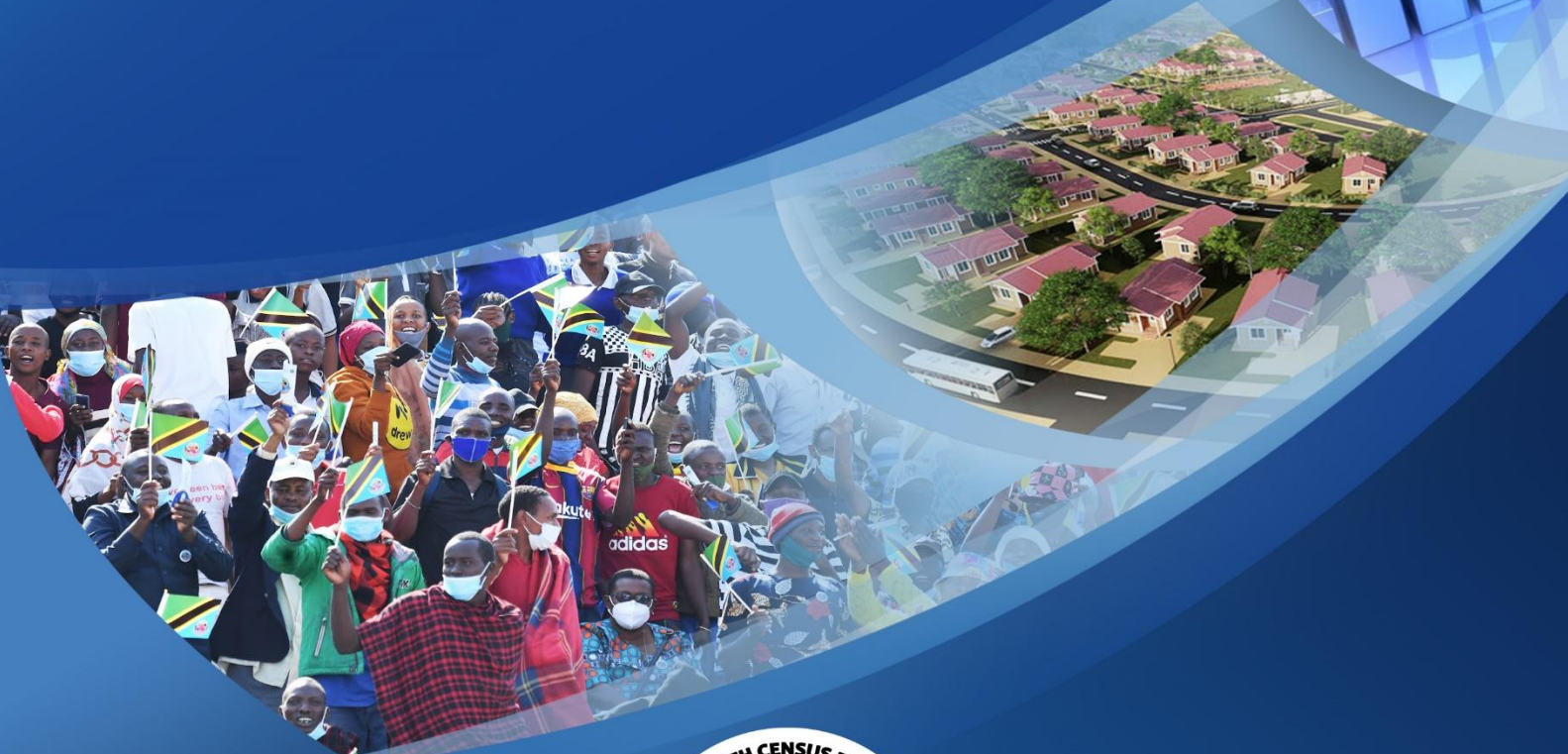




THE UNITED REPUBLIC OF TANZANIA

## Kilimanjaro Region

# Basic Demographic and Socio-Economic Profile





The United Republic of Tanzania

**Kilimanjaro Region**  
**Basic Demographic and Socio- Economic Profile**

Ministry of Finance and Planning  
National Bureau of Statistics  
Tanzania

and

Presidents' Office - Finance and Planning  
Office of the Chief Government Statistician  
Zanzibar

**December 2024**



The Republic of Korea



People's Republic of China

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**Notes:**

Maps and land area used in this publication are derived from the 2022 Population and Housing Census (PHC) cartographic work; therefore, they are for statistical use only.

# KILIMANJARO REGION, ADMINISTRATIVE BOUNDARIES



## Foreword

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The 2022 Population and Housing Census (PHC) for the United Republic of Tanzania had its



reference as the midnight of the 22<sup>nd</sup>/23<sup>rd</sup> August 2022. This was the Sixth and the first digital Census after the Union of Tanganyika and Zanzibar in 1964. Other post union censuses were carried out in 1967, 1978, 1988, 2002 and 2012. The Sixth Phase Government of Tanzania



under the leadership of Her Excellency Dr. Samia Suluhu Hassan, and the Eighth Phase Government of Zanzibar under the leadership of His Excellency Dr. Hussein Ali Mwinyi, like the previous phases, have fulfilled their obligation of conducting the 2022 PHC according to the United Nations Principles and Recommendations for the Population and Housing Census. **We owe them much appreciation for their commitment and support during Census implementation.**

The 2022 PHC was conducted in accordance with the Statistics Act Cap 351, which mandates the Government of the United Republic of Tanzania to conduct Population and Housing Census every ten years. It also followed the United Nations Principles and Recommendations for conducting the 2020 Round of Population and Housing Census, including adoption of advanced Information and Communication Technology (ICT) at all stages of Census implementation. Indeed, the country's decision to use more advanced technology to capture data during cartographic mapping, enumeration, data transmission and processing made the 2022 PHC the first ever digital census to be conducted in Tanzania.

The Government of the United Republic of Tanzania conducted for the first time the 2022 Tanzania Buildings Census (2022 TBC), an exercise done concurrently with the 2022 Population and Housing Census. Buildings are amongst the most important infrastructure in the lives of people in Tanzania and around the world. Buildings help to preserve and promote the lives of individuals, families and society at large in the economic, social, political and cultural spheres. Moreover, buildings as part of premises are an important criterion for measuring the state of a non-income economy for an individual or community concerned. The main uses of buildings in the lives of rural and urban people include residential, commercial, commercial-

residential, institutional and industrial. Apart from addressing the long-time challenges of lack of information on buildings in the country, the 2022 TBC has been conducted to meet the requirements of various national, regional and international policies pertaining to human settlements development. This huge national undertaking has been made practical due to a clear understanding that, buildings census is the primary means of accessing complete, accurate, adequate, timely and reliable building information.

The 2022 PHC and TBC results are for integrated plans and sustainable development of the country and will increase awareness and transparency in allocation of resources at all levels of administration based on the actual population. The results will be used by the Government and stakeholders in monitoring and evaluating various national, regional and international development frameworks including the Tanzania Development Vision 2025 and Zanzibar Development Vision 2050; the Third National Five-Year Development Plan 2021/22 - 2025/26 and Zanzibar Development Plan 2021/22 - 2025/26; the East African Community Vision 2050; Southern African Development Community Vision 2050 and the African Development Agenda 2063.

Furthermore, the results will enable the country to evaluate the progress of implementation of Sustainable Development Goals (United Nation Agenda 2030); goals that aim at achieving equality and eradicating poverty of all kinds including extreme poverty by 2030 by ensuring no one is left behind. The census data will also provide a basis for the computation of several indicators such as enrolment and literacy rates, infant and maternal mortality rates, unemployment rate and others.

The Kilimanjaro Basic Demographic and Socio-Economic Profile is the fifth in a series of major planned publications for the 2022 PHC. The major reports that have been produced so far are Administrative Units Population Distribution Reports, Age and Sex Reports, The Tanzania Basic Demographic and Socio-Economic Profile and *Ripoti ya Idadi ya Watu katika Majimbo ya Uchaguzi (Constituency Population Distribution Report)* in two volumes of United Republic of Tanzania and Tanzania Zanzibar. The first three major reports are in three volumes for the United Republic of Tanzania, Tanzania Mainland and Tanzania Zanzibar. The main purpose of this report is to provide a short descriptive analysis and related tables on main thematic areas covered in the 2022 Population and Housing Census. Areas covered include population

and household characteristics, social and economic activities. Other reports in the series of planned Census publications will be Thematic Reports.

The success of both 2022 PHC and TBC depended on the cooperation and contributions from the Government, specifically Census Committees from national to the lowest administrative level. These include the National Central Census Committee; National Census Advisory Committee; National Census Technical Committee; Census Committees at regional, district, wards, village/mtaa and hamlet. There were also forums from Non-States Actors including Collaborators Forum, Private Sector, various institutions and the public at large.

A word of thanks goes to Government leaders at all levels, particularly, Minister for Finance; Minister for Lands, Housing and Human Settlements Development, Minister of State - President's Office, Finance and Planning, Zanzibar; Minister for Lands and Housing Development Zanzibar; Members of Parliament; Members of the House of Representatives; Councillors/Shehas; Regional and District Census Committees chaired by Regional and District Commissioners of respective areas; Census Coordinators (National and Zanzibar); Regional and District Census Coordinators; Supervisors; Enumerators; Local leaders and all respondents (heads of households, members of households and other individuals).

Special gratitude is extended to the following Development Partners:- United Nations Population Fund (UNFPA); World Bank (WB); United Nations Children's Fund (UNICEF); UN-Women; International Organization for Migration (IOM); United States Agency for International Development (USAID); Foreign, Commonwealth and Development Office (FCDO); United States Census Bureau (USCB), The Republic of South Korea, The People's Republic of China and other Development Partners for providing equipment, expertise, training and financial support in making the 2022 Population and Housing Census a success. We also thank religious, traditional and political leaders, non-governmental organization leaders, the media and all citizens and non-citizens in general for their participation and contributions in the successful implementation of the Census.

