	5,491	24,946
Transport and Storage	22,094	568	2,303	654.0	7,474	1,330	77	101	207	1,300	8,080
Accommodation and food services activities	7,291	252	691	172.0	2,466	419	65	60	83	399	2,684
Information and Communication	3,297	71	255	132.0	1,100	157	119	112	35	182	1,134
Finance and Insurance	3,613	88	301	72.0	1,458	188	3	2	28	163	1,310
Real Estate Activities	251	2	18	3.0	83	15	-	-	1	9	120
Community Social and Personal Services	85,345	2,942	8,382	3,723.0	27,528	6,341	825	1,144	1,433	7,086	25,941
Not stated	27,481	752	3,634	1,307.0	5,998	1,968	1,337	1,682	941	2,612	7,250

Source: 2010 Census of Population and Housing

Annex E: Fertility Levels, Patterns and Trends

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

Age Group	Total	Chilila-bombwe	Chingola	Kalulushi	Kitwe	Luanshya	Lufwan-yama	Masaiti	Mpongwe	Mufurila	Ndola
15-19	0.0902	0.0675	0.0586	0.0700	0.0621	0.0573	0.1126	0.0961	0.1434	0.0534	0.0628
20-24	0.2350	0.2237	0.1827	0.2241	0.1953	0.1733	0.3227	0.2634	0.3508	0.1788	0.1926
25-29	0.2431	0.2221	0.2126	0.2423	0.2174	0.1976	0.3023	0.2428	0.3232	0.2032	0.2127
30-34	0.2098	0.2048	0.1884	0.2068	0.1855	0.1729	0.2639	0.2349	0.3061	0.1940	0.1800
35-39	0.1477	0.1398	0.1380	0.1355	0.1389	0.1217	0.2105	0.1795	0.2327	0.1186	0.1284
40-44	0.0617	0.0621	0.0530	0.0579	0.0605	0.0465	0.1138	0.0940	0.1243	0.0506	0.0549
45-49	0.0156	0.0220	0.0143	0.0201	0.0160	0.0165	0.0304	0.0358	0.0318	0.0139	0.0169
TFR	5.0	4.8	4.9	5.4	4.7	4.5	7	6.7	7.1	4.7	4.9

Source: 2010 Census of Population and Housing

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

Age Group	1990*		2000*		2010	
	Observed ASFR	Adjusted ASFR	Observed ASFR	Adjusted ASFR	Observed ASFR	Adjusted ASFR
15-19	0.0879	0.0940	0.0928	0.1407	0.0530	0.0902
20-24	0.2501	0.2674	0.2118	0.2768	0.1610	0.2350
25-29	0.2746	0.2936	0.2116	0.2692	0.1738	0.2431
30-34	0.2543	0.2719	0.1846	0.2317	0.1531	0.2098
35-39	0.2112	0.2258	0.0420	0.1748	0.1105	0.1477
40-44	0.1203	0.1286	0.0710	0.0833	0.0487	0.0617
45-49	0.0549	0.0587	0.0290	0.0301	0.0145	0.0156
Obs. TFR	6.3		4.7		3.6	
Adj. TFR		6.7		6.0		5.0
MACB					20.9	

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

E3: Adjusted Total Fertility Rate by District and Rural/Urban, Copperbelt Province 1990 – 2010

Census Year	Total			Districts									
	Total	Rural	Urban	Chilila-bombwe	Chingola	Kalulushi	Kitwe	Luanshya	Lufwan-yama	Masaiti	Mpongwe	Mufurila	Ndola
1990	6.6	6.6	6.6	-	-	-	-	-	-	-	-	-	-
2000	5.2	6.1	5.0	6.3	5.3	5.2	4.8	5.1	6.4	6.0	6.4	4.5	4.9
2010	5.0	6.9	4.6	4.8	4.9	5.4	4.7	4.5	7.0	6.7	7.1	4.7	4.9

