

"Quality Statistics for Development"



Birth & Death-Registration Passport Activity Limitation Education Literacy Marital Status

Social

Labourforce Unempolyment Employment Economic -dependency

Economic

ZAMBIA 2022 CENSUS 18th August - 14th September

2022 CENSUS NATIONAL ANALYTICAL REPORT

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For comments and additional information, Please contact:



Nationalist Road - P.O. Box 31908 - Lusaka Tel: +260 211 251377 email: info@zamstats.gov.zm www.zamstats.gov.zm

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2022 CENSUS National Analytical Report





ZAMBIA STATISTI AGENCY



FOREWORD



The 2022 Census of Population and Housing marks a significant milestone in Zambia's statistical history. As the sixth census since independence and the first to be fully digitized, it reflects a strategic shift towards modern, efficient, and technology-driven data collection and analysis systems.

Guided by the Statistics Act No. 13 of 2018, the Zambia Statistics (ZamStats) Agency undertook this mammoth exercise between 14th August and 18th September 2022. The census provided a comprehensive and inclusive enumeration of Zambia's population characteristics. and housina Computer-Assisted Leveraging Personal Interviewing (CAPI) and Geographic Information System (GIS) technologies, mapping data we improved accuracy, coverage, and timeliness, setting standards for statistical new undertakings in the country.

This National Analytical Report is the first in a series of analytical products drawn from the census data. It presents in-depth insights into Zambia's demographic, social, and economic characteristics, offering a solid evidence base for development planning, monitoring, and decision-making at all levels. Key highlights include population growth trends, youth demographics and urbanisation patterns, critical indicators for achieving Zambia's Vision 2030 and Sustainable Development Goals (SDGs).

The census was made possible through the commitment and cooperation of the Zambian people, the unwavering dedication of ZamStats staff, and the strategic support of various stakeholders, including local authorities, development partners, civil society, and the media.

Much appreciation to the Government of the Republic of Zambia for the financial and logistical support rendered from the highest level of governance to the sub-national structures. I am incredibly grateful for the generous support extended by the following international partner organisations: DFID, who contributed 15,000 tablets out of the 45,000 tablets required for data collection, the US Government, through the US Census Bureau, for their unwavering technical support in GIS, IT systems, and pilot census, census data analysis which has been invaluable to our efforts. The UNFPA. for their consistent technical and financial support since the inception of the census planning process in 2017, and for their dedicated work in resource mobilization for the census. UNICEF. for their vital role in the capacity building workshop, the



adaptation of the Questionnaire, and its pretesting, which significantly contributed to our preparations. The United Nations Economic Commission for Africa (UNECA), provided technical support towards the 2022 Census of Population and Housing in various ways. The World Bank, that provided financial and technical support for the Mapping and Listing exercise and the data analysis.

I also wish to express my profound gratitude to various Ministries, The University of Zambia, Department of Demography Population Sciences, Monitoring and Evaluation and private sector organisations that contributed to the planning, organisation, funding and implementation of the census. The Ministries and Departments for their material and other logistical support required for the census. I also wish to thank the Traditional Leaders and other local authorities for their moral support and cooperation. Grateful to the contribution of the security forces for providing the required security during the entire enumeration process in some areas.

I'm so grateful to the Zambia National Commercial Bank (ZANACO) for their financial support, Eco Bank and the First National Bank (FNB) for their material support. My sincere appreciation also goes to the Media, Choppies Chain Stores and New Horizon Printers for publicizing the census activities on their platforms and conveying census messages to the general public, which greatly enhanced the conduct of the census. ProPrint limited for their contribution in printing publicity materials.

I am indebted to the Census National Development Coordinating Committee (NDCC), Census Steering Committee (CSC) and the Technical Advisory Committee (TAC) with the Technical Working Groups, Provincial and District Census Committees for the roles they played in the implementation of the census.

I am very grateful to all the authors of the various chapters of the national analytical report. Lastly, I wish to express my appreciation to all staff of the Zambia Statistics Agency for their dedication and commitment throughout the entire process as well as the entire people of Zambia for their cooperation.

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Sheila Mudenda ACTING STATISTICIAN GENERAL

June, 2025



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ZAMBIA STATISTICS AGENCY "Quality Statistics for Development"



ACRONYMS

CAPI	Computer Assisted Personal Interviewing
СРН	Census of Population and Housing
CSO	Central Statistical Office
DCC	District Census Coordinator
DCITC	District Census IT Coordinator
DCITS	District Census IT Supervisor
DNRPC	Department of National Registration, Passports and Citizenship
DR Congo	Democratic Republic of the Congo
EA	Enumeration Area
FNB	First National Bank
GIS	Geographic Information System
GPS	Global Positioning System
ICT	Information and Communication Technology
IT	Information Technology
MOFNP	Ministry of Finance and National Planning
NDCC	National Development Coordinating Committee
NGO	Non-Governmental Organisation
NRC	National Registration Card
SDA	Seventh-Day Adventist
SZI	Smart Zambia Institute
TAC	Technical Advisory Committee
TWG	Technical Working Group
UN	United Nations
UNECA	United Nations Economic Commission for Africa
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNZA DDPSME	University of Zambia Department of Demography, Population Science, Monitoring and Evaluation
ZaMstats	Zambia Statistics Agency
ZANACO	Zambia National Commercial Bank



CHAPTER 1: 2022 CENSUS OVERVIEW





CHAPTER 1:

BACKGROUND

1.0. Geographic Overview

Zambia is a land linked country in Southern Africa. It is located between latitudes 8° and 18° south and longitudes 22° and 34° east and covers a total area of 752,612 square kilometers (km²). The country is bordered by, The Democratic Republic of Congo to the north, Tanzania to the north-east, Malawi to the east, Mozambique, Zimbabwe, Botswana and Namibia to the South, and Angola to the west.

1.1. Administration

Zambia is administratively divided into ten provinces namely: Central, Copperbelt, Eastern, Luapula, Lusaka, Muchinga, Northern, North Western, Southern and Western provinces. At the time of the 2022 Census, Zambia had 116 districts, 156 constituencies and 1,858 wards. Lusaka is the Capital City of Zambia and seat of the government. The government comprises of the Central and Local Government.

1.2. Natural resources

Zambia's vegetation is mainly made up of savannah woodlands and grasslands. It has a tropical climate with three distinct seasons, the cool and dry season, the hot and dry season and the hot and wet season. The country has abundant natural resources. It has five main rivers, namely Zambezi, Kafue, Luangwa, Luapula, and Chambeshi rivers. In addition to these rivers, the country also has major lakes such as Tanganyika, Mweru, Mweru Wa Ntipa, Bangweulu and the man-made lakes Kariba and Itezhi Tezhi.

Zambia has some of nature's best wildlife and game reserves affording the country with abundant tourism potential. The Luangwa and Kafue National Parks have one of the most prolific animal populations in Africa. The Victoria Falls in the Southern part of the country is a major tourist attraction. The country is also endowed with various minerals and precious stones such as copper, emeralds, zinc, lead and cobalt.

1.3. Census of population and housing undertaking

Zambia conducted her first E-census in 2022. This was the sixth National Census of Population and Housing conducted in Zambia since independence in 1964. So far the country has conducted censuses in 1969, 1980, 1990, 2000 and 2010. The 2022 Census of Population and Housing was carried out from 18th August to 21st September, 2022.



The Census was launched by His Excellency, the President of the Republic of Zambia Mr. Hakainde Hichilema on 17th August, 2022. The census enumeration started on the 18th of August 2022 with Census enumerators going out visiting all buildings in Zambia whether completed, incomplete, abandoned, habitable and inhabitable for the purpose of identifying characteristics of all buildings and households. All persons who lived in the buildings as well as those that lived in open spaces as households were counted. Persons who were present at any time at the household during the reference period (18th August to 7th September) were counted directly as Usual Household Members present at the Housing Unit/Dwelling. Those that visited the household and stayed throughout the reference period were counted as Visitors of the Household. While those who were absent the entire enumeration period were enumerated by proxy, that is, as Usual Household Members Absent from the Housing Unit/Dwelling. Detailed personal information was only collected for Usual Household Members present and Visitors found at the Housing Unit/Dwelling during the reference period, while for Usual Household Members Absent, only Age, Sex, Relationship to Household Head and Residence Status were collected from the main respondent for the Household.

1.3.1. Improvements during the 2022 Census

The 2022 Census employed the use of digital and satellite imagery mapping and listing of all structures and households, and the use of Computer Assisted Person Interviewing (CAPI). All materials for trainings and field work were loaded on the tablets minimising the cost of printing large volume of documents. Another very important improvement in the 2022 Census was the capturing of GPS coordinates for all households. This information is very important in relating to the location of households and their social and economic facilities. This information also improved the census coverage by identifying omissions and validating coverage.

1.3.2. Legal basis for the Census

A Census is the primary source of information about the population of a country and is carried out every 10 years at a minimum. The Zambia Statistics Agency is mandated through the Statistics Act No.13 of 2018 of Laws of Zambia, under section 7(2)(h) to conduct the census of population and housing every ten years. Further in accordance with section 22 of the Act, Statutory Instrument (SI) No. 92 of 2021, the national census of population and housing was approved by the Minister of Finance and National Planning Dr. Situmbeko Musokotwane.

1.3.3. Data confidentiality

All the information collected during the 2022 Census of Population and Housing was treated as strictly confidential. Extensive confidentiality processes were made to ensure that anonymity of data providers was ascertained at all times. The data collected will not be shared with any third parties if it may lead to the direct or indirect identification of the respondents. All the non-civil service census staff took an oath of secrecy before being engaged in any data collection or data handling. Mechanisms were put in place to report any possible violations of census procedures and/ or violation of confidentiality.



1.3.4. Census objectives

The main objectives of the 2022 Census were:

- To provide accurate and reliable information on the size, composition and distribution of the population of Zambia at Provincial, District, Constituency and Ward levels;
- To provide information on the demographic and socio-economic characteristics of the population of Zambia;
- To provide an accurate sampling frame for future inter-censal household and population based surveys;
- To generate statistics on small areas and population groups; and
- To provide a benchmark for research and analysis, particularly for population projections.

1.3.5. Pre-enumeration phase

The pre-enumeration phase can be categorized into five main parts; Formation of the Census administrative structures, Mapping and Listing, Questionnaire Adaptation, Pilot Census and Publicity campaigns.

(a) Formation of the Census administrative structures

The Statistician General supported by the Board of Directors, had the overall responsibility for coordinating all the census activities. Strategic implementation structures were set up at the national, provincial and district levels.

The Census Office was established as the Secretariat for the 2022 Census. Various census administrative committees and technical working groups were formed to spearhead the census undertaking.

The main committees formed included:

- National Development Coordinating Committee (NDCC): This was the main advisory body that was responsible for advising Cabinet on the overall implementation of the 2022 Census. The committee comprised the Secretary to Cabinet as the chairperson, all ministers of line ministries and a representative of cooperating Partners;
- Census National Steering Committee: This was the overseer of the Census activities. The Committee was there to ensure that the aims and objectives of the Census were well implemented. The membership included: The Deputy Secretary to the Cabinet, National Coordinator of Smart Zambia Institute (SZI), Secretary to the Treasury; Permanent Secretaries from the Ministry of Education; Ministry of Works and Supply; Ministry of Home Affairs; Ministry of Health; Ministry of Finance: and the Statistician General;



- Census Technical Advisory Committee (TAC): This provided guidance to the Technical Working Groups and reported to the Census National Steering Committee. The membership included; The Permanent Secretary - MOFNP-(Chairperson); Statistician General (Secretary) Chairpersons of TWGs, Census Office, and Assistant Directors; and
- **Technical Working Groups (TWG):** Five technical working groups were formed to oversee various census activities. These included; the Census Planning and Methodology; IT Systems; Mapping; Field Operations; and the Census Publicity Technical Working Group. These technical working groups were composed of members from various Government Ministries and Departments, cooperating partners, NGOs and institutions of higher learning.

At provincial level, there were Provincial Census Committees chaired by the provincial permanent secretaries and at the district level, District Census Committees were in place, chaired by the District Commissioners.



2022 Census Organogram

(b) Mapping and listing

The mapping and listing started in 2019 with a pilot undertaking in Chongwe and Lusaka districts. The exercise was completed in August 2020. This was the first digital mapping in which geographical coordinates were collected for all structures and households in the country. A total of 4,555,632 structures were captured during the exercise.



The overall objective of the census mapping and listing exercise was to provide an updated digital geospatial database for enumeration areas that can be used as a basis for the census planning process during the pre-enumeration phase, census data collection and, for development of sampling frames for surveys and dissemination of census data/results during the Post-enumeration phase. The specific objectives were:

- To delineate enumeration areas (EAs) in the country to facilitate the smooth counting of people during the enumeration period and essentially to establish that all areas are covered and that everyone in the country is counted with minimal possibility of under or over counting;
- Re-delineate enumeration areas (EAs) into manageable sizes in terms of households' population to be enumerated during the census period;
- Provide the basis to estimate resources required at each administrative level such as personnel, materials and transport; and
- Ensure that EA maps easily guide the enumerators on the households that they should cover during the census period.

(c) Questionnaire adaptation

The process of the census questionnaire adaptation started in July 2018. The Zambia Statistics Agency drafted the questionnaires taking into consideration local and international demands. Specifically the following aspects were considered during questionnaire drafting:

- Quality of data collected through the previous censuses;
- Timeliness;
- National sensitivity of specific topics;
- International recommendations;
- Historical comparisons;
- International comparability;
- Suitability of topics for collecting reliable information; and
- Resources available for the census undertaking.

The draft questionnaire was shared and a consultative process was held for stakeholders to provide feedback. Submissions were received and discussions were held to decide on the non-core questions to be added. A consolidated draft questionnaire was produced and the data collection application was developed. Several pre-tests were held thereafter to ensure the questionnaire would be able to collect the required data.

(d) Census questionnaires

The 2022 Census had two types of questionnaires; the Household questionnaire and the Institutional questionnaire. The household questionnaire was used to capture both individual and household characteristics, whereas, the Institutional questionnaire was used to capture populations residing in collective living quarters.



The content of the 2022 Census questionnaire generally remained the same as that of the previous censuses. However, there were a few changes made on certain topics and addition of new topics. Some changes included disability data collected using the six Washington Group questions which focuses on Activity Limitation, Nationality was changed to Citizenship, the question on Children born in the last 12 months was changed to Date of birth of the last child born alive. Among the added topics and questions were; Date of arrival in the country, Birth registration, Death registration and certification, Emigration of household members and Ownership of ICT materials.

(e) Publicity and advocacy

The success of the census depends on the willingness of the people to respond to the census questions and the 2022 CPH was no exception. In order to achieve this there was need to inform and educate the populace about the coming census. Publicity and advocacy activities were conducted prior and during the census period. Publicity materials were developed such as information sheets, posters, brochures, flyers, calendars, t-shirts and advocacy narrative and jingle videos for use to sensitise and educate the public about the importance of the census, and to encourage them to participate in the exercise.

Various stakeholders i.e., ministries, departments, private sectors, agencies and the media were engaged at the various levels for public education on the census. Religious groups also played a role of conveying census awareness information to the congregates and traditional authorities at the community level were engaged and they played specific roles to enhance the publicity of the census. Learning institutions were contacted and learners were informed and educated on census, with the expectation that they would share information with their parents and guardians so that they cooperate with the census enumerators.

Print and electronic media played an important role in the census publicity. Advertisements were aired to the public on how to identify and receive a census enumerator when approached. General categories of questions that would be asked were also incorporated in the advertisements. Radio and television discussion programmes were also conducted by ZamStats representatives and some stakeholders. Hundred days census count down was placed on ZamStats website and census Facebook page.

The Census also used residents in the enumeration areas as foot soldiers who sensitized the communities on the importance of the census and informed households that data collectors would be going round their communities to collect information.

(f) Pilot Census

The Pilot Census was conducted from 15th November to 12th December, 2020. The purpose of the pilot census was to provide a trial for the main census undertaking in order to evaluate all aspects of the census operation including the concepts and definitions; the adequacy of the questionnaires; the training of field enumerators and supervisory staff; field organization; census methodology; data processing and data tabulation.







A purposively selected sample of 640 enumeration areas was used for the pilot census. Two districts were selected in each province to represent both rural and urban setups. Altogether there were 290 rural enumeration areas and 350 urban enumeration areas. Each enumeration area was assigned to one enumerator. The number of enumerators per supervisor ranged from eight to ten. In each district three coordinators were assigned.

The pilot census adopted face to face interviewing as a data collection approach. Computer Assisted Personal Interviews (CAPI) was used. The data collected was sent to the server at the ZamStats head office. The data collected was monitored by the ZamStats head office IT staff through a monitoring system that was programmed to perform further data quality checks and produce field data check tables. Field work took three weeks and an additional week was included for the mop-up exercise. Quality control in the pilot census was ensured through effective supervision of the teams during fieldwork. The first level of supervision was provided by the supervisors. The supervisors were responsible for closely monitoring the work of the teams to ensure that all households were visited, all respondents were contacted, and all procedures were accurately implemented. Close communication was maintained at all times between the Census Office and field personnel during fieldwork. Field check tables were used to monitor fieldwork quality and make the necessary adjustments if data quality problems were detected.

A review of the pilot census exercise was done after field work. A report containing a summary of the pilot census findings aimed at assisting to revise the field operations plans as well as to put in place measures to avoid all logistical challenges faced during the pilot census from recurring during the main census enumeration was produced. The report also contained summary tables to validate the tabulation plan which would be used during the main census.

1.3.6. Data collection phase

Data collection for the 2022 census was carried out using computer assisted personal interviews (CAPI) and traditional face-to-face interviews were used. Field work commenced on 18th August, 2022, and ended on 14th September, 2022, with a one week extension for the mop-up exercise. Before enumeration, data collectors went round the enumeration areas (EA) with the use of enumeration area maps to identify boundaries and generally to familiarize themselves with the areas.

Persons below the age of 35 that had completed their Secondary School Education were recruited as Enumerators and Supervisors. College and university graduates were selected as Zonal Census Coordinators. The ZamStats officers were appointed as District Census Coordinators (DCCs) and these were assisted by District Census IT Coordinators and the District Census IT Supervisors, who were recruited from ZamStats and the line ministries. There were 38,570 enumerators, 6,430 supervisors, 1,880 zonal census coordinators, 116 DCCs, 116 DCITCs and 116 DCITSs.



Enumerators were assigned an EA each. During enumeration, data collectors used electronic EA maps prepared by the Geographic Information System (GIS) Unit to identify households and conduct interviews. The maps contained geo-referenced households from the Mapping and Listing exercise conducted from 2019 to 2020. Households whose markers were not appearing on the maps were added and interviewed.

In vast EAs where enumerators had to move long distances, bicycles were used to move around these EAs to cover households. Supervisors on the other hand mostly used motor bikes to navigate the areas, collect data from enumerators' tablets and send data to the central server at the head office.

A census dashboard was set up for data quality control as enumeration was in progress. It assisted with assessing the coverage of areas as well as monitoring several questionnaire content indicators such as population size, fertility rate, sex ratio, average household size, response rate, among others. Furthermore, spot checks and re-interviews were conducted by census supervisors to ensure quality data was collected.

The 2022 CPH used both the de facto and de jure method of enumeration. The midnight of 8th September 2022 was the reference date for the 2022 CPH or the census reference moment. The three week period (18th August– 7th September) was taken as the census reference period. During this period, all persons residing in Zambia, other than diplomats, were enumerated regardless of their residence status. Those who were outside the country and were not expected to be back within 6 months were not enumerated.

1.3.7. Post enumeration phase

The GIS, using the satellite imagery validated the enumeration area coverage by the data collectors. Where households were missed, data collectors had to go back to ensure complete enumeration. Households falling outside the boundaries were realigned. Apart from GIS enumeration area coverage validation, the post enumeration phase also involved data cleaning and processing for the questionnaire content. During this process data was checked for errors, completeness, duplicates, consistency and also its validity.



CHAPTER 2: Demographic characteristics









CHAPTER 2:

DEMOGRAPHIC CHARACTERISTICS

KEY FINDINGS

Population Size

- The De Jure population was 19,693,423, of which 9,657,260 were males and 10,036,163 were females.
- The population of Zambia is predominantly rural, with 55.3 percent of the total population in rural areas and 44.7 percent in urban areas.

Growth Rate

- Between 2010 and 2022, the population grew at an average annual growth rate of 3.5 percent.
- North Western Province recorded the highest growth rate at 4.8 percent while Lusaka and Copperbelt provinces recorded the lowest at 2.9 percent each.

Population Density

• Lusaka Province had the highest population density of 141.3 and North Western Province had the lowest at 10.2 persons per square kilometre.

Median Age

• The median age in 2022 was 18.3 years, an increase from 16.9 in 2010.

Working-age Population

• The working-age population increased in proportion from 52.0 percent in 2010 to 55.2 percent in 2022.

Age Dependency Ratio

• The overall age dependency ratio declined from 92.5 in 2010 to 82.1 dependants per 100 working-age individuals in 2022.

Sex Ratio

• The overall population had 96 males per 100 females, indicating a 2.7 percent male deficit. The sex ratio (Masculinity ratio) at birth was 103 males per 100 females.

2.0. Introduction

This chapter presents an analysis of levels and trends in the population size, growth and distribution. It also presents other demographic aspects of the population such as density, age composition, sex composition, age and sex structure; and age dependency ratios.

2.1. Concepts and definitions

• **Census of Population:** this is the 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).

- **Population Growth Rate:** this is the change in the size of the population as a proportion of the total population of an area. Estimated yearly, it gives the average annual growth rate for each year of the inter-censal period.
- **Population Density:** this is defined as the total number of persons per square kilometre.
- **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, health centres and academic institutions like universities, colleges and boarding schools are counted as members of their usual household.
- **De facto Population:** this refers to household members and visitors who were present at a household during the census. 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 and De facto Population counts- The De jure count is considered the true or resident population of a country. It is used to present the age-sex distribution and as a denominator in the calculation of vital indicators such as gross and net enrolment rates for the education sector. Unlike the De jure population count, the De facto count includes data on various social, economic and health characteristics for individuals who were absent from the household at the time of the census. Figure 2.1 shows the difference between the De jure and De facto count.











- Sex ratio this is the number of persons of one sex per 100 of the other sex. It can be calculated as masculinity ratio (number of males per 100 females) or femininity ratio (this is the number of females per 100 males). A value equal to 100 indicates equal males and females.
- **Percent deficit** this shows the percent at which males are fewer than females. A negative value shows a deficit of males while a positive value shows an excess of males.
- Age Dependency Ratio this is a demographic measure that shows the ratio of population aged 0-14 years and persons aged 65 years and older per 100 persons in the age group 15- 64 years old.
- **Child Dependency Ratio** this is the number of children aged below 15 years per 100 persons aged between 15 and 64 years.
- Aged Dependency Ratio this is the number of persons aged 65 years and older per 100 persons aged between 15 and 64 years.
- **Overall Dependency Ratio** this is the number of children below 15 years and elderly persons aged 65 and older per 100 persons aged between 15 and 64 years.

2.2. Population size

This refers to the absolute number of people enumerated at the time of the census. The census moment and the reference date for the 2022 Census of Population and Housing was 00:00 hours on 8th September 2022. The enumeration period was from 18th August to 7th September 2022.

The population of Zambia in 2022 was 19,693,423 persons, an increase from 13,092,666 in 2010. Figure 2.2 shows Zambia's De jure population size for the 1969, 1980, 1990, 2000, 2010 and 2022 Census years.

Figure 2.2: Population size (De jure), Zambia 1969 - 2022


The population in rural areas increased from 7,919,216 in 2010 to 10,900,054 in 2022 while the urban population increased from 5,173,450 in 2010 to 8,793,369 in 2022 (**Figure 2.3**).



Figure 2.4 shows the Population Size by Sex and Rural/Urban. In 2022, there were 10,036,163 females and 9,657,260 males, indicating more females compared to males. The same pattern of having more females than males was observed in both rural and urban areas.





Figure 2.3: Population Size Rural/Urban, Zambia 2010 and 2022



Figure 2.5 shows population size by province. Lusaka Province has the largest population of 3,093,617, followed by Copperbelt with 2,768,192. The other provinces with a population of over 2 million are Eastern, Southern, and Central provinces.



Figure 2.5: Population size (de jure) by province, Zambia 2022

A comparison between the 2010 and 2022 censuses indicates an increase in the population size in all provinces (Figure 2.6).



Figure 2.6: Population distribution by province, Zambia 2010 and 2022

Table 2.1 shows a summary distribution of the population by sex, rural/urban and province. The provinces with the largest population in urban areas was Lusaka (2,774,038), followed by Copperbelt (2,303,964), Southern (692,159), and Central provinces (676,617). Eastern Province had the largest rural population at 2,018,497 while Lusaka recorded the least at 319,579.



Drovinco	Total			Rural			Urban		
FIOVINCE	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	19,693,423	9,657,260	10,036,163	10,900,054	5,407,970	5,492,084	8,793,369	4,249,290	4,544,079
Central	2,261,336	1,122,735	1,138,601	1,584,719	796,279	788,440	676,617	326,456	350,161
Copperbelt	2,768,192	1,361,013	1,407,179	464,228	235,640	228,588	2,303,964	1,125,373	1,178,591
Eastern	2,462,682	1,215,490	1,247,192	2,018,497	1,001,540	1,016,957	444,185	213,950	230,235
Luapula	1,519,478	747,398	772,080	1,114,146	550,602	563,544	405,332	196,796	208,536
Lusaka	3,093,617	1,497,994	1,595,623	319,579	162,191	157,388	2,774,038	1,335,803	1,438,235
Muchinga	922,213	455,278	466,935	688,030	341,439	346,591	234,183	113,839	120,344
Northern	1,623,853	800,648	823,205	1,218,888	605,988	612,900	404,965	194,660	210,305
North Western	1,278,357	626,652	651,705	704,417	348,082	356,335	573,940	278,570	295,370
Southern	2,388,091	1,168,167	1,219,924	1,695,932	838,016	857,916	692,159	330,151	362,008
Western	1,375,604	661,885	713,719	1,091,618	528,193	563,425	283,986	133,692	150,294

Table 2.1: Total population size (de jure) by sex, rural/urban and province, Zambia 2022.

2.3. Annual population growth and trends in the population size and distribution

Figure 2.7 shows the percent annual average rate of population growth by Rural/Urban. The population grew at an annual growth rate of 3.5 percent. This was an increase from the annual rate of 2.4 percent and 2.8 percent recorded during the 1990-2000 and 2000-2010 inter-censal periods, respectively.