Special thanks also go to Honourable Anne Semamba Makinda - Census Commissar for Tanzania Mainland and Former Speaker of the National Assembly and Honourable Ambassador Mohamed Haji Hamza - Census Commissar for Tanzania Zanzibar, for their

effective leadership and management in educating and sensitizing all citizens and non-citizens to participate in the 2022 Population and Housing Census thus, resulting in enhanced quality, smooth and timely execution of the Census exercise. We also thank the Chairperson of the Governing Board of the National Bureau of Statistics (NBS), Dr. Amina Msengwa and the Chairperson of the Statistics Board of Zanzibar, Ambassador Amina Salum Ali, for their guidance throughout the implementation of the Census exercise.

Last but not least, we acknowledge the unprecedented efforts and commitment of the management and staff of the National Bureau of Statistics under the leadership of Dr. Albina Chuwa, the Statistician General; and staff of the Office of the Chief Government Statistician, Zanzibar under the leadership of Mr. Salum Kassim Ali; Chief Government Statistician; staff from the Ministry of Lands, Housing and Human Settlements Development; Ministry of Information, Communication and Information Technology; as well as other Government officials who worked tirelessly in ensuring that the 2022 Population and Housing Census was implemented successfully.



**Kassim Majaliwa Majaliwa (MP)**  
Prime Minister of  
The United Republic of Tanzania



**Hemed Suleiman Abdulla (MHR)**  
Second Vice President of Zanzibar

## Acknowledgement

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The National Bureau of Statistics and Office of the Chief Government Statistician, Zanzibar conducted the 2022 PHC and TBC to provide necessary information for policy implementation, planning, monitoring and evaluation of development processes. The Census collected detailed information on demographic characteristics, fertility, mortality, migration, orphanhood, disabilities, possession of national documents, education, economic activities, land ownership and information related to ICT ownership and use, housing ownership and assets, agriculture, community facilities and buildings. Some information on physical addresses were also collected.

This report presents basic demographic and socio-economic indicators from regional to Council level. The report will facilitate users of Census data to make evidence-based decisions for social and economic development. We therefore express our appreciation to all experts who have put their time and efforts to produce this report. In particular, we would like to thank Ruth Davison Minja, the Director of Population Census and Social Statistics; Fahima Mohamed Issa, Director of Social Statistics, Census and Survey, (OCGS); Seif Ahmad Kuchengo, the National Census Coordinator; Abdul-majid Jecha Ramadhan, the Tanzania Zanzibar Census Coordinator, National Census Technical Team, Statisticians, Demographers, Information Technology and Geographic Information System officers for their commitment which led to successful completion of this report.

Our appreciation is as well extended to all professionals, regional and district supervisors, enumerators and field supervisors as well as the media for their dedicated work. Certainly, without their commitment and dedication, the census would not have been successful. We would also like to thank the public for their cooperation during the entire period of the Census.



**Dr. Albina Chuwa**  
Statistician General  
National Bureau of Statistics



**Salum Kassim Ali**  
Chief Government Statistician  
Office of the Chief Government  
Statistician, Zanzibar

## Executive Summary

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The 2022 Kilimanjaro Basic Demographic and Socio-Economic Profile provides a short descriptive analysis and related tables on main thematic areas covered in the 2022 Population and Housing Census as well as the 2022 Building Census. Areas covered are population size, growth and distribution; age and sex profile; household composition; marital status; national identification documents and citizenship; survival of parents; education, literacy and numeracy; employment and economic activities; disability; land ownership; housing characteristics, asset ownership and environmental control; and access and use of Information and Communication Technology (ICT) by individuals and households; and information on buildings. In many cases, information has been disaggregated by place of residence and where possible comparisons have been made with previous Census(es) to observe the trend over time. New topics covered in the 2022 PHC for the first time to fill the national data gaps include; national identification documents, numeracy, land title deed status, production and disposal of Electronic and Electric Equipment Waste (EEEW), forestry and ICT. The report also provides policy recommendations emanating from key findings on areas covered by the 2022 PHC.

**Chapter One** presents an overview of the 2022 PHC. It presents the brief history of census undertaking in the country and the main objective of the 2022 PHC. It also highlights on preparatory and implementation of census activities at different levels as well as the legal framework, census organisation structure, development of census instruments, cartographic work, pilot census, census publicity and advocacy campaigns. Furthermore, the Chapter elaborates on census enumeration activities including recruitment and training of personnel, distribution of enumeration materials and the actual enumeration exercise. Post enumeration activities (data processing and quality control procedures) are also discussed in this Chapter.

**Chapter Two** provides users of this publication with an understanding of the size, growth, and distribution of Kilimanjaro Region's population based on 2022 PHC and previous censuses. Kilimanjaro Region has a population of 1.8 million persons with 954,298 females and 907,636 males. The population of Kilimanjaro Region grew at an average annual rate of 1.3 percent from 2012 to 2022, representing an increase of 13.5 percent over a 10-year period. At this rate, the population of Kilimanjaro Region is expected to double in the next 55 years. The Region's

population remains predominantly rural, with 76.2 percent of its total population living in rural areas and 23.8 percent living in urban areas.

**Chapter Three** is about age and sex profile of Kilimanjaro Regional population. The chapter presents population by sex and major age groups. The data depict a young population age structure with a median age of 22.2 years. More than thirty five percent (35.1%) of the population is aged below 15 years. The percentage of the working age population (15 - 64 years) has increased from 47.3 percent in 1988 Census to 57.6 percent in 2022. Results from 2022 PHC also show that the proportion of the working age population is higher in Urban areas (62.9%) compared with Rural areas (55.9%) and the age dependency ratio for the Region is 73.7. The percentage of the elderly population aged 65 years and above in Kilimanjaro Region has increased from 5.9 percent in 2002 to 7.3 percent in 2022.

**Chapter Four** presents information on household composition. Kilimanjaro Region has 494,428 private households, out of which 125,244 (25.3%) are in urban areas. This is about the same percentage for 2012 PHC (25.4%). Female-headed households in Kilimanjaro Region increased from 36.6 percent in 2012 to 37.5 percent in 2022. Furthermore, the percentage of female headed households is higher in urban areas (39.1%) than in rural areas (37.0%). The average household size decreased from 4.2 persons in 2012 to 3.7 persons in 2022.

**Chapter Five** presents the results on marital status for persons aged 15 years and above. About half percent (47.2 %) of persons aged 15 years and above are married; females are more likely (47.4%) to be married than males (47.0%). About seven percent (6.9%) of persons aged 15 years and above are widowed. The percentage of females widowed is higher (11.1%) than that of Males (2.3%). The Mean Age at First Marriage in Kilimanjaro Region is 26.6 years; females are getting married at a younger age (24.5 years) than males (29.0 years). Results also show that there is an insignificant increase in the MAFM for females from 24.1 years in 2012 to 24.5 years in 2022. During the same period, the MAFM for males increased from 26.7 years in 2012 to 29.0 years in 2022

**Chapter Six** provides information on national identification documents and citizenship. The majority (56.6%) of the population in Kilimanjaro Region have neither birth certificates nor birth notifications. Only 38.8 percent have birth certificates and a mere 3.4 percent have birth notification. Analysis by age indicates that the under-five population has the highest percentage (68.6%) of the individuals with birth certificates, followed by 60.8 percent of the population aged 5-9 years. Results on other national identification documents show that 277,429 (25.9%) percent of persons aged 18 years and above have national identification cards and 174,540 (16.3%) have national identification numbers. Only 223,104 (12.2%) of persons in the Region have health insurance from National Health Insurance Fund (NHIF) or Community Health Insurance Fund (CHIF).

Results on citizenship indicate that 1,857,194 persons (99.7%) out of 1,861,934 persons enumerated in Kilimanjaro Region are Tanzanians. The majority (1,962 persons) of non-Tanzanians are from other East African countries followed by those from countries outside Africa (1,723 persons) and those from other African countries (1,048 persons).

**Chapter Seven** presents information on survival of parents. Results indicate that about nine out of ten (91.3%) children under 18 years in Kilimanjaro Region have both parents alive. Almost nine percent (8.7%) of children under 18 years are orphans with insignificant differences between urban areas (8.9%) and rural areas (8.6%). About six percent (6.6%) of children under 18 years are orphans with one parent dead while 2.1 percent are orphans with both parent dead. Moshi Municipal Council has the highest percentage (9.7%) of orphans compared with other councils in Kilimanjaro Region.

**Chapter Eight** presents information on education, literacy and numeracy. Adult literacy rate for persons aged 15 years and above in Kilimanjaro Region is 94.2 percent. Literacy rate is higher among males (95.7 %) than females (92.9 %). Numeracy rate among persons aged five years and above is 89.7 percent and it is higher among males (90.0%) than females (89.5%). Net Enrolment Rate (NER) for primary schools is 96.4 percent. It is higher among females (96.8%) than males (96.0%). Majority (66.0%) of population aged four years and above attained primary education, 23.1 percent attained ordinary level secondary education and 7.5 percent attained university and other related education level.

**Chapter Nine** presents information on employment and current economic activities for persons aged 15 years and above in Kilimanjaro Region. There are 1,183,637 (78.4%) persons in employment. The current unemployment rate in the Region using International relaxed definition is 4.8 percent. Females have higher unemployment rate (5.9%) than males (3.8%). The overall Labour Force Participation Rate (LFPR) for Kilimanjaro Region is 82.4 percent.