Source: 1990, 2000 and 2010 Census of Population and Housing

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

Age Group	Total			Rural			Urban		
	ASFR(f)	Survival Ratios	ASFR at Current Mortality Rates	ASFR(f)	Survival Ratios	ASFR at Current Mortality Rates	ASFR(f)	Survival Ratios	ASFR at Current Mortality Rates
15 - 19	0.0265	4.2461	0.1105	0.0461	4.0911	0.1886	0.0228	4.2885	0.0976
20 - 24	0.0789	4.1007	0.3188	0.1180	3.9190	0.4644	0.0720	4.1477	0.2998
25 - 29	0.0863	3.8650	0.3287	0.1107	3.6691	0.4094	0.0819	3.9139	0.3248
30 - 34	0.0749	3.5582	0.2608	0.0997	3.3640	0.3394	0.0701	3.6060	0.2572
35 - 39	0.0555	3.2613	0.1738	0.0802	3.1017	0.2487	0.0504	3.3011	0.1679
40 - 44	0.0232	3.0033	0.0656	0.0397	2.8381	0.1115	0.0198	3.0441	0.0595
45 - 49	0.0074	2.7643	0.0190	0.0111	2.6205	0.0281	0.0066	2.7998	0.0181
GRR 2010	1.8			2.5			1.6		
GRR 2000	1.7			2.5			1.5		
GRR 1990	3.3			3.3			3.3		
NRR 2010			1.3			1.8			1.2
NRR 2000			1.3			1.9			1.2
NRR 1990			2.3			2.3			2.3

Source: 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, Copperbelt Province 2010

Age Group	Total	Rural	Urban	Chilila-bombwe	Chin-gola	Kalulushi	Kitwe	Luan-shya	Lufwan-yama	Masaiti	Mpon-gwe	Mufulira	Ndola
0 - 4	0.271	0.338	0.253	0.317	0.236	0.274	0.258	0.222	0.370	0.327	0.391	0.266	0.254
5-9	0.036	0.048	0.033	0.035	0.030	0.035	0.035	0.032	0.054	0.054	0.050	0.031	0.035
10-14	0.026	0.031	0.024	0.020	0.029	0.028	0.024	0.021	0.030	0.033	0.035	0.028	0.023
15 - 19	0.038	0.038	0.037	0.049	0.037	0.032	0.035	0.036	0.029	0.046	0.038	0.044	0.038
20 - 24	0.056	0.052	0.057	0.065	0.061	0.059	0.054	0.058	0.060	0.047	0.041	0.057	0.057
25 - 29	0.084	0.067	0.089	0.071	0.097	0.077	0.094	0.085	0.051	0.066	0.069	0.087	0.085
30 - 34	0.096	0.073	0.102	0.092	0.112	0.089	0.100	0.100	0.075	0.070	0.066	0.087	0.105
35 - 39	0.082	0.061	0.088	0.062	0.084	0.081	0.093	0.102	0.055	0.051	0.057	0.084	0.083
40 - 44	0.059	0.052	0.060	0.048	0.056	0.053	0.064	0.066	0.051	0.059	0.047	0.056	0.058
45 - 49	0.048	0.036	0.051	0.044	0.052	0.041	0.051	0.050	0.021	0.043	0.045	0.046	0.050
50 - 54	0.035	0.029	0.037	0.027	0.033	0.053	0.039	0.036	0.034	0.034	0.023	0.035	0.033
55 - 59	0.027	0.024	0.028	0.029	0.025	0.030	0.029	0.028	0.019	0.021	0.024	0.034	0.027
60 - 64	0.030	0.026	0.031	0.027	0.029	0.032	0.029	0.033	0.028	0.020	0.027	0.033	0.034
65 - 69	0.026	0.027	0.026	0.031	0.022	0.019	0.022	0.029	0.027	0.032	0.021	0.026	0.030
70 - 74	0.028	0.031	0.027	0.022	0.029	0.023	0.025	0.032	0.030	0.036	0.022	0.027	0.029
75+	0.059	0.068	0.056	0.061	0.068	0.072	0.049	0.071	0.065	0.061	0.044	0.059	0.060

Source: 2010 Census of Population and Housing

Annex H: Disability

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

Sex and District	Disabled Population			Percent Disabled		
	Total	Rural	Urban	Total	Rural	Urban
Total	30,727	8,653	22,074	1.6	2.4	1.4
Sex						
Male	16,167	4,631	11,536	1.7	2.5	1.5
Female	14,560	4,022	10,538	1.5	2.2	1.3
District						
Chililabombwe	1,084	370	714	1.2	2.7	0.9
Chingola	2,735	664	2,071	1.3	2.2	1.2
Kalulushi	1,629	623	1,006	1.7	2.7	1.4
Kitwe	7,216	452	6,764	1.4	3.0	1.4
Luanshya	2,865	617	2,248	1.9	2.8	1.7
Lufwanyama	1,598	1,545	53	2.1	2.1	2.9
Masaiti	2,379	2,334	45	2.4	2.4	2.3
Mpongwe	2,062	1,755	307	2.3	2.3	2.1
Mufulira	2,397	293	2,104	1.5	2.7	1.4
Ndola	6,762	-	6,762	1.5	-	1.5