A growth rate of 3.5 is relatively higher than the African standard averaging 2.4. At this rate, Zambia's population is expected to double in 20 years, 8 years ahead of most African Countries' doubling time. The annual population growth rate of the urban population increased from 4.2 percent during the 2000-2010 to 4.5 percent in 2010-2022 inter-censal periods. Similarly, the rural population grew at an annual rate of 2.7 percent in the 2010-2022 inter-censal period, an increase from a rate of 2.1 in the 2000-2010 inter-censal period.







Figure 2.8 shows the annual average rate of population growth by province. All provinces recorded a population increase between 2010 and 2022 inter-censal period. North Western had the highest average annual growth rate at 4.8 percent. Central Province had the second-highest growth rate at 4.7 percent. Copperbelt and Lusaka provinces had the lowest growth rate at 2.9 percent each.



Figure 2.8: Average annual growth rate by province, Zambia 2022

Table 2.2 shows the population size, percentage change, growth rate and the population doubling time by rural/urban residence and province. The percent change for the population of Zambia was 50.4 percent during the 2010-2022 inter-censal period. Given an annual growth rate of 3.5, the population of Zambia will double in twenty years. Urban areas had a percent change of 70 percent and a doubling time of 15.6 years given a growth rate of 4.5 percent per annum, compared to rural areas that exhibited a percent change of 37.6 percent and doubling time of 25.9 percent. Among provinces, the highest percentage change and lowest doubling time were seen in North Western Province at 75.8 percent and 14.6 years respectively. The lowest percent change was in Muchinga Province at 29.6 percent. The highest doubling time were observed in Lusaka province 24.1 years.

Province/ Rural/	Popula	tion Size	Percentage Change	Growth Rate Per Annum	Doubling Time	
Urban	2010	2022	2010-2022	2010-2022	(redis)	
Total	13,092,666	19,693,423	50.4	3.5	20.0	
Rural	7,919,216	10,900,054	37.6	2.7	25.9	
Urban	5,173,450	8,793,369	70.0	4.5	15.6	
Province						
Central	1,307,111	2,261,336	73.0	4.7	14.9	
Copperbelt	1,972,317	2,768,192	40.4	2.9	24.1	
Eastern	1,592,661	2,462,682	54.6	3.2	21.9	
Luapula	991,927	1,519,478	53.2	3.6	19.4	
Lusaka	2,191,225	3,093,617	41.2	2.9	24.1	
Muchinga	711,657	922,213	29.6	3.5	20.0	
Northern	1,105,824	1,623,853	46.8	3.3	21.2	
North Western	727,044	1,278,357	75.8	4.8	14.6	
Southern	1,589,926	2,388,091	50.2	3.4	20.6	
Western	902,974	1,375,604	52.3	3.6	19.4	

Table 2 2. Population	size and growth ind	icators by province	and rural /urban	Zambia 2010 and 2022
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2.4. Population distribution

Figure 2.9. shows the percentage distribution of the population by rural/urban in 2000, 2010, and 2022. The population of Zambia has remained largely rural at 55.3 percent. The rural population declined to 55.3 percent in 2022 from 65.3 percent in 2000. The population in urban areas increased from 34.7 percent in 2000 to 44.7 percent in 2022.



Figure 2. 9: Percentage distribution of the population by rural/urban, Zambia 2000-2022

Figure 2.10 shows the population distribution by inter-censal percent change and rural/urban. The population living in urban areas increased from 51.0 percent between 2000 and 2010 to 70.0 percent between 2010 and 2022. The increase in the urban population could have been driven by rural/urban migration, it could also due to the urbanization of some rural areas during the inter-censal period

Figure 2.10: Population distribution by inter-censal percent change and rural/urban, Zambia 2000-2010 70.0





In Zambia, there were more females than males, with 51 percent of the population being female compared with 49 percent males. Both rural and urban areas had a predominantly female population (Figure 2.11).



Figure 2. 11: Percentage distribution of the population by sex and rural/urban, Zambia 2022

Figure 2.12 shows the percent distribution of the population by province and rural/urban from 2010 to 2022. In 2022, Lusaka province had the highest share of the total population at 15.7 percent followed by Copperbelt at 14.1 percent. Muchinga province had the lowest share of the population at 4.7 percent. Between 2010 and 2022, the contribution of Lusaka, Copperbelt, Muchinga, and Northern provinces to the population of Zambia declined.





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Figure 2.13 shows the percentage change in population between 2010 and 2022. The contribution of Northern, Muchinga, Lusaka and Copperbelt provinces to the national population of Zambia declined. The population of urban areas increased by 5.1 percentage points while that of rural areas reduced by 5.1 percentage points. Central, Northwestern, Eastern, Western and Luapula provinces had a positive increase while Northern, Muchinga, Lusaka and Copperbelt had a negative increase.





2.5. Population density

Figure 2.14 shows the population density of Zambia from 1990 to 2022. Zambia has a total surface area of 752,612 square kilometres. The country was sparsely populated with a population density of 26.2 persons per square kilometre in 2022. The population density increased from 17.4 in 2010 to 26.2 persons per square kilometre in 2022.



Figure 2.14: Population density, Zambia, 1990, 2000, 2010 and 2022



Figure 2.15 is a map showing the population density by province in 2022. Lusaka Province had the largest population density of 141.3 persons per square kilometre compared with other provinces. Copperbelt Province was second, with a population density of 88.4 persons per square kilometre. North western Province was the least densely populated province at 10.2 persons per square kilometre.





Figure 2.16 shows Zambia's population density by province from 2010 to 2022. All provinces have increased population density per square kilometre over the 2010 to 2022 inter-censal period. With an increase in population particularly in predominantly urban provinces of Lusaka and Copperbelt, there is a need for enhanced provision of social services such as roads, housing, public health services, and education.



Figure 2.16: Population Density by Province, Zambia 2010 and 2022

2.6. Age composition

The age and sex structure of a population, also referred to as the age and sex composition, shows the number or proportion of males and females in each age category. Age and sex are important demographic characteristics used for the planning and delivery of services such as health and education. The 2022 census collected information on sex and age. Information on age was collected in completed years at the time of enumeration

2.6.1. Population by selected age groups

Figure 2.17 presents the distribution of the population by sex and five-year age groups. Results show a young population age structure with high percentages in the population below the age of 15. There was a higher percentage of males than females at birth up to age 15-19, and age groups 40-44 to 50-54.



Figure 2.17: Percentage distribution by sex and five-year age groups, Zambia 2022



Figure 2.18 shows the age distribution by rural/urban. A comparison of the age distribution shows a higher percentage of the population aged 0-14 years and 55 years and older in rural areas. However, the proportion of the population aged 15-54 years in urban areas was higher than that of rural areas. This appears to be due to the migration of people in the working-age from rural to urban areas.



Figure 2.18: Population by age and sex structure, rural/ urban, Zambia 2022

The age and sex structure is further illustrated in the population pyramids in Figures 2.19, 2.20, and 2.21. The population pyramids indicate that the age and sex structure for national, rural and urban areas generally depicts a young population with small populations of 65 years and older. However, the population pyramids illustrate that there is a slight shift in the population structure. At the national level, for the first time, the population in the age group 5-9 and 10-14 appear to be almost the same size as the population in the age group 0-4 years.

In 2022, the age and sex pyramid for Zambia shows very little differences in the numbers of those aged below 15 years by sex. It still shows a decrease in the numbers with an increase in age after age group 10-15. This observation is similar to rural and urban populations.















Median age is the age which divides the population into two equal parts, one above and one below, implying that one-half of the population is younger than the median age while the other half is 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 2.22 shows the median age for the country by rural and urban residence in 2010 and 2022. The median age was 18.3 in 2022. It shows an increase between 2010 and 2022. In urban areas, the median age was 20.3 years while in rural areas, it was 16.8 years. Despite an increase, Zambia population is still predominantly young, thus efforts should be tailored towards harnessing a youthful demographic dividend through investment in health, education and skills development.





Figure 2.23 shows the median age by sex and rural/urban. In 2022, the median age for females and males was 18.5 and 18.1 years respectively. In rural areas, the median age for females was higher than that of males at 17.1 and 16.5 years, respectively. In urban areas, the median age for males was at 20.4 years, slightly higher than that of females at 20.2 years.



Figure 2.23: Median age by sex and rural/urban, Zambia 2022

Figure 2.24 shows the median age by province. Other than Lusaka and Copperbelt provinces, the median age for males was lower than for females in all the provinces. This suggests an in migration of males of productive age group in industrial provinces of Lusaka and Copperbelt, leaving other provinces predominantly with females in more productive ages.



Figure 2.24: Median age by province, Zambia 2022

2.6.3. Population by selected age groups

For targeted interventions, proportions of selected age groups have been presented. Selected age groups include proportions of the population under five years (<5); under fifteen (<15), sixteen years and older (16+), adolescents aged 10-19; adolescents in the middle and late adolescence stages (15-19); persons under eighteen (<18); adults 18 years and older; youths aged between 15-24 and 19-34 years; persons aged between 15-64 years and older people aged 65 years and older.

Figure 2.25 shows the population proportions by selected age groups in 2010 and 2022. Between 2010 and 2022, the proportion of the population 0-4 years, under fifteen (<15), and 0-18 years declined. The proportion of the population eligible to obtain a National Registration Card (16+ years) increased from 52.1 percent to 55.4 percent of the total population between the 2010 and 2022 inter-censal period. A similar pattern was observed for the proportion of the population aged 15-24 years, 18 years and older, 15-64 years, and the proportion of older people 65 years and older.









Figure 2.26 shows the population proportions of selected age groups by rural/urban. Urban areas had high proportions of the population in age groups 15-24, 16+, 19-34, 15-64 and 18+ while rural areas had a higher proportion of the population 0-4, under the age of 15 years, 0-18 and 65+. This shows that rural areas have a higher proportion of older people than urban areas. A higher proportion of youthful population in urban areas suggests a migration of younger people from rural to urban areas.



Figure 2.26: Population proportions of selected age groups by rural/urban, Zambia 2022

2.7. Youth population (19-34 years)

Figure 2.27 shows the youth population 19-34 years by rural/urban. There were more female than male youths. A similar pattern was observed for both rural and urban areas. This indicates that there are more youthful females than males in Zambia.







Figure 2.28 shows the percentage of the youth population aged 19-34. The population aged 19-34 years increased from 25.7 percent in 2010 to 26.1 percent in 2022.





Figure 2.29 shows the percentage of youth population aged 19-34 years by sex and rural/ urban. At national level, female youth accounted for 51.9 percent while male youth accounted for 48.1 percent. In both rural and urban, there were more female youths than males.









Figure 2.30 shows the youth population aged 19-34 years by province. In all the provinces, the youth population increased. Lusaka Province recorded the highest increase from 680,956 in 2010 to 966,347 in 2022. Muchinga Province had the lowest increase from 165,808 in 2010 to 230,473 in 2022.



Figure 2.30: Youth population aged 19-34 years by province, Zambia 2010 and 2022

2.8. Population of children aged below 15 years and the elderly 65 years and older

Figure 2.31 shows the percentage of children aged below 15 years and the elderly (65 years and older) by province. Muchinga Province had the lowest percent of both the children below 15 years and the elderly aged 65 years and older at 17.9 percent and 1.3 percent, respectively. Eastern Province had the highest proportion of children below 15 years at 49.3 percent while Copperbelt Province had the highest percent of older population (65 years and older) at 4.0 percent.





2.9. Sex composition

In this report, two measures are used to describe the sex composition of the population. These are sex ratio (masculinity ratio) and the percent deficit of males.

2.9.1. Sex ratio and percent deficit of males

Table 2.3 shows the sex ratio by five-year age groups and rural/urban. The general pattern of the sex ratio shows a gradual decrease with age, where there are more males than females at birth, and eventually, the number of males falls below 100. Overall, the sex ratio was 96 males per every 100 females, 98 for rural areas and 94 for urban areas. The sex ratio for the population in the age groups 40-54 was high, indicating that there were more males than females (ranging from 103 to 108 males per 100 females). A similar pattern was observed in rural and urban populations for the ages 40-44 and 45-49 years. The sex ratio of the population aged 0 - 19 years in rural areas was high (100 to 105 boys per 100 girls). However, the sex ratio of the same age group for the urban population was low with 87 to 99 males per 100 females. This shows fewer males than females in urban areas.

Table 2.0. Sex ratio by five year age groups by ratid/arban, Zambia 2022						
Age Group	Zambia	Rural	Urban			
Total	96	98	94			
0 - 4	100	100	99			
5-9	98	100	96			
10-14	97	103	90			
15 - 19	97	105	87			
20 - 24	93	98	87			
25 - 29	91	96	87			
30 - 34	96	96	96			
35 - 39	93	89	97			
40 - 44	103	98	107			
45 - 49	108	102	115			
50 - 54	107	102	114			
55 - 59	92	90	95			
60 - 64	85	86	83			
65 - 69	83	83	82			
70 - 74	70	67	75			
75 - 79	65	62	69			
80 - 84	70	73	65			
85+	74	81	61			

Table 2.3: Sex ratio by five-year age groups by rural/urban, Zambia 2022



Figure 2.32 shows the sex ratio and percent deficit of males by rural/urban and province. There were fewer males per 100 females, with a sex ratio of 96.2 males per 100 females. This indicates a deficit of males at 2.7 percent of the total population. The sex ratio was highest in Central Province at 97.4 males per 100 females, indicating a 1.3 percent deficit of males. Lusaka Province had the lowest sex ratio at 91.0 males per 100 females, indicating a 4.5 percent deficit of males.





2.9.2. Sex ratio at birth

Figure 2.33 shows the sex ratio at birth by province and rural/urban. The births in the last twelve (12) months reported by women aged 15-49 years were used as a proxy for calculating the sex ratio at birth. The sex ratio at birth was 103 males per 100 females, indicating an excess of males at birth. At the provincial level, Western Province had the highest sex ratio at birth (105), while Copperbelt, Luapula, Lusaka and Eastern provinces had the lowest at 102 each.



Figure 2.33: Sex ratio at birth by province and rural/urban, Zambia 2022

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2.10. Age dependency ratios

Figure 2.34 shows the age dependency ratios by rural/urban for the years 2010 and 2022. The overall dependency ratio was 81.2 persons for every 100 persons in the productive population, which was a reduction from 92.5 in 2010. Similarly, the child dependency ratio declined from 87.4 in 2010 to 76.1 in 2022. The pattern is similar for both rural and urban areas.





Figure 2.35 shows the overall, child and aged dependency ratios by province. Western Province had the highest overall dependency ratio while Lusaka Province had the lowest, at 94.5 and 62.1 persons for every 100 persons aged 15-64 years, respectively.



Figure 2. 35: Overall, child and aged dependency ratios by province, Zambia 2022



CHAPTER 3: SOCIAL CHARACTERISTICS









CHAPTER 3:

SOCIAL CHARACTERISTICS

KEY FINDINGS Marital Status

- Never-married individuals constituted the largest share at 49.8 percent of persons aged 10+, followed by monogamously married at 38.6 percent while only 1.2 percent were cohabiting.
- Urban areas had a higher percentage of never-married persons (52.5 percent) than rural areas (47.5 percent).
- Polygamous unions were more prevalent in rural areas (3.6 percent) than in urban areas (0.6 percent).
- A comparison with 2010 showed a decline in marriage rates (from 53.0 percent to 50.5 percent) and a slight increase in divorce (from 2.8 percent to 3.2 percent).

Median Age at First Marriage

- The national median age at first marriage was 20.9 years; 23.8 years for males and 19.6 years for females.
- Urban residents marry later (22.4 years) compared to rural residents (20.4 years).
- The highest median age was in Lusaka (22.7 years); the lowest was in Eastern Province (20.3 years).
- All provinces saw a rise in the median age at first marriage from 2010 to 2022, signalling a trend toward delayed unions.

Citizenship

- Zambians made up 99.3 Percent of the population.
- Dual citizenship holders were 0.1 Percent, with most also holding DR Congo (15.2 Percent) or Zimbabwean (14.9 Percent) citizenship.
- Non-Zambians (0.4Percent) were mainly in Zambia for family reasons (37.5 Percent) or as refugees.
- The top countries of origin for non-Zambians were DR Congo (26.5 percent) and Malawi (13.0 percent).

Religious Affiliation

- Christianity remained dominant at 98 percent of the population.
- Islam represented 0.5 percent, and 1.3 percent reported no religious affiliation.
- Catholic, Seventh-Day Adventist and Pentecostal denominations had the highest percentage of the Christian population at 17.9, 17.7 and 17.5 percent, respectively.
- The Pentecostal denomination had the highest percentage of the Christian population in urban areas at 24.7.
- Eastern Province had the highest proportion of non-Christian affiliations and unaffiliated individuals (4.1 percent).
- In terms of sex, more males were Catholics while more females were Pentecostal.

Civil and Vital Registration

- Overall, 16.6 percent of the population aged 0-49 years had a birth certificate, 25.5 percent in urban areas and 2.5 percent rural areas.
- About 31 percent of the reported deaths had a death certificate; 54.2 percent in urban and 16.1 percent in rural areas.

This chapter presents information on social characteristics, focusing on marital status, citizenship, religious affiliation, and vital and civil registration. Understanding these elements is crucial for assessing population dynamics, legal identity, and social structures in the country.

3.1. Concepts and definition

- Never Married: This is someone who has never been in any marital union to a person of the opposite sex.
- Marriage: This is a union between two or more people of the opposite sex with an intention
 of living together as husband and wife, legalised through civil, religious, customary law, by
 a competent authority such as a registrar of marriages, a religious or traditional leader. A
 marriage can be a first marriage or re-marriage and individuals can be monogamously or
 polygamously married.
- **Monogamous marriage:** This is a marital union of two individuals of the opposite sex with an intention to live as husband and wife, legalised under civil law, religious or customary law by a competent authority such as a registrar of marriages, a religious or traditional leader. A person who is monogamously married has one spouse.
- **Polygamous marriage:** this is a marital union to more than one person of the opposite sex. It is a marriage with more than one spouse. A man who marries two or more women or a woman that gets married to two or more men is in a polygamous marriage. A union of one man with more than one wife is Polygyny while a union of a woman to more than one husbands is Polyandry.
- **Divorced:** This is the final legal dissolution of a marital union declared by legal or judicial decree through a competent authority. A competent authority can be taken from civil, religious and customary law. A divorce confers on the individuals that were united the right to remarry under civil, customary and religious laws.
- **Separated:** This is a case where individuals are still in a marital union but living separately. The Separations are usually given or decreed by a competent authority (Civil or legal or religious). A separation can either lead to reconciliation or divorce.
- Widowed: a man or woman whose partner died and has no wife/husband at present. A widow is a woman who has lost a male spouse to death while a widower is a man who has lost a female spouse to death.
- **Cohabiting/living together:** a man and a woman living together like a married couple without any legal, religious or customary consent of the union.
- Ever married: these are people that have ever experienced a marriage or are in a marital union. It includes the married, divorced and widowed
- Age at First Marriage The age at which the respondent began living with her/his first spouse/ partner.
- **Citizenship:** The relationship between an individual and a state to which the individual owes allegiance and in turn is entitled to its protection
- Zambian Dual Citizenship: This is the acquisition of the citizenship of one other country in addition to the Zambian citizenship.
- **Religion:** System of belief and worship.



- Religious Affiliation: Specific religion an individual identifies with.
- **Civil Registration:** A continuous, permanent, compulsory and universal recording of the occurrence and characteristics of vital events pertaining to the population in accordance with legal requirements of each country.
- **National Registration Card:** An identity card issued by the national registration authority to persons who attain age 16.
- Birth Certificate: A first official acknowledgement of a child's existence by the state.
- **Death Certificate:** A legal document issued by a government civil registration office, that declares the date, location and cause of a person's death, as entered in an official register of deaths.
- **Vital Statistics:** Data on vital events of a person as well as relevant characteristics of the events themselves and of the person(s) concerned.
- **Religion:** System of belief and worship.
- Religious Affiliation: Specific religion an individual identifies with.

3.2. Marital status

In the 2022 CPH information on marital status was collected for all persons aged 10 years and older. Figure 3.1 shows the percentage distribution of the population 10 years and older by marital status. The highest percentage of the population aged 10 years and older was never married (49.8 percent), followed by the monogamously married (38.6 percent). The lowest was cohabiting/living together at 1.2 percent.



Figure 3.1: Percentage distribution of the population 10 years and older by marital status, Zambia 2022



Figure 3.2 shows the percentage distribution of the population 10 years and older by marital status and rural/urban residence. In 2022, the percentage of persons who were never married was more in urban areas at 52.5 percent compared with rural areas at 47.5 percent. The percentage of persons who were polygamously married was more in rural areas at 3.6 percent compared to 0.6 percent in urban areas.





Figure 3.3 shows the percentage distribution of the population aged 10 years and older by marital status and sex. Persons who were never married were more among the males at 55.0 percent compared with females at 45.0 percent. The percentage of persons who were divorced was higher among females at 3.7 percent compared with males at 1.3 percent. Furthermore, the percentage of the widowed females was higher at 6.7 percent compared with that of males at 0.9 percent.





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Figure 3.4 shows the percentage distribution of the population 15 years and older by marital status in 2010 and 2022. The two categories, monogamously married and polygamously married were combined in the 2022 Census to come up with one variable "married" in order to make it comparable with the 2010 Census.

The results show that the population that was married was 50.5 percent in 2022 compared with 53.0 percent in 2010. However, the percentage of persons who were divorced was 2.8 percent in 2010 compared with 3.2 percent in 2022. This indicates that there were more persons who were divorced in 2022 compared with 2010.





3.2.1. Median age at first marriage

Median age at first marriage divides the married population into two parts, that is, half of that population (50 percent) got married at the age younger than the median age and the other half got married at an age older than the median age. The analysis was done on the population aged 15 years and older to make it comparable with the 2010 census.

Figure 3.5 shows the median age at first marriage by sex and rural/urban. The median age at first marriage was 20.9 years. The median age at first marriage was lower in rural areas (20.4 years) than in urban areas (22.4 years). This indicates that persons in rural areas were married earlier compared with persons in urban areas. The median age for males was 23.8 years while that of females was 19.6 years. This suggests that females in Zambia were more likely to marry earlier than males.





Figure 3.6 shows the population 15 years and older by median age at first marriage in 2010 and 2022. The results show that the median age at first marriage increased from 20.7 years in 2010 to 20.9 years in 2022. There was a slight decrease for males from 24.2 years in 2010 to 23.8 years in 2022 and a slight increase among the females from 18.8 years in 2010 to 19.6 years in 2022.







Figure 3.7 shows the median age at first marriage by province. Lusaka Province had the highest median age at first marriage of 22.7 years, while Eastern Province had the lowest at 20.3 years. This means that persons in Eastern Province marry at an early age compared with the rest of the provinces.



Figure 3.7: Ever married population 15 years and older by median age at first marriage and province, Zambia 2022

Figure 3.8 shows the median age at first marriage by province for 2010 and 2022. The median age at first marriage increased in all the provinces, indicating that persons in 2010 got married at an early age compared with persons in 2022.





2010 2022

3.3. Citizenship

Citizenship is a fundamental aspect of identity, determining an individual's legal rights and obligations within the country. Figure 3.9 shows the percentage distribution of the population by citizenship. Zambian citizens accounted for 99.3 percent of the population, while 0.1 percent had dual citizenship and 0.4 percent were non-Zambian.



Figure 3.9: Percentage distribution of the population by citizenship, Zambia 2022

Figure 3.10 shows the percentage distributions of Zambians with Dual citizenship by top 15 other countries of citizenship. Zambian citizens who also have DR Congo citizenship had the highest percentage at 15.2, followed by those with Zimbabwean citizenship at 14.9 percent. All the other countries not in the top 15 collectively accounted for 13.8 percent of Zambians with duo Citizenship.



Figure 3.10 Distribution of Zambians with dual citizenship by top 15 other countries of citizenship, Zambia 2022



Figure 3.11 shows the percentage distribution of the non-Zambian population by purpose of stay in Zambia. The results show that majority (37.5 percent) of non-Zambians cited family reasons as the main reason for being in Zambia, followed by refugees at 31.4 percent. The least reason which was cited was those in transit at 1.2 percent.





Figure 3.12 shows the percentage distribution of non-Zambians by the top 15 countries of Citizenship. DR Congo had the highest percentage at 26.5 followed by Malawi at 13.0 percent.





3.4. Religion

Religious affiliation plays a significant role in shaping cultural norms, values, and social interactions. Zambia is a religiously diverse nation. Religious groups were further divided into denominations. Christianity had over 23 denominations, while Islam had two main branches: Shia and Sunni. The remaining religious groups were not categorized by denomination.

3.4.1. Religious affiliation

Figure 3.13 shows the percentage distribution of the population by religious affiliation. The 2022 CPH revealed that, 98.0 percent of the population were Christians. Islam accounted for 0.5 percent of the population while 1.3 percent of the population were not affiliated with any religion.



Figure 3.13: Percentage distribution of population by religious affiliation, Zambia 2022

Figure 3.14 shows the percentage distribution of the population by religious affiliation and sex in Zambia. Christianity accounted for the majority of both males and females. The male and female Christians were 97.4 percent and 98.5 percent, respectively.



Figure 3.14: Percentage distribution of population distribution by religious affiliation and sex, Zambia 2022



Figure 3.15 shows the percentage distribution of the population by religious affiliation and rural/ urban. Christianity accounted for the majority in both urban and rural areas at 98.1 percent and 97.8 percent, respectively. Those affiliated to African Traditional Religion accounted for 0.3 percent in rural areas and 0.1 percent in urban areas.





Figure 3.16 shows that all provinces had a higher proportion of Christians compared to "other religious" groups and None religious affiliation. Eastern Province had the highest percentage of the population affiliated to "other religious groups" and No religious affiliation at 4.1 percent.



Figure 3.16: Percentage distribution of population by religion affiliation and province, Zambia 2022

Christianity

Other Religious Groups and None Religious Groups

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Figure 3.17 illustrates the percentage distribution of the Christian population by denomination. The Catholic denomination had the highest percentage at 17.9 percent, followed by Seventh-Day Adventist with 17.7 percent and Pentecostal at 17.5 percent. The Lutheran, Episcopal, and Restoration denominations had the lowest share at 0.1 percent each.



Figure 3.17: Percentage distribution of the Christian population by denomination, Zambia 2022

Figure 3.18 shows that the Pentecostal denomination had the highest percentage of females at 18.2 percent while catholic had the highest percentage of males at 18.1 percent.