**Chapter Ten** highlights on disability statistics status in Kilimanjaro Region. For the purpose of this report, Persons With Disabilities (PWDs) are those with physical, mental, intellectual or sensory impairment which may hinder or limit their full and effective participation in society on an equal footing with others. More than fifteen percent (15.3%) of the total population aged 7 years and above in the Region is living with some form of disability. Difficulty in seeing (3.9%) and walking (2.1%) are the most common types of disabilities in Kilimanjaro Region.

**Chapter Eleven** focuses on status of land ownership including information on persons owning land, type of ownership and legal documents possession in Kilimanjaro Region. Almost thirty-four percent (33.5%) of the population aged 15 years and above in the Region own land for different uses, including agriculture, residential, commercial or industrial. The proportion of females owning land is lower (29.6%) than that of males (37.9%). About fifty two percent (52.6%) of persons aged 15 years and above in Kilimanjaro Region own land without legal documents. Among the land owners with legal documents in Kilimanjaro Region, 23.1 percent of them own land alone followed by those owning land jointly (22.5%).

**Chapter Twelve** presents information on housing characteristics, assets ownership and environmental control for Kilimanjaro Region. Six out of ten (65.2%) households in the Region live in their own houses. Nearly one third (32.6 %) of households have no legal rights over the land where their houses are built. About 76 percent (75.7%) of households are living in houses with improved floor covering materials. More than ninety percent (92.8%) of households in Kilimanjaro Region use improved sources of drinking water and 82.4 percent of households use improved toilet facilities.

The majority of households in Kilimanjaro Region use firewood (64.5%) and charcoal (9.8%) as main sources of energy for cooking. The main source of energy for lighting is electricity from the national grid (TANESCO) used by 63.1 percent of households. The percentage of

households using electricity from the national grid for lighting increased from 28.9 percent in 2012 to 63.1 percent in 2022. About six out of ten (59.9%) households in Kilimanjaro Region use burning of solid waste as the main method of solid waste disposal and 41.4 percent of households mix electronic waste with other refuse.

**Chapter Thirteen** highlights on the households and individual's Access and Use of Information and Communication Technology (ICT), including Ownership of ICT equipment and the Type of Use of ICT equipment in Kilimanjaro Region. It is shown that there is significant mobile phone penetration in this Region, with 89.4 percent of person aged 15 years and above owning mobile phones; 64.7 percent own only non-smartphones and 0.8 percent own only smartphones. Sixty percent of persons aged 15 years and above use ICT equipment for communication. The non-smartphones are mostly used by individuals aged 15 years and above who attained training after secondary education (98.1%). About three percent (3.4%) of person aged 15 and above in Kilimanjaro Region use laptop computers and 1.6 percent use desktop computers.

**Chapter Fourteen** presents information on the number of buildings, types of buildings, main uses of buildings and the number of units in residential and commercial-residential buildings in Kilimanjaro Region and Councils levels as per the 2022 Tanzania Building Census (2022 TBC) results. Findings further indicate that 69.9 percent of all buildings/units in the Region are occupied by the owners themselves and 12.9 percent are occupied by tenants. About seventy-five percent (71.1%) of all individually owned buildings in Kilimanjaro Region are owned by males, 22.3 percent are owned by females and 3.8 percent are owned by males and females jointly. About sixty-four percent (63.8%) of all buildings have permanent flooring materials (sand-cement or tiles (ceramic/marble/PVC) and terrazzo). Seventy-four percent (74.0%) percent of all buildings/units in Kilimanjaro Region are built on un-surveyed land. About twenty nine percent (28.8%) of all buildings/units in Kilimanjaro Region are constructed on land that does not have legal documents. Forty-five percent (44.1%) of all buildings/units in the Region are connected to the national grid electricity, while 11.8 percent are powered by other sources. Forty-six percent (45.4%) of all buildings/units have water services. Three percent (3.3%) of all buildings in Kilimanjaro Region have infrastructures for the people with disabilities.

## Census Results in Brief

### Summary of Key Indicators for Kilimanjaro Region, Rural and Urban, 2022 Census

Indicator	Total		Rural		Urban	
	Number	Percent	Number	Percent	Number	Percent
<b>Population Size, Growth and Distribution</b>						
Total Population	1,861,934	100.0	1,419,512	100.0	442,422	100.0
Male	907,636	48.7	694,000	48.9	213,636	48.3
Female	954,298	51.3	725,512	51.1	228,786	51.7
Average Annual Intercensal Growth Rate (2012 – 2022)	-	1.3	-	1.3	-	1.1
<b>Age and Sex Profile</b>						
<b>Children (0–4 years)</b>	<b>224,780</b>	<b>12.1</b>	<b>171,555</b>	<b>12.1</b>	<b>53,225</b>	<b>12.0</b>
Male	113,713	12.5	86,882	12.5	26,831	12.6
Female	111,067	11.6	84,673	11.7	26,394	11.5
<b>Young Population (0–14 years)</b>	<b>654,298</b>	<b>35.1</b>	<b>509,625</b>	<b>35.9</b>	<b>144,673</b>	<b>32.7</b>
Male	330,412	36.4	258,352	37.2	72,060	33.7
Female	323,886	33.9	251,273	34.6	72,613	31.7
<b>Young Population (0–17 years)</b>	<b>766,731</b>	<b>41.2</b>	<b>596,101</b>	<b>42.0</b>	<b>170,630</b>	<b>38.6</b>
Male	386,165	42.5	302,068	43.5	84,097	39.4
Female	380,566	39.9	294,033	40.5	86,533	37.8
<b>Youth Population (15–24 years)</b>	<b>339,920</b>	<b>18.3</b>	<b>245,904</b>	<b>17.3</b>	<b>94,016</b>	<b>21.3</b>
Male	166,869	18.4	122,383	17.6	44,486	20.8
Female	173,051	18.1	123,521	17.0	49,530	21.6
<b>Youth Population (15–35 years)</b>	<b>616,486</b>	<b>33.1</b>	<b>439,238</b>	<b>30.9</b>	<b>177,248</b>	<b>40.1</b>
Male	302,355	33.3	217,119	31.3	85,236	39.9
Female	314,131	32.9	222,119	30.6	92,012	40.2
<b>Females of Reproductive Age (15-49 years)</b>	<b>445,827</b>	<b>46.7</b>	<b>320,839</b>	<b>44.2</b>	<b>124,988</b>	<b>54.6</b>
<b>Working Age Population (15-64 years)</b>						
<b>Working Age Population (15-64 years)</b>	<b>1,071,790</b>	<b>57.6</b>	<b>793,357</b>	<b>55.9</b>	<b>278,433</b>	<b>62.9</b>
Male	518,576	57.1	385,355	55.5	133,221	62.4
Female	553,214	58.0	408,002	56.2	145,212	63.5
<b>Elderly Population (60+ years)</b>	<b>194,440</b>	<b>10.4</b>	<b>164,928</b>	<b>11.6</b>	<b>29,512</b>	<b>6.7</b>
Male	85,930	9.5	72,757	10.5	13,173	6.2
Female	108,510	11.4	92,171	12.7	16,339	7.1
<b>Elderly Population (65+ years)</b>	<b>135,846</b>	<b>7.3</b>	<b>116,530</b>	<b>8.2</b>	<b>19,316</b>	<b>4.4</b>
Male	58,648	6.5	50,293	7.2	8,355	3.9
Female	77,198	8.1	66,237	9.1	10,961	4.8
<b>Household Composition</b>						
Total Number of Private Households	494,428	100.0	369,184	74.7	125,244	25.3
Male Headed Households	309,059	62.5	232,752	63.0	76,307	60.9

Indicator	Total		Rural		Urban	
	Number	Percent	Number	Percent	Number	Percent
Female Headed Households	185,369	37.5	136,432	37.0	48,937	39.1
<b>Average Household Size<sup>1</sup></b>	-	3.7	-	3.8	-	3.4
Average Household Size Headed by Male <sup>1</sup>	-	3.8	-	3.9	-	3.5
Average Household Size Headed by Female <sup>1</sup>	-	3.5	-	3.7	-	3.2
<b>Marital Status (15 years and Above)</b>						
Never Married	443,528	36.7	317,914	34.9	125,614	42.2
Married	570,120	47.2	440,921	48.5	129,199	43.4
Living Together	44,087	3.7	31,152	3.4	12,935	4.3
Divorced	39,125	3.2	30,069	3.3	9,056	3.2
Separated	27,388	2.3	20,698	2.3	6,690	2.2
Widowed	83,388	6.9	69,133	7.6	14,255	4.8
<b>National Identification Documents and Citizenship</b>						
Birth Registration						
Population with Birth Certificates	712,228	38.8	88,280	35.9	206,467	48.6
Population with Birth Notification	62,275	3.4	8,702	3.5	12,599	3.0
<b>Country of Citizenship</b>						
Tanzanians	1,857,194	99.7	1,416,788	99.8	440,406	99.5
Non-Tanzanians	4,740	0.3	2,724	0.2	2,016	0.5
<b>National Identification Documents</b>						
National Health Insurance or Community Health (NHIF or CHF)	223,104	12.2	156,554	11.1	66,550	15.7
Other Health Insurance	27,348	1.5	20,176	1.4	7,172	1.7
National Identification Card	277,429	25.9	205,225	25.2	72,204	28.1
National Identification Number	174,540	16.3	131,653	16.1	42,887	16.7
Zanzibar Identification Card	268	0.0	158	0.0	110	0.0
Driving License	67,593	6.3	40,732	5.0	26,861	10.5
Voter's Identification Card	751,370	70.1	574,607	70.5	176,763	68.9
Travel Passport	22,633	1.2	13,366	0.9	9,267	2.2
<b>Orphanhood (one or both parents died)</b>						
Child Orphans (0-17 years)	66,747	8.7	51,518	8.6	15,229	8.9
<b>Literacy, Numeracy and Education</b>						
Adult Literacy Rate (15 years and above)	1,138,107	94.2	848,508	93.3	289,599	97.3
Youth Literacy Rate (15-35 years)	597,198	96.9	422,680	96.2	174,518	98.5
Adult Numeracy Rate (15 years and above)	1,097,757	92.7	830,794	92.1	266,963	94.7
Net Enrolment Ratio in Primary Schools (7 – 13 years)	289,006	96.4	227,471	96.2	61,535	97.3
Gross Enrolment Ratio in Primary Schools	451,840	150.7	353,773	149.5	98,067	155.0
<b>Highest Level of Educational Attained (4 Years and Above)</b>						
Total Number	996,971	100.0	745,560	100.0	251,411	100.0