Source: 2010 Census of Population and Housing

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

Age	Disabled Population			Percent Disabled		
	Total	Male	Female	Total	Male	Female
Total	30,727	16,167	14,560	1.6	1.7	1.5
0 - 4	1,180	714	466	0.4	0.5	0.3
5-9	1,922	1,065	857	0.8	0.9	0.7
10-14	2,710	1,474	1,236	1.0	1.2	0.9
15 - 19	2,745	1,414	1,331	1.1	1.2	1.1
20 - 24	1,968	1,073	895	1.1	1.3	0.9
25 - 29	1,980	1,080	900	1.2	1.3	1.0
30 - 34	1,986	1,111	875	1.5	1.6	1.4
35 - 39	1,969	1,101	868	1.8	2.0	1.7
40 - 44	1,772	961	811	2.4	2.4	2.3
45 - 49	1,900	938	962	3.1	3.1	3.2
50 - 54	1,897	913	984	4.0	3.9	4.0
55 - 59	1,701	851	850	5.0	4.7	5.3
60 - 64	1,769	849	920	6.6	6.1	7.2
65 - 69	1,518	715	803	8.6	7.9	9.3
70 - 74	1,401	682	719	11.2	10.8	11.6
75 - 79	1,058	572	486	13.3	13.5	13.1
80 - 84	636	339	297	16.0	17.0	15.0
85 - 89	356	193	163	17.0	18.4	15.6
90 - 94	133	73	60	20.3	21.3	19.3
95+	126	49	77	19.7	20.6	19.2

Source: 2010 Census of Population and Housing

Annex I: Evaluation of Coverage and Content Errors

11: Population by Age Group, Sex, Age Ratio and Sex Ratio, Copperbelt Province 1990								
Age Group	Population		Age Ratio		Deviation from 100		Sex Ratio	Difference
	Male	Female	Male	Female	Male	Female		
0-4	109710	110893	-	-	-	-	98.9	-
5-9	105926	109714	100.9	101.8	0.9	1.8	96.5	-2.4
10-14	100278	104634	100.9	100.0	0.9	-0.0	95.8	-0.7
15-19	92896	99603	107.7	109.3	7.7	9.3	93.3	-2.6
20-24	72213	77655	98.4	99.1	-1.6	-0.9	93.0	-0.3
25-29	53878	57162	90.7	93.6	-9.3	-6.4	94.3	1.3
30-34	46559	44453	103.8	101.2	3.8	1.2	104.7	10.5
35-39	35873	30696	92.7	90.6	-7.3	-9.4	116.9	12.1
40-44	30804	23324	103.1	100.1	3.1	0.1	132.1	15.2
45-49	23896	15915	96.4	89.4	-3.6	-10.6	150.1	18.1
50-54	18760	12281	104.1	104.0	4.1	4.0	152.8	2.6
55-59	12162	7704	91.1	87.1	-8.9	-12.9	157.9	5.1
60-64	7942	5410	93.4	101.2	-6.6	1.2	146.8	-11.1
65-69	4840	2990	87.7	81.7	-12.3	-18.3	161.9	15.1
70-74	3098	1908	-	-	0.0	0.0	162.4	0.5
75+	2673	1696	-	-	-	-	157.6	-
Total	721508	706038	-	-	-	-	-	-
Mean	-	-	-	-	5.4	5.9	-	7.0

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.
 $3 \times 7.0 + 5.4 + 5.9$
 $= 32.1$