Figure 3.19 shows the percentage distribution of Christian population by denomination and rural/ urban. Seventh-Day Adventist (SDA) had the highest percentage at 20.3 percent in rural areas followed by catholic at 17.8 percent. In urban areas, Pentecostal accounted for the highest percentage at 24.7 percent followed by catholic at 18.1 percent.



Figure 3.19: Percentage distribution of Christian population by denomination and rural/urban, Zambia 2022

3.5. Birth registration

In 2022, the population aged 0-49 years old was 16,632,119. Information on whether a birth was registered with the Department of National Registration, Passports and Citizenship (DNRPC) was collected for all persons aged 0-49 years. Thirty one percent of the population aged 0-49 years had their birth registered, of which 43.7 percent were urban areas while 20.9 percent were in rural areas (Figure 3.20).



Figure 3.20: Percentage distribution of population aged 0-49 years with or without a birth registered by rural/urban, Zambia 2022

Figure 3.21 shows that the percentage of females whose birth was registered was proportionately higher at 31.3 percent than males at 30.7 percent.





Figure 3.22 shows the percentage distribution of the population aged 0-49 years born in Zambia by birth registration status and province. Lusaka province had the highest percentage of the population with births that were registered at 49.5 percent, followed by Copperbelt province at 44.3 percent. Luapula province recorded the lowest percentage of the population with registered births at 17.7 percent.







3.6. Birth certificate

Information was collected for those aged 0-49 years on whether they had a birth certificate or not. Overall, 16.6 percent of the population aged 0-49 years had a birth certificate (Figure 3.23). About four in every five (80.4 percent) did not have birth certificates. The percentage of the population with birth certificates was higher in urban areas (25.5 percent) than in rural areas (9.5 percent).





Figure 3.24 shows the percentage distribution of the population aged less than 18 years with or without birth certificates or who did not know whether they had birth certificates or not for 2010 and 2022. There was an increase in proportion of the population below 18 years without birth certificates from 76.8 percent in 2010 to 81.7 percent in 2022.






Figure 3.25 shows the percentage distribution of the population aged 0-49 years born in Zambia by birth certification status, sex and province. The results show that there were proportionately more females with birth certificates (16.7 percent) than males (16.5 percent). The proportions of the population with a birth certificate by province range from 28.3 percent in Lusaka province to 7.5 percent in Luapula Province.





3.7. Death registration and certification

3.7.1. Death registration

Figure 3.26 shows the percentage distribution of deaths that occurred in the 12 months prior to the census by death registration status. About 40 percent of the deaths were registered with DNRPC. Additionally, results show a higher proportion (65.2 percent) of deaths registered in urban areas than in rural areas (24.2 percent).





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Figure 3.27 indicates the percentage of deaths registered by province. The percentage of registered deaths was higher in Lusaka Province at 70.9 percent, followed by Copperbelt at 69.3 percent. Luapula Province recorded the lowest percentage of deaths registered at 19.9 percent.





3.7.2. Death certificates

Figure 3.28 shows the percentage distribution of deaths that occurred 12 months prior to the census by death certification status and rural/urban. A total number of 100,639 deaths were reported to have occurred 12 months prior to the Census. Results show that 31.2 percent of the reported deaths had a death certificate. There were more death certificates in the urban areas (54.2 percent) compared with rural areas (16.1 percent).





Table 3.1 shows the percentage distribution of deaths that occurred in rural areas 12 months prior to the census by death certification status, age and sex. The results show that in both rural and urban areas, the percentage of death certificates generally increases with age of the decedent. However, a a general declining pattern is noted in the older ages from 60 years for rural areas and from 70 years in urban areas.



Age	Person who died			With Death Certificate			Without Death Certificate			Don't know		
Group	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	60,827	56.0	44.0	16.1	16.5	15.7	79.7	79.2	80.2	4.2	4.3	4.1
0 - 4	17,733	54.8	45.2	9.0	9.0	9.0	88.4	88.5	88.2	2.6	2.5	2.7
5 - 9	2,637	54.9	45.1	11.9	11.5	12.5	85.2	85.9	84.4	2.8	2.6	3.1
10 - 14	1,885	53.5	46.5	13.4	12.5	14.5	83.1	83.8	82.3	3.4	3.7	3.2
15 - 19	2,029	55.4	44.6	15.9	15.8	16.0	79.8	80.2	79.3	4.2	3.9	4.6
20 - 24	2,708	59.4	40.6	17.9	17.4	18.6	77.5	77.9	76.9	4.6	4.7	4.5
25 - 29	2,548	61.5	38.5	20.5	21.1	19.6	74.8	74.3	75.7	4.6	4.6	4.7
30 - 34	2,405	59.5	40.5	20.2	19.4	21.2	74.8	75.4	73.9	5.0	5.2	4.8
35 - 39	2,708	60.8	39.2	20.8	21.7	19.3	73.9	72.4	76.2	5.3	5.8	4.5
40 - 44	2,685	62.5	37.5	21.6	21.6	21.6	73.1	73.4	72.8	5.3	5.1	5.6
45 - 49	2,634	64.8	35.2	22.3	21.5	23.8	72.6	74.0	70.1	5.0	4.4	6.2
50 - 54	2,491	62.0	38.0	21.4	20.3	23.3	72.6	73.2	71.6	6.0	6.5	5.2
55 - 59	2,298	59.4	40.6	21.1	22.1	19.7	73.6	73.0	74.6	5.2	4.9	5.7
60 - 64	2,246	61.0	39.0	21.0	22.8	18.1	73.1	70.8	76.7	5.9	6.4	5.1
65 - 69	2,321	58.6	41.4	19.4	18.7	20.5	76.5	77.6	74.9	4.1	3.8	4.6
70 - 74	2,428	50.9	49.1	18.3	20.1	16.4	75.7	73.5	77.9	6.0	6.4	5.6
75 - 79	2,427	48.5	51.5	19.4	21.4	17.6	75.9	73.0	78.6	4.7	5.5	3.8
80 - 84	2,439	46.8	53.2	18.1	20.8	15.7	77.2	74.6	79.6	4.7	4.6	4.7
85 - 89	1,962	44.3	55.7	19.9	21.5	18.6	74.9	72.0	77.2	5.2	6.4	4.2
90 - 94	1,172	47.5	52.5	19.3	20.6	18.0	76.4	74.1	78.4	4.4	5.2	3.6
95 +	1,071	46.3	53.7	18.0	17.5	18.4	75.7	76.2	75.3	6.3	6.3	6.3

Table 3.1: Percentage of deaths that occurred 12 months prior to the census in rural areas by death certification status, Zambia rural, 2022

The percentage of death certificates was higher in urban (54.2 percent) than in rural areas (16.1 percent). (Table 3.1 & 3.2).

certification status, Zambia urban, 2022												
Age	Person who died			With Death Certificate			Without Death Certificate			Don't know		
Group	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	39,812	56.8	43.2	54.2	55.0	53.3	38.4	37.7	39.3	7.4	7.4	7.4
0 - 4	7,565	54.2	45.8	38.6	39.2	37.8	55.8	55.1	56.6	5.6	5.6	5.5
5 - 9	953	51.6	48.4	41.7	42.7	40.6	52.8	52.0	53.6	5.6	5.3	5.9
10 - 14	794	53.8	46.2	47.1	45.0	49.6	44.5	45.9	42.8	8.4	9.1	7.6
15 - 19	1,128	56.3	43.7	51.5	51.3	51.7	42.2	42.7	41.6	6.3	6.0	6.7
20 - 24	1,842	61.3	38.7	52.4	51.7	53.5	40.0	40.3	39.5	7.7	8.1	7.0
25 - 29	2,249	61.7	38.3	56.6	55.9	57.6	34.4	35.0	33.4	9.0	9.1	8.9
30 - 34	2,408	63.5	36.5	56.1	57.1	54.3	34.1	33.4	35.5	9.8	9.5	10.2
35 - 39	2,651	60.7	39.3	58.4	58.3	58.6	32.9	33.0	32.8	8.7	8.7	8.6
40 - 44	2,558	64.3	35.7	57.9	58.3	57.1	33.2	32.9	33.7	8.9	8.8	9.2
45 - 49	2,545	66.1	33.9	59.1	59.8	57.8	32.9	32.8	33.2	8.0	7.4	9.0
50 - 54	2,213	60.3	39.7	62.3	63.2	60.8	30.6	29.5	32.3	7.1	7.3	6.8
55 - 59	2,028	57.3	42.7	61.9	62.7	60.9	30.7	30.1	31.5	7.3	7.1	7.6
60 - 64	1,889	58.3	41.7	63.5	64.1	62.6	29.6	28.5	31.1	6.9	7.4	6.3
65 - 69	1,792	57.8	42.2	63.4	65.3	61.0	31.0	29.5	32.9	5.6	5.2	6.1
70 - 74	1,889	52.6	47.4	62.3	63.8	60.6	30.4	29.5	31.4	7.4	6.7	8.0
75 - 79	1,638	46.9	53.1	57.8	58.9	56.8	34.7	34.4	35.1	7.5	6.8	8.2
80 - 84	1,348	44.7	55.3	57.5	54.7	59.7	34.7	36.2	33.6	7.8	9.1	6.7
85 - 89	1,163	39.8	60.2	58.5	63.3	55.3	34.6	29.8	37.7	7.0	6.9	7.0
90 - 94	626	44.7	55.3	58.3	57.1	59.2	34.2	35.4	33.2	7.5	7.5	7.5
95 +	533	42.4	57.6	55.0	56.6	53.7	36.0	34.1	37.5	9.0	9.3	8.8

Table 3.2: Percentage of deaths that occurred 12 months prior to the census in rural areas by death certification status, Zambia urban, 2022



Figure 3.29 shows the percentage distribution of deaths that occurred 12 months prior to the census by death certification status and province. Copperbelt Province had the highest percentage of death certificates at 58.8 percent, followed by Lusaka Province at 58.6 percent. Central Province was third at 32.1 percent. The rest of the provinces recorded percentages of death certificates below the national average of 31.2 percent.





3.8. Zambian National Registration Card

In Zambia three types of cards are issued by the government: Green, Pink, and Blue National Registration Cards (NRCs). The Green NRCs are issued to Zambian nationals. The Pink NRCs are issued to commonwealth nationals while the Blue NRCs are issued to aliens or foreign nationals other than those from the commonwealth countries. The age at which one is required to obtain an NRC is 16 years.

3.8.1. Holders of National Registration Cards

In 2022, 10,138,123 persons were aged 16 years and older. Figure 3.30 shows the percentage distribution of the population aged 16 years and older with or without NRC by type and rural/urban. Persons with NRC accounted for 87.6 percent. Of these, 8,700,678 (85.8 percent) had Green NRCs, while those with pink and blue NRCs accounted for 0.1 percent each. About 14 percent of the population aged 16 years and older did not have an NRC.

Additionally, results show that there are slightly more people in urban areas with NRCs at 87.7 percent than rural areas at 87.5 percent.



Figure 3.30: Population with or without a national registration card (green, pink or blue) and rural/urban, Zambia 2022



Figure 3.31 shows the percentage distribution of the population aged 16 years and older without any type of a Zambian national registration card by province. Four provinces namely Western (20.0 Percent), North-western (17.0 percent), Central (16.1 percent) and Southern (15.7 percent) recorded higher percentages of the population 16 years and older without any type of NRC and above the national total of 13.6 percent.





Figure 3.32 shows the percentage distribution of the population aged 16 years and older with green NRC by sex and rural/urban. Of the 10,138,123 Zambian citizens aged 16 years and older, 8,700,678 (85. 8 percent) had a Green NRC. In urban areas, 88.2 percent had a green NRC, while in rural areas, 84.7 percent had a green NRC. More females (87.1 percent) had a green NRC than their male counterparts (85.6 percent).



Figure 3.32: Proportion of the population aged 16 years and older with green national registration card by sex and rural/urban, Zambia 2022



Figure 3.33 shows the percentage distribution of the population aged 16 Years and Older with Green NRCs by Province. Copperbelt Province had the highest percentage of the population aged 16 years and older with a green national registration card at 88.4 percent while Western Province had the lowest at 79.4 percent. Four provinces namely; Central, North Western, Southern and Western had percentages lower than the national average.





Figure 3.34 shows the distribution of the population aged 16 years and older with Green NRCs by province. The figure shows the share of each province for population aged 16 years and older with Green NRCs to the National total of 8,700,678.



Figure 3.34: Population distribution aged 16 years and older with green NRCS by province, Zambia 2022

Figure 3.35 shows the percentage of the population aged 16 years and older with Green NRCs by sex, rural/urban for 2010 and 2022. There were increases in all the categories (national, region sex) in the percentage of the population 16 years and older with Green NRCs from 2010 to 2022. The percentage increased from 83.6 percent in 2010 to 85.8 percent in 2022. The increase was highest among females who reported having a green NRC registering a 3.5 percentage points increase.



Figure 3.35: Percentage of the population aged 16 years and older with green national registration card by sex and rural/urban, Zambia 2010 and 2022





Figure 3.36 shows the proportion of the population aged 16 years and older with green national registration card by province for 2010 and 2022. A comparison among the provinces with NRCs between 2010 and 2022 shows that all the provinces registered increases in the proportion of the population 16 years and older with NRCs the exception of Western and North Western provinces which showed reductions from 80.9 and 82.9 percent to 79.4 and 82.0 percent, respectively.





3.9. Passport holders

Figure 3.37 shows the percentage distribution of the population of Zambians and non-Zambians with or without a passport. For both Zambians and Non-Zambians, 4.4 percent of the population had a passport at the time of the Census. More males had a passport at 4.8 percent than females at 3.9 percent.





This chapter has highlighted key social patterns that can inform policymaking, especially in sectors such as family planning, education, civil and vital registration, citizenship and interfaith dialogue.



CHAPTER 4: LITERACY AND EDUCATION









CHAPTER 4:

LITERACY AND EDUCATION

Key Findings

Literacy

- National literacy stood at 62.6 percent among the population aged 5 years and older with urban areas and males consistently outperforming rural areas and females.
- The literacy rate for the population aged 15 to 24 years was 77.1 percent, 77.4 percent for males and 76.9 percent for females. Literacy rates were higher in urban areas (89.8 percent) than in rural areas (66.7 percent).

School Attendance

- About 75 percent of the population aged 3 years and older reported that they had ever attended school.
- About 45 percent of the population aged 5 years and older were currently attending school.

Net School Attendance Rate

- Net early childhood education attendance rate was 20.8 percent: 19.9 percent for males and 21.6 percent for females.
- Net primary school attendance rate was 72.4 percent; 70.8 percent for males and 74.0 percent for females.
- Net secondary school attendance rate was 41.8 percent; 38.7 percent for males and 44.7 percent for females.

Technical and Vocational Education (TEVET)

• Participation in TEVET remains low at 3.5 Percent.

4.0. Introduction

The Government of Zambia through the 8th National Development Plan has stipulated strategies aimed at enhancing access to quality, equitable and inclusive education, improving technical, vocational and entrepreneurship skills as well as increasing access to higher education. Currently, the Government is providing free education from early childhood to secondary school. These strategies are key in the social and economic growth and development process of Zambia.

The 2022 Census of Population and Housing (CPH) collected information on education. At the time of the census, Zambia's education system was organized into the following progressive stages: Early Childhood Education (ECE) for children aged 3-6 years, primary school with grades one to seven for children aged 7 to 13 years, secondary school education with grades eight to twelve for persons aged 14 to 18 years, and higher Education for persons aged 19-24 years. This report presents information based on the education system as at 2022.

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4.1. 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:** The ratio of the population 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 percentage of the school-age population that is attending a designated level of education. This indicator is much more refined than the gross attendance rates. The gross and net attendance rates are used to determine the extent of under and over age school attendance in an education system.
- Educational Attainment: This is the highest level of formal education that an individual has completed regardless of duration in school. It is the highest grade completed within the most advanced level attended in the educational system of the country where the education was received.
- Literacy: This is the ability to read and write with understanding, a short, simple statement 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.
- Vocational Training: These are education training programmes that are designed for learners to acquire the knowledge, skills and competencies specific to a particular occupation, trade, or class of occupations or trades such as carpentry and automotive mechanics.

4.2. Literacy

Figure 4.1 shows literacy rate for the population aged 5 years and older by sex and rural/urban. The results show that the national literacy rate was 62.6 percent. The literacy rate was higher among males (65.3 percent) compared with females (60.1 percent). The urban literacy rate was 78.2 percent while that of the rural areas was lower at 49.8 percent. Literacy rates were lower among the females and in the rural areas.







Figure 4.2 shows the literacy rate for population aged 5 years and older by province. Lusaka Province had the highest literacy rate at 78.5 percent followed by Copperbelt Province at 78.3 percent. Eastern Province had the lowest at 47.0 percent.



Figure 4.2: Literacy rate for population aged 5 years and older by province, Zambia 2022

Figure 4.3 shows the literacy rates for the population aged 5 years and older by sex and province. Lusaka Province had the highest percentage of the literate population for both male and female with 80.3 percent and 76.9 percent, respectively. Eastern Province had the lowest literacy rate for both sexes at 50.1 percent for males and 44.1 percent for females.







Figure 4.4 shows the literacy rate for the population aged 5 years and older by sex and rural/urban since 2000. The percentage of persons aged 5 years and older that were literate increased from 55.3 percent in 2000 to 70.2 percent in 2010, and then decreased to 62.6 percent in 2022.





4.3. Literacy rates for youth population aged 15 -24 years

Figure 4.5 shows the literacy rate for population aged 15-24 years by sex and rural/urban. The literacy rate was 77.1 percent, 77.4 percent for males and 76.9 percent for females. Literacy rates were higher in urban areas (89.8 percent) than in rural areas (66.7 percent).



Figure 4.5: Literacy rate for population aged 15-24 years by sex and rural/urban, Zambia 2022



Figure 4.6 shows the literacy rate for the youth population aged 15-24 years by province. Lusaka Province had the highest percentage at 93.4 percent while Eastern Province recorded the lowest at 68.1 percent.



Figure 4.6: Literacy Rate of the Youth Population Aged 15-24 Years by Province, Zambia 2022

4.4. Literacy rates for youth population aged 19-34 years

Figure 4.7 shows the literacy rate for population aged 19-34 years by sex and rural/urban. The literacy rate was 77.0 percent. It was higher for males at 80.9 percent than for females at 73.5 percent. Urban areas had more literate youths than rural areas.





By Province, Lusaka had the highest percentage of literate youths aged 19-34 years at 89.8 percent followed by Copperbelt Province at 89.5 percent. Eastern Province had the lowest at 61.1 percent (Figure 4.8).





4.5. School attendance

Figure 4.9 shows the percentage distribution of the population aged 3 years and older by school attendance status, sex and rural/urban. Of the population aged 3 years and older, 75.1 percent had attended school while 24.9 percent had never attended school. For both sexes and rural/urban, there were more people who had attended school compared with those who had never attended school.





Figure 4.10 shows the percentage of the population aged 3 years and older that was currently attending school by sex and rural/urban. The population that was currently attending school was 42.9 percent of which 43.6 percent were males and 42.3 percent were females. The rural population had 41.3 percent compared with 45.0 percent in urban areas. More males than females were currently attending school in both rural and urban areas.







Figure 4.11 shows the percentage of the population aged 3 years and older that was currently attending school by province. Muchinga Province had the highest at 46.2 percent while Eastern Province had the lowest at 37.3 percent.







Figure 4.12 shows the percentage of the population aged 5 years and older currently attending school by sex and rural/urban for the years 2000, 2010 and 2022. The percentage of the population that was currently attending school increased from 26.7 percent in 2000 to 44.5 percent in 2022. Similarly, an increase in the percentage of current school attendance was observed among both males and females, as well as in rural and urban areas.





2000 2010 2022

Figure 4.13 shows the percentage of the population aged 3 to 6 years that was currently attending school. Children aged 3 to 6 years were expected to be in Early Childhood Education. The results show that 30.6 percent were currently attending school of which 28.9 percent were males and 32.2 percent were females. The urban areas had more children currently attending school for both males and females than the rural areas. More efforts have to be put in place to increase school attendance in the rural areas, as well as increasing school attendance for the boys.



Figure 4.13: Percentage of the population aged 3-6 years that was currently attending school by sex and rural/urban, Zambia 2022



Figure 4.14 shows the percentage of the population aged 3 to 6 years that was currently attending school by province. Lusaka Province had the highest at 52.9 percent and Northern Province had the lowest at 15.0 percent.



Figure 4.14: Percentage of population aged 3-6 years currently attending school by province, Zambia 2022

Figure 4.15 shows the percentage of the population aged 7 to 13 years that was currently attending school by sex and rural/urban. Overall, 76.7 percent of the population aged 7 to 13 years were currently attending school with more females (78.6 percent) than males (74.7 percent). The urban areas had more children aged 7 to 13 years who were currently attending school at 87.0 percent compared with rural areas at 69.7 percent.





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Figure 4.16 shows the percentage of the population aged 7 to 13 years that was currently attending school by province. Southern Province had the highest at 90.8 percent, followed by Copperbelt Province at 89.8 percent. Luapula Province had the lowest at 76.5 percent.





Figure 4.17 shows the percentage of the population aged 7 to 13 years old that was currently attending school by sex and rural/urban. Primary school attendance rate increased from 62.2 percent in 2000 to 76.7 percent in 2022. The increase in attendance rates have been observed in both rural and urban areas, and among males and females.







Figure 4.18 shows the percentage of the population aged 14 to 18 years that was currently attending school by sex and rural/urban. The population that was currently attending school was 72.6 percent. The urban population had more children who were currently attending school at 80.6 percent compared with the rural population at 66.5 percent.



Figure 4.18: Percentage of the population aged 14-18 years that was currently attending school by sex and rural/urban, Zambia 2022

Figure 4.19 shows the percentage of the population 14 to 18 years that was currently attending school by province. Lusaka Province had the highest percentage of the population aged 14-18 years who were currently attending school at 80.1 percent while Eastern Province had the lowest at 60.7 percent.



Figure 4.19: Percentage of population aged 14-18 years that was currently attending school by province, Zambia 2022



Figure 4.20 shows the percentage of the population aged 19 to 24 years that was currently attending school by sex and rural/urban. Of the population aged 19-24 years, 35.0 percent was currently attending school. The male population that was currently attending school was 37.7 percent while that of females was 32.6 percent. The population that was currently attending school in rural areas was higher compared with urban areas for both males and females.





Figure 4.21 shows the percentage of the population aged 19 to 24 years that was currently attending school by province. Muchinga Province had the highest percent of the population accounting for 42.4 percent and Southern Province had the lowest percentage of the population that was in school accounting for 30.7 percent.







4.6. Gross and net attendance rates

Figure 4.22 shows the gross attendance rate for the population aged 3 to 24 years by sex and rural/ urban. The gross attendance rate was 71.5 percent, 71.8 percent for the males and 71.2 percent for the females. Urban areas had higher gross attendance rate than rural areas.





Figure 4.23 shows the net attendance rate for the population aged 3 to 24 years by sex and rural/ urban. The net attendance was 57.2 percent. Females had a higher rate at 57.6 percent compared with males at 56.9 percent. The net attendance rate in urban areas was higher than that in rural areas at 65.4 percent and 51.4 percent, respectively.





4.7. Early childhood education (ECE) attendance rate

Figure 4.24 shows the gross early childhood education attendance rate by sex and rural/urban. The gross attendance rate was 25.2 percent, with females at 25.9 percent while males were at 24.4 percent. The gross attendance in urban areas was higher than in rural areas. The attendance rates for ECE are still low and more efforts still need to be done to increase coverage of ECE.



Figure 4.24: Gross early childhood education attendance rate by sex and rural/urban, Zambia 2022

Figure 4.25 shows the gross early childhood education attendance rate by province. Lusaka Province had the highest gross ECE attendance rate at 43.9 percent and Northern Province had the least at 10.8 percent.



Figure 4.25: Gross early childhood education attendance rate by province, Zambia 2022



Figure 4.26 shows the net early childhood education attendance rate of the population aged 3-6 years by sex and rural/urban. The net ECE attendance rate was 20.8 percent with 19.9 percent for male and 21.6 percent for female. The net ECE attendance rate was higher in the urban areas at 33.1 percent compared with 12.9 percent in rural areas.





Figure 4.27 shows the net early childhood education attendance rate for population aged 3-6 years by province. Lusaka Province had the highest net ECE attendance rate at 38.5 percent and Northern Province had the lowest at 8.3 percent.





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4.8. Primary school attendance rate

Figure 4.28 shows the gross primary school attendance rate for the population aged 7-13 years by sex and rural/urban. The gross primary school attendance rate was 119.0 percent with the male rate at 116.5 percent and 114.0 percent for the female. The rural rate (121.0 percent) was higher than the urban rate (116.1 percent). The gross primary school attendance rate was above 100 percent at primary level indicating that there were under aged and/or over aged learners at the primary school level.





Figure 4.29 shows the gross primary school attendance rate of the population aged 7-13 years by province. Muchinga Province had the highest rate at 129.7 percent and Eastern Province had the lowest at 112.5 percent.



Figure 4.29: Gross primary school attendance rate of the population aged 7-13 years by province, Zambia 2022



Figure 4.30 shows the net primary school attendance rate of the population aged 7-13 years. The net primary school attendance rate was 72.4 percent with 70.8 percent for males and 74.0 percent for females. The attendance rate was higher in urban areas at 81.3 percent compared with 66.5 percent in rural areas.



Figure 4.30: Net primary school attendance rate of the population aged 7-13 years by sex and rural/urban,

Figure 4.31 shows the net primary school attendance rate for population aged 7-13 years by province. Copperbelt and Lusaka Provinces had the highest primary net school attendance rate at 81.9 percent. Eastern Province had the lowest at 60.2 percent.



Figure 4.31: Net primary school attendance rate of the population aged 7-13 years by province, Zambia 2022

4.9. Secondary school attendance rate

Figure 4.32 shows the gross secondary school attendance rate for population aged 14-18 years by sex and rural/urban. The gross secondary school attendance rate was 96.3 percent, 99.0 percent for males and 93.8 percent for females. The rural and urban gross secondary school attendance rate were 75.1 percent and 124.2 percent, respectively. The gross secondary school attendance rate was above 100 percent in urban areas indicating that there were under aged and/or over aged learners attending secondary school level.





Figure 4.33 shows the gross secondary attendance rate for the population aged 14-18 years by province. Lusaka Province had the highest rate at 130.3 percent and Eastern Province had the lowest rate at 68.7 percent.



Figure 4.33: Gross secondary school attendance rate by province, Zambia 2022



Figure 4.34 shows the net secondary school attendance rate for the population aged 14-18 years by sex and rural/urban. The net secondary school attendance rate was 41.8 percent, 38.7 percent for males and 44.7 percent for females. The urban and rural net secondary school attendance rate was 58.5 and 29.0 percent, respectively.