<sup>1</sup> The values of these indicators are averages and not percentages (no absolute numbers)

Indicator	Total		Rural		Urban	
	Number	Percent	Number	Percent	Number	Percent
Pre-Primary	1,599	0.2	1,295	0.2	304	0.1
Primary School (1 - 8)	658,053	66.0	523,818	70.3	134,235	53.4
Training After Primary	6,163	0.6	4,917	0.7	1,246	0.5
Pre-Form One	281	0.0	190	0.0	91	0.0
Secondary School O - level (1 - 4)	230,486	23.1	153,977	20.7	76,509	30.4
Secondary School A - level (5 - 6)	11,029	1.1	6,900	0.9	4,129	1.6
Training After Secondary Education	14,641	1.5	9,671	1.3	4,970	2.0
University and Other Related	74,656	7.5	44,752	6.0	29,904	11.9
<b>Education for people with mental disabilities/ mental health disabilities</b>	63	0.0	40	0.0	23	0.0
<b>Economic Activity</b>						
Legislators, administrators and managers	4,489	0.5	2,530	0.4	1,959	0.9
Professionals	23,269	2.5	13,652	1.9	9,617	4.4
Technicians and associate professionals	38,964	4.2	24,032	3.4	14,932	6.8
Clerks	4,592	0.5	2,527	0.4	2,065	0.9
Service workers and shop sales workers	48,711	5.3	28,189	4.0	20,522	9.4
Agricultural and fishery workers	415,655	44.8	356,976	50.4	58,679	26.8
Craft and related workers	168,844	18.2	124,020	17.5	44,824	20.4
Plant and machine operators and assemblers	8,743	0.9	5,662	0.8	3,081	1.4
Elementary occupations	214,435	23.1	150,877	21.3	63,558	29.0
<b>Disability</b>						
Disability Prevalence	233,588	15.3	189,842	16.2	43,746	12.4
<b>Type of Disability</b>						
Albinism	2,143	0.1	1,572	0.1	571	0.1
Seeing	59,541	3.9	46,826	4.0	12,715	3.6
Hearing	14,830	1.0	11,599	1.0	3,231	0.9
Walking	31,395	2.1	24,995	2.1	6,400	1.8
Remembering	11,784	0.8	9,366	0.8	2,418	0.7
Self-Care	4,078	0.3	3,126	0.3	952	0.3
Communication	14,934	1.0	11,690	1.0	3,244	0.9
Other Disability	97,026	6.4	82,240	7.0	14,786	4.2
<b>Ownership of Land (15 years and above)</b>						
Persons Owning Land	397,089	33.5	331,795	36.8	65,294	23.2
Male	212,509	37.9	176,782	41.1	35,727	27.2
Female	184,580	29.6	155,013	32.8	29,567	19.6
<b>Housing Characteristics, Asset Ownership and Environmental Control</b>						
<b>Type of Tenure (Main dwelling)</b>						
Owned by Household	322,463	65.5	269,361	75.0	53,102	52.0
Living without Paying any Rent	30,698	4.8	22,859	5.2	7,839	4.2
Rented Privately	87,844	20.9	40,405	11.7	47,439	34.0

Indicator	Total		Rural		Urban	
	Number	Percent	Number	Percent	Number	Percent
Rented by Employer	17,927	2.8	11,988	2.5	5,939	3.1
Rented by Government at Subsidized Rent	16,684	3.3	10,563	2.6	6,121	4.2
Owned by Employer (Free)	12,420	1.4	9,497	1.7	2,923	1.0
Owned by Employer (Rent)	6,392	1.3	4,511	1.3	1,881	1.4
<b>Main Materials Used for Roofing</b>						
Iron Sheets	476,232	96.3	353,493	95.7	122,739	98.0
Grass/Leaves	11,339	2.3	10,560	2.9	779	0.6
Mud and Leaves	1,761	0.4	1,601	0.4	160	0.1
Others	5,096	1.0	3,530	1.0	1,566	1.3
<b>Main Materials Used for Flooring</b>						
Cement	318,694	64.5	224,037	60.7	94,657	75.6
Earth/Sand	109,520	22.2	100,277	27.2	9,243	7.4
Ceramic tiles	49,303	10.0	30,869	8.4	18,434	14.7
Other	16,911	3.4	14,001	3.8	2,910	2.3
<b>Main Materials Used for Walls</b>						
Cement Bricks	204,735	41.4	136,392	36.9	68,343	54.6
Baked Bricks	153,438	31.0	112,574	30.5	40,864	32.6
Sundried Bricks	29,672	6.0	24,454	6.6	5,218	4.2
Poles and Mud	54,806	11.1	51,566	14.0	3,240	2.6
Stones	13,255	2.7	9,183	2.5	4,072	3.3
Others	38,522	7.8	35,015	9.5	3,507	2.8
<b>Main Source of Energy for Lighting</b>						
Electricity (TANESCO)	48,537	63.1	14,364	56.3	183,361	34,174.0
Solar	7,526	15.7	6,882	18.7	36,429	645.0
Kerosene	240,116	8.2	205,705	9.7	6,077	34,412.0
Others	154,212	13.1	150,431	15.3	32,433	3,754.0
<b>Main Source of Energy for Cooking</b>						
Firewood	318,800	64.5	282,357	76.5	36,443	29.1
Charcoal	48,376	9.8	23,062	6.2	25,314	20.2
Kerosene	5,185	1.0	2,305	0.6	2,880	2.3
Electricity	22,261	4.5	12,889	3.5	9,372	7.5
Gas	83,576	16.9	37,539	10.2	46,037	36.8
Others	16,230	3.3	11,032	3.0	5,198	4.2
<b>Main Source of Drinking Water</b>						
Piped Water	428,329	86.6	313,084	84.8	115,245	92.0
Other Protected Sources	30,571	6.2	23,768	6.4	6,803	5.4
Unprotected Sources	35,528	7.2	32,332	8.8	3,196	2.6
<b>Type of Toilet Facility</b>						
Flush Toilet	217,968	44.1	136,304	36.9	81,664	65.2

Indicator	Total		Rural		Urban	
	Number	Percent	Number	Percent	Number	Percent
Ventilated Improved Pit Latrine (VIP)	58,304	11.8	46,416	12.6	11,888	9.5
Pit Latrine	203,091	41.1	172,624	46.8	30,467	24.3
Others	3,339	0.7	2,850	0.8	489	0.4
No Facility	11,726	2.4	10,990	3.0	736	0.6
<b>Type of Refuse Disposal</b>						
Collected by Company or Authority	172,347	19.1	36,132	9.0	136,215	48.9
Burnt	233,106	59.9	164,277	66.2	68,829	41.2
Roadside Dumping	2,056	0.3	1,069	0.3	987	0.3
Burying/Pit	162,613	11.7	118,898	13.4	43,715	6.7
Other Dumping (bush, open space)	54,198	9.1	45,644	11.2	8,554	2.9
<b>Ownership of Household Assets</b>						
Hand Hoe	304,749	61.6	255,349	69.2	49,400	39.4
Farm Land	342,415	69.3	284,674	77.1	57,741	46.1
House	404,217	69.1	275,394	77.2	128,823	45.2
Bicycle	53,298	10.8	40,378	10.9	12,920	10.3
Motorcycle or Vespa	51,132	10.3	39,478	10.7	11,654	9.3
Power Tiller	1,398	0.3	1,061	0.3	337	0.3
<b>Information, Communication and Technology</b>						
Households owning radio	241,185	48.8	181,928	49.3	59,257	47.3
Persons aged 15+ owning mobile phone	1,057,788	89.4	797,912	88.5	259,876	92.2
Private households with at least one member owning mobile phone	453,543	91.7	334,402	90.6	119,141	95.1
Persons aged 15+ using ICT equipment for communication	1,101,973	60.0	834,377	59.1	267,596	63.0
Persons aged 15 and above own desktop	19,127	1.6	12,685	1.4	6,442	2.3
Persons aged 15 and above owned laptop	40,485	3.4	24,406	2.7	16,079	5.7
<b>Buildings Census</b>						
Buildings with Physical Address	406,838	79.0	348,130	80.0	58,708	73.3
<b>Basic Services in Buildings</b>						
Electricity (TANESCO)	234,246	44.1	174,704	39.3	59,542	68.5
Water	241,311	45.4	188,610	42.4	52,701	60.6
Toilet	418,347	78.7	346,529	77.9	71,818	82.6
Infrastructure for People with Disabilities	16,982	3.3	12,655	2.9	4,327	5.4
<b>Building Land Survey Status</b>						
Surveyed	87,575	17.0	42,781	9.8	44,794	55.9
Not Surveyed	381,319	74.0	358,992	82.5	22,327	27.9
Regularised	32,901	6.4	23,967	5.5	8,934	11.2

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## Abbreviations and Acronyms