12: Population by Age Group, Sex, Age Ratio and Sex Ratio, Copperbelt Province 2000								
Age Group	Population		Age Ratio		Deviation from 100		Sex Ratio	Difference
	Male	Female	Male	Female	Male	Female		
0-4	120015	120144	-	-	-	-	99.9	-
5-9	116393	118754	107.2	107.3	7.2	7.3	98.0	-1.9
10-14	97123	101288	94.9	94.3	-5.1	-5.7	95.9	-2.1
15-19	88320	96045	102.8	103.3	2.8	3.3	92.0	-3.9
20-24	74766	84577	97.9	104.9	-2.1	4.9	88.4	-3.6
25-29	64460	65174	102.5	99.7	2.5	-0.3	98.9	10.5
30-34	51048	46168	98.4	90.1	-1.6	-9.9	110.6	11.7
35-39	39323	37262	95.9	99.5	-4.1	-0.5	105.5	-5.0
40-44	30930	28712	96.6	99.7	-3.4	-0.3	107.7	2.2
45-49	24714	20339	97.8	93.5	-2.2	-6.5	121.5	13.8
50-54	19618	14800	105.0	100.0	5.0	0.0	132.6	11.0
55-59	12644	9272	87.9	81.4	-12.1	-18.6	136.4	3.8
60-64	9165	7971	95.1	107.5	-4.9	7.5	115.0	-21.4
65-69	6629	5557	98.3	99.1	-1.7	-0.9	119.3	4.3
70-74	4325	3240	-	-	0.0	0.0	133.5	14.2
75+	4770	3746	-	-	-	-	127.3	-
Total	764243	763049	-	-	-	-	-	-
Mean	-	-	-	-	4.2	5.1	-	7.8

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.
 $3 \times 7.8 + 4.2 + 5.1$
 $= 32.7$

13: Population by Age Group, Sex, Age Ratio and Sex Ratio, Copperbelt Province 2010								
Age Group	Population		Age ratio		Deviation from 100		Sex ratio	Difference
	Male	Female	Male	Female	Male	Female		
0-4	143,515	144,669	-	-	-	-	99.2	-
5-9	122,799	125,605	91.2	90.6	-8.8	-9.4	97.8	-1.4
10-14	125,884	132,661	104.5	105.2	4.5	5.2	94.9	-2.9
15-19	118,176	126,613	111.8	109.9	11.8	9.9	93.3	-1.6
20-24	85,557	97,747	86.3	91.5	-13.7	-8.5	87.5	-5.8
25-29	80,086	87,140	103.7	107.5	3.7	7.5	91.9	4.4
30-34	68,847	64,442	100.8	93.7	0.8	-6.3	106.8	14.9
35-39	56,451	50,349	103.4	101.4	3.4	1.4	112.1	5.3
40-44	40,340	34,841	92.8	86.5	-7.2	-13.5	115.8	3.7
45-49	30,500	30,217	95.4	102.1	-4.6	2.1	100.9	-14.8
50-54	23,568	24,339	97.3	105.0	-2.7	5.0	96.8	-4.1
55-59	17,929	16,132	95.7	87.0	-4.3	-13.0	111.1	14.3
60-64	13,898	12,743	103.0	102.7	3.0	2.7	109.1	-2.1
65-69	9,062	8,676	89.7	91.6	-10.3	-8.4	104.4	-4.6
70-74	6,317	6,203	-	-	0.0	0.0	101.8	-2.6
75+	7,846	7,459	-	-	-	-	105.2	-
Total	950775	969836	-	-	-	-	-	-
Mean	-	-	-	-	6.1	7.2	-	5.9

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.
 $3 \times 5.9 + 6.1 + 7.2$
 $= 30.9$