Figure 4.35 shows the net secondary school attendance rate for the population aged 14-18 years by province. Lusaka Province had the highest rate at 58.4 percent and Eastern Province had the lowest rate at 25.2 percent.







Figure 4.36 shows the gross tertiary school attendance rate for population aged 19-24 years by sex and rural/urban. The gross tertiary school attendance rate was 8.5 percent, 9.5 percent for males and 7.5 percent for females. The gross tertiary school attendance rate was higher in urban areas (15.2 percent) than in rural areas (2.8 percent).





Figure 4.37 shows the gross tertiary attendance rate for the population aged 19-24 years by province. Lusaka Province had the highest gross tertiary attendance rate at 18.4 percent and Eastern Province had the lowest at 4.1 percent.



Figure 4.37: Gross tertiary attendance rate for population aged 19-24 years by province, Zambia 2022



Figure 4.38 shows the net tertiary school attendance rate for population aged 19-24 years by sex and rural/urban. The net tertiary school attendance rate was 2.1 percent at national level and for males and females. Rural areas had net tertiary school attendance rate at less than 1 percent.





Figure 4.39 shows the net tertiary school attendance rate for population aged 19-24 years by province. Lusaka Province had the highest rate at 5.3 percent while Eastern Province had the lowest rate at 0.7 percent.





4.10. Education attainment

Figure 4.40 shows the population aged 3 years and older who ever attended school by highest education level completed. There were 26.2 percent persons who completed upper primary education while 22.9 percent completed lower primary education.



Figure 4.40: Percentage of the population aged 3 years and older who ever attended school by highest level of education completed, Zambia 2022



Figure 4.41 shows the population aged 3 years and older who ever attended education by highest level completed by sex. More females than males completed lower and upper primary education, junior secondary.

Figure 4.41: Population aged 3 years and older by highest level of education completed and sex, Zambia 2022



4.11. Technical education and vocational training (TEVET)

Questions on Technical Education and Vocational Training (TEVET) was asked to persons who never attended general education and persons who attended general education but did not have a post-secondary qualification, either academic or professional qualification. The data was collected for the population aged 10 years and older. In this report, the population aged 12 years and older was analysed.



Figure 4.42 shows percentage distribution of population aged 12 years and older that ever attended technical education and vocational training by sex and rural/urban. The national total was 3.5 percent. Vocational attendance was higher in urban areas and among the male population.





Ever attended Never attended

Figure 4.43 shows the percent of the population aged 12 years and older who attended technical education and vocational training by Province. Lusaka Province had the highest percentage at 6.2 percent followed by Copperbelt Province at 6.0 percent. Eastern Province had the lowest at 1.5 percent.





Figure 4.44 shows the percentage of the population aged 12 years and older that attended technical education and vocational training by sex and province. Copperbelt Province had the highest male population that attended technical education and vocational training at 7.8 percent followed by Lusaka Province at 7.7 percent. Lusaka Province had the highest female population that had attended technical education training at 5.0 percent followed by Copperbelt Province at 4.3 percent. Eastern Province had the lowest percentage of male and females who attended technical education and vocational training at 2.1 percent and 1.0 percent, respectively.





Figure 4.45 shows the percentage of the population aged 12 years and older that attended technical education and vocational training by rural/urban. Southern Province had the highest urban population that attended technical education and vocational training at 7.7 percent followed by Copperbelt and Lusaka provinces at 6.6 percent each. Lusaka Province had the highest rural population that attended technical education and vocational training at 3.4 percent. For both urban and rural, Northern Province had the lowest at 3.6 percent and 1.1 percent, respectively.





Rural Urban



Figure 4.46 shows the percentage distribution of the population aged 12 years and older who attended technical education and vocational training by attendance status. Among the population who attended technical education and vocational training, 89.3 percent had completed, 6.1 percent dropped out and 4.6 were currently attending. Rural areas had the highest percentage of those who dropped out at 12.2 percent.





Completed Currently attending Dropped out

Figure 4.47 shows the percentage of the population who attended technical education and vocational training by highest level completed and rural/urban. The population that attained skills award were the highest at 32.6 percent and the lowest were those who attained trade test certification with 13.2 percent. Skills award and craft certificates were predominant in the urban areas while in the rural areas only the skills award certificate was predominant.



Figure 4.47: Percentage of the population aged 12 years and older that ever attended technical education and vocational training by highest level completed and rural/urban, Zambia 2022



Figure 4.48 shows the percentage of the population who attended technical education and vocational training by highest level completed and sex. Skills award certificate was completed by 33.3 percent of males and 31.6 percent of females. More females (18.6 percent) than males (13.6 percent) completed diploma or advanced diploma.





4.12. Field of study

Field of study data was collected from persons aged 10 years and older who completed higher or tertiary education as well as technical education or vocational qualification. Table 4.1 shows the number and percentage of the population aged 12 years and older by top 20 field of a study, sex and rural/urban. Education was the top field of study accounting for 20.6 percent, followed by business and administration at 15.2 percent. There were more males than females all the top 20 field of study except for education, personal services, health, manufacturing and processing, welfare, social and behavioural sciences, personal skills and development, journalism and information and basic programmes and qualifications. Urban areas had more people in all the field of studies than in rural areas.



Table 4.1: Population aged 12 years and older with academic, professional, technical or vocational qualification by top twenty field of study, sex and rural/urban, Zambia 2022

Field of Chudy	Tot	tal	S	ex	Rural/Urban		
Field of Sludy	Number	Total	Male	Female	Rural	Urban	
Total	975,916	100	56.9	43.1	15.7	84.3	
Education	201,336	20.6	40.2	59.8	21.9	78.1	
Business and administration	148,011	15.2	54.8	45.2	7.9	92.1	
Engineering and engineering trades	122,342	12.5	91.8	8.2	9.2	90.8	
Health	84,888	8.7	33.7	66.3	13.6	86.4	
Architecture and construction	59,297	6.1	92.4	7.6	22.5	77.5	
Personal services	55,980	5.7	24.7	75.3	12.1	87.9	
Manufacturing and processing	53,101	5.4	37.3	62.7	16.9	83.1	
Transport services	36,987	3.8	96.9	3.1	15.4	84.6	
Agriculture	35,040	3.6	70.7	29.3	37.7	62.3	
Information and Communication Technologies (ICTs)	28,207	2.9	57.4	42.6	6.1	93.9	
Welfare	20,348	2.1	27.6	72.4	14.5	85.5	
Social and behavioural sciences	20,207	2.1	49.1	50.9	9.1	90.9	
Arts	15,226	1.6	57.4	42.6	18.0	82.0	
Security services	14,634	1.5	79.8	20.2	14.9	85.1	
Law	9,724	1	58.0	42.0	5.1	94.9	
Humanities (except languages)	8,356	0.9	80.1	19.9	12.9	87.1	
Journalism and information	6,071	0.6	47.1	52.9	4.9	95.1	
Hygiene and occupational health services	5,290	0.5	64.3	35.7	14.8	85.2	
Environment	5,175	0.5	62.0	38.0	18.3	81.7	
Basic programmes and qualifications	4,602	0.5	38.2	61.8	30.2	69.8	
Other Field of Study	22,258	2.3	65.8	34.2	20.5	79.5	
Not stated	18,836	1.9	69.3	30.7	31.5	68.5	


CHAPTER 5: INFORMATION AND COMMUNICATION TECHNOLOGY







CHAPTER 5:

INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

KEY FINDINGS

Device Ownership

• 40.8% of individuals aged 5+ owned a functional ICT device.

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- Urban areas had significantly higher ownership (54.0%) than rural areas (29.9%).
- Lusaka Province led with 58.7% ownership; Luapula Province had the lowest at 26.9%. **Internet Usage**
- Only 15.0% of individuals aged 5+ used the internet in the 3 months before the census.
- Usage was much higher in urban areas (29.2%) compared to rural areas (5.3%).
- Lusaka Province had the highest internet usage at 35.4%, while Northern Province was lowest at 5.6%.

Sex Disparities

- Males had higher device ownership (43.6%) compared to females (38.2%).
- Males also had higher internet usage overall, especially in urban areas.

Child Access (Ages 5–18)

- Ownership among Children was low: 11.7% of males and 10.1% of females.
- Internet usage was 4.7% for males and 4.3% for females, with marked differences between urban and rural areas.

5.0. Introduction

The 2022 Census of Population and Housing was the first census in Zambia in which data on Information Communication and Technology (ICT) device ownership and internet usage was collected. It specifically collected information on the ownership of four functional devices: smartphones, non-smartphones, tablets, and laptops.

5.1. Concepts and definitions

- Information and Communication Technology (ICT): all tools or gadgets that will store, retrieve, manipulate, transmit, or receive information electronically in a digital form. Example of these gadgets are television sets, cell phones, computers, laptops, tablets, etc.
- **Ownership of ICT device:** the individual to whom the device belongs.
- **Functional ICT device:** a device that is operational and able to perform at least some basic functions which it was designed to do.
- **Internet:** a telecommunication network that uses telephone lines, cables, satellites or wireless connection to aid communication between and among individuals across the globe.
- Smart Phone: any mobile phone that performs many of the functions of a computer.
- Tablet: a wireless hand-held personal computer

Laptop: a portable computer which is mobile and small enough to carry around in a brief case

5.2. Ownership of functional ICT devices

or back pack.

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Figure 5.1 shows the percentage distribution of the population five years and older by ownership of functional ICT devices and rural/urban. The results indicate that 40.8 percent of the population owned ICT devices. More persons in urban areas (54.0 percent) owned ICT devices compared with persons in rural areas (29.9 percent).

Figure 5.1: Percentage distribution of the population 5 years and older by ownership of functional ICT devices and rural/urban, Zambia 2022



Figure 5.2 shows the percentage distribution of the population five years and older by ownership of functional ICT devices, sex and rural/urban. There was a difference in ownership by sex, with 43.6 percent of males owning at least one device compared with 38.2 percent of females. In both rural and urban areas males had a higher ownership of ICT devices.



Figure 5.2: Percentage distribution of the population 5 years and older by ownership of functional ICT devices, sex and rural/urban Zambia 2022



Figure 5.3 shows the percentage distribution of the population 5 years and older by ownership of functional ICT devices and province. Ownership of functional ICT devices was highest in Lusaka Province at 58.7 percent followed by Copperbelt Province at 50.9 percent. Luapula Province had the lowest at 26.9 percent.





Figure 5.4 shows the percentage distribution of the population aged 5 - 18 years by ownership of functional ICT devices, sex and rural/urban. Overall, 11.7 percent of males owned at least one ICT device, compared with 10.1 percent of females. Ownership was lower in rural areas, at 9.4 percent of males and 6.4 percent of females owning a device.

Figure 5.4: Percentage distribution of the population aged 5 - 18 years by ownership of functional ICT devices, sex and rural/urban, Zambia 2022



Figure 5.5 shows the percentage distribution of the population aged 5 years and older by type of functional ICT device owned and rural/urban. Non-smart phone was the most owned ICT device at 26.9 percent, followed by smart phone at 16.1 percent. Ownership of all ICT devises was more in urban areas than rural areas.







Figure 5.6 shows the percentage distribution of the population 5 years and older by type of functional ICT device owned and sex. Males had higher ownership of smartphones, tablets, and laptops. However, females in urban areas had a higher ownership of non-smart phones.





Figure 5.7 shows the percentage distribution of the population 5 years and older by type of functional ICT device owned and province. Ownership of smartphones (36.6 percent), tablets (3.3 percent) and laptops (7.9 percent) was highest in Lusaka Province. Copperbelt Province was the highest in non-smart phones at 30.5 percent and North Western was the lowest at 21.6 percent.





2022 CENSUS

Figure 5.7 shows the distribution of the population 5 years and older by internet usage in the last 3 months prior to the census and rural/urban. The results show that 15.0 percent of the population used the internet. More people used the internet in urban areas at 29.2 percent compared with 5.3 percent in rural areas.





Figure 5.8 shows the percentage distribution of the population five years and older by internet usage, sex and rural/urban. Internet use was lower in the rural areas than in urban areas for both males and females at 5.1 percent and 2.8 percent, respectively.







Figure 5.9 shows the percentage distribution of the population 5 years and older by internet usage and province. Lusaka Province had the highest internet usage at 35.4 percent while Northern Province had the lowest at 5.6 percent.





Figure 5.10 shows the percentage distribution of the population aged 5 – 18 years by internet usage and rural/urban. Internet usage among children (5 to 18 years) was at 4.7 percent for males and 4.3 percent for females. In rural areas, 1.2 percent of males and 0.8 percent of females used the internet. Urban areas had a higher usage, with 10.1 percent of males and 9.1 percent of females using the internet.



Figure 5.10: Percentage distribution of the population aged 5 – 18 years by internet usage and rural/urban, Zambia



CHAPTER 6: **CHAPTER 6**: **ECONOMIC CHARACTERISTICS**









CHAPTER 6:

ECONOMIC CHARACTERISTICS

KEY FINDINGS

Labour Force

• Of the over 10.5 million working-age people, 39.1 percent were active in the labour force, with a slightly higher concentration in urban areas at 44.5 percent.

Employment

- Employment levels were skewed towards males (57.4 per cent) and urban residents (58.4 percent), with Lusaka and Copperbelt provinces contributing the most significant shares to both the employed and unemployed populations.
- The employment-to-population ratio stood at 34.7 percent, indicating that nearly twothirds of the working-age population were unemployed. This figure was markedly lower for females (28.2 per cent) than for males (41.7 per cent).

Unemployment Rate

- Unemployment was predominantly urban, with 62.9 percent of unemployed individuals residing in cities. The overall unemployment rate was 11.3 percent, but it was notably higher among females (13.0 per cent) and youth aged 15–24 (19.7 per cent).
- Youth (ages 19–34) faced significant labour market challenges:
 - o 278,017 youths were unemployed, most of whom lived in urban areas.
 - o The youth unemployment rate was 14.5 percent, again with females disproportionately affected.

Economic Dependency

• A high economic dependency ratio of 3.9 suggests that for every 1 employed person, there were four economically dependent persons, with rural areas and females bearing the greater dependency burden.

6.0. Introduction

Individuals engage in economic activities in order to sustain their livelihood. In a developing country like Zambia, it is imperative to monitor changes in the levels of economic activities such as, the labour force participation, employment and economic dependency levels which have an impact on poverty.

Before 2017, Zambia 's census data on economic activities was measured and analysed based on the 13th International Conference of Labour Statisticians (ICLS) resolution of 1982. This resolution considers employment as work activity to produce goods/provide services intended for sale or pay including production of goods for own use. This has since been updated and realigned in the 19th International Conference of Labour statistician resolution I of 2013, which treats only all work activities for pay or profit as employment.



The minimum age for consideration for employment in Zambia is 15 years, in line with the provision of the Employment (Code) Act No. 3, 2019. This is different from what was reported in the previous censuses and in other countries within the sub region where age 12 was the minimum age of analysis.

6.1. Concepts and definitions

- Working-age population- The number of persons above a specified minimum age in a given territory/state at a specified point in time irrespective of the work status. In Zambia, the minimum age for working-age population is set at 15 years.
- Labour force-This is a total number of the employed and unemployed population.
- Employed population-refers to the number of persons who have a paid job in cash, in kind or both; are in 'self-employment' or are 'in contributing family work' (either currently at work or not). Workers who have a paid job and are on leave, as well as those in self-employment but are absent from work during the reference period due to various reasons such as inadequate raw materials, labour dispute, absence of business opportunities, etc., are considered employed.
- **Unemployed population**-refers to all persons in the labour force who are not in employment, are available for employment and are actively seeking employment during a specified reference period.
- **Employment-to-population ratio-**This is the ratio of the employed persons to the working-age population expressed as a percentage.
- Labour force participation rate-This is a ratio of the labour force to the working-age population expressed as a percentage.
- **Unemployment rate-**The ratio of the unemployed population to the labour force expressed as a percentage.
- Economic Dependency Ratios-It is the ratio of the economically inactive persons to a 100 economically active persons.

6.2. Working-age population

Figure 6.1 shows the organogram with various components of working-age (15 years and Older) population. Its main components are the labour force and inactive population, including their subcomponents. The total working-age population in 2022 CPH was 10, 558, 711 of which 4, 123, 681 were in the labour force and 6, 435, 030 were outside the labour force.



Figure 6.1: Organogram showing various components of working-age (15 years and older) population



Table 6.1 shows number and percentage distribution of working-age population by Sex and rural/ urban. Of the total working-age population, 52.5 percent were in rural areas while 47.5 percent were in urban areas.

Table 6.1: Number and percentage distribution of working-age population (15 years and older) by sex and
rural/urban, Zambia 2022

Rural/Urban	To	tal	Ma	ale	Female			
	Number	Percent	Number	Percent	Number	Percent		
Total	10,558,711	100.0	5,037,945	100.0	5,520,766	100.0		
Rural	5,541,425	52.5	2,683,740	53.3	2,857,685	51.8		
Urban	5,017,286	47.5	2,354,205	46.7	2,663,081	48.2		

Figure 6.2 shows the percentage distribution of working-age population aged 15 years and older by sex and rural/urban. Findings show that there were more females (52.3 percent) than males (47.7 percent) in working-age population. In rural areas, females accounted for 51.6 percent while males accounted for 48.4 percent.







Figure 6.3 shows percentage distribution of the working-age population by province. Lusaka Province had the highest proportion of working-age population at 16.7 percent, followed by Copperbelt Province at 15.3 percent. Muchinga Province had the lowest proportion at 4.5 percent.



Figure 6.3: Percentage distribution of the working-age population 15 years and older by province, Zambia 2022

Table 6.2 shows the number and percentage distribution of the labour force by sex and rural/urban. There were 4,123,681 persons in the labour force, of which, 54.1 percent were in urban areas while 45.9 percent were in rural areas.

Rural/Urban	To	tal	Ма	ale	Female		
	Number	Percent	Number	Percent	Number	Percent	
Total	4,123,681	100.0	2,331,313	100.0	1,792,368	100.0	
Rural	1,890,922	45.9	1,057,747	45.4	833,175	46.5	
Urban	2,232,759	54.1	1,273,566	54.6	959,193	53.5	

Table 6.2: Number and percentage distribution of labour force by sex and rural/urban, Zambia 2022

Figure 6.4 shows the percentage distribution of the labour force by sex and rural/urban. There were more males (56.5 percent) than females (43.5 percent) in the labour force. In urban areas, males accounted for 57.0 percent while females accounted for 43.0 percent.







Figure 6.5 shows percentage distribution of the labour force by province. Lusaka Province recorded the highest proportion of the labour force at 20.0 percent, followed by Copperbelt Province at 16.9 percent. Muchinga Province had the lowest proportion at 4.1 percent.





6.4. Labour force participation rate

Figure 6.6 shows the labour force participation rate by sex and rural/urban. About four in every 10 persons (39.1 percent) were either employed or unemployed. Male participation rate was higher at 46.3 percent than females at 32.5 percent. The labour force participation rate in urban areas was higher at 44.5 percent compared with 34.1 percent in rural areas.







Figure 6.7 shows the labour force participation rate by age group and rural/urban. Labour force participation rate increased with increase in age, reaching the peak in age group 35-39 at 65.5 percent. The participation rate was higher in urban areas than in rural areas for persons aged 20-24 through 65-69.



Figure 6.7: Labour force participation rate by age group and rural/urban, Zambia 2022

Total	14.0	37.1	56.2	63.1	65.5	65.3	64.9	61.6	56.3	48.2	42.2	34.5	28.9	22.3	17.9	13.2	9.5
	16.3	34.1	47.8	51.9	53.7	53.6	53.8	51.9	49.8	46.0	41.8	36.0	30.8	24.3	19.9	14.5	10.3
	10.8	40.8	64.3	73.1	76.3	76.6	76.3	73.1	64.9	51.5	42.6	32.2	25.6	17.9	13.1	9.5	7.6

Figure 6.8 shows the labour force participation rate by age group and sex. Labour force participation rate for males was higher than for females in all the age groups, reaching the peak of 65.5 percent in the 35-39 age group.





	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80 - 84	85 - 89	90 - 94	95 +
Male	14.0	37.1	56.2	63.1	65.5	65.3	64.9	61.6	56.3	48.2	42.2	34.5	28.9	22.3	17.9	13.2	9.5
Female	11.6	27.1	37.9	43.0	45.7	47.0	46.6	43.4	38.7	32.7	27.3	21.0	15.5	10.8	7.9	6.4	5.6



Figure 6.9 shows the labour force participation rate by province. Lusaka Province had the highest labour force participation rate at 46.8 percent followed by Copperbelt Province at 43.3 percent. Eastern Province had the lowest participation rate at 29.7 percent.





6.5. Youth labour force aged 19-34 years

Table 6.3 shows the number and percentage distribution of youth labour force aged 19-34 years by sex and rural/urban. There were 1,914,268 youths aged 19 to 34 years in the labour force of which 43.8 percent were in the rural areas while 56.2 percent were in the urban areas. There were more female and male youths aged 19-34 years in urban areas at 56.5 percent and 55.9 percent, respectively.

Table 6.3: Nun	nber and percentage distributi	on of youth labour force aged	19-34 years by sex and rural/
urban, Zambia	2022		

Rural/Urban	То	tal	Ma	ale	Female		
	Number	Percent	Number	Percent	Number	Percent	
Total	1,914,268	100.0	1,073,515	100.0	840,753	100.0	
Rural	838,383	43.8	473,018	44.1	365,365	43.5	
Urban	1,075,885	56.2	600,497	55.9	475,388	56.5	

Figure 6.10 shows the percentage distribution of the youth labour force aged 19-34 years by sex and rural/urban. There were more male youth in the labour force at 56.1 percent than female youths at 43.9 percent. In the rural areas, 56.4 percent of youths in the labour force were males while 43.6 were females.



Figure 6.10: Percentage distribution of the youth labour force aged 19-34 years by sex and rural/urban, Zambia 2022

Figure 6.11 shows the youth labour force participation rate aged 19-34 years by sex and rural/urban. The youth labour force participation rate was 40.4 percent with males having a higher rate at 48.1 percent than females at 33.6 percent. Urban areas had a higher participation rate than rural areas at 45.7 percent and 35.2 percent, respectively. In both rural and Urban areas, the participation rate for males was higher than that of females.



Figure 6.11: Youth labour force participation rate aged 19-34 years by sex and rural/urban, Zambia 2022

6.6. Employed population aged 15 years and older

Table 6.4 shows number and percentage distribution of employed population by sex and rural/urban. There were 3,658,908 persons in employment, of these, 53.0 percent were in urban areas while 47.0 percent were in rural areas. For both sexes, the employed population was higher in urban areas than rural areas.

 Table 6.4: Number and percentage distribution of employed population by sex and rural/urban, Zambia

 2022

Burol/Urbon	То	tal	Ма	ale	Female		
Kural/Orban	Number	Percent	Number	Percent	Number	Percent	
Total	3,658,908	100.0	2,099,463	100.0	1,559,445.0	100.0	
Rural	1,718,274	47.0	965,624	46.0	752,650.0	48.3	
Urban	1,940,634	53.0	1,133,839	54.0	806,795.0	51.7	



Figure 6.12 shows percentage distribution of employed population by sex and rural/urban. There were more males (57.4 percent) than females (42.6 percent) in employment. A similar pattern was observed in urban and rural areas were males accounted for 58.4 percent and 56.2 percent, respectively.





Figure 6.13 shows the percentage distribution of employed persons by province. Lusaka Province recorded the highest proportion of the employed persons at 19.9 percent, followed by Copperbelt Province at 16.1 percent. Muchinga Province had the lowest proportion at 4.2 percent.



Figure 6.13: Percentage distribution of employed persons by province, Zambia 2022

6.7. Employment-to-population ratio

Figure 6.14 shows the employment to population ratio by sex and rural/urban. About one third (34.7 percent) were in employment. Males employment to population ratio was higher at 41.7 percent than females at 28.2 percent. The employment to population ratio was higher in urban areas (38.7 percent) than in rural areas (31.0 percent).







Figure 6.15 shows the employment-to-population ratio by age group and rural/urban. Employment to population ratio increased with age, reaching the peak of 51.9 percent in age group 45 -49. The employment to population ratio was higher in urban areas than in rural areas for persons aged 25-29 through 60-64.







Figure 6.16 shows employment to population ratio by age group and sex. Employment to population ratio for males was higher than that of females, reaching a peak of 60.8 percent in age group 40-44.



Figure 6.16: Employment-to-population ratio by sex and age group, Zambia 2022

Figure 6.17 shows employment-to-population ratio by province. Lusaka Province had the highest employment-to-population ratio of 41.3 percent, followed by Luapula and Northern provinces at 37.6 and 37.1 percent, respectively. Eastern Province had the lowest employment to population ratio at 27.1 percent





Figure 6.18 shows percentage distribution of the employed population by status in employment and sex. Of the employed population, 57.0 percent were own account workers, accounting for the highest proportion followed by paid employees at 36.9 percent. Both female and male own account workers had the highest percentage share of the employed population at 65.7 and 50.5 percent, respectively.





6.8. Youth employment

Table 6.5 shows the number and percentage distribution of employed youths aged 19 to 34 years by sex and rural/urban. There were 1,636,251 youths aged 19 to 34 years in employment of which 45.6 percent were in rural areas while 54.4 percent were in urban areas. For both males and females, there were more youths in employment in urban areas.

 Table 6.5: Number and percentage distribution of employed youth (19-34 years) population by sex and rural/urban, Zambia 2022

Rural/Urban	То	tal	Ma	ale	Female		
	Number	Percent	Number	Percent	Number	Percent	
Total	1,636,251	100.0	938,638	100.0	697,613	100.0	
Rural	746,093	45.6	423,868	45.1	322,225	46.2	
Urban	890,158	54.4	514,770	54.8	375,388	53.8	

Figure 6.19 shows the percentage distribution of employed youths aged 19 to 34 years by sex and rural/urban. There were more male youths in employment at 57.4 percent compared with females at 42.6 percent. In both rural and urban areas, there were more males than females in employment.







6.9. Youth employment-to-population ratio

Figure 6.20 shows the youth employment-to-population ratio aged 19 to 34 years by sex and rural/ urban. In 2022, the youth employment-to-population ratio was 34.5 percent. Males had a higher parentage than females at 42.0 percent and 27.9 percent, respectively. Urban areas had a higher percentage at 37.8 percent compared with rural areas at 31.3 percent.