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CAPI	Computer Assisted Personal Interviews
CBO	Community Based Organisation
CCRO	Certificate of Customary Right of Occupancy
CEB	Children Ever Born
CRO	Certificate of Right of Occupancy
CHIF	Community Health Insurance Fund
DHS	Demographic Health Surveys
EA	Enumeration Area
FCDO	Foreign, Commonwealth and Development Office
GER	Gross Enrolment Rate
GIS	Geographical Information System
GPS	Global Positioning System
ICT	Information and Communication Technology
ID	Identification Card
IOM	International Organization for Migration
ISIC	International Standard Industrial Classification of All Economic Activities
LFPR	Labour Force Participation Rate
MAFM	Mean Age at First Marriage
MDAs	Ministry, Departments and Agencies
NA	Not Applicable
NBS	National Bureau of Statistics
NER	Net Enrolment Rate
NGOs	Non-Governmental Organizations
NHC	National Housing Corporation
NHIF	National Health Insurance Fund
NIDA	National Identification Authority
OCGS	Office of Chief Government Statistician
PHC	Population and Housing Census
PWDs	Persons with Disabilities
SG	Statistician General
SMAM	Singulate Mean Age at First Marriage

TASCO	Tanzania Standard Classification of Occupations
TBA	Tanzania Building Agency
TBC	Tanzania Building Census
TFR	Total Fertility Rate
TOT	Training of Trainers
UN	United Nations
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
URT	United Republic of Tanzania
USAID	United States Agency for International Development
USCB	United State Census Bureau
VIP	Ventilated Improved Pit latrine
WB	World Bank
WHC	Watumishi Housing Company
ZAN ID	Zanzibar Identification Card
ZHC	Zanzibar Housing Corporation

## Concepts and Definitions

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### Population and Housing Census

**Census Night** is a reference point for Census enumeration and all questions in the census relates to that night. According to the Tanzania 2022 Population and Housing Census, the Census night was the night of 22nd /23rd August, 2022.

**De facto Methodology** means persons were enumerated where they slept on the Census night.

**Enumeration Area (EA)** is a designated area with an average of 60 to 100 households.

**Geographical Information System (GIS)** is a system designed to capture, store, manipulate, analyse, manage and present all types of geographical data.

**Population and Housing Census (PHC)** is defined as the total process of collecting, compiling, evaluating, analysing and publishing or otherwise disseminating demographic, economic and social data pertaining, at a specified time, to all persons in a country or in a well delineated part of a country (United Nations definition).

**Quality Control** refers to observations, techniques and activities used to fulfil requirements for quality.

### Population Size, Growth and Distribution

**Population growth** refers to the change in population over time, and can be quantified as the change in the number of individuals in a population using "per unit time" for measurement.

**Population Growth Rate** refers to the change in population over a unit time period, often expressed as a percentage of the number of individuals in the population at the beginning of that period. Growth rate in this book is expressed as an exponential rate of growth of population from year 2012 to 2022 and is termed as average annual intercensal population growth rate.

## Age and Sex Profile

**Age** is the number of years one had lived as at last birthday i.e., in reference to the census night.

**Age-Dependency Ratio** is the ratio of people in the “dependent” ages (those under age 15 and age 65 and older) to those in the “working age population” (15-64 years).

**Elderly Population** refers to persons aged 65 years and above (according to international definition). However, according to Tanzania National Ageing Policy, an elderly is individual who is 60 years and above.

**Median Age** is the age at which exactly half the population is older and half is younger.

**Population Pyramid** is a graphical presentation of population’s age and sex composition. Horizontal bars present the numbers or proportions of males and females in each age group.

**Sex Ratio** is the ratio of males to females in a given population usually expressed as the number of males for every 100 females.

**Working Age Population** in Census is the population age 15 to 64 years (international definition).

**Young People** comprise the population aged 0 to 14 years.

**Youth Population** comprises the population aged 15-24 years (international definition). However, according to Tanzania’s Youth Policy, youth population refers to the population aged 15 to 35 years.

## Household Composition

**Average Household Size** is the average number of persons per private household. Average household size is obtained by dividing the total number of persons living in private households by the total number of private households.

**A Collective Household** is one in which a group of persons reside in one dwelling or compound and have no head of household. Boarding schools, hospitals and camps are examples of collective households.

**Head of Household** is a person who is acknowledged as such by other household members.

**Household** refers to a person or group of persons who reside in the same homestead or compound but not necessarily in the same dwelling unit, have same cooking arrangements, and are answerable to the same household head except for collective household.

**Private Household** is defined as a person or group of persons who reside in the same homestead or compound but not necessarily in the same dwelling unit, having the same cooking arrangements, and are answerable to the same household head.

## **Marital Status**

**Divorced Persons** are those persons who were once married but their marriages were permanently terminated and have not remarried since then. Note that in polygamous marriages the divorce of one or more wives does not categorize the husband as divorced if he still lives with the other wife (wives).

**Living Together** is an act of persons who are not formally married but are in a consensual union or are living in a socially recognized stable union.

**Marriage** is an act of persons who are living together or separately but are formally married irrespective of the type of marriage, which may be customary, civil or religious marriage.

**Mean Age at First Marriage** is defined as the average length of single life expressed in years among those who marry before age 50.

**Never Married** means persons who have remained single all their lives and exclude persons who have lived with a spouse but are now living alone.

**Separated** is the act of persons who were once married but now are living apart. Those who live apart because their spouses are employed far away from home or for similar reasons are considered to be married.

**Widowed** is the act of persons whose marriages were terminated by death and have not remarried since. Note that in polygamous marriages the death of one or more wives does not make the husband a widower if he still has other wife (wives).

### **National Identification Documents and Citizenship**

**Birth Certificate** is a vital record that documents the birth of a child. The term "birth certificate" can refer to either the original document certifying the circumstances of the birth or to a certified copy of or representation of the ensuing registration of that birth.

**Birth Registration** is the process by which a child's birth is recorded in the civil register by Government authority.

**National Identification** is any official document that may be used to prove a person's identity such as the bearer's full name, birth date, address, an identification number, card number, sex, citizenship and more.

### **Survival of Parents**

**Orphanhood** is the condition of being a child without living parents. In other words, the term 'orphan' is understood to mean a person whose parents are both dead. However, United Nations definition that was adopted by the Tanzanian Government identifies an orphan as a child under 18 years of age who has lost one or both parents.

### **Literacy, Numeracy and Education**

**Educational Attainment** is the highest grade completed according to the country's educational system. A grade is a stage of instruction usually covered in the course of a school year.

**Gross Enrolment Rate (GER)** is defined as the number of children attending primary school regardless of age divided by the total number of children age 7-13 years.

**Literacy** is the ability to read and write with an understanding a short simple sentence in everyday life.

**Literacy Rate** is the percentage of a population that can read and write in Kiswahili, English, both Kiswahili and English or in any other language(s).

**Net Enrolment Rate (NER)** is defined as the number of children age 7-13 years who are attending school divided by the total number of children in that age group.

**Numeracy** is the ability to access, use, interpret and communicate simple mathematical information and ideas, to engage in and manage mathematical demands for a range of situations in adult life.

**Numeracy Rate** is the percentage of a population who has ability to access, use, interpret and communicate simple mathematical information and ideas.

**School Attendance** refers to attendance at any regular authorized or licensed educational institution or programme for organized learning at any level of education at the time of the Census.

## **Employment and Economic Activities**

**Economic activity status** refers broadly to economically active population which includes those employed and unemployed. It also includes inactive population covering all persons who were without work during the reference period and were not available for work.

**Labour Force Participation Rate (LFPR)** is defined as the number of persons in the labour force as a percentage of the population aged 15 years and above.

**Informal Non-Agricultural Economic Activities** are activities that are unregulated and often without formal recorded business transactions, and are normally outside the framework of formal business regulations and system.

**Unemployed persons** comprise those who in the last seven days prior to the census enumeration were not engaged in any economic activity but were available for work regardless of whether they took any effort to look for work (According to the relaxed international definition of unemployment).

## **Disability**

Disability is defined as a loss or limitation of opportunities to take part in the normal life in the community on an equal level with others due to physical, mental or social factors. All the three (physical, mental and social factors) use the concept of activity limitation in defining disability rather than physical impairment.

## **Land Ownership**

**Certificate of Right of Occupancy** is a formalized land tenure system. It allows individuals or entities to acquire rights to use and occupy land for specific purposes, such as agriculture, residential, commercial or industrial.

**Customary land tenure** is the form of land ownership based on customary practices and traditional land rights.

**Land ownership** is a process of acquiring land or right of occupancy from a relevant Government authority. It is categorized into three main tenure systems namely customary land tenure, right of occupancy and Government land.

**Land Title Deed** is a legal document that states and proves a person's legal right to own a piece of land.

## **Housing Characteristics, Assets Ownership and Environmental Control**

**Improved roofing materials** are durable roofing materials used for roofing which include iron sheets, tiles, concrete and asbestos. Unimproved roofing materials include grass or leaves, mud and leaves, plastics or box and tent.

**Improved floor covering materials** are long lasting flooring materials such as cement, ceramic tiles, parquet or polished wood, terrazzo, vinyl or asphalt strips. Non-improved materials include wood planks, palm or bamboo, earth or sand, dung, containers or tents.

**Room for sleeping** is defined as any space within a dwelling which is currently used for sleeping by household members. Any space within a dwelling can be termed as a room for sleeping if currently used by any household members for sleeping purposes and can be a sitting room, a dining room or even a store.

**Improved sources of drinking water** include sources that, by nature of their construction or through active intervention, are protected from outside contamination, particularly faecal matter. It comprises piped water, tube well or borehole, protected dug well, protected spring, rainwater, bottled water, carts with small tank/drum and tanker truck. Unimproved sources of drinking water include unprotected dug well, unprotected spring and surface water.