Life Tables

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

Age,	Width,	nMx	nax	nqx	lx	ndx	nLx	5Px	Tx	ex
0	1	0.0688	0.3	0.0656	100,000	6,565	95,405	0.9027	4,843,358	48.4
1	4	0.0139	0.4	0.0529	93,435	4,943	355,946	0.9639	4,747,953	50.8
5	5	0.0038	0.5	0.0186	88,492	1,643	435,068	0.9867	4,392,007	49.6
10	5	0.0026	0.5	0.0127	86,849	1,101	429,293	0.9813	3,956,939	45.6
15	5	0.0040	0.5	0.0194	85,748	1,666	421,246	0.9639	3,527,647	41.1
20	5	0.0079	0.5	0.0380	84,083	3,196	406,030	0.9410	3,106,401	36.9
25	5	0.0130	0.5	0.0614	80,886	4,967	382,079	0.9168	2,700,371	33.4
30	5	0.0186	0.5	0.0858	75,919	6,515	350,279	0.9097	2,318,292	30.5
35	5	0.0198	0.5	0.0908	69,404	6,302	318,665	0.9080	1,968,012	28.4
40	5	0.0201	0.5	0.0922	63,103	5,815	289,345	0.9074	1,649,348	26.1
45	5	0.0202	0.5	0.0927	57,287	5,310	262,543	0.9120	1,360,003	23.7
50	5	0.0190	0.5	0.0874	51,978	4,543	239,443	0.9062	1,097,460	21.1
55	5	0.0207	0.5	0.0945	47,434	4,485	216,989	0.8750	858,017	18.1
60	5	0.0291	0.5	0.1288	42,949	5,530	189,861	0.8428	641,028	14.9
65	5	0.0376	0.5	0.1608	37,419	6,017	160,018	0.7808	451,167	12.1
70	5	0.0570	0.5	0.2269	31,402	7,125	124,945	0.7316	291,149	9.3
75	5	0.0729	0.5	0.2744	24,276	6,661	91,409	0.4500	166,204	6.8
80 +	-	0.1276	0.5	1.0000	17,616	17,616	74,795		74,795	4.2

Source: 2010 Census of Population and Housing

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

Age,	Width,	nMx	nax	nqx	lx	ndx	nLx	5Px	Tx	ex
0	1	0.0721	0.3	0.0686	100,000	6,863	95,196	0.8986	4,699,361	47.0
1	4	0.0145	0.4	0.0550	93,137	5,120	354,114	0.9622	4,604,165	49.4
5	5	0.0040	0.5	0.0196	88,017	1,725	432,320	0.9849	4,250,051	48.3
10	5	0.0029	0.5	0.0145	86,291	1,255	425,810	0.9812	3,817,731	44.2
15	5	0.0039	0.5	0.0193	85,037	1,637	417,816	0.9617	3,391,921	39.9
20	5	0.0084	0.5	0.0404	83,400	3,372	401,823	0.9395	2,974,105	35.7
25	5	0.0133	0.5	0.0628	80,027	5,030	377,504	0.9132	2,572,281	32.1
30	5	0.0195	0.5	0.0897	74,998	6,725	344,729	0.9038	2,194,777	29.3
35	5	0.0213	0.5	0.0970	68,273	6,623	311,563	0.8972	1,850,049	27.1
40	5	0.0228	0.5	0.1035	61,650	6,382	279,532	0.8948	1,538,486	25.0
45	5	0.0233	0.5	0.1054	55,268	5,823	250,138	0.8999	1,258,954	22.8
50	5	0.0219	0.5	0.0995	49,445	4,919	225,093	0.8945	1,008,815	20.4
55	5	0.0235	0.5	0.1062	44,527	4,728	201,357	0.8640	783,722	17.6
60	5	0.0319	0.5	0.1397	39,799	5,558	173,981	0.8362	582,365	14.6
65	5	0.0393	0.5	0.1669	34,240	5,715	145,483	0.7767	408,384	11.9
70	5	0.0583	0.5	0.2308	28,525	6,583	113,002	0.7328	262,901	9.2
75	5	0.0722	0.5	0.2725	21,942	5,979	82,805	0.4476	149,899	6.8
80+	-	0.1273	0.5	1.0000	15,963	15,963	67,095		67,095	4.2