6.10. Population Outside Labour Force

Table 6.6 shows the number and percentage distribution of population outside labour by Sex and rural/urban. There were 6,435,030 persons outside labour force, of which 56.7 percent were in rural areas while 43.3 percent were in urban areas. For both sexes, the population outside the labour force was higher in rural areas than in urban areas.

Table 6.6: Number and percentage distribution of the population outside the labour force by sex and rural/
urban, Zambia 2022

Rural/Urban	To	tal	Ma	ale	Female		
	Number	Percent	Number	Percent	Number	Percent	
Total	6,435,030	100	2,706,632	100.0	3,728,398	100.0	
Rural	3,650,503	56.7	1,625,993	60.1	2,024,510	54.3	
Urban	2,784,527	43.3	1,080,639	39.9	1,703,888	45.7	

Figure 6.21 shows the percentage distribution of the population outside labour force by sex and rural/urban. There were more females (57.9 percent) than males (42.1 percent) in the population outside labour force. In urban areas, males and females accounted for 61.2 percent and 38.8 percent, respectively.







■ Male ■ Female

Figure 6.22 shows the percentage distribution of population outside labour force by reason for being outside labour force. Taking care of the home/family was the most reported reason for being outside labour force at 47.3 percent followed by "waiting for the season to start" at 16.2 percent. Performing unpaid voluntary work was the least reason given for being outside the labour force at 0.4 percent.







Figure 6.23 shows the percentage distribution of population outside labour force by reason and sex. All reasons for being outside labour force were mostly reported by males except for "Long term illness/ injury/ disability" and "Taking care of the home or family".



Figure 6.23: Percentage distribution of the population outside labour force by reason and sex, Zambia 2022

6.11. Economic dependency ratios

Figure 6.24 shows economic dependency ratio by sex and rural/urban. The economic dependency ratio was 3.9, implying that for every employed person, there were four economically dependent persons. Rural areas had a higher ratio with 4.8 compared with urban areas at 3.0. Females had a higher ratio of five economically dependent persons for every employed person compared to three for males.







Figure 6.25 shows economic dependency ratio by province. Four provinces had an economic dependency ratio that was above the national average of 3.9. These include Eastern (5.5) North western (4.5), Central (4.5) and Muchinga provinces (4.4).

Eastern Province had the highest economic dependency ratio of 6 economically inactive persons for every one employed person while western had the lowest with 1 economically inactive person for every one employed person





6.12. Unemployment

Table 6.8 shows the number and percentage distribution of the unemployed by sex and rural/urban. There were 464,773 unemployed persons of which 37.1 percent were in rural areas and 62.9 percent were in urban areas. The urban areas had 65.4 percent of unemployed females while 60.3 percent were males.

	Tatal	Mala	Famala
2022			
Table 6.8: Num	nber and percentage distribution	on of unemployed population by	y sex and rural/urban, Zambia

Rural/Urban	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	464,773	100.0	231,850	100.0	232,923	100.0
Rural	172,648	37.1	92,123	39.7	80,525	34.6
Urban	292,125	62.9	139,727	60.3	152,398	65.4



Figure 6.25 shows the percentage distribution of unemployed population by sex and rural/urban. There were more unemployed males (50.1 percent) than females (49.9 percent). In the rural areas, males accounted for 53.4 percent compared to females at 46.6 percent. In urban areas, females and males accounted for 52.2 percent and 47.8 percent, respectively.



Figure 6.25: Percentage distribution of unemployed population by sex and rural/urban, Zambia 2022

Figure 6.26 shows the percentage distribution of the unemployed population by province. Copperbelt Province had the highest share of the unemployed population at 23.8 percent, followed by Lusaka Province at 21.1 percent. Muchinga Province had the lowest share at 3.2 percent.





6.13. Unemployment rate

Figure 6.27 shows the unemployment rate by sex and rural/urban. Overall, the unemployment rate was 11.3 percent. Female unemployment rate was 13.0 percent while male unemployment rate was 9.9 percent. Urban areas had a higher rate at 13.1 percent than rural areas at 9.1 percent. In both rural and urban areas, females had a higher unemployment rate than males.





Figure 6.28 shows the unemployment rate by province. Copperbelt Province had the highest unemployment rate at 15.8 percent while Northern had the lowest at 6.9 percent.



Figure 6.28 Unemployment rate by province, Zambia 2022

6.14. Youth unemployment (15 to 24 years)

Table 6.9 shows the number and percentage distribution of youth aged 15-24 years unemployment by sex and rural/urban. There were 161,849 unemployed youth of which 60.3 percent were in the urban areas and 39.7 percent were in the rural areas. Among the female unemployed youths 62.8 percent were in urban areas while 37.2 percent were in rural areas.

Table 6.9: Number and percentage distribution of unemployed youth aged 15-24 years by sex and rural/ urban, Zambia 2022

Rural/Urban	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	161,849	100.0	81,244	100.0	80,605	100.0
Rural	64,210	39.7	34,251	42.2	29,959	37.2
Urban	97,639	60.3	46,993	57.8	50,646	62.8



50.2

Total

Figure 6.29 shows the percentage distribution of unemployed youth aged 15-24 years by sex and rural/urban. The youth unemployment was higher among males at 50.2 percent compared to females at 49.8 percent. In Urban areas, the youth unemployment was higher for females (51.9 percent) than for males (48.1 percent).



53.3

Rural

Male Female

48.1

Urban

Figure 6.29: Percentage distribution of unemployed youth aged 15-24 years by sex and rural/urban, Zambia 2022

Figure 6.30 shows the percentage distribution of youth unemployment by province. Copperbelt Province had the highest share of the unemployed youths at 21.8 percent, followed by Lusaka Province at 20.3 percent. Muchinga Province had the lowest share at 3.4 percent.



Figure 6.30: Percentage Distribution of Unemployed Youth (Aged 15-24) by Province, Zambia 2022

Figure 6.31 shows the youth unemployment rate (aged 15-24 years) by sex and rural/urban. Overall, the youth unemployment rate was 19.7 percent. Female unemployment rate was higher at 21.6 percent compared with males at 18.1 percent. Urban areas had a higher rate (27.5 percent) than rural areas (13.8 percent).



Figure 6.31: Youth unemployment rate (aged 15-24 years) by sex and rural/urban, Zambia 2022

Figure 6.32 shows the unemployment rate (aged 15-24 years) by province. Copperbelt Province had the highest unemployment rate at 32.2 percent while Northern Province had the lowest at 10.8 percent.



6.16. Youth unemployment (19-34 years)

Table 6.10 shows the number and percentage distribution of the unemployed youth aged 19-34 years by sex and rural/urban. The were 278,017 unemployed youth aged 19 to 34 years of which 66.8 percent were in the urban areas and 33.2 percent in the rural areas. Among the female unemployed youth, 69.9 percent were in urban areas while 30.1 percent were in rural areas.



Table 6.10: Number and percentage distribution of the unemployed youth aged 19-34 years by sex and rural/urban, Zambia 2022

Rural/Urban	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	278,017	100.0	134,877	100.0	143,140	100.0
Rural	92,290	33.2	49,150	36.4	43,140	30.1
Urban	185,727	66.8	85,727	63.6	100,000	69.9

Figure 6.33 shows the percentage distribution of unemployed youth aged 19-34 years by sex and rural/ urban. There were more female unemployed youth aged 19 to 34 years at 51.5 percent compared with males at 48.5 percent. In rural areas, there were more males (53.3 percent) than females (46.7 percent). In urban areas, the proportion of females was higher than that of males at 53.8 percent and 46.2 percent, respectively.





6.17. Youth unemployment rate (19-34 years)

Figure 6.35 shows the youth (19-34 years) unemployment rate by sex and rural/urban. The unemployment rate for the youth aged 19 to 34 years was 14.5 percent. Females had a higher rate at 17.0 percent than that of males at 12.6 percent. The youth unemployment in urban areas was higher than that of rural areas at 17.3 percent and 11.0 percent, respectively.





CHAPTER 7: FERTILITY CHARACTERISTICS









CHAPTER 7:

FERTILITY CHARACTERISTICS

KEY FINDINGS

Total Fertility Rate (TFR)

- The Total Fertility Rate (TFR) was 4.6. The TFR was 5.5 in rural areas and 3.9 in urban areas. The TFR has decreased from 6.7 in 1990 to 4.6 in 2022.
- Luapula Province had the highest Total Fertility Rate (TFR) at 5.4 followed by North Western Province at 5.3. Lusaka Province had the lowest at 3.6.

Crude Birth Rate (CBR)

• The Crude Birth Rate (CBR) in 2022 was 26; 28 in rural areas and 24 in urban areas.

Child Woman Ratio (CWR)

• The Child Woman Ratio (CWR) for Zambia in 2022 was 562 children (0-4 years) per thousand women. The CWR was 681 in rural areas and 441 in urban areas.

Mean Age at Child Bearing

• The mean age at child bearing in 2022 was 29.4 years. This was an increase from 29.3 in 2010.

General Fertility Rate

• The number of live births occurring in a year per thousand women of child bearing, also referred to as the General Fertility Rate, was 104; 123 in rural areas and 85 in urban areas.

Completed Family Size

• The completed family size was 5.3; 6.1 for rural areas and 4.5 for urban areas.

Gross Reproduction Rate (GRR)

• The average number of female births, generally referred to as the Gross Reproduction Rate (GRR), was 1.7. The GRR was 2.0 in rural areas and 1.3 in urban areas.

Net Reproductive Rate (NRR)

• The Net Reproductive Rate (NRR) was 1.5. The NRR was 1.8 in rural areas and 1.2 in urban areas.

7.0. Introduction

Fertility is one of the most important demographic variables generated from Census data. It is the primary factor in population growth. During the 2022 Census of Population and Housing, all females 10 years and older were asked if they ever had a live birth. Further, they were asked the number of children they had by sex and whether these children were still alive or not. Females aged 10 to 50 years old were also asked about the date of the last child born alive by sex and whether the child was still alive or not.

7.1. Concepts and definitions

• Age Specific Fertility Rates (ASFR)- Is the annual number of births to women in a particular age group per 1,000 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.
- Children Ever Born (CEB)- The number of children born alive to a woman.
- **Completed Family Size (Mean Parity)** is the number of children ever born to women who have completed their reproduction i.e. those aged 50 and older.
- Crude Birth Rate (CBR)- Is the annual number of live births per 1,000 population present at mid-year.
- Fertility- Refers to the occurrence of live births among women in a population.
- General Fertility Rate (GFR)- The number of live births occurring in a year per 1,000 women of childbearing age.
- **Gross Reproduction Rate (GRR)** Refers to the average number of female births that a woman would give birth to by the time she reached the end of her reproduction if she experienced age specific fertility rates prevailing in that year.
- Mean Age at Child Bearing (MACB)- Is the mean age of mothers at the birth of their children if women were subject throughout their lives to the age-specific fertility rates observed in a given year. It is computed as the sum of age-specific fertility rates weighted by the midpoint of each group.
- 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 was subjected, 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.

7.2. Data availability and limitations

Fertility measurement in most developing countries, is still a challenge. This is so because direct methods of measuring fertility, such as the vital registration system, are still underdeveloped. As a result, the 2022 Census applied indirect estimation methods to measure fertility. The 2022 Census followed international standards in asking questions on children ever born and births occurring in the 12 months prior to the census reference moment.

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)**, and provides estimates for lifetime fertility and completed mean parity or family size. 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).

Data from the question on 'date of birth of the last child born alive' was used to estimate ASFRs, TFR, GRRs and NRRs. Omission of children by women responding to the census question on children ever born and date of birth of the last child born alive may introduce errors in the estimation of fertility, especially those that died or are living elsewhere. In view of this weakness, this question included



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.

7.3. Evaluation and justification for adjustments

The 2022 Census data on fertility was evaluated for completeness of reporting of Children Ever Born (CEB) and recent births using the Coale-Demeny and Brass Empirical formula technique. Using data for CEB, the Brass empirical formula yielded this result: (P2)(P4/P3)4 = (0.946)(2.983/1.907)4 = 5.921. Observed average parity for women 45-49 years for the 2022 Census was 5.327. 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 2022 Census analysis 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).

7.4. Fertility indicators

7.4.1. Adjusted age specific fertility rates

Figure 7.1 shows the adjusted age specific fertility rates (ASFRs) by Age group. The age group with the highest ASFR was 25-29 years. This was followed by the age group 20-24 years (See details in appendix A1).





Figure 7.2 shows the adjusted age specific fertility rates by age group and rural/urban. Child bearing starts early in rural areas compared to urban areas. The peak for child bearing in urban areas was similar to that of the national level (25-29 age group in Figure 7.1) while in rural areas the peak was in the age group 20-24.



Figure 7.2: Adjusted age specific fertility rates by age group and rural/urban, Zambia 2022

Faure 7.3 shows the adjusted ASFRs for Zambia from 1990 to 2022. Overall, ASFRs reduced in 2022 compared with the previous years. The peak for child bearing was the same in 2000 and 2010 at age group 20-24. The peak of childbearing has since increased to age group 25-29 in 2022, as was observed in 1990. A drop was observed among women aged 15-19 years in 2022 compared to 2000 and 2010, but was still higher than in 1990.



Figure 7.3: Adjusted age specific fertility rates (ASFRS) by age group, Zambia, 1990, 2000, 2010 and 2022

7.4.2. Total fertility rate

Figure 7.4 shows the total fertility rates (TFR) for Zambia from 1990 to 2022. The TFR has declined from 6.7 in 1990 to 4.6 in 2022.







7.4.2.1. Total fertility rate by rural/urban

Figure 7.5 shows the total fertility rates by rural/urban in 1990, 2000, 2010 and 2022. The TFR in rural areas reduced from 7.0 in 1990 to 6.7 in 2000, and increased to 7.0 in 2010 and then reduced to 5.5 in 2022. The TFR in urban areas declined from 6.3 in 1990 to 3.9 in 2022. Fertility rates in rural areas have remained higher than in urban areas since 1990.





7.4.2.2. Total fertility rate by province

Figure 7.6 shows the total fertility rates by province. The Total Fertility Rate was highest in Luapula Province at 5.4, followed by North Western Province at 5.3. Lusaka Province had the lowest rate at 3.6.


Figure 7.6: Total fertility rates by province, Zambia 2022

7.4.3. Mean age at child bearing (MACB)

Figure 7.7 shows the mean age at child bearing (MACB) in 1990, 2000, 2010 and 2022. The figure shows that the MACB for 2022 was 29.4 years. The MACB has been decreasing from 30.3 in 1990 to 29.3 in 2010. It increased to 29.4 in 2022.



Figure 7.7 Mean age at child bearing, Zambia 1990, 2000, 2010 and 2022

7.4.4. Gross reproduction rates

Figure 7.8 shows the gross reproduction rates (GRR) by rural/urban in 1990, 2000, 2010 and 2022. The GRR declined from 3.3 in 1990 to 1.7 in 2022. The GRR was higher in rural areas at 2.0 compared to 1.3 in urban areas in 2022.



Figure 7.8: Gross reproduction rates by rural/urban, Zambia 1990, 2000, 2010 and 2022



7.4.5. Net reproduction rates

Figure 7.9 shows the net reproduction rates (NRR) by rural/urban. The NRR reduced from 2.2 in 1990 to 1.5 in 2022. The NRR was higher in rural areas at 1.8 compared with 1.2 in urban areas in 2022.



Figure 7.9: Net reproduction rate sby rural/urban, Zambia 1990, 2000, 2010 and 2022

7.4.6. Other fertility indicators

From data on births and population, several other indices of fertility can also be measured (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 fertility indicators by rural/urban and province in 1990, 2000, 2010 and 2022. Generally, the CBR, GFR and CFS have decreased since 1990. The CWR increased from 729 per 1,000 women aged 15 to 49 in 2000 to 738 per 1,000 women aged 15 to 49 in 2010. The CWR reduced from 738 in 2010 to 562 in 2022.



Census Year Rural/ Urban and Province	TFR	CFS	CBR	CWR	GFR	GRR	NRR		
Total									
1990	6.7	7.1	44	678	185	3.3	2.2		
2000	6.0	6.8	36	729	152	2.3	1.7		
2010	5.9	6.0	35	738	147	2.3	1.7		
2022	4.6	5.3	26	562	104	1.7	1.5		
Rural									
1990	7.0	7.2	45	712	194	3.4	2.3		
2000	6.7	7.0	40	843	178	2.7	1.9		
2010	7.0	6.4	39	879	178	2.8	2.1		
2022	5.5	6.1	28	681	123	2.0	1.8		
Urban									
1990	6.3	6.9	43	629	171	3.1	2.2		
2000	4.9	6.5	29	605	111	1.7	1.3		
2010	4.6	5.4	30	563	109	1.7	1.3		
2022	3.9	4.5	24	441	85	1.3	1.2		
Fertility Indicators by Pro	Fertility Indicators by Province 2022								
Central	4.9	5.6	27	601	112	1.7	1.6		
Copperbelt	4.0	4.8	23	453	87	1.4	1.3		
Eastern	5.0	5.8	28	635	116	1.8	1.7		
Luapula	5.4	6.3	28	629	343	1.9	1.6		
Lusaka	3.6	4.2	24	423	82	1.3	1.2		
Muchinga	4.7	5.3	24	605	98	1.6	1.4		
Northern	5.0	5.6	27	646	113	1.8	1.6		
North Western	5.3	5.9	26	610	108	1.8	1.6		
Southern	5.2	6.0	30	629	122	1.9	1.8		
Western	5.1	5.2	26	612	107	1.7	1.5		

Table 7.1: Fertility indicators by rural/urban and province, Zambia 1990, 2000 and 2010

7.5. Total fertility rates by education attainment of women aged 15-49 Years

Table 7.3 shows the total fertility rates (TFR) by education attainment of women aged 15 to 49 years and province. The total fertility rate was highest among women with primary education at 5.7, followed by women with no education at 5.1. Women with tertiary education had the lowest fertility rate at 2.8. A similar pattern was observed across all provinces.

Provinco	Total Fertility Rates by Education								
FIOVINCE	All Women	No-Education	Primary	Secondary	Tertiary				
Central	4.9	5.1	5.9	4.1	2.8				
Copperbelt	4.0	4.5	5.3	3.8	2.9				
Eastern	5.0	5.4	5.5	3.9	2.9				
Luapula	5.4	5.6	6.2	4.4	3.0				
Lusaka	3.6	4.0	4.8	3.5	2.6				
Muchinga	4.7	4.7	5.5	3.7	3.0				
Northern	5.0	4.8	5.8	4.0	2.9				
North Western	5.3	5.8	6.4	4.6	2.9				
Southern	5.1	5.7	6.3	4.4	2.9				
Western	n 5.1 5.4		6.0	4.2	2.8				
Total	4.6	5.1	5.7	3.9	2.8				

 Table 7.3: Total fertility rates by education attainment of women aged 15-49 years and province, Zambia

 2022



Figure 7.10 shows TFR by Educational Attainment of women aged 15-49. Women with primary education had the highest fertility rates at 6.9, 7.1 and 6.8 in 2000, 2010 and 2022, respectively. The lowest fertility rate was observed for women with tertiary education since 1990.



Figure 7.10: Total Fertility Rate by Education of Women Aged 15-49 Years, Zambia 1990, 2000, 2010 and 2022



CHAPTER 8: GENERAL AND MATERNAL MORTALITY









CHAPTER 8:

GENERAL AND MATERNAL MORTALITY

KEY FINDINGS

Crude Death Rate (CDR)

• The Crude Death Rate (CDR) in 2022 was 5.1 deaths per 1,000 population; 5.9 deaths per 1,000 population for males and 4.4 deaths per 1,000 population for females.

Age Specific Deaths

• The age groups with the highest percentage of reported adult deaths were 30-34 for females and 40-44 for males.

Childhood Mortality

- Infant mortality rate (IMR) was 31.0 deaths per 1,000 live births, 34.7 deaths per 1,000 live births in rural areas and 25.2 deaths per 1,000 live births in urban areas
- Infant mortality rate (IMR) declined from 123 infant deaths per 1,000 live births in 1990 to 31 infant deaths per 1,000 live births in 2022.
- Child Mortality Rate (CMR) was 14 deaths per 1,000 live births. In rural areas, the CMR was 17 deaths per 1,000 live births and 10 deaths per 1000 live births among children in urban areas.
- Luapula Province had the highest child mortality rate at 37 deaths per 1,000 live births. Lusaka province had the lowest child mortality rate at 7 deaths per 1,000 live births.
- The Under-Five Mortality Rate (U5MR) was 45 deaths per 1,000 live births. The U5MR was 51 deaths per 1,000 live births in rural areas and 35 deaths per 1,000 live births in urban areas.

Life expectancy

• Life expectancy at birth was 67 years in 2022. It was higher among females at 69 years than males at 64 years.

Maternal Mortality

- Maternal deaths accounted for 8.9 percent of all adult female deaths reported during the census, 10.4 percent in rural areas and 7.1 percent in urban areas.
- The adjusted maternal mortality rate (MMRate) was 24 deaths per 100,000 females aged 15-49.
- The maternal mortality ratio was estimated at 184 deaths per 100,000 live births.

8.0. Introduction

The 2022 census collected data on the deaths that occurred in the households in the 12 months before the census enumeration date. Currently, Zambia does not have a fully functional vital registration system to record, collate, and disseminate mortality data. It is for this reason that the census is a major source of mortality information, providing information on the distribution of deaths by age, sex, province, district, constituency, ward, and rural/urban.



Mortality data are useful in assessing national health programmes' performance, including disease control and prevention interventions. Mortality statistics also provide a foundation on which health policies and interventions are formulated. Information on infant and child mortality is relevant to a demographic assessment of a country's population and is an indicator of the country's socioeconomic development and quality of life.

8.1. Concepts and definitions

- Age-Specific Death Rates (ASDRs): 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.
- **Child Mortality Rate (CMR):** refers to the number of child (children aged between exact age one and four years) deaths per 1,000 live births occurring during a specified reference period, in this case taken to be one year prior to the census.
- **Crude Death Rate (CDR):** Ratio of the number of deaths occurring in a year to the mid-year population expressed per 1,000 population. It provides a general indication of the levels of mortality in a population.
- **Death (Mortality:** The complete disappearance of any signs of life at any time after a live birth has occurred.
- Infant Mortality Rate (IMR): Refers to the number of infant (children below the age of one year) deaths per 1,000 live births occurring during a specified reference period, in this case taken to be one year prior to the census.
- Maternal Mortality Ratio (MMRatio): Number of maternal deaths in a given time period per 100,000 live births during the same time period. It depicts the risk of maternal deaths relative to the number of live births and essentially captures the risk of death in a single pregnancy or a single live birth.
- Maternal Mortality Rate: Maternal mortality rate is the number of maternal deaths in a given period per 100,000 women of reproductive age during the same time-period. The Maternal Mortality Rate is an indicator of the risk of maternal death among women of reproductive ages (Hill et al., 2001).

The Maternal Mortality Rate is given by the formula;

 $Maternal Mortality Rate = \frac{Number of maternal deaths}{Number of women aged 15 - 49} * 100,000$

- Maternal Mortality Rate: (Number of maternal deaths)/(Number of women aged 15-49)*100,000
- Life Expectancy at Birth (e0): Average number of years expected to live by a birth cohort, based on prevailing age specific mortality rates. Life expectancy can be derived at any other age cohort based on the current mortality rates.



• **Proportion Maternal-Related Female Deaths (PMRD):** Number of maternal-related deaths in a given period divided by the total deaths among women aged 15 to 49 years. One of the indicators used in measuring levels of maternal mortality is the percentage of female deaths that are maternal related. This indicator is sometimes abbreviated PMRD (Percent Maternal Related Deaths) or PMFD (Proportion of adult female deaths due to maternal causes).

 $PMRD = \frac{Number of maternal deaths}{Number of deaths among women aged 15 - 49} * 100$

• Under-Five Mortality Rate (UMR): refers to the number of deaths among children aged below the age of five years per 1,000 live births occurring during a specified reference period, in this case taken to be one year prior to the census. UMR therefore, constitutes both the infant and child mortality.

8.2. Collection of mortality data in the 2022 census

Information on children ever born, children surviving and children dead and direct questions on deaths in the 12 months before 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 August 2021, the sex of the deceased, age and the cause of death.

In households with a death of a female aged 12 to 49 years, maternal or pregnancy-related death questions were asked. For pregnancy-related deaths, questions were asked on whether the female death occurred while pregnant, during childbirth or six weeks after termination of pregnancy, regardless of the outcome.

8.3. Evaluation of mortality data

There are several methods used for evaluating mortality data for completeness of reporting or registration. These methods usually form a basis for adjustment of mortality data for under-reporting, over-reporting or misclassification. Two methods namely the Brass Growth Balance method, and the Preston-Coale method have been used for the 2022 Census of Population and Housing.

8.3.1. Results of the Brass Growth Balance Method

The basic assumption of the Brass Growth Balance is that of stable population. A stable population is one that has been subject to constant fertility and mortality for a long time (UN, 1983). Violation of the stable population assumption is known to affect the results of the method.

The US Census Bureau spreadsheet GRBAL was used to apply the household deaths data to the Brass Growth Balance method. Figure 8.1 shows the application of the Brass Growth Balance Method to Reported Household Deaths 12 Months Prior to the Census. The level of completeness of reported adult deaths was 58.4 percent as shown Table 8.1.



One major limitation of the method is that a constant adjustment factor has to be applied to all age groups, regardless of possible variations such as in the reporting of infant deaths versus adult deaths. Another challenge when it comes to applying the method to Zambia is on the critical assumption of constant mortality.





8.3.2. Results of the Preston-Coale Method

As with the Brass Growth Balance method, the Preston-Coale method also assumes a stable population theory (US Census Bureau, 1994). The adjustment of deaths is made by multiplying deaths by an exponential factor (derived using the population's growth rate and the mean age of the age group). The adjusted deaths are cumulated and taken as an estimate of the population at a certain age. This estimate is compared with the actual population at the same age and the ratio of the estimated to the actual population represents the completeness of reported deaths (US Census Bureau, 1994).

Age misreporting by households relative to the age of deceased persons at the time of death may affect the results of the Preston-Coale method. Age mis-statement by the enumerated population, including missing ages might distort the population age structure and also affect the results obtained.

The US Census Bureau spreadsheet PRECOA was used to apply the household deaths data to the Preston-Coale method. The level of completeness of reporting of adult deaths in the 2022 Census was 79.7 percent (Table 8.1). Figure 8.2 shows the application of the Preston-Coale method to reported household deaths 12 months prior to the census. The comparison of the reported and estimated populations indicates possible over reporting for ages below 25 years and over enumeration for ages between 50 years and 75 years.