**Improved sanitation facilities** are the facilities that ensure hygienic separation of human excreta from human contact. They include flush or pour flush toilet that flushes the water and waste to a piped sewer system, septic tank, pit latrine or unknown destination; ventilated improved pit (VIP) latrine, pit latrine with washable slab and pit latrine without slab. Unimproved facilities include pit latrine without slab (open pit) and bucket.

**Solid waste disposal** refers to the collection, sorting, transport and treatment of waste as well as its storage and tipping above or burying, as well as the transformation operations necessary for its re-use, recovery or recycling.

**Electronic waste (E-waste)** describes discarded electrical or electronic devices. It is also known as waste electrical and electronic equipment (WEEE) or end-of-life (EOL) electronics. It also refers to discarded, recycled or refurbished electrical and electronic products.

## **Access and Use of Information and Communication Technology by Individuals and Households**

**Radio** refers to a device capable of receiving broadcast signals using frequencies in the FM, AM, LW and SW bands. A radio can be a standalone unit or integrated into other devices, including alarm clocks, audio players, mobile telephones or computers.

**Television** refers to a device capable of receiving broadcast signals using standard access methods, including radio frequency (over-the-air), cable, and satellite. A television set is usually a standalone unit but may be integrated into other devices, such as computers or mobile telephones.

**The Internet** is a vast global network of interconnected computers and other electronic devices, allowing them to share information and communicate through a standardised set of protocols known as the Internet Protocol Suite (TCP/IP). It provides access to several communication services, including the World Wide Web and carries e-mail, news, entertainment and data files, irrespective of the device used.

**Landline Telephone** is a communication device that transmits and receives sound, typically the human voice, through physical wire or fibre optic cable connections.

**A mobile (cellular) telephone** also known as a cell phone, is a portable device that allows for voice and data communication over a wireless cellular network. Mobile phones have become essential devices in daily life, profoundly impacting on how we communicate, access information, and interact with the world around us.

**Smart Mobile Phone (Smartphone)** refers to a device that performs many computer functions, typically having a touch screen interface, broadband Internet access, and an operating system capable of running apps such as Facebook, WhatsApp or YouTube.

**Non-Smartphone (Feature phone)** refers to a device that performs only basic functions such as making and receiving calls, sending/receiving text messages and browsing Internet.

**Computer** is an electronic device designed to process, store, and manipulate data according to a set of instructions known as programs. It can perform a wide range of tasks, from simple calculations to complex operations involving data analysis, graphics design, and more.

**Desktop Computer** is a personal computing device designed for regular use at a single location. Unlike portable devices like laptops and tablets, desktop computers typically comprise separate components, including a monitor (screen), a keyboard, a mouse, and a central processing unit (CPU) housed in a tower or desktop case.

**Laptop** is a portable computer that integrates all the components of a traditional desktop computer into a single compact unit. Laptops are designed for convenience and mobility, making them ideal for use in various settings, such as at home, in the office, while travelling, or in educational environments.

**Tablet** is a portable computing device with a touchscreen interface, allowing users to interact with digital content and applications through touch gestures. Tablets are larger than smartphones but smaller and more compact than laptops, making them highly portable while offering a screen size that enhances the experience of browsing the Internet, reading digital books, watching videos, and playing games.

## **Information on Buildings**

**Access Road** means any road whether public or private and includes any street, square, court, alley, beach, footway, path, passage or highway whether a thoroughfare or not.

**Building Census** is the act of collecting, analysing and disseminating buildings' data for specific time.

**Building** means any structure or erection and any part of any structure or erection of any kind whatsoever whether permanent, temporary or movable, and whether completed or uncompleted.

**Building Parastatals** are Government institutions whose functions are to provide and or facilitate the provision of housing and other buildings in Tanzania.

**Building Stock** refers to the total number of buildings in a particular area.

**Certificate of Customary** means the certificate of right of occupancy issued to land Right of Occupancy under customary tenure as stipulated under Section 27 of the Land Act No.5 of 1999.

**Certificate of Right** refers to a legal land certificate of occupation granted under Occupancy of the Land Act No. 4 of 1999 in Tanzania and the Land Tenure Act No. 12 of 1992 of Tanzania Zanzibar.

**Detached house** refers to a building that stands alone from the foundation to roof level. I a house that does not share walls with other houses. The building could be single or multi-storey.

**Non-residential Use** means a building or structure of any kind, designed or intended to be used for other than a residential use.

**Partly Complete House** refers to a building for which one part is complete and can be occupied and other part is still under construction.

**Physical Address** means the mailing address, including a zip code which details the actual location (building number and street name) of a person, business or physical property.

**Regularised Settlement** is the legalised tenure status in the informal or unplanned settlements through a deliberate process aimed at bringing the informal and unauthorised settlements within the official legal (formal) and administrative systems of land to guarantee security of tenure for the concerned population.

**Residential Building** means a structure used or constructed or adapted to be used primarily for human habitation; such buildings may be available as apartments, quarters and similar facilities or accommodation.

**Residential License** confers upon the licensee the right to occupy land in non-hazardous land, land reserved for public utilities and surveyed land, urban or peri-urban area for the period of time for which it has been granted as provided in Section 23 of the Land Act No.4 of 1999.

**Single Storey** refers to a building consisting of ground floor only.

**Stand Alone** refers to a single house that is separate and detached from other buildings.

**Surveyed Settlement** refers to human settlements that cadastral surveying has been undertaken to each land parcel to determine its location, the extent of its boundaries and surface area, and to indicate its separate identity, both graphically on a map or in a record as well as physically on the ground.

**Tenure** is defined as institutions and rules which regulate property rights and resource use, and determine who can use what resource, under what conditions and for how long.

**Terrace/Row of Houses** refers to a row of more than two similar houses under one roof joined together by their side walls. The house could be single or multi-storey

**A Unit;** for the purpose of this publication, is a house or part of the house with all necessary amenities. A building can have more than one unit.

## Chapter 1

# Overview of the 2022 Population and Housing Census

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### 1.1 Introduction

The United Nations defines a population census as the total process of collecting, compiling, evaluating, analysing, publishing and disseminating demographic, economic and social data pertaining, at a specified time, to all persons in a country or in a well delineated part of a country. It is the primary source of detailed data on the size, distribution and composition of the population. It covers all population groups including those in private households, institutions, the homeless and migrants for all geographic and/or administrative units in a country.

Additionally, the term “Housing Census” is used to imply the collection of information related to housing conditions such as the number of households, access to basic household amenities and living conditions. By combining population and housing data, policy makers and researchers are provided with valuable insights about demographic trends, social conditions and housing patterns, enabling them to make informed decisions and develop appropriate policies to address the needs of the population.

#### 1.1.1 A Brief History of Census Undertaking in Tanzania

The history of population counts in Tanzania dates back to 1910. The first population census was conducted in 1958. Other censuses were conducted in 1967, 1978, 1988, 2002 and 2012 after the union of Tanganyika and Zanzibar in 1964. Since 1967, the country has conducted decennial Population and Housing Censuses (PHC) on a *de-facto* basis in accordance with the United Nations (UN) Principles and Recommendations for Conducting Population and Housing Censuses.

Unlike previous censuses, the 2022 PHC is the first digital census in Tanzania, whereby a mobile technology was used at all stages of Census implementation. In the first phase, mobile GIS technology was used to facilitate demarcation of enumeration areas and transmission of census cartographic information to the servers located at NBS and OCGS Headquarters. Likewise, in the second phase, Computer Assisted Personal Interviews (CAPI) technology was used for data capture and transmission of information from the field to the servers during enumeration. Mobile devices (tablets) were programmed with a data capture system developed using CSEntry (a CSpro tool for data capture) that runs on Android Operating System. Development of the applications and programming of the devices were done by Tanzanian experts. The third phase of Census implementation which

includes data processing, analysis and dissemination is based on the use of more advanced technologies such as mobile phones for broadcasting census results and more iterative dashboards for data sharing.

## **1.2 Objectives of the 2022 PHC**

The main objective of conducting the 2022 PHC was to provide the Government and other stakeholders with information on the size, distribution, composition and other social economic characteristics of the population, environment and information on housing conditions. This information contributes to the improvement of quality of life for Tanzanians through provision of current and reliable data for policy formulation, development planning, evidence-based decision making and service delivery. Census information is also used for monitoring and evaluating population and socio-economic programmes in the country.

### **1.2.1 Specific Objectives of the 2022 PHC**

Specific objectives of the 2022 PHC were to:

- a) Increase availability and accessibility of accurate, timely and reliable data on demographic, socio-economic characteristics and environment;
- b) Enhance knowledge of stakeholders on socio-economic, demographic characteristics and environment of the Tanzanian population as well as patterns and trends of population growth; and
- c) Strengthen capacity of the National Bureau of Statistics (NBS) and the Office of the Chief Government Statistician (OCGS) in carrying out population and housing censuses, in areas of planning, collecting, processing, analysing, disseminating, utilising and archiving population and housing census and other statistical data.

## **1.3 Preparations for the 2022 PHC**

### **1.3.1 Legal Framework**

The 2022 PHC was carried out in accordance with the Statistics Act CAP 351. The Act, inter alia, mandates the NBS, in collaboration with OCGS Zanzibar, to conduct population and housing censuses within the United Republic of Tanzania every ten years. In this respect, the Statistician General (SG) of NBS is responsible for planning the overall organisation and technical administration of the Census. Furthermore, SG is the Accounting Officer and in charge of all Census operations. The Order to conduct the 2022 Population and Housing Census on 23<sup>rd</sup> August, 2022 was made by H.E. Dr. Samia Suluhu Hassan, President of

the United Republic of Tanzania, on 21<sup>st</sup> March, 2022 and was published in the Tanzania Government Gazette of the 29<sup>th</sup> April, 2022 as directed by the Act.