Source: 2010 Census of Population and Housing

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

Age,	Width,	nMx	nax	nqx	lx	ndx	nLx	5Px	Tx	ex
0	1	0.0656	0.3	0.0628	100,000	6,275	95,607	0.9067	5,003,846	50.0
1	4	0.0133	0.4	0.0508	93,725	4,765	357,745	0.9656	4,908,239	52.4
5	5	0.0036	0.5	0.0176	88,960	1,561	437,772	0.9884	4,550,494	51.2
10	5	0.0022	0.5	0.0109	87,398	952	432,705	0.9813	4,112,723	47.1
15	5	0.0040	0.5	0.0196	86,446	1,694	424,608	0.9658	3,680,017	42.6
20	5	0.0074	0.5	0.0359	84,752	3,042	410,074	0.9425	3,255,409	38.4
25	5	0.0127	0.5	0.0600	81,711	4,901	386,498	0.9206	2,845,335	34.8
30	5	0.0176	0.5	0.0817	76,810	6,273	355,822	0.9166	2,458,837	32.0
35	5	0.0181	0.5	0.0837	70,537	5,901	326,131	0.9209	2,103,015	29.8
40	5	0.0169	0.5	0.0786	64,636	5,077	300,333	0.9204	1,776,884	27.5
45	5	0.0172	0.5	0.0797	59,559	4,748	276,429	0.9243	1,476,551	24.8
50	5	0.0161	0.5	0.0753	54,811	4,125	255,491	0.9194	1,200,122	21.9
55	5	0.0175	0.5	0.0813	50,686	4,121	234,886	0.8872	944,631	18.6
60	5	0.0261	0.5	0.1166	46,565	5,429	208,393	0.8495	709,746	15.2
65	5	0.0360	0.5	0.1548	41,136	6,366	177,030	0.7850	501,352	12.2
70	5	0.0558	0.5	0.2229	34,769	7,751	138,966	0.7302	324,322	9.3
75	5	0.0736	0.5	0.2765	27,018	7,470	101,474	0.4525	185,356	6.9
80+	-	0.1279	0.5	1.0000	19,548	19,548	83,882		83,882	4.3

Source: 2010 Census of Population and Housing

Table 4: Abridged Life Table Copperbelt Province Rural - Both Sexes, 2010

Age,	Width,	nMx	nax	nqx	lx	ndx	nLx	5Px	Tx	ex
0	1	0.0754	0.3	0.0716	100,000	7,164	94,986	0.8864	4,726,822	47.3
1	4	0.0184	0.4	0.0692	92,836	6,424	348,220	0.9545	4,631,836	49.9
5	5	0.0047	0.5	0.0232	86,413	2,002	423,056	0.9828	4,283,616	49.6
10	5	0.0033	0.5	0.0165	84,411	1,393	415,788	0.9754	3,860,559	45.7
15	5	0.0052	0.5	0.0255	83,018	2,115	405,576	0.9532	3,444,771	41.5
20	5	0.0103	0.5	0.0493	80,904	3,987	386,577	0.9340	3,039,196	37.6
25	5	0.0145	0.5	0.0679	76,917	5,226	361,068	0.9149	2,652,619	34.5
30	5	0.0189	0.5	0.0871	71,691	6,244	330,356	0.9161	2,291,551	32.0
35	5	0.0180	0.5	0.0835	65,447	5,463	302,652	0.9035	1,961,196	30.0
40	5	0.0215	0.5	0.0980	59,984	5,881	273,455	0.9170	1,658,544	27.6
45	5	0.0175	0.5	0.0812	54,103	4,393	250,747	0.9198	1,385,089	25.6
50	5	0.0173	0.5	0.0801	49,710	3,981	230,635	0.9163	1,134,342	22.8
55	5	0.0182	0.5	0.0841	45,729	3,847	211,332	0.9025	903,707	19.8
60	5	0.0218	0.5	0.0991	41,882	4,152	190,725	0.8745	692,376	16.5
65	5	0.0291	0.5	0.1288	37,730	4,858	166,787	0.8237	501,651	13.3
70	5	0.0436	0.5	0.1824	32,872	5,994	137,383	0.7813	334,864	10.2
75	5	0.0560	0.5	0.2236	26,877	6,009	107,344	0.4564	197,482	7.3
80	+	0.0998	0.5	1.0000	20,868	20,868	90,138		90,138	4.3