Figure 8.2: Application of the preston-coale method to reported household deaths 12 months prior to the Census, Zambia, 2022



Table 8.1: Completeness of Reporting of Deaths, Zambia 2022

Province	Brass Growth Balance Method	Preston-Coale Method		
Central	63.6	107.7		
Copperbelt	50.7	72.2		
Eastern	86.5	86.1		
Luapula	105.4	92.4		
Lusaka	28.6	57.0		
Muchinga	77.2	73.2		
Northern	78.1	67.0		
North Western	74.8	93.5		
Southern	53.1	76.9		
Western	125.2	104.4		
Total	58.4	79.7		

8.4. Evaluation of maternal-related deaths

Possible sources of error in maternal mortality data include under-reporting, over-reporting, misclassification of deaths by cause, misclassification of deaths to wrong reference periods or place of occurrence etc. Challenges exist in the precise identification of maternal deaths, including distinguishing actual maternal deaths from maternal related deaths. Accurate attribution of a female death as a maternal death is difficult, adherence to reference period for a case to qualify as a maternal death may be difficult also (WHO et al., 2012).

Once computed, the observed Maternal Mortality Rates (MMRate) and Maternal Mortality Ratios (MMRatio) from the 2022 Census were reviewed and found to over-estimate maternal mortality. This assessment was made by cross referencing with other estimates from alternative sources such as the ZDHS and the UN.

An adjustment factor was generated based on a study conducted in Zambia in 1998 based on the Reproductive Age Mortality Survey (RAMOS) study design (Nsemukila et al., 1998). In this study, 349 maternal-related deaths were identified during fieldwork, however further analysis revealed that the actual number of maternal deaths was 244. There was a case of over reporting of maternal deaths



in the study by survey respondents. The over reporting could have been due to misclassification of deaths as maternal deaths. A ratio of 244/349 was used as an adjustment factor for maternal related deaths reported in the 2022 Census. Live births were adjusted using the PF Ratio method (see Chapter 7 on fertility). This is the same procedure that was used for the 2010 Census maternal mortality analysis.

Table 8.2 shows the observed and adjusted births and maternal deaths by age and rural/urban of the female population aged 15 to 49 years.

Possible sources of error in maternal mortality data include under-reporting, over-reporting, misclassification of deaths by cause, misclassification of deaths to wrong reference periods or place of occurrence etc. Challenges exist in the precise identification of maternal deaths, including distinguishing actual maternal deaths from maternal related deaths. Accurate attribution of a female death as a maternal death is difficult, adherence to reference period for a case to qualify as a maternal death may be difficult also (WHO et al., 2012).

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Table 8.2 shows the observed and adjusted births and maternal deaths by age and rural/urban of the female population aged 15 to 49 years.

Table 8.	2: Observed and adjusted births a	and maternal deaths by age of fer	nale population 15-49 and rural/
urban,	Zambia 2022		
	1	1	

	Zambia Total				Zambia Rural				Zambia Urban			
Age Group	Observed Births	Observed Maternal Deaths	Adjusted Births	Adjusted Maternal Deaths	Observed Births	Observed Maternal Deaths	Adjusted Births	Adjusted Maternal Deaths	Observed Births	Observed Maternal Deaths	Adjusted Births	Adjusted Maternal Deaths
15 - 19	81,359	218	118,276	152	58,131	151	78,213	106	23,228	67	40,063	47
20 - 24	125,088	333	159,119	233	77,924	234	92,911	164	47,164	99	66,208	69
25 - 29	111,204	326	139,198	228	58,966	205	76,508	143	52,238	121	62,690	85
30 - 34	79,097	282	97,655	197	41,755	170	53,340	119	37,342	112	44,315	78
35 - 39	55,878	256	67,770	179	32,336	158	38,734	110	23,542	98	29,036	69
40 - 44	24,277	130	27,856	91	15,324	85	16,919	59	8,953	45	10,936	31
45 - 49	6,613	75	6,685	52	4,012	35	3,725	24	2601	40	2,960	28
Total	483,516	1,620	616,559	1,133	288,448	1,038	360,350	726	195,068	582	256,209	407



8.5. General mortality

8.5.1. Crude Death Rate

Figure 8.3 shows the observed crude death rate (CDR) per 1,000 population by sex and rural/urban. The total crude death rate was 5.1 deaths per 1,000 population, 5.9 deaths per 1,000 males and 4.4 deaths per 1,000 females. This indicates a higher death rate per 1,000 population among males compared with females in both rural and urban areas. Generally, the CDR was higher in rural areas, 6.3 deaths per 1,000, than in urban areas, 5.3 deaths per 1,000 population.



Figure 8.3: Observed crude death rate (CDR) per 1,000 population by sex and rural/urban, Zambia 2022

Figure 8.4 shows the crude death rates by sex for 2010 and 2022. The overall observed CDR in 2010 was 13.1 deaths per 1,000 population compared with 5.1 deaths per 1,000 population in 2022. The CDR for both males and females declined between 2010 and 2022 censuses. The decline in deaths per 1,000 population between 2010 and 2022 could be due to increased access to education and health services.





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Figure 8.5 shows the CDR by province. The figure shows that Luapula province had the highest CDR of 8.5 deaths per 1,000 population followed by Western Province at 6.3 deaths per 1,000 population. Lusaka Province had the lowest at 3.9 deaths per 1,000 population. Efforts to enhance the well-being of the population should be targeted towards improving the health and well-being of people, particularly in provinces with high CDR.





A comparison of observed CDR between males and females by province shows that Luapula and Muchinga provinces had the highest CDR among males per 1,000 population. Luapula, Western, and Munchinga provinces had higher CDR among females compared to other provinces. The lowest CDRs for males and females were in Lusaka Province at 4.7 and 3.1 deaths per 1,000 population, respectively. (Figure 8.6)



Figure 8.6: Observed crude death rate by sex and province, Zambia 2022

8.5.2. Age-specific death rate

Age and sex are important demographic variables in the analysis and understanding of mortality because they influence health outcomes, risk factors, and life expectancy. Certain diseases or mortality risks tend to be age or sex selective. Understanding of age -sex specific death rates allow for more targeted public health interventions and resource allocation.



Figure 8.7 shows the observed age-specific death rates by age group and sex. The Age-Sex mortality is characterised by a U-shape. The high death rates in the ages less than 1 and 1-4 years indicate high child mortality that Zambia continues to experience. The results show a steady increase in mortality as age advances from 15 years. However, the pattern of mortality increases sharply among both males and females above the age of 70 years.





Figures 8.8 and 8.9 show age-sex-specific death rates for rural and urban areas, respectively. In both cases, the mortality pattern is characterized by high mortality in young ages that declines with increasing age until the age of 15. After age 15, mortality steadily increases before a sharp increase in the 60s. Generally, in both rural and urban areas, mortality was higher among males than females, especially over the age of 30.



Figure 8.8: Observed age-sex specific death rates by age group and sex, Zambia Rural 2022

-- male --- Female





Figures 8.10 shows the age-sex-specific death rates for rural/urban. Mortality below the age of 10 was higher in rural areas than urban areas, while mortality above the age of 50 years was higher in urban than in rural areas. In both cases, the mortality pattern is characterized by high mortality in young ages that declines with increasing age until the age of 10 years. After the age of 10 years, mortality steadily increases before a sharp increase at age 60 years.





Figure 8.11 shows the percentage of observed adult deaths by age and sex. The mortality increases steadily from age 10, with the highest observed in the age group of 40 to 44 years for males and 30 to 34 for females. Mortality by age is higher among males compared with females.

The age-specific death rate pattern of mortality observed calls for targeted intervention to mitigate the risk of mortality in early childhood and among older people. There is a need for differentiated efforts that address the specific needs of people, considering their age and sex.







8.6. Childhood mortality and life expectancy

8.6.1. Infant mortality rate

Figure 8.12 shows infant mortality rates (IMR) by sex and rural/urban for the 12 months period prior to the census. The IMR was 31.0 infant deaths per 1,000 live births, 34.7 deaths per 1,000 live births in rural areas and 25.2 deaths per 1,000 live births in urban areas. The Estimated IMR was higher for male children than female children in both urban and rural areas.



Figure 8.12: Infant mortality rates (IMR) by sex and rural/urban, Zambia 2022

The infant mortality rates presented in Figure 8.13 show declining trends since 1990. The IMR declined from 123 infant deaths per 1,000 live births in 1990 to 31 infant deaths per 1,000 live births in 2022. The decline in IMR occurred in both urban and rural areas since 1990.



Figure 8.13: Trends in infant mortality (IMR) rate by rural/urban, Zambia 1990,2000,2010 and 2022

Figure 8.14 presents infant mortality rates (IMR) by province. Infant mortality rate was highest in Luapula Province with 51 deaths per 1,000 live births, followed by Western Province at 38 infant deaths per 1000 live birth. Lusaka Province had the lowest infant mortality rate at 22 deaths per 1,000 live births.



Figure 8.14: Infant mortality rates (IMR) by province, Zambia 2022



Figure 8.15 shows infant mortality rates (IMR) by province for the 2010 and 2022 censuses. The IMR declined in all the provinces during the period 2010 and 2022. The highest decline in IMR occurred in Eastern Province from 97 deaths per 1,000 live births in 2010 to 31 deaths per 1,000 live births in 2022.





8.6.2. Child mortality rate

Table 8.16 shows child mortality rates (CMR) by sex and rural/urban. The CMR was 14 deaths per 1,000 live births. In rural areas, the CMR was 17 deaths per 1,000 live births and 10 deaths per 1000 live births among children in urban areas. The CMR was highest among male children than female children in both rural and urban areas.





Figure 8.17 shows child mortality rates (CMR) by rural/urban in 1990, 2000, 2010 and 2022. There were improvements in child survival as depicted by declining child mortality rate in both rural and urban areas during since 2000. Child mortality rate declined in rural areas from 67 deaths per 1,000 live births in 2010 to 17 deaths per 1,000 live births in 2022. Similarly, child mortality rate declined in urban areas from 50 deaths per 1,000 live births in 2010 to 10 deaths per 1,000 live births in 2022.





Figure 8.18 shows the Child Mortality Rates (CMR) by province. Similar to Infant Mortality Rate (IMR), Luapula Province had the highest child mortality rate at 37 deaths per 1,000 live births. Lusaka province had the lowest child mortality rate at 7 deaths per 1,000 live births.





Figure 8.19 shows child mortality rate by province for the 2010 and 2022 censuses. Child mortality has declined in all the provinces. Eastern Province recorded the highest decline in CMR from 99 deaths per 1,000 live births in 2010 to 12 deaths per 1,000 live births in 2022.







8.6.3. Under-five mortality rate

Figure 8.20 shows under five mortality rate (U5MR) by sex and rural/urban. The U5MR was 45 deaths per 1,000 live births. The U5MR was 51 deaths per 1,000 live births in rural areas and 35 deaths per 1,000 live births in urban areas. As observed in infant and child mortality, under-five mortality rate was higher for male children than for female children in both rural and urban areas.





Figure 8.21 shows U5MR by rural/urban in 1990, 2000, 2010 and 2022. The U5MR declined from 208 deaths per 1,000 live births in 1990 to 45 deaths per 1,000 live births in 2022 U5MR has been declining in both rural and urban areas since 2000. In rural areas, under five mortality rate declined from 198 deaths per 1,000 live births in 2000 to 51 deaths per 1,000 live births in 2022. A decline was also observed in urban areas from 149 deaths per 1000 live births in 2000 to 35 deaths per 1,000 live births in 2022.



Figure 8.21: Trends in under five mortality rates by rural/urban, Zambia 1990,2000,2010 and 2022

Figure 8.22 show U5MR by province. Luapula Province had the highest under five mortality at 88 deaths per 1000 live births and Lusaka Province had the lowest at 29 deaths per 1,000 live births.



Figure 8.22: Under five mortality rates by province, Zambia 2022

Figure 8.23 shows U5MR by province in 2010 and 2022. The U5MR has declined in all the provinces. The major decline was from 196 deaths per 1,000 live births to 43 deaths per 1,000 live births in Eastern Province.





Figure 8.23: Under five mortality rates by province, Zambia 2010 and 2022

8.6.4. Life expectancy

Unadjusted household deaths data were used to generate abridged life tables by sex, rural/urban and province. The 2000 estimates were based on indirect estimation based on the North Model Life Table, while the 2010 and 2022 estimates were based on empirical data on household deaths collected during the two censuses. The US census bureau spreadsheet LTPOPDTH was used to generate life tables from which the estimates of life expectancy at birth were extracted.

Figure 8.24 shows life expectancy at birth by sex and rural/urban. Life expectancy at birth was 67 years in 2022. This means that children born in 2022 are expected to live up to 67 years if the 2022 mortality conditions were to remain the same. The life expectancy was higher among females at 69 years than males at 64 years. It was higher in urban areas at 67 years compared with rural areas at 66 years.





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Figure 8.25 shows life expectancy at birth by rural/urban for the years 1990, 2000, 2010 and 2022. Life expectancy at birth increased by 20 years from 47 years in 1990 to 67 years in 2022. In rural areas, life expectancy at birth increased from 52 years in 2010 to 66 years in 2022. A similar pattern was observed in urban areas where life expectancy increased from 51 years in 2010 to 67 years in 2022.



Figure 8.25: Life expectancy at birth (e0) by rural/urban, Zambia 1990,2000,2010 and 2022

Figure 8.26 shows life expectancy at birth by province. Southern and Lusaka provinces had the highest life expectancy at birth at 69 years each. Luapula Province had the lowest life expectancy at birth at 59 years.



Figure 8.26: Life expectancy at birth by province, Zambia 2022



Figure 8.27 shows life expectancy at birth by province for the 2010 and 2022 censuses. Life expectancy increased for all the provinces. Eastern Province had the highest increase in life expectancy at birth.



Figure 8.27: Life expectancy at birth by province, Zambia 2010 and 2022

8.7. Maternal mortality

Maternal mortality is an important global health issue. The Sustainable Development Goals target 3.1 aims to reduce the global maternal mortality ratio to less than 70 per 100, 000 live births by 2030 (UN 2015). The 2022-2026 national health strategic plan aims to reduce maternal mortality to less than 100 deaths per 100, 000 live births by 2026.

Figure 8.28 shows reported and adjusted percentages of maternal related adult female deaths by rural/urban. Maternal deaths accounted for 8.9 percent of all adult female deaths reported during the census, 10.4 percent in rural areas and 7.1 percent in urban areas.



Figure 8.28: Percentage of reported and adjusted maternal related adult female deaths by rural/urban, Zambia, 2022

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Figure 8.29 shows the percentage of observed and adjusted maternal related adult female deaths by age **group**. Most of the maternal deaths occurred in the age group 20-24 (12.8 percent), followed by age group 25-29 (12.8 percent).





Figure 8.30 shows the percentage of observed and adjusted maternal related deaths by province. Northern Province had the highest percentage of maternal related deaths deaths at 11 percent, followed by Luapula Province at 10.5 percent. Lusaka Province had the lowest at 6.2 percent.





Figure 8.31 shows the observed and adjusted maternal mortality rates (MMRates) by rural/urban. The adjusted MMRate was 24 deaths per 100,000 females aged 15-49 years. The maternal mortality rate was higher in rural areas with 31 deaths per 100,000 females aged 15-49 years compared with 18 deaths per 100,000 females aged 15-49 years in urban areas.







Figure 8.32 shows the maternal mortality rate by province. Luapula Province had the highest MMRate at 49 maternal deaths per 100,000 women aged 15-49 years, followed by Western Province at 39 maternal deaths. Lusaka Province had the lowest at 14 maternal deaths per 100,000 women aged 15-49 years.



Figure 8.32: Maternal mortality rate by province, Zambia 2022

Figure 8.33 shows the observed and adjusted maternal mortality ratios (MMR) by rural/urban. The maternal mortality ratio was estimated at 184 deaths per 100,000 live births. The MMR was higher in rural at 201 than in urban areas at 159.





The risk of dying from to maternal caused among females aged 15-49 years increases with age as observed in Figures 8.32. Maternal mortality ratio is highest in the age group 45-49 (784) followed by age group 40-44 (326). (Figure 8.34)



Figure 8.35 shows Maternal Mortality Ratios by province. Luapula Province had the highest maternal mortality ratio with 328 maternal deaths per 100,000 live births, followed by Western Province at 260. Lusaka Province had the lowest at 123 maternal deaths per 100,000 live births.



Figure 8.35: Observed and adjusted maternal mortality ratios by province, Zambia 2022



8.8.Cause of Death

In the 2022 Census of Population and Hosing, information on cause of death was collected for two broad categories; natural causes (illness/disease) and external causes (Injuries/Accidents). This was done to avoid misreporting of causes of death by respondents.

Figure 8.36 shows the percentage of reported deaths by cause, sex and rural/urban. The major cause of mortality were natural causes (illness/disease) accounting for 73.2 percent of all reported household deaths. External causes were cited as a cause of death for 20.3 percent of deaths reported; higher in rural areas (21.5 percent) than in urban areas (18.6 percent). They were also higher among males at 22.7 percent than females at 17.3 percent.





Figure 8.37 shows the percentage of reported deaths by cause and province. Natural causes (illness/ disease) were the leading causes of death in all the provinces. Among the provinces, North Western had the highest percentage of deaths attributed to external causes at 24.5 percent, followed by Muchinga Province at 23.1 percent.









CHAPTER 9: ACTIVITY LIMITATION AND ALBINISM









CHAPTER 9:

ACTIVITY LIMITATION AND ALBINISM

Key Findings Activity Limitation

- A total of 1,804,563 individuals aged 5 years and older reported at least some difficulty in performing activities in one or more functional domains.
- A significantly higher number of people in rural areas (1,137,014) reported difficulties compared to urban areas (667,549).
- About 12 percent of individuals aged 5 years and older experienced at least some difficulty in one or more functional domains.
- Two percent of the population reported "a lot of difficulty" or were unable to perform at least one activity.

Albinism

• There were 64,026 people with albinism recorded, with rural areas accounting for the majority.

9.0. Introduction

The 2022 Census of Population and Housing (CPH) gathered data on Activity Limitation and Albinism. Activity limitation was captured using the Washington Group Short Set (WG-SS) of questions. These six questions assess functional difficulties rather than medical diagnoses, focusing on six domains: seeing, hearing, self-care, cognition, walking, and communication. Information on activity limitation was collected for individuals aged 5 years and older, as younger children may not yet perform certain activities. The WG-SS questions are widely used in censuses and surveys worldwide.

9.1. Concepts and definitions

- **Functional Domain:** refers to an activity among the 6 activities captured by the WG-SS, that is, seeing, hearing, self-care, cognition (Remembering and Concentrating), walking and communicating.
- Activity: is the execution of a task or action by an individual. It represents the individual's perspective of functioning.
- Activity limitations- refers to difficulties an individual may have in executing activities.
- Seeing-refers to an individual using his/her eyes and visual capacity in order to notice or observe what is happening around them.
- **Hearing**-refers to an individual using his/her ears and auditory (or hearing) capacity in order to know what is being said to them or the sounds of activity, including danger that is happening around them.
- **Difficulty Walking**-refers to the use of legs in such a way as to move oneself over the ground to get from point A to point B. The ability to walk should be without assistance of any device (wheelchair, crutches, walker, artificial legs etc.) or human. If such assistance is needed, the person was considered as having difficulty walking.



- **Remembering**-refers to the use of memory to recall incidents or events. It means an individual can bring to mind or think again about something that took place in the past.
- **Concentrating**-refers to the use of mental ability to accomplish some task such as reading, calculating numbers and learning something. It is associated with focusing on the task at hand in order to complete the task.
- Self-Care-includes activities such as washing all over one's entire body, dressing, e.t.c.
- **Communicating**-refers to a person exchanging information or ideas with other people through the use of language.
- Albinism-an inherited genetic condition that reduces the amount of melanin pigment formed in the skin, hair and/or eyes. A defect in one of several genes that produce or distribute melanin causes albinism.
- Severity of Difficulty- refers to the degree of a person's (in)ability to perform a specified function or activity and is categorised as 'no difficulty', 'some difficulty', a 'lot of difficulty' and 'cannot do it at all'.
- **No difficulty** refers to complete absence of any challenge or problem in performing a specified function or activity.
- **Some difficulty** refers to presence of a partial or mild challenge or problem in performing a specified function or activity.
- A lot of difficulty- refers to acute challenge or problem in performing a specified function or activity.
- Cannot do at all- refers to complete or total inability to perform a specified function or activity.

9.2. Population 5 years and older with or without difficulty

Results show that of the population aged 5 years and older, 1,804,563 reported having at least some difficulties (some difficulty, a lot of difficulty and cannot do it at all) in at least one of the six functional domains. More people in rural areas (1,137,014) experienced difficulties in at least one functional domain compared with those in urban areas at 667,549 (**Figure 9.1**).







9.3. Population with at least some difficulty by age group and sex

The highest percentage of people with at least some difficulty was recorded among the age group 18 years and older at 14.5 percent while the least was among the age group "5 to 17 years old". For age groups, "5 years and older" and age group "18 years and older", more females reported difficulties compared to males (**Figure 9.2**).





9.4. Population with a lot of difficulty and cannot do it at all by age group and sex

The Washington Group recommends using the cut-off of "a lot of difficulty" or "cannot do at all" to identify individuals with disabilities for international reporting and cross-national comparability. In the 2022 CPH, 2 percent of the population aged 5 years and older reported that they had "a lot of difficulty" and/or "could not perform" at least an activity in one of the functional domains. More females in both the "5 years and older" and "18 years and older" age groups reported having difficulties compared to males (Figure 9.3).



Figure 9.3: Percentage distribution of the population with a lot of difficulty by age group and sex, Zambia 2022

9.5. Population aged 5 years and older with at least some difficulty by sex and rural/urban

In the 2022 CPH, 11.5 percent reported having at least some difficulty in performing at least one activity. More females (12.4 percent) reported having a difficulty as compared to males at 10.5 percent. In rural areas, 13.2 percent of the population reported that they had difficulty as compared to 9.4 percent in urban areas (**Figure 9.4**).





9.6. Population aged 5 years and older with at least some difficult by province

Luapula Province had the highest percent of population aged 5 years and older with at least some difficulty at 15.7 percent followed by Western Province at 14.2 percent. Lusaka Province had the lowest at 8.6 percent (Figure 9.5).



Figure 9.5: Percentage distribution of the population aged 5 years and older with at least some difficulty by province, Zambia 2022



9.7. Population aged 5 years and older by functional domain

Across all functional domains, most people reported that they did not have any difficulty performing an activity. Seeing had the highest percent of people reporting at least some difficulty at 5.6 percent while communication had the lowest at 1.2 percent.





9.8. Population with albinism by sex and rural/urban

In the 2022 CPH, people with albinism were 64,026, of which 33,227 were males and 30,799 were females. Rural areas had a larger number of people with albinism (40, 694) as compared with urban areas (23, 332) (Figure 9.7).





9.9. Population with albinism by province

At provincial level, Western Province had the largest number of people with albinism (8,289), followed by Copperbelt (7,660). North Western Province had the smallest number at 4,707 (**Figure 9.8**).



Figure 9.8: Number of persons with albinism by province, Zambia 2022




CHAPTER 10: LANGUAGE AND ETHNICITY









CHAPTER 10:

LANGUAGE AND ETHNICITY

Key Findings

Language

- Bemba was the most widely spoken language of communication in Zambia, used by 34.0 percent of the population, followed by Tonga (12.8 percent) and Nyanja (11.4 percent).
- Urban–rural disparities were notable: In urban areas, Bemba accounted for 46.7 percent of the spoken languages, while in rural areas, it was at 23.8 percent.
- English was used by only 1.9 percent nationally, with higher usage in urban areas (4.1 percent) than rural (0.1 percent).
- Language usage trends shifted between 2010 and 2022: Increases were observed in the usage of Tonga, Lunda of North Western, and English language groups, while Bemba, Nyanja, and Mambwe language groups saw declines.
- Language usage was strongly correlated with ethnic affiliation: The majority of individuals reported using a language of communication that aligns with their ethnic group.

Ethnicity

- Ethnic composition remained diverse: Bemba was the largest ethnic group (25.4 percent), followed by Tonga (14.9 percent). Other ethnicities individually accounted for less than one percent and were grouped as "other".
- Minimal variation by sex was observed in both language use and ethnic group affiliation.

10.0 Introduction

Understanding Zambia's linguistic and ethnic landscape is central to appreciating its rich cultural diversity and fostering inclusive development. As a multi-ethnic and multilingual country, Zambia is home to more than 70 ethnic groups and an equal number of languages and dialects. While English is the official language of government, education, and commerce, seven regional languages, Bemba, Kaonde, Lozi, Lunda, Luvale, Nyanja, and Tonga are officially recognised for local communication and educational purposes.

The language most commonly spoken at home, referred to as the language of communication, does not necessarily reflect the speaker's ethnic group but rather the language most frequently used in daily life. This distinction is crucial in evaluating linguistic trends and intercultural communication across different regions.



In this chapter, results are presented for both individual language and ethnic groups, as well as broader groupings. The broader groups were created using the following criteria:

- **Geographic proximity**, such as the grouping of several languages into the "North-Western language group".
- **Mutual intelligibility**, where linguistically similar dialects were combined, such as Mambwe, Lungu, Namwanga, Wina, and Tambo being classified under the "Mambwe group".
- Trans-ethnic languages, such as Nyanja, which is spoken across multiple ethnic lines.
- For non-Zambian residents, ethnicity was classified based on the country of origin

10.1 Concepts and Definitions

- **Ethnicity:** A self-identified tribal group with which an individual associates. It reflects cultural heritage and social identity and was reported for all individuals, including those in institutional populations.
- Language of Communication: The language most commonly spoken at home by an individual. It does not necessarily correspond to the person's ethnic background.
- Scope of Language Data: Language information was collected only from household members. Children too young to speak, individuals with speech impairments, and persons who could not respond were excluded. Consequently, the reported population by language of communication is less than the total de facto population.

10.2 Language of Communication by Rural-Urban

Figure 10.1 presents the percentage distribution of the population by language of communication at home, disaggregated by rural and urban residence. Bemba emerged as the most spoken language nationwide, accounting for 34.0 percent of the population. It was also the dominant language in both rural and urban areas. However, usage varied considerably: In urban areas, 46.7 percent of people reported Bemba as their main language of communication at home. In rural areas, this figure dropped to 23.8 percent.

Tonga was the second most commonly spoken language overall (12.8%), and more prevalent in rural areas (18.2%) compared to urban areas. Nyanja followed with 11.4 percent usage, playing a more prominent role in urban settings where 21.8 percent of the population used it at home.