### **1.3.2 Census Organisation**

A Population and Housing Census is a massive undertaking that needs careful planning coupled with an appropriate organisational, administrative arrangements and procedures. These are necessary in ensuring that, extensive human and material resources mobilized for the census are effectively and efficiently used and that the census tight schedules and massive logistic requirements are met. During the 2022 Census, a well-planned decentralized census organisation was formed with a primary role of coordinating all census activities from the national down to the grass root level.

Preparations for the 2022 PHC were facilitated by various committees at national, regional, district, ward/shehia and village/mitaa levels to guide and monitor the Census processes. The committees drew members from Ministries, Departments and Agencies (MDAs), Higher Learning Institutions, Private Sector and Non-Governmental Organizations (NGOs). The main committees were: - National Census Central Committee, National Census Advisory Committee, Census Collaborators Forum, Technical Advisory Committee as well as Regional and Districts Census Committees.

The Prime Minister's Office of the United Republic of Tanzania and the Second Vice President's Office for the Government of Zanzibar were responsible for overseeing the overall operations of the 2022 PHC. The Regional and District Census Committees chaired by Regional and District Commissioners respectively were responsible for ensuring that all Census activities were successfully undertaken in their areas of jurisdiction.

The Population and Housing Census Commissars, one from each side of the United Republic of Tanzania, were responsible for publicity and advocacy activities such as educating, sensitising and mobilising the public for census exercise. They were also responsible for resource mobilisation and a link between census technical personnel and other stakeholders as well as enhancing political buy-in of the Census.

### **1.3.3 Development of Census Instruments**

The Census instruments (questionnaires, manuals and other census documents) were developed in collaboration with national experts from MDAs, higher learning and research institutions, private sector and Non-State Actors. The 2022 PHC questionnaires were developed in accordance with the United Nations Principles and Recommendations for the 2020 Round of Population Censuses. They included topics from previous censuses for comparison purposes (both national, regional and international) and new topics to cater for

the country's current data needs (Tanzania Development Vision 2050) and to feed into regional and international programmes (i.e., East African Community Vision 2050; the Southern African Development Community Vision 2050; African Development Agenda 2063; and 2030 Agenda for Sustainable Development). The draft questionnaires were shared widely with various stakeholders both in Tanzania Mainland and Tanzania Zanzibar through stakeholders' workshops and the Census Committees. The final questionnaires were approved by the Central Census Committee.

The 2022 PHC had three main digital tools for data collection. The first one was a community questionnaire, which collected information on all social amenities; land use patterns and environmental or natural features and available community infrastructure. The second tool was the main census questionnaire which collected detailed information on demographics, including fertility, mortality, migration, orphanhood, and disabilities; possession of national documents, education level and economic activities. It also collected information on land ownership and information related to ICT ownership and use, housing, utilities, ownership of assets and agriculture. The third tool was a questionnaire for special population groups such as diplomats and travellers.

#### **1.3.4 Cartographic Work**

The 2022 PHC enumeration was preceded by extensive cartographic work covering the entire country. The main objective of the cartographic work was to delineate the entire country into Enumeration Areas (EAs) in order to produce maps required for Census operations. In urban areas, EA sizes ranged from 50 to 150 households while for rural areas, a hamlet was considered as an EA.

Unlike in previous censuses, the 2022 Population and Housing Census used modern technology (Arc-GIS) in demarcating enumeration areas. The Arc-GIS technology enabled the use of digital based maps (Satellite images) instead of analogue -based maps. Delineation of EA boundaries was done using Global Positioning System (GPS). In addition, coordinates of prominent features existing in each particular EA were also recorded as shown on Map 1.1. Overall, 2,610 EAs were delineated in Kilimanjaro Region (461 EAs in urban areas and 2,149 hamlets in rural areas).

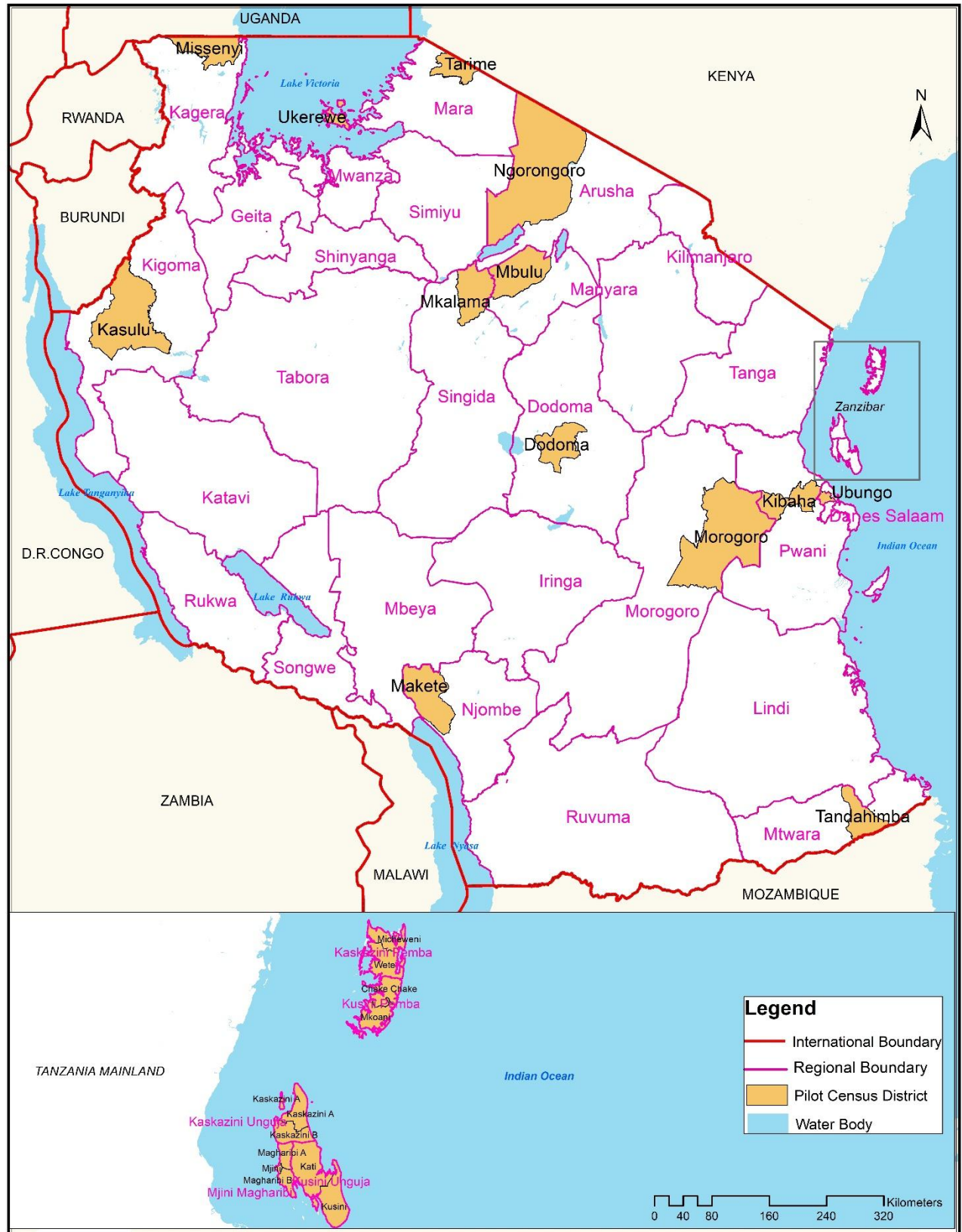
**Map 1.1: A Typical Enumeration Area Map for 2022 PHC**



### **1.3.5 Pilot Census**

According to the United Nations requirements and guidelines, NBS/OCGS conducted a Pilot Census in September, 2021; one year before the actual census. The main purpose of the Pilot Census was to test the effectiveness of the entire Census mechanism that would be used during implementation of the 2022 Population and Housing Census. Pilot census was conducted in 18 purposively selected regions, of which 13 were in Tanzania Mainland and five in Tanzania Zanzibar (Map 1.2). The experience and obtained results provided valuable inputs which were used to improve Census instruments and logistics in the final preparations towards the 2022 Population and Housing Census enumeration.

**Map 1.2: Selected Areas for the 2021 Pilot Census**



### 1.3.6 Census Publicity and Advocacy Campaign

The 2022 PHC used intensive and extensive publicity and advocacy programmes to educate, sensitise and mobilise the public to participate in the Census process. There were two Census Commissars one for Tanzania Mainland and the other for Tanzania Zanzibar. The main function of the Commissars was to publicise the implementation of the Population and Housing Census and Advocacy activities. Other functions were to collaborate with committees at all administrative levels to motivate community participation and ensure timely and sufficient availability of human and financial resources as well as equipment.

To standardise publicity and advocacy campaigns throughout the country, the NBS and OCGS developed publicity guidelines that were used during the Census publicity and advocacy operations. The guidelines explained in brief, the meaning and purpose of the Census as well as broad topics covered.

Given the importance of Census publicity, resources were availed to regional authorities for the purpose of educating, sensitising and mobilising the public to participate in the census in their respective areas.



Image 1.1: Hon. Anne Semamba Makinda, Census Commissar for Tanzania Mainland speaking to citizens living on the border of Tanzania and Rwanda at Rusumo during the 2022 census publicity campaign on 14<sup>th</sup> June, 2022.