Source: 2010 Census of Population and Housing

Table 5: Abridged Life Table Copperbelt Province Urban - Both Sexes, 2010

Age,	Width,	nMx	nax	nqx	lx	ndx	nLx	5Px	Tx	ex
0	1	0.0670	0.3	0.0640	100,000	6,404	95,517	0.9073	4,865,822	48.7
1	4	0.0126	0.4	0.0482	93,596	4,509	358,153	0.9666	4,770,304	51.0
5	5	0.0035	0.5	0.0172	89,087	1,536	438,523	0.9877	4,412,151	49.5
10	5	0.0024	0.5	0.0118	87,551	1,029	433,125	0.9824	3,973,629	45.4
15	5	0.0037	0.5	0.0182	86,522	1,579	425,506	0.9658	3,540,504	40.9
20	5	0.0074	0.5	0.0360	84,943	3,058	410,956	0.9423	3,114,998	36.7
25	5	0.0127	0.5	0.0602	81,886	4,928	387,250	0.9171	2,704,041	33.0
30	5	0.0185	0.5	0.0856	76,957	6,585	355,153	0.9085	2,316,791	30.1
35	5	0.0201	0.5	0.0923	70,372	6,493	322,644	0.9090	1,961,638	27.9
40	5	0.0198	0.5	0.0908	63,880	5,802	293,289	0.9052	1,638,994	25.7
45	5	0.0208	0.5	0.0953	58,078	5,535	265,481	0.9103	1,345,705	23.2
50	5	0.0193	0.5	0.0890	52,543	4,676	241,671	0.9036	1,080,224	20.6
55	5	0.0213	0.5	0.0973	47,866	4,655	218,384	0.8663	838,553	17.5
60	5	0.0316	0.5	0.1382	43,211	5,971	189,189	0.8310	620,169	14.4
65	5	0.0410	0.5	0.1730	37,241	6,444	157,208	0.7628	430,980	11.6
70	5	0.0631	0.5	0.2458	30,797	7,571	119,918	0.7095	273,772	8.9
75	5	0.0811	0.5	0.2971	23,227	6,901	85,077	0.4470	153,854	6.6
80	+	0.1399	0.5	1.0000	16,325	16,325	68,776		68,776	4.2

Source: 2010 Census of Population and Housing

- 1980, 1990 and 2000 Census of Population and Housing Reports -Central Statistical Office, Zambia
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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		SEA No.		Census Building No. (CBN)	
Ward		Household No. (HHN)		Village/Locality Name	
Region		Housing Unit No. (HUN)		Residential Address	
Rural		Urban		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 Member-ship status?	P3 What is (NAME'S) relationship to the head of household?	P4 Is (NAME) male or female?	P5 How old was (NAME) at his/her last birthday? If less than 1 year enter "00"	P6 PLACE OF BIRTH Where was (NAME) born?	P7 Was this part of the district rural or urban at the time of birth?	P8 If Zambian, code here then skip to P11	P9 If non-Zambian, code here then write name of country	P10 What is the main purpose of your stay in Zambia?	P11 What is (NAME'S) religion?
1	1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1	1	1	1

ENUMERATOR

Name

Date

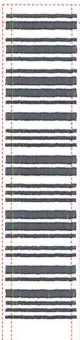
SUPERVISOR

Name

Date

CONFIDENTIAL: The census is being conducted under the Census & Statistics Act, CAP127 of the laws of Zambia. The information will be strictly confidential and used for statistical purposes only.

99080946 (82)



99080946 (82)

HOUSEHOLD SUMMARY COUNT					INSTITUTIONAL				
Usual members present			Usual members absent		Type of Collective Quarters			Summary Count	
Male			Male		Hotel/Motel/Lodge	Police Cell	Male		
Female			Female		Hostel/Guest House/Inn	Refugee Camp	Other (specify below)		
Total			Total		Hospital			Female	
					Learning Institution			Total	
					Prison				

Person Number	FOR ALL MEMBERS PRESENT					ONLY FOR PERSONS LESS THAN 18 YEARS OLD										ONLY FOR PERSONS AGED 5 YEARS AND OLDER				
	P12 What is (NAME'S) ethnicity?	P13 What is (NAME'S) predominant language of communication?	P14 Where was (NAME) residing in October 2009?	P15 How long has (NAME) been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)?	P16 Is (NAME) disabled in any way?	P17 What is (NAME'S) disability?	P18 What is the cause of (NAME'S) disability?	P19 Is (NAME) an albino?	P20 Is (NAME'S) biological mother alive?	P21 Does (NAME'S) biological mother live in this household?	P22 Is (NAME'S) biological father alive?	P23 Does (NAME'S) biological father live in this household?	P24 Does (NAME) have a birth certificate?	P25 Can (NAME) read and write in any language?	P26 Has P27 Is (NAME) ever attended school? (NAME) completed?	P28 What is highest level of education has (NAME) completed?				
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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 H – HOUSING CHARACTERISTICS

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	No
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
M1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

A2 On your holding, which of the following crops did you grow since 1st October 2009?	Yes	No
Maize	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sorghum	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Millet	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Rice	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Cassava	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sweet potatoes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Irish potatoes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Groundnuts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Mixed beans	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Cow peas	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Wheat	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Colton	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Burley tobacco	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Virginia tobacco	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sunflower	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Soya beans	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Paprika	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sugar cane	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Cashew Nuts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Vegetables	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Orchard	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Coffee	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Velvet beans	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Bambazra nuts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Pineapple	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Other crop	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