Despite its status as the official national language, English was used by only 1.9 percent of the population as a primary language of communication at home. The majority of English speakers resided in urban areas (4.1%), while rural usage was minimal (0.1%).

Languages spoken by less than one percent of the population were grouped together and reported under "Other languages."





Figure 10.1: Percentage Distribution of Population by Language of Communication and Rural-Urban, Zambia

10.3 Language of Communication by Sex and Rural-Urban

Figure 10.2 illustrates the percentage distribution of the population by language of communication at home, disaggregated by sex and rural/urban residence. The results show that Bemba remained the most widely spoken language across both sexes and in both rural and urban settings. Among urban males and females, Bemba had the highest proportion of speakers. Similarly, in rural areas, Bemba remained dominant for both sexes, although the percentage was lower compared to urban areas. In rural areas, Tonga was the second most spoken language for both males and females, with around 18.2 percent usage. In urban areas, Nyanja emerged as the second most spoken language for both males and females, with 21.8 percent usage, reflecting its broader role as a lingua franca in urban and cosmopolitan settings, especially in Lusaka.

Languages that were spoken by fewer than one percent of the population were aggregated under the category "Other languages."

These patterns reinforce the influence of geographical location on language use and also suggest minimal disparity by sex in home language practices.



Figure 10.2: Percentage Distribution of Population by Language of Communication by Sex and Rural/Urban, Zambia, 2022



10.4 Trends in Language Group Distribution

Figure 10.3 shows the percentage distribution of Zambia's population by major language groups over four census years: 1990, 2000, 2010, and 2022. This longitudinal view highlights shifting linguistic dynamics over time. Between 2010 and 2022, the following notable trends were observed: The Tonga, Northwestern, and English language groups increased in terms of the proportion of the population using these languages for communication. In contrast, the Bemba, Nyanja, and Mambwe language groups declined over the same period. The Western and Tumbuka language groups remained largely stable.

These shifts may reflect a combination of factors, including internal migration, urbanisation, intermarriage, educational attainment, and regional economic developments. For example, the growth in English language use, though still modest, may be associated with urbanisation and increased access to formal education. The expansion of the Tonga and Northwestern groups may suggest growing demographic or cultural influence.

Overall, the data underscore Zambia's linguistic dynamism, with some language groups gaining ground while others experience relative decline.





■ 1990 ■ 2000 ■ 2010 ■ 2022

10.5 Ethnicity by Rural and Urban

Figure 10.4 presents the percentage distribution of Zambia's population by ethnic group, disaggregated by rural and urban residence. The Bemba ethnic group had the largest representation nationally, accounting for 25.4 percent of the population. This pattern held across both rural and urban areas: In urban areas, Bemba constituted 32.0 percent of the population. In rural areas, Bemba made up 20.2 percent of the population. The Tonga ethnic group was the second most prominent, representing 14.9 percent of the total population. Tonga ethnicity was more prevalent in rural areas. Other ethnic groups, each accounting for less than one percent of the total population, were combined and reported under "Other ethnicities." This category includes a variety of other tribal affiliations that contribute to Zambia's ethnic diversity.







10.6 Ethnicity by Sex

Figure 10.5 displays the percentage distribution of Zambia's population by ethnic group and sex. The data reveal no significant differences by sex in the distribution of ethnic groups. For each major ethnic category—including Bemba, Tonga, Northwestern, Western, Nyanja, Tumbuka, and Mambwe—the proportions were consistently similar for both males and females. This uniformity suggests that ethnic identification is evenly distributed across sexes, reinforcing that ethnicity in Zambia is primarily shaped by lineage, cultural background, and community affiliation rather than gender-based distinctions.





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10.7 Relationship Between Ethnic Group and Language of Communication

Table 10.1 presents the distribution of the population by major ethnic groups and the major language group used for communication.

Table 10.1: Percent distribution of the population by ethnic group and major language group of communication, Zambia 2022

		Major Language Group											
Major Ethnic Group	Total Population	Total Percent	Bemba Speaking	Tonga Speaking	North Western Group	Western Group	Nyanja Speaking	Tumbuka Speaking	Mambwe Speaking				
Bemba Group	5,839,790	100	92.1	0.7	0.4	0.2	6.2	0.1	0.3				
Tonga Group	3,110,635	100	6.4	80.3	0.2	0.6	12.4	0.0	0.0				
North Western Group	1,706,714	100	17.9	1.6	69.8	4.0	6.7	0.0	0.0				
Western Group	1,256,969	100	6.2	5.3	2.2	75.8	10.3	0.0	0.1				
Nyanja group	2,827,159	100	11.7	1.3	0.1	0.2	84.7	1.8	0.1				
Tumbuka Group	863,850	100	19.3	0.9	0.1	0.2	23.2	55.3	1.0				
Mambwe Group	928,858	100	37.1	0.5	0.2	0.1	11.2	0.6	50.3				
Total	16,533,975	100	41.1	16.2	7.6	6.4	22.3	3.3	3.0				



CHAPTER 11: EVALUATION OF COVERAGE AND CONTENT ERRORS





CHAPTER 11:

EVALUATION OF COVERAGE AND CONTENT ERRORS

Key Findings

- The percentage of children aged 0 4 years reduced from 17.7 percent to 14.3 percent between 2010 and 2022.
- The child woman ratio reduced from 738 in 2010 to 562 children aged 0 4 years per 1,000 women aged 15 49 years in 2022.
- The number of dependents per 100 persons of the working-age population reduced from 95.1 in 2010 to 82.1 in 2022.
- Age heaping reduced from 6.7 in 2010 to 4.3 in 2022 indicating an improvement in age reporting.
- The most preferred ages were those ages ending with digit 2.
- The Age-Sex Accuracy Index reduced from 28.0 in 2010 to 23.2 in 2022.

11.0. Introduction

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

- Sex
- Age (in completed years)
- Rural/urban status of households
- Number of children still living, and
- Number of deceased children

11.1. Concepts and definitions

- **The Age-Sex Accuracy Index-** Mean difference in sex ratios plus the mean deviations of male and female age ratios multiplied by three. This provides 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).
- **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-** Errors 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.
- **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 (Masculinity Ratio) Number of males per 100 females in a population.
- **Overall Survival Ratio-** The ratio of the population of age say 10 years and older that will survive to 15 years and older.

11.2. Type of population used in evaluating the coverage and content errors

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

11.3. 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.

11.4. 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.



11.4.1. Age composition

Examining age composition over time can help assess the coverage error in census data. The percentage for each age 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 13.1 presents the population distribution by broad age groups. There has been a reduction of 3.9 percentage points in the percentage of children aged 0 - 14 years between 2010 and 2022. Between 2010 and 2022, the percentage of the working-age population increased by 3.7 percentage points. This implies an increase in the labour force. The observed changes amongst the different age groups indicate a shift in age composition between the censuses.

	Population												
Age Group	1990	Percent	2000	Percent	2010	Percent	2022	Percent					
0 - 4	1,200,344	16.3	1,656,720	17.7	2,214,887	17.7	2,618,682	14.3					
5 - 9	1,119,524	15.2	1,461,082	15.6	1,856,336	14.8	2,586,094	14.1					
10 - 14	1,029,803	13.9	1,205,646	12.9	1,699,042	13.6	2,533,789	13.8					
0 - 14	3,349,671	45.4	4,323,448	46.3	5,770,265	46.1	7,738,565	42.2					
15 - 64	3,842,793	52.0	4,758,697	51.0	6,419,717	51.2	10,073,618	54.9					
65+	190,632	2.6	255,280	2.7	336,332	2.7	528,160	2.9					
Total	7,383,096	100	9,337,425	100	12,526,314	100	18,340,343	100					

Table 11.1: Population distribution by age groups, Zambia 1990, 2000, 2010 and 2022

11.4.2. Child woman ratio

Figure 13.1 shows the child woman ratio for census years 1990, 2000, 2010 and 2022. The child woman ratio has been declining since 2000. This means that there has been a decline in the number of children under the age of five since 2000. The large decrease between 2010 and 2022 could be attributed to the decrease in fertility or under reporting of births.





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11.4.3. Dependency ratio

The consistency in the coverage for the four censuses can be further explored through dependency ratios. Figure 11.2 shows dependency ratio for census years 1990, 2000, 2010 and 2022. The overall dependency ratios in 1990, 2000, 2010 and 2022 censuses were 92.1, 96.2, 95.1 and 82.1, respectively. This means that in 2022 for every 100 persons aged 15 - 64 years, there were 82.1 dependents aged 0 - 14 years and 65 years and older. The Child and Aged dependency ratios had a similar pattern to that of the Overall dependency ratio. The observed changes in dependency ratios were consistent with observed changes in the broad age groups and the changes in the child woman ratio.



Figure 11.2: Dependency Ratio, Zambia 1990, 2000, 2010 and 2022

11.5. 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. Some content errors can be estimated by the use of the Myers' Index, Sex Ratios, Age Ratios and Survival Ratios.

11.5.1. 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 13.3 shows the Myers' Index by Rural/urban for 2000, 2010 and 2022. The maximum value of Myers' Index is 90 and the minimum value is 0. A high Myers' Index implies poor age reporting whereas a low Myers' Index indicates good age reporting. The Myers' Index has been decreasing since 2000 indicating an



improvement in the quality of data over the years. In 2022, the index decreased to 4.3 from 6.7 in 2010. This suggests an improvement in the quality of age reporting in 2022 compared with 2010. The index for urban areas was lower than the index in rural areas in all the census years, implying better age reporting in urban than in rural areas.





Table 11.2 shows the most preferred digits by sex and rural/urban for the years 2000, 2010 and 2022. Digit preference can also be explored by looking at age heaping. There was age heaping in all the censuses. At national level, the most preferred digits were 0, 5 and 8 in both 2000 and 2010 while the digit 2 was the most preferred in 2022. Digit preference among males followed the national pattern while females preferred 0 and 8 in 2000; 0, 8, 5 in 2010 and a preference of 2 in 2022. In rural areas the most preferred digits were 0, 5 and 8 in 2000; 0, 8 and 5 in 2010 and 2 in 2022. In urban areas, the most preferred digits were 0 and 8; 0, 8 and 5; and 2 in 2000, 2010 and 2022 respectively.

Bural /urban	Most Preferred Digits and Census Year									
	Sex	2000	2010	2022						
	Both Sexes	0, 5, 8	0, 8, 5	2						
Zambia	Male	0, 5, 8	0, 5, 8	2						
	Female	0, 8	0, 8, 5	2						
	Both Sexes	0, 5, 8	0, 8, 5	2						
Rural	Male	0, 5, 8	0, 5, 8	2						
	Female	0, 8	0, 8, 5	2						
	Both Sexes	0, 8	0, 8, 5	2						
Urban	Male	0, 5, 8	0, 8, 5	2						
	Female	0, 2, 8	0, 8, 5	2						

Tahlo	11 2	• Most	nreferred	digits by	her yeav	rural/urhan	7amhia	2000	2010 a	nd 2022
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Figure 11.4 shows the population distribution by single age for 2022. Irregularities in the reported age data was analysed using population pyramids. Inaccuracies in census age data are easily spotted when data is distributed in single years than in five-year age groups. The population pyramids for the 2022 Census data show age misreporting with preference for ages ending with 2 mostly at ages 12 and 22. The preference for reporting ages ending with 2 in Figure 11.4, 11.5 and 11.6 were consistent with the 2022 observed most preferred digits by sex and rural/urban.





Figure 11.5: Population Distribution in Single Years, Rural Zambia 2022









Errors in age data reporting are also presented in Figures 11.7, 11.8 and 11.9. The figures show population distribution in single years for 2000, 2010 and 2022. The peaks on the curves indicate the most preferred ages in reporting while the troughs indicate the under reported ages.











Figure 11.9: Population distribution in single years, Zambia 2022

- Figures 11.7, 11.8 and 11.9 show that the peaks and troughs were more pronounced for ages below 55 years in the three 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.
- In 2022 the ages 12 and 22 had the highest peaks, indicating highest age misreporting at those ages.

When single year age data is grouped into five-year age groups, irregularities in age data arising from age misreporting tend to disappear. Figures 11.10, 11.11 and 11.12 show population distribution in 5-year age groups for 2000, 2010 and 2022. The figures show smoothened curves after the single age data was grouped for the three censuses.



Figure 11.10: Population distribution by 5 year age group, Zambia 2000













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. Table 11.3 shows sex ratios by 5-year age group and Rural/ urban for 1990, 2000, 2010 and 2022.

- The age-specific sex ratios for 2022 show a deficit of males in age groups 5 9 to age group 40 44 years.
- There was an excess of males over females in the age groups 45 49 and 50 54 years. After age 55 years, there was a deficit of males.
- The 1990 and 2000 censuses had an excess of males in the older age groups.



Age		1990			2000			2010			2022	
Group	Total	Rural	Urban									
0 - 4	99	99	99	99	99	99	99	99	99	100	100	99
5 - 9	98	99	96	100	101	97	99	101	96	98	100	96
10 - 14	99	104	93	99	103	93	98	103	91	97	103	89
15 - 19	94	96	90	92	94	89	94	98	89	96	104	86
20 - 24	87	84	90	84	83	86	82	82	83	90	96	84
25 - 29	87	84	92	95	92	101	86	84	88	88	93	83
30 - 34	96	90	105	103	96	113	99	94	104	92	93	91
35 - 39	98	82	119	97	90	108	106	97	117	90	87	93
40 - 44	91	68	138	98	91	110	108	99	120	98	95	101
45 - 49	95	73	153	100	89	121	97	93	104	103	99	109
50 - 54	92	75	153	93	78	134	91	88	96	103	99	109
55 - 59	112	99	160	99	87	138	95	88	106	89	88	91
60 - 64	105	98	139	91	87	108	83	75	102	82	84	80
65 - 69	122	118	143	109	109	110	83	79	93	81	82	80
70 - 74	124	123	133	116	118	108	86	85	87	69	66	73
75 - 79	155	155	152	134	140	111	100	105	86	64	61	68
80 - 84	110	113	94	122	127	100	96	101	81	70	73	65
85+	111	114	93	104	109	78	88	94	72	74	81	61

Table 11.3: Sex ratio by 5 year age group and rural/urban, Zambia 1990, 2000, 2010 and 2022

11.5.3. Age ratios

The quality of age data has been 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 disaggregated by sex are given in Figure 11.13.





• The irregular patterns of the age ratios indicate that data could be affected by errors from age misreporting, digit preference, omission, migration or fluctuations in births and deaths.

The Age-Sex Accuracy Index describes the quality of age data. The United Nations (UN) defines age data as "accurate, inaccurate and highly inaccurate" if the Age-Sex Accuracy Index lies below 20, between 20 - 40, and 40 and above, respectively. Figure 11.14 shows the Age-Sex Accuracy Indexes for 1990, 2000, 2010 and 2022.







- Over the years, there has been an improvement in the quality of data as depicted by the declining Age-Sex Accuracy Index.
- The Age Accuracy Index declined from 31.7 in 1990 to 28.7 in 2000 and to 28.0 in 2010.
- In 2022, the Age-Sex Accuracy Index was 23.2 indicating much improvement in the age and sex data in the 2022 Census over the previous censuses.

11.5.4. 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 age 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. Female ratios are generally expected to be higher than the male ratios because females normally have lower mortality compared to males. Figure 13.15 shows cohort survival ratio by 5-year age group and sex for 2010 - 2022.







- There were 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.
- Table 11.4 shows cohort survival ratios by 5-year age group, sex and rural/urban for 2010 2022. Table 11.4 and Figure 11.15 indicate more female survival ratios expect for age group 20 - 29.

A m a	Cohort Survival Ratios 2010 - 2022										
Group		Zambia			Rural			Urban			
oroup	Total	Male	Female	Total	Male	Female	Total	Male	Female		
0-04	1.1440	1.1338	1.1540	1.0241	1.0459	1.0024	1.3757	1.3040	1.4465		
5-09	1.1648	1.1432	1.1862	1.0024	1.0182	0.9864	1.4735	1.3861	1.5577		
10-14	1.0146	0.9700	1.0583	0.8730	0.8425	0.9042	1.2438	1.1895	1.2931		
15-19	1.0316	0.9932	1.0679	0.8669	0.8429	0.8905	1.2453	1.1975	1.2881		
20-24	1.0409	1.1053	0.9877	0.9070	0.9725	0.8534	1.1965	1.2586	1.1450		
25-29	1.0007	1.0245	0.9803	0.9191	0.9368	0.9043	1.0922	1.1200	1.0677		
30-34	1.0360	1.0332	1.0389	0.9840	0.9885	0.9797	1.0940	1.0805	1.1081		
35-39	0.9728	0.9626	0.9836	0.9217	0.9292	0.9145	1.0342	0.9994	1.0748		
40-44	1.0901	1.0675	1.1145	1.0529	1.0520	1.0538	1.1398	1.0863	1.2041		
45-49	0.9320	0.8923	0.9706	0.8961	0.8726	0.9178	0.9845	0.9193	1.0521		
50-54	0.9838	0.9325	1.0304	0.9644	0.9409	0.9850	1.0134	0.9204	1.1026		
55-59	1.0086	0.9255	1.0875	0.9706	0.9316	1.0049	1.0668	0.9169	1.2267		
60-64	0.8619	0.7746	0.9343	0.7882	0.7355	0.8275	1.0071	0.8398	1.1778		
65-69	0.7709	0.6621	0.8608	0.7091	0.6126	0.7849	0.9174	0.7693	1.0555		
70-74	0.6751	0.6026	0.7373	0.6262	0.5731	0.6715	0.8093	0.6824	0.9201		
75-79	0.4701	0.3851	0.5548	0.4229	0.3557	0.4933	0.6088	0.4808	0.7186		
80-84	0.4519	0.4257	0.4769	0.4344	0.4129	0.4562	0.5026	0.4675	0.5307		
85+	0.1780	0.1600	0.1938	0.1623	0.1471	0.1765	0.2272	0.2069	0.2417		

Table 11.4: Cohort survival ratios by 5-year age group, sex and rural/urban, Zambia 2010 – 2022

- The overall survival ratios by age group and sex for 2010-2022 show a continued decline with increase in age, indicating consistency in the age group data (Figure 11.15)
- Females have higher survival ratios across all age.

Figure 11.15: Overall survival ratio by age group and sex, Zambia 2010 - 2022





Table 11.5 shows overall survival ratios by age group, sex and Rural/urban for 2010 - 2022.

- In rural areas, males had higher overall survival ratios than females at 10+ and 30+ years.
- In the urban areas, males had lower ratios than females in all age groups.
- In both cases the rations decline with increase in age suggesting consistency in age data

A	Overall Survival Ratios 2010 - 2022									
Age		Zambia			Rural			Urban		
oroup	Total	Male	Female	Total	Male	Female	Total	Male	Female	
10+	1.0486	1.0334	1.0632	0.9354	0.9386	0.9324	1.2195	1.1764	1.2607	
15+	1.0282	1.0113	1.0441	0.9142	0.9122	0.9160	1.1916	1.1532	1.2282	
20+	0.9982	0.9815	1.0138	0.8921	0.8846	0.8991	1.1415	1.1113	1.1701	
25+	0.9940	0.9845	1.0029	0.8973	0.8969	0.8977	1.1190	1.0946	1.1423	
30+	0.9840	0.9822	0.9856	0.9055	0.9122	0.8996	1.0852	1.0682	1.1017	
35+	0.9689	0.9519	0.9850	0.9051	0.8979	0.9117	1.0534	1.0193	1.0881	
40+	0.9589	0.9306	0.9866	0.9011	0.8874	0.9139	1.0397	0.9869	1.0961	
45+	0.9332	0.8964	0.9692	0.8770	0.8575	0.8949	1.0181	0.9505	1.0913	
50+	0.9185	0.8707	0.9642	0.8626	0.8334	0.8888	1.0110	0.9277	1.0982	
55+	0.8598	0.7975	0.9168	0.8044	0.7621	0.8414	0.9586	0.8567	1.0593	
60+	0.8329	0.7606	0.8976	0.7736	0.7234	0.8167	0.9471	0.8279	1.0623	
65+	0.7733	0.6917	0.8456	0.7066	0.6458	0.7584	0.9146	0.7828	1.0424	
70+	0.6860	0.6006	0.7598	0.6228	0.5527	0.6818	0.8385	0.7107	0.9567	
75+	0.6013	0.5196	0.6734	0.5503	0.4799	0.6128	0.7380	0.6271	0.8345	
80+	0.5089	0.4460	0.5665	0.4684	0.4177	0.5162	0.6256	0.5327	0.7032	
85+	0.3901	0.3401	0.4379	0.3578	0.3180	0.3981	0.4861	0.4140	0.5443	
90+	0.3152	0.2960	0.3327	0.2972	0.2816	0.3125	0.3691	0.3457	0.3869	
95+	0.1780	0.1600	0.1938	0.1623	0.1471	0.1765	0.2272	0.2069	0.2417	

Table 11.5: Overall survival ratios by age, sex and rural/urban, Zambia 2010 - 2022



CHAPTER 12: CHARACTERISTICS OF AGRICULTURAL HOUSEHOLDS





CHAPTER 12:

CHARACTERISTICS OF AGRICULTURAL HOUSEHOLDS

KEY FINDINGS

- About 66 percent of households were involved in agricultural activities.
- The proportion of agricultural households increased by 4.6 percentage points, from 61.3 percent in 2010 to 65.9 percent in 2022.
- At the national level, 73.9 percent were male headed agricultural households, while 26.1 percent were female headed agricultural households.
- Eighty-eight percent of rural households were engaged in agricultural activities and 40.8 percent of urban households were involved in agricultural activities.
- All the provinces except Copperbelt and Lusaka had more than two-thirds of households engaged in agriculture.

12.0. Introduction

This chapter provides information on households that engaged in agricultural activities since 1st October, 2021. The agricultural activities encompassed the cultivation of crops, as well as the raising of livestock, poultry, fish farming, capture fisheries, game ranching and bee keeping.

12.1. Concepts and definitions

- **Agricultural-Household-** This is a household in which at least one member of the household is directly involved or carrying out an agricultural activity and/or horticultural farming on the holding.
- **Agricultural-Holding** This refers to land wholly or partly operated for agricultural purposes such as growing crops.
- **Agricultural Activity-** This is the growing of any crop and/ or raising of livestock and/or raising of poultry and /or fish farming and/or game ranching.
- Livestock- This includes cattle, pigs, goats, sheep and donkeys.
- **Poultry-** This includes chickens, ducks, geese, pigeons, guinea fowls, rabbits and turkeys.

12.2. Agricultural households

Figure 12.1 shows the percentage of agricultural households by rural/urban. At national level, agricultural households accounted for 65.9 percent. In rural areas 88.0 percent of households were engaged in agriculture, indicating a high reliance on agriculture as a livelihood source.





12.3. Distribution of agricultural households by sex of head of household

Figure 12.2 shows the percentage distribution of agricultural households by sex of household head and rural/urban. At national level, male-headed agricultural households were higher at 73.9 percent than female-headed agricultural households at 26.1 percent. A similar pattern was observed in both rural and urban areas, reflecting cultural norms and societal expectations that favor men as household heads and decision-makers. This disparity highlights the need to consider gender dynamics and power structures in agricultural development and policy-making



Figure 12.2: Percentage Distribution of Agricultural Households by Sex of Household Head and Rural/Urban, Zambia 2022

12.4. Agricultural households by province

Figure 12.3 shows the percentage of agricultural households by province. All provinces had more than 70 percent agricultural households except for Copperbelt and Lusaka provinces. Eastern Province had the largest proportion at 86.2 percent. Overall, the results highlight the importance of agriculture in the country's economy and the need for region-specific policies and interventions to support agricultural development.







12.5. Agricultural households by province, Zambia 2010 and 2022

Figure 12.4 shows the percentage of agricultural households by province in 2010 and 2022. The proportion of agricultural households increased from 61.3 percent in 2010 to 65.9 percent in 2022. Further, four out of the ten provinces had an increase in agricultural households, with Lusaka Province increasing from 14.7 percent to 29.3 percent during the reference period, indicating a growing importance of agriculture.





12.6. Agricultural household by sex of household head and province

Figure 12.5 shows the percentage distribution of agricultural households by sex of household head and province. Western Province had the highest proportion of female headed agricultural households at 39.7 percent. All the provinces had a higher proportion of male headed agricultural households.





Figure 12.5: Percentage Distribution of Agricultural Households by Sex of Household Head and Province, Zambia 2022

12.7. Agricultural households by type of agricultural activity

12.7.1. Crop growing households

Figure 12.6 shows the percentage of agricultural households by crop growing and province. The results indicate that a high proportion of households were engaged in crop growing, with Eastern Province recording the highest percentage at 97.4 percent and Lusaka Province recording the lowest at 83.7 percent. This indicates that provinces may be vulnerable to crop-related shocks, such as droughts or pests, which could impact food security and livelihoods. This highlights the need for policymakers and stakeholders to consider the specific needs and vulnerabilities of different provinces and households engaged in crop growing.

Figure 12.6: Percentage of agricultural households by crop growing and province, Zambia 2022

12.7.2. Livestock raising households

Figure 12.7 shows percentage of households by livestock raising and province. Livestock raising is most prevalent in the Southern and Central provinces at 67.3 percent and 50.6 percent, respectively, while it is least common in Luapula and Copperbelt provinces at 26.1 percent. The varying prevalence of livestock raising across provinces highlights the need for targeted support and regional development strategies.

Figure 12.8 shows Percentage of households by poultry raising and Province. The prevalence of poultry raising varies across provinces, with Southern Province having the highest percentage of households engaged in poultry raising at 62.1%, followed by Central Province at 50.3%. North Western had the least percentage of households engaged in poultry raising at 28.3.