A3 On your holding, which of the following livestock/poultry have you raised since 1st October 2009?	Yes	No
Cattle	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Goats	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Pigs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sheep	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Donkeys	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Chickens	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Other Poultry	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Other Livestock	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

A4 Has your agriculture holding included fish farming since 1st October 2009?	Yes	No
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

A5 Has your agriculture holding included game ranching since 1st October 2009?	Yes	No
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

HH9 How many persons usually sleep in the housing unit(s)? <div> <input type="text"/> <input type="text"/> </div>	HH10 Is this housing unit rented from the employer of any member of this household? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> → HH12
HH3 How is the household refuse disposed? Regularly collected <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Irregularly collected <input type="checkbox"/> Burnt <input type="checkbox"/> Roadside dumping <input type="checkbox"/> Other dumping <input type="checkbox"/> Burying/pit <input type="checkbox"/> Other <input type="checkbox"/>	HH11 Is this employer ... The Central Government? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> The Local Government? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Parastatal? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> A private Organisation? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> An individual? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> All skip to A1 →
HH4 What is the main type of toilet used by members of this household? Flush Private connected to water sewer system <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Flush Private connected to stand alone soak away <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Flush Communal <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Pit Latrine <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Ventilated Improved Pit Latrine (VIP) <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Bucket <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Other <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> No toilet facility <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> → HH7	HH12 Is this housing unit rented from ... The Central Government? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> The Local Government? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Parastatal? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> A private Organisation? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> An individual? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

HH9 How many persons usually sleep in the housing unit(s)? <div> <input type="text"/> <input type="text"/> </div>	HH10 Is this housing unit rented from the employer of any member of this household? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> → HH12
HH3 How is the household refuse disposed? Regularly collected <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Irregularly collected <input type="checkbox"/> Burnt <input type="checkbox"/> Roadside dumping <input type="checkbox"/> Other dumping <input type="checkbox"/> Burying/pit <input type="checkbox"/> Other <input type="checkbox"/>	HH11 Is this employer ... The Central Government? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> The Local Government? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Parastatal? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> A private Organisation? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> An individual? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> All skip to A1 →
HH4 What is the main type of toilet used by members of this household? Flush Private connected to water sewer system <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Flush Private connected to stand alone soak away <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Flush Communal <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Pit Latrine <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Ventilated Improved Pit Latrine (VIP) <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Bucket <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Other <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> No toilet facility <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> → HH7	HH12 Is this housing unit rented from ... The Central Government? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> The Local Government? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Parastatal? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> A private Organisation? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> An individual? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

HH9 How many persons usually sleep in the housing unit(s)? <div> <input type="text"/> <input type="text"/> </div>	HH10 Is this housing unit rented from the employer of any member of this household? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> → HH12
HH3 How is the household refuse disposed? Regularly collected <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Irregularly collected <input type="checkbox"/> Burnt <input type="checkbox"/> Roadside dumping <input type="checkbox"/> Other dumping <input type="checkbox"/> Burying/pit <input type="checkbox"/> Other <input type="checkbox"/>	HH11 Is this employer ... The Central Government? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> The Local Government? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Parastatal? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> A private Organisation? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> An individual? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> All skip to A1 →
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H4 What is the floor of this housing unit mainly made of?	1	2	3	4	5	6	7	8	9
Concrete									
Cement									
Brick									
Tiles									
Mud									
Wood (not wooden tiles)									
Marble									
Terrazzo									
Other									

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

H2 What is the main type of material used for the roof?	1	2	3	4	5	6
Thatch/Palm Leaf						
Rustic Mat						
Palm/Bamboo						
Wood Planks						
Cardboard						
Metal/Iron Sheets						

H1 H1 Type of housing unit	1	2	3	4	5	6	7	8	9	10	11
Traditional											
Improved traditional											
Mixed											
Conventional flat											
Conventional house											
Mobile											
Part of commercial building											
Improvised/Makeshift											
Collective/institutional quarters											
Unintended											
Other											

H4 (If shared) what is the number of households?	1	2

SECTION M: GENERAL AND MATERNAL DEATHS

[illegible][illegible][illegible]

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