Figure 12.8: Percentage of Households by Poultry Raising and Province, Zambia 2022

2022 CENTRE

APPENDICES

Appendix 1: Tables

Table 1: Population aged 12 years and older with academic, professional, technical or vocational qualification by field of study, sex and rural/urban, Zambia 2022

Field of Study	Tota	al		Sex		R	Rural/Urban			
Field of Study	Number	Total	Male	Female	Total	Rural	Urban	Total		
Total	975,916	100.0	56.9	43.1	100.0	15.7	84.3	100.0		
Basic programmes and qualifications	4,602	0.5	38.2	61.8	100.0	30.2	69.8	100.0		
Literacy and numeracy	178	0.0	48.3	51.7	100.0	26.4	73.6	100.0		
Personal skills and development	3,199	0.3	49.5	50.5	100.0	14.3	85.7	100.0		
Education	201,336	20.6	40.2	59.8	100.0	21.9	78.1	100.0		
Arts	15,226	1.6	57.4	42.6	100.0	18.0	82.0	100.0		
Humanities (except languages)	8,356	0.9	80.1	19.9	100.0	12.9	87.1	100.0		
Languages	1,482	0.2	62.3	37.7	100.0	15.5	84.5	100.0		
Social and behavioural sciences	20,207	2.1	49.1	50.9	100.0	9.1	90.9	100.0		
Journalism and information	6,071	0.6	47.1	52.9	100.0	4.9	95.1	100.0		
Business and administration	148,011	15.2	54.8	45.2	100.0	7.9	92.1	100.0		
Law	9,724	1.0	58.0	42.0	100.0	5.1	94.9	100.0		
Biological and related sciences	3,762	0.4	57.5	42.5	100.0	14.2	85.8	100.0		
Environment	5,175	0.5	62.0	38.0	100.0	18.3	81.7	100.0		
Physical sciences	3,623	0.4	74.5	25.5	100.0	14.8	85.2	100.0		
Mathematics and statistics	4,015	0.4	72.2	27.8	100.0	28.3	71.7	100.0		
Information and Communication Technologies (ICTs)	28,207	2.9	57.4	42.6	100.0	6.1	93.9	100.0		
Engineering and engineering trades	122,342	12.5	91.8	8.2	100.0	9.2	90.8	100.0		
Manufacturing and processing	53,101	5.4	37.3	62.7	100.0	16.9	83.1	100.0		
Architecture and construction	59,297	6.1	92.4	7.6	100.0	22.5	77.5	100.0		
Agriculture	35,040	3.6	70.7	29.3	100.0	37.7	62.3	100.0		
Forestry	1,295	0.1	75.8	24.2	100.0	20.9	79.1	100.0		
Fisheries	1,304	0.1	71.5	28.5	100.0	28.7	71.3	100.0		
Veterinary	2,200	0.2	73.7	26.3	100.0	30.0	70.0	100.0		
Health	84,888	8.7	33.7	66.3	100.0	13.6	86.4	100.0		
Welfare	20,348	2.1	27.6	72.4	100.0	14.5	85.5	100.0		
Personal services	55,980	5.7	24.7	75.3	100.0	12.1	87.9	100.0		
Hygiene and occupational health services	5,290	0.5	64.3	35.7	100.0	14.8	85.2	100.0		
Security services	14,634	1.5	79.8	20.2	100.0	14.9	85.1	100.0		
Transport services	36,987	3.8	96.9	3.1	100.0	15.4	84.6	100.0		
Not stated	18,836	1.9	69.3	30.7	100.0	31.5	68.5	100.0		
Other	1,200	0.1	62.1	37.9	100.0	26.3	73.8	100.0		

Table 2: Adjusted ASFRs and TFRs by province, Zambia 2022

Age Group	Zambia	Rural	Urban	Central	Copper- belt	Eastern	Luapula	Lusaka	Muchin- ga	North- ern	North Western	South- ern	Western
15 - 19	0.1177	0.1546	0.0767	0.1387	0.0813	0.1645	0.1218	0.0696	0.1038	0.1046	0.1211	0.155	0.1366
20 - 24	0.1928	0.2303	0.159	0.2046	0.1662	0.2171	0.2332	0.1486	0.199	0.2166	0.2094	0.2105	0.2044
25 - 29	0.1951	0.2232	0.1773	0.1982	0.1825	0.1996	0.2343	0.1677	0.1999	0.2142	0.2252	0.2078	0.2142
30 - 34	0.1775	0.2013	0.1621	0.1799	0.1669	0.1779	0.2129	0.1537	0.176	0.1923	0.2129	0.1883	0.1926
35 - 39	0.1403	0.1651	0.1199	0.1455	0.1241	0.1367	0.1665	0.1136	0.1493	0.153	0.1719	0.1554	0.1637
40 - 44	0.0732	0.0907	0.0568	0.0777	0.0585	0.0731	0.0891	0.0543	0.0788	0.0859	0.0906	0.0835	0.0894
45 - 49	0.0237	0.027	0.0208	0.0264	0.0201	0.024	0.0278	0.0199	0.0256	0.0258	0.0327	0.0232	0.026
Adjusted TFR	4.6	5.5	3.9	4.9	4.0	5.0	5.4	3.6	4.7	5.0	5.3	5.1	5.1

Table 3: Abridged life table, both sexes, Zambia 2022

Age(x)	Width (n)	nMx	nax	nqx	lx	ndx	nLx	5Px	Tx	ex
0	1	0.0317	0.3	0.0310	100,000	3,102	97,828	1	6,669,187	66.7
1	4	0.0035	0.4	0.0139	96,898	1,346	382,745	1	6,571,359	67.8
5	5	0.0013	0.5	0.0064	95,552	615	474,991	1	6,188,614	64.8
10	5	0.0010	0.5	0.0049	94,937	462	472,606	1	5,713,623	60.2
15	5	0.0013	0.5	0.0067	94,475	629	469,543	1	5,241,017	55.5
20	5	0.0024	0.5	0.0119	93,846	1,121	464,183	1	4,771,474	50.8
25	5	0.0030	0.5	0.0150	92,724	1,390	457,368	1	4,307,292	46.5
30	5	0.0039	0.5	0.0190	91,335	1,734	448,868	1	3,849,923	42.2
35	5	0.0050	0.5	0.0243	89,600	2,176	438,210	1	3,401,055	38.0
40	5	0.0059	0.5	0.0285	87,424	2,496	425,892	1	2,962,845	33.9
45	5	0.0076	0.5	0.0370	84,929	3,140	410,514	1	2,536,953	29.9
50	5	0.0090	0.5	0.0432	81,789	3,534	393,043	1	2,126,439	26.0
55	5	0.0123	0.5	0.0584	78,255	4,569	370,715	1	1,733,396	22.2
60	5	0.0148	0.5	0.0693	73,686	5,104	345,462	1	1,362,681	18.5
65	5	0.0211	0.5	0.0964	68,582	6,609	313,172	1	1,017,219	14.8
70	5	0.0298	0.5	0.1312	61,973	8,131	273,277	1	704,047	11.4
75	5	0.0429	0.5	0.1798	53,842	9,682	225,643	0	430,770	8.0
80	+	0.0900	0.5	1.0000	44,160	44,160	205,127		205,127	4.6

Table 4: Abridged Life table, males, Zambia 2022

Age(x)	Width (n)	nMx	nax	nqx	lx	ndx	nLx	5Px	Tx	ex
0	1	0.0347	0.3	0.0339	100000	3,390	97,627	0.9576	6,392,781	63.9
1	4	0.0038	0.4	0.0151	96,610	1,460	381,183	0.9873	6,295,154	65.2
5	5	0.0014	0.5	0.0070	95,150	667	472,747	0.9945	5,913,971	62.2
10	5	0.0011	0.5	0.0053	94,483	499	470,169	0.9927	5,441,224	57.6
15	5	0.0015	0.5	0.0075	93,984	709	466,730	0.9858	4,971,055	52.9
20	5	0.0030	0.5	0.0149	93,275	1,392	460,113	0.9811	4,504,325	48.3
25	5	0.0039	0.5	0.0193	91,883	1,775	451,429	0.9767	4,044,213	44.0
30	5	0.0049	0.5	0.0237	90,108	2,139	440,917	0.9703	3,592,784	39.9
35	5	0.0063	0.5	0.0304	87,970	2,675	427,811	0.9650	3,151,867	35.8
40	5	0.0073	0.5	0.0355	85,295	3,028	412,846	0.9549	2,724,056	31.9
45	5	0.0096	0.5	0.0462	82,266	3,801	394,226	0.9497	2,311,210	28.1
50	5	0.0106	0.5	0.0507	78,465	3,980	374,414	0.9316	1,916,983	24.4
55	5	0.0150	0.5	0.0704	74,485	5,247	348,813	0.9134	1,542,569	20.7
60	5	0.0192	0.5	0.0886	69,238	6,132	318,596	0.8825	1,193,756	17.2
65	5	0.0272	0.5	0.1210	63,106	7,636	281,167	0.8448	875,160	13.9
70	5	0.0372	0.5	0.1595	55,470	8,847	237,538	0.7943	593,993	10.7
75	5	0.0523	0.5	0.2118	46,623	9,873	188,684	0.4707	356,455	7.6
80	+	0.0967	0.5	1.0000	36,750	36,750	167,771		167,771	4.6

Table 5: Abridged life table, females, Zambia 2022

Age(x)	Width (n)	nMx	nax	nqx	lx	ndx	nLx	5Px	Tx	ex
0	1	0.0287	0.3	0.0281	100,000	2,814	98,030	0.9647	6,949,969	69.5
1	4	0.0032	0.4	0.0127	97,186	1,231	384,312	0.9894	6,851,939	70.5
5	5	0.0012	0.5	0.0059	95,955	563	477,239	0.9954	6,467,627	67.4
10	5	0.0009	0.5	0.0045	95,392	425	475,045	0.9943	5,990,388	62.8
15	5	0.0012	0.5	0.0058	94,966	552	472,349	0.9912	5,515,343	58.1
20	5	0.0019	0.5	0.0092	94,415	867	468,172	0.9892	5,042,994	53.4
25	5	0.0022	0.5	0.0110	93,548	1,031	463,098	0.9859	4,574,821	48.9
30	5	0.0029	0.5	0.0144	92,517	1,332	456,587	0.9819	4,111,723	44.4
35	5	0.0038	0.5	0.0185	91,184	1,687	448,328	0.9790	3,655,136	40.1
40	5	0.0043	0.5	0.0213	89,497	1,908	438,897	0.9737	3,206,808	35.8
45	5	0.0055	0.5	0.0268	87,589	2,349	427,371	0.9658	2,767,911	31.6
50	5	0.0072	0.5	0.0350	85,239	2,984	412,769	0.9542	2,340,539	27.5
55	5	0.0098	0.5	0.0471	82,255	3,871	393,856	0.9482	1,927,771	23.4
60	5	0.0110	0.5	0.0523	78,384	4,103	373,456	0.9273	1,533,915	19.6
65	5	0.0161	0.5	0.0750	74,281	5,574	346,323	0.8935	1,160,459	15.6
70	5	0.0245	0.5	0.1103	68,707	7,578	309,433	0.8473	814,136	11.8
75	5	0.0368	0.5	0.1580	61,129	9,657	262,189	0.4805	504,703	8.3
80	+	0.0852	0.5	1	51,472	51,472	242,514		242,514	4.7

Table 6: Abridged life table, both sexes, Zambia Rural 2022

Age(x)	Width (n)	nMx	nax	nqx	lx	ndx	nLx	5Px	Tx	ex
0	1	0.0355	0.3	0.0347	100,000	3,466	97,574	0.9558	6,610,539	66.1
1	4	0.0042	0.4	0.0167	96,534	1,608	380,349	0.9861	6,512,965	67.5
5	5	0.0016	0.5	0.0078	94,927	744	471,287	0.9940	6,132,616	64.6
10	5	0.0012	0.5	0.0058	94,183	547	468,452	0.9926	5,661,329	60.1
15	5	0.0015	0.5	0.0076	93,636	712	464,973	0.9871	5,192,877	55.5
20	5	0.0027	0.5	0.0135	92,923	1,251	458,985	0.9835	4,727,904	50.9
25	5	0.0034	0.5	0.0168	91,672	1,544	451,413	0.9800	4,268,919	46.6
30	5	0.0042	0.5	0.0204	90,128	1,837	442,373	0.9750	3,817,506	42.4
35	5	0.0052	0.5	0.0255	88,291	2,254	431,310	0.9708	3,375,133	38.2
40	5	0.0061	0.5	0.0296	86,037	2,546	418,727	0.9639	2,943,823	34.2
45	5	0.0076	0.5	0.0369	83,491	3,078	403,601	0.9585	2,525,096	30.2
50	5	0.0087	0.5	0.0420	80,412	3,377	386,865	0.9463	2,121,494	26.4
55	5	0.0116	0.5	0.0550	77,035	4,237	366,109	0.9367	1,734,629	22.5
60	5	0.0136	0.5	0.0642	72,798	4,675	342,951	0.9093	1,368,521	18.8
65	5	0.0205	0.5	0.0938	68,123	6,390	311,857	0.8803	1,025,570	15.1
70	5	0.0276	0.5	0.1229	61,732	7,589	274,513	0.8367	713,712	11.6
75	5	0.0397	0.5	0.1684	54,144	9,120	229,681	0.4770	439,199	8.1
80	+	0.0852	0.5	1.0000	45,024	45,024	209,518		209,518	4.7

Table 7: Abridged life table, males, Zambia rural 2022

Age(x)	Width (n)	nMx	nax	nqx	lx	ndx	nLx	5Px	Тx	ex
0	1	0.0390	0.3	0.0380	100,000	3,795	97,343	0.9517	6,321,072	63.2
1	4	0.0046	0.4	0.0182	96,205	1,748	378,524	0.9848	6,223,729	64.7
5	5	0.0017	0.5	0.0086	94,456	812	468,627	0.9936	5,845,205	61.9
10	5	0.0012	0.5	0.0061	93,644	573	465,641	0.9920	5,376,578	57.4
15	5	0.0017	0.5	0.0082	93,071	766	461,906	0.9847	4,910,937	52.8
20	5	0.0033	0.5	0.0161	92,305	1,486	454,835	0.9794	4,449,031	48.2
25	5	0.0043	0.5	0.0211	90,818	1,916	445,469	0.9757	3,994,197	44.0
30	5	0.0050	0.5	0.0246	88,902	2,188	434,664	0.9681	3,548,728	39.9
35	5	0.0067	0.5	0.0327	86,714	2,836	420,809	0.9634	3,114,064	35.9
40	5	0.0077	0.5	0.0371	83,878	3,109	405,399	0.9541	2,693,255	32.1
45	5	0.0098	0.5	0.0469	80,769	3,790	386,791	0.9493	2,287,856	28.3
50	5	0.0107	0.5	0.0512	76,979	3,941	367,162	0.9336	1,901,066	24.7
55	5	0.0145	0.5	0.0682	73,038	4,983	342,766	0.9183	1,533,903	21.0
60	5	0.0180	0.5	0.0833	68,055	5,672	314,750	0.8855	1,191,137	17.5
65	5	0.0265	0.5	0.1183	62,383	7,379	278,710	0.8526	876,387	14.0
70	5	0.0350	0.5	0.1510	55,004	8,307	237,638	0.8012	597,677	10.9
75	5	0.0503	0.5	0.2050	46,697	9,574	190,401	0.4712	360,039	7.7
80	+	0.0907	0.5	1.0000	37,123	37,123	169,638		169,638	4.6

Table 8: Abridged life table, females, Zambia rural 2022

Age(x)	Width (n)	nMx	nax	nqx	lx	ndx	nLx	5Px	Тx	ex
0	1	0.0321	0.3	0.0314	100,000	3,135	97,805	0.9600	6,902,592	69.0
1	4	0.0038	0.4	0.0151	96,865	1,466	382,183	0.9874	6,804,787	70.3
5	5	0.0014	0.5	0.0071	95,399	674	473,962	0.9943	6,422,604	67.3
10	5	0.0011	0.5	0.0055	94,725	520	471,284	0.9932	5,948,642	62.8
15	5	0.0014	0.5	0.0069	94,205	655	468,078	0.9895	5,477,359	58.1
20	5	0.0022	0.5	0.0109	93,550	1,017	463,174	0.9875	5,009,281	53.5
25	5	0.0026	0.5	0.0127	92,533	1,178	457,364	0.9841	4,546,107	49.1
30	5	0.0033	0.5	0.0163	91,355	1,488	450,080	0.9812	4,088,743	44.8
35	5	0.0039	0.5	0.0190	89,867	1,712	441,634	0.9782	3,638,663	40.5
40	5	0.0045	0.5	0.0221	88,156	1,952	431,993	0.9740	3,197,029	36.3
45	5	0.0054	0.5	0.0264	86,203	2,278	420,764	0.9681	2,765,036	32.1
50	5	0.0067	0.5	0.0325	83,925	2,725	407,362	0.9582	2,344,272	27.9
55	5	0.0089	0.5	0.0428	81,200	3,478	390,347	0.9532	1,936,910	23.9
60	5	0.0099	0.5	0.0473	77,722	3,675	372,070	0.9301	1,546,563	19.9
65	5	0.0155	0.5	0.0726	74,046	5,372	346,056	0.9002	1,174,493	15.9
70	5	0.0227	0.5	0.1030	68,674	7,077	311,525	0.8603	828,437	12.1
75	5	0.0331	0.5	0.1442	61,597	8,884	268,007	0.4815	516,913	8.4
80	+	0.0810	0.5	1.0000	52,713	52,713	248,906		248,906	4.7

Table 9: Abridged life table, both sexes, Zambia urban 2022

Age(x)	Width (n)	nMx	nax	nqx	lx	ndx	nLx	5Px	Tx	ex
0	1	0.0256	0.3	0.0252	100,000	2,519	98,236	0.9696	6,747,089	67.5
1	4	0.0024	0.4	0.0096	97,481	935	386,556	0.9919	6,648,853	68.2
5	5	0.0009	0.5	0.0043	96,545	416	480,855	0.9964	6,262,297	64.9
10	5	0.0007	0.5	0.0035	96,129	337	479,131	0.9947	5,781,442	60.1
15	5	0.0011	0.5	0.0054	95,793	522	476,615	0.9902	5,302,310	55.4
20	5	0.0021	0.5	0.0102	95,271	976	471,961	0.9870	4,825,696	50.7
25	5	0.0027	0.5	0.0133	94,295	1,257	465,818	0.9827	4,353,734	46.2
30	5	0.0036	0.5	0.0178	93,038	1,654	457,748	0.9774	3,887,916	41.8
35	5	0.0047	0.5	0.0231	91,384	2,113	447,410	0.9729	3,430,168	37.5
40	5	0.0056	0.5	0.0275	89,271	2,457	435,296	0.9639	2,982,758	33.4
45	5	0.0077	0.5	0.0371	86,813	3,219	419,583	0.9561	2,547,462	29.3
50	5	0.0093	0.5	0.0446	83,595	,732	401,178	0.9391	2,127,879	25.5
55	5	0.0133	0.5	0.0628	79,862	5,013	376,756	0.9250	1,726,701	21.6
60	5	0.0164	0.5	0.0764	74,850	5,718	348,516	0.9026	1,349,945	18.0
65	5	0.0220	0.5	0.0999	69,131	6,905	314,583	0.8612	1,001,429	14.5
70	5	0.0330	0.5	0.1436	62,226	8,938	270,911	0.8066	686,846	11.0
75	5	0.0487	0.5	0.1998	53,288	10,649	218,522	0.4746	415,935	7.8
80	+	0.1003	0.5	1.0000	42,640	42,640	197,413		197,413	4.6

Table 10: Abridged life table, males, Zambia urban 2022

Age(x)	Width (n)	nMx	nax	nqx	lx	ndx	nLx	5Px	Тx	ex
0	1	0.0279	0.3	0.0274	100,000	2,739	98,083	0.9670	6,491,713	64.9
1	4	0.0026	0.4	0.0103	97,261	1,006	385,422	0.9913	6,393,630	65.7
5	5	0.0009	0.5	0.0045	96,255	437	479,308	0.9960	6,008,208	62.4
10	5	0.0008	0.5	0.0040	95,818	382	477,372	0.9937	5,528,899	57.7
15	5	0.0013	0.5	0.0066	95,436	627	474,360	0.9872	5,051,527	52.9
20	5	0.0027	0.5	0.0135	94,809	1,281	468,283	0.9828	4,577,167	48.3
25	5	0.0036	0.5	0.0176	93,528	1,650	460,218	0.9776	4,108,884	43.9
30	5	0.0047	0.5	0.0230	91,879	2,110	449,898	0.9722	3,648,666	39.7
35	5	0.0058	0.5	0.0284	89,769	2,547	437,382	0.9665	3,198,768	35.6
40	5	0.0070	0.5	0.0340	87,222	2,969	422,750	0.9557	2,761,386	31.7
45	5	0.0095	0.5	0.0455	84,253	3,834	404,014	0.9503	2,338,636	27.8
50	5	0.0105	0.5	0.0502	80,419	4,037	383,931	0.9292	1,934,622	24.1
55	5	0.0157	0.5	0.0732	76,382	5,594	356,740	0.9064	1,550,692	20.3
60	5	0.0210	0.5	0.0960	70,789	6,799	323,349	0.8784	1,193,952	16.9
65	5	0.0281	0.5	0.1248	63,990	7,984	284,021	0.8338	870,603	13.6
70	5	0.0405	0.5	0.1714	56,006	9,602	236,821	0.7831	586,582	10.5
75	5	0.0558	0.5	0.2230	46,404	10,348	185,454	0.4698	349,761	7.5
80	+	0.1110	0.5	1	36,056	36,056	164,307		164,307	4.6

Table 11: Abridged life table, females, Zambia urban 2022

Age(x)	Width (n)	nMx	nax	nqx	lx	ndx	nLx	5Px	Tx	ex
0	1	0.0234	0.3	0.0230	100,000	2,299	98,391	0.9722	7,007,450	70.1
1	4	0.0022	0.4	0.0088	97,701	865	387,691	0.9924	6,909,060	70.7
5	5	0.0008	0.5	0.0041	96,836	396	482,401	0.9968	6,521,369	67.3
10	5	0.0006	0.5	0.0031	96,441	296	480,869	0.9957	6,038,968	62.6
15	5	0.0009	0.5	0.0045	96,144	429	478,789	0.9929	5,558,099	57.8
20	5	0.0015	0.5	0.0074	95,715	709	475,385	0.9907	5,079,310	53.1
25	5	0.0019	0.5	0.0096	95,006	908	470,943	0.9876	4,603,925	48.5
30	5	0.0026	0.5	0.0128	94,098	1,201	465,083	0.9825	4,132,982	43.9
35	5	0.0037	0.5	0.0180	92,897	1,671	456,964	0.9798	3,667,899	39.5
40	5	0.0042	0.5	0.0205	91,226	1,868	447,721	0.9734	3,210,934	35.2
45	5	0.0056	0.5	0.0273	89,357	2,435	435,827	0.9629	2,763,214	30.9
50	5	0.0079	0.5	0.0382	86,922	3,322	419,659	0.9488	2,327,386	26.8
55	5	0.0111	0.5	0.0527	83,600	4,402	398,186	0.9413	1,907,728	22.8
60	5	0.0126	0.5	0.0594	79,197	4,706	374,809	0.9236	1,509,541	19.1
65	5	0.0169	0.5	0.0784	74,491	5,844	346,160	0.8829	1,134,732	15.2
70	5	0.0273	0.5	0.1217	68,648	8,355	305,641	0.8238	788,572	11.5
75	5	0.0438	0.5	0.1830	60,293	11,037	251,799	0.4786	482,931	8.0
80	+	0.0936	0.5	1.0000	49,256	49,256	231,132		231,132	4.7

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Appendix 3: List of Personnel Involved In the Report Preparation

01	EDITORS			
	Sheila S. Mudenda	-	Acting Statistician General	
	Frank Kakungu	-	Census Manager	
	Chola Nakazwe	-	Deputy Census Manager	
	Palver Sikanyiti	-	Assistant Census Manager	
	Francis Mwinsa K	-	Statistician	
	Chibesa Musamba	-	Senior Statistician	
	Joshua Siuluta	-	Demographer	
	Mundia Muyakwa	-	Statistician	
	Andrew Banda	-	Lecturer/Demographer (UNZA-DDPSME)	
	Gloria Songolo	-	Lecturer/Demographer (UNZA-DDPSME)	
02	ANALYSTS			
02	ANALYSTS Palver Sikanyiti	-	Senior Demographer	
02	ANALYSTS Palver Sikanyiti Gerson Banda	-	Senior Demographer Principal Statistician	
02	ANALYSTS Palver Sikanyiti Gerson Banda Brenda Nakamba	- - -	Senior Demographer Principal Statistician Statistician	
02	ANALYSTS Palver Sikanyiti Gerson Banda Brenda Nakamba Etambuyu Lukonga	- - -	Senior Demographer Principal Statistician Statistician Senior Research Officer	
02	ANALYSTS Palver Sikanyiti Gerson Banda Brenda Nakamba Etambuyu Lukonga Aram Chitalu	- - - -	Senior Demographer Principal Statistician Statistician Senior Research Officer Senior Research Officer	
02	ANALYSTS Palver Sikanyiti Gerson Banda Brenda Nakamba Etambuyu Lukonga Aram Chitalu Oliver Chitalu	- - - - -	Senior Demographer Principal Statistician Statistician Senior Research Officer Senior Research Officer Statistician	
02	ANALYSTS Palver Sikanyiti Gerson Banda Brenda Nakamba Etambuyu Lukonga Aram Chitalu Oliver Chitalu Pasco Mumba	- - - - - - -	Senior Demographer Principal Statistician Statistician Senior Research Officer Senior Research Officer Statistician Statistician	
02	ANALYSTS Palver Sikanyiti Gerson Banda Brenda Nakamba Etambuyu Lukonga Aram Chitalu Oliver Chitalu Pasco Mumba Salome Naluyele	- - - - - - -	Senior Demographer Principal Statistician Statistician Senior Research Officer Senior Research Officer Statistician Statistician Statistician	

- Senior Statistician
- Demographer
 - Statistician
 - Senior Statistician _
 - Lecturer/Demographer (UNZA-DDPSME) _
 - Lecturer/Demographer (UNZA-DDPSME)
 - Statistician
 - Statistician

03 IT STAFF

Joseph Mweetwa

Evelyn Chisanga

Andrew Banda

Gloria Songolo

Wellani Simwinga

Precious Chanda

Nene Bah

Bertha Nachinga	-	Senior Systems Analyst
Barbara Moto,-	-	Senior Systems Analyst
Chanda Mutale	-	Senior Systems Analyst
Stembile Lungu	-	Systems Analyst
Chenela Nkhowani	-	Programmer Analyst
Ben Mwale	-	Systems Analyst
Costain Musanka	-	Programmer Analyst
Hilda Chileshe	-	Systems Analyst
Chonde Namutowe	-	Programmer Analyst
Tandiwe Africa	-	Systems Analyst
Pius Kawesha	-	Senior Statistician

03 SPATIAL ANALYSTS

Michelo Choongo Statistician Webster Sikalumbi Senior Statistical Officer Cartographer Humphrey Mpimpa Japhet Phiri - Cartographer Cartographer _

04 FORMATTING & ILLUSTRATIONS

Anthony Nkole	-	Desktop Publishing Officer
Perry Musenge	-	Assistant Desktop Publishing Officer
Bowa Makoselo	-	Assistant Desktop Publishing Officer