## **1.4 Census Enumeration Activities**

Several activities were undertaken in preparation for the main enumeration exercise, including recruitment and training of field personnel and distribution of enumeration materials to all regions and districts in the country.

### **1.4.1 Recruitment and Training**

Recruitment of census enumerators and supervisors followed procedures set by NBS and OCGS and approved by the Central Census Committee. The process was coordinated by Regional and District Census Committees in their respective administrative areas. A total of 205,000 enumerators and supervisors were recruited and trained.

Training for census enumeration was conducted at three levels namely: - Training of Trainers (TOT) at national level; training of trainers at regional level; and training of supervisors and enumerators at district level. Trainings were conducted from June to August 2022 and covered theoretical and field practical trainings. The training enabled participants to conceptualise the topics covered in the Census questionnaire; build common understanding of all questions, understand techniques of asking questions and probing where necessary. Furthermore, participants were trained on the use of ICT during data collection, particularly the use of tablets to collect the required information. Trainers were provided with training manuals while supervisors and enumerators were provided with instruction manuals to be used as reference materials.

### **1.4.2 Other Preparations for Enumeration**

A range of other preparatory activities were carried out in the second and third week of August 2022. The activities included distribution of enumeration materials to supervisors and enumerators, physical identification of EA boundaries and meeting local authorities in their respective areas. Activities at regional and district levels were coordinated by Regional and District Census Coordinators in collaboration with respective Census Committees.

### **1.4.3 Enumeration**

The targeted population for the 2022 PHC was all persons who spent the night of 22<sup>nd</sup>/23<sup>rd</sup> August, 2022 within the borders of Tanzania. The actual enumeration was conducted by enumerators and supervisors in their respective assigned areas. Other enumerators were stationed at mass transit points (the night of 22<sup>nd</sup>/23<sup>rd</sup>) to enumerate passengers on buses, trains, airports and ships. Special enumeration cards were issued to each traveller after enumeration to avoid double-counting. Arrangements were also made to enumerate the homeless during the same night. During enumeration, enumerators were submitting data to

their supervisors every day and the supervisors in turn were transferring them to the server at NBS after checking their quality.

The duration for enumeration, as per the Presidential Order, was seven days from 23<sup>rd</sup> to 29<sup>th</sup> August, 2022. Enumeration exercise was completed by 93.45 percent within the planned period of seven days. However, in some areas, enumeration could not be completed within the seven days' period due to various reasons. Reasons for not completing enumeration within the allocated time included; scattered households, EAs having more households than expected and difficulty to reach EAs. Nevertheless, by the 5<sup>th</sup> September, 2022 the enumeration exercise had been completed by 99.99 percent in all EAs.



Image:1.2 H.E. Dr. Samia Suluhu Hassan, President of the United Republic of Tanzania being enumerated at the State House, Dodoma on 23<sup>rd</sup> August, 2022.

#### **1.4.4 Post Enumeration Activities**

After enumeration all tablets and their accessories, quality control forms and notebooks were collected for safe custody at respective Regional Census Offices from where they were transported to NBS and OCGS headquarters for further logistics.

#### **1.5 Data Processing**

The whole process of compilation basic counts and data analysis was completed in 45 days after completion of the enumeration exercise. Initial results of the 2022 PHC at National level were released in Dodoma by H.E. Dr. Samia Suluhu Hassan, President of the United Republic of Tanzania on 30<sup>th</sup> October, 2022.

## **1.6 Quality Control Procedures**

Quality control is an essential component of the Census undertaking. Quality control standards and procedures were developed and observed throughout all steps of the census undertaking to ensure collection of quality data. All supervisors and coordinators were trained on quality control standards and procedures during training sessions of the census.

## Chapter 2

# Population Size, Growth and Distribution

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### Key Points

- Kilimanjaro Region has a population of 1,861,934 persons; (907,636 males and 954,298 females).
- The regional population grew at an average annual growth rate of 1.3 percent between 2012 and 2022. At this rate, Kilimanjaro Regional population is expected to double in the next 55 years; that is in year 2077.
- The regional population remains predominantly rural with 76.2 percent of its total population living in rural areas and 23.8 percent living in urban areas.

### 2.1 Introduction

This chapter presents information on population size, distribution by place of residence and sex, population growth and the annual average intercensal growth rates in Kilimanjaro Region. Population size is the first demographic fact that any population census aims to obtain. Determining population size is crucial for planning, monitoring and establishing the necessary resources for socio-economic development of any country. The growth and distribution of the population determines the demand for and location of essential social services, such as education, health, water, transport and housing. Therefore, understanding population size, growth and distribution is important for decision makers, planners, researchers, implementers of development programs and the public in general. These statistics facilitate making evidence-based decisions-making, optimal resource allocation, and the planning, monitoring and evaluation of development frameworks.

### 2.2 Population Size

Kilimanjaro Region has a population of 1,861,934 persons and is the eighteenth most populous Region in Tanzania Mainland. Slightly more than half (51.3 %) of this population are females (954,298 persons) while 48.7 percent are male (907,636 persons) (Table 2.1).

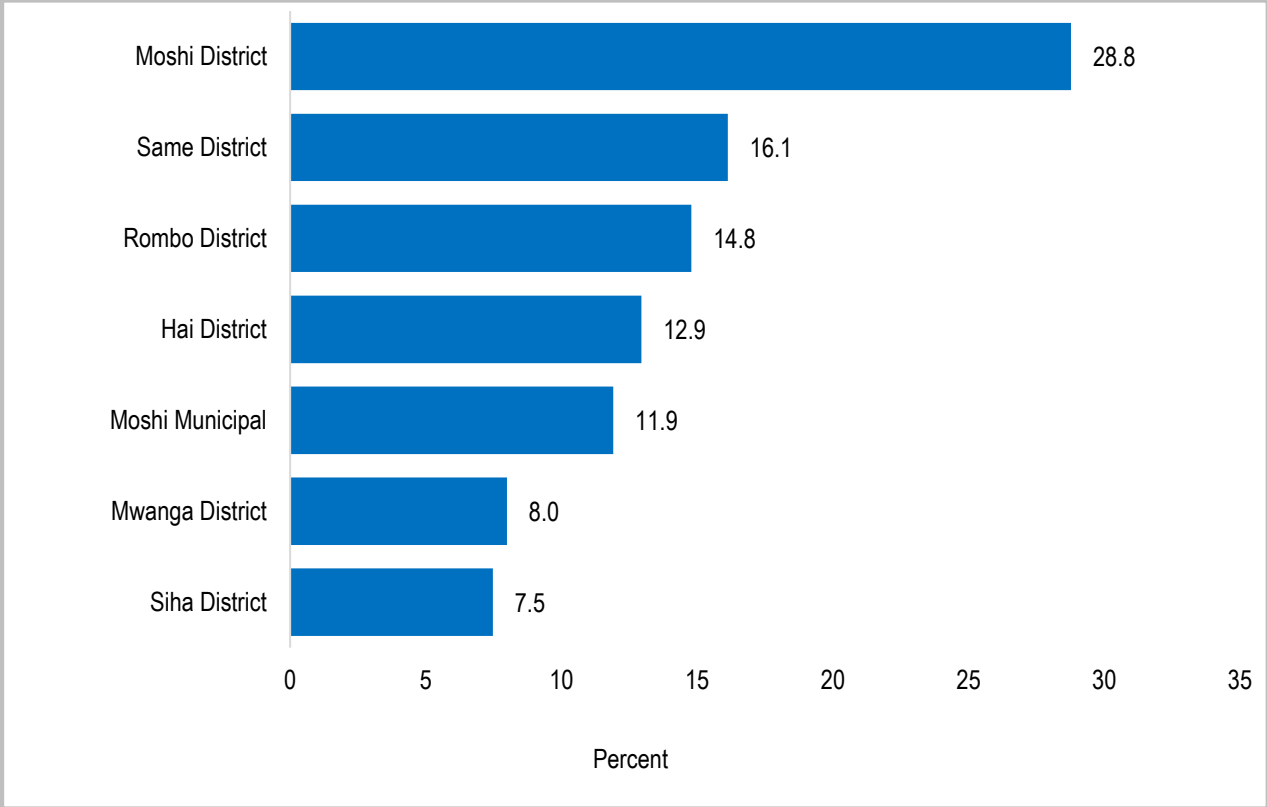
## 2.2.1 Population Size by Council

Administratively, Kilimanjaro Region has seven Councils: six (6) District Councils and one (1) Municipal Council. Among these, Moshi District Council has the largest population with 535,803 persons compared to the other Councils. Other two most populous councils are Same District with 300,303 persons and Rombo District with 275,314 persons. Together, these three councils account for nearly 60 percent (59.7%) of the total population in Kilimanjaro Region. The two councils with the smallest population are Siha District with 139,019 persons and Mwanga District with 148,763 persons. Generally, the number of females in Kilimanjaro Region exceeds the number of males in all councils (Table 2.1 and Figure 2.1).

**Table 2.1: Number and Percentage Distribution of Population by Sex and Council; Kilimanjaro Region, 2022 PHC**

Council	Population size				
	Both sexes	Male		Female	
		Number	Percent	Number	Percent
<b>Total</b>	<b>1,861,934</b>	<b>907,636</b>	<b>48.7</b>	<b>954,298</b>	<b>51.3</b>
Rombo District	275,314	133,258	48.4	142,056	51.6
Mwanga District	148,763	72,157	48.5	76,606	51.5
Same District	300,303	147,293	49.0	153,010	51.0
Moshi Municipal	221,733	108,462	48.9	113,271	51.1
Moshi District	535,803	261,950	48.9	273,853	51.1
Hai District	240,999	117,223	48.6	123,776	51.4
Siha District	139,019	67,293	48.4	71,726	51.6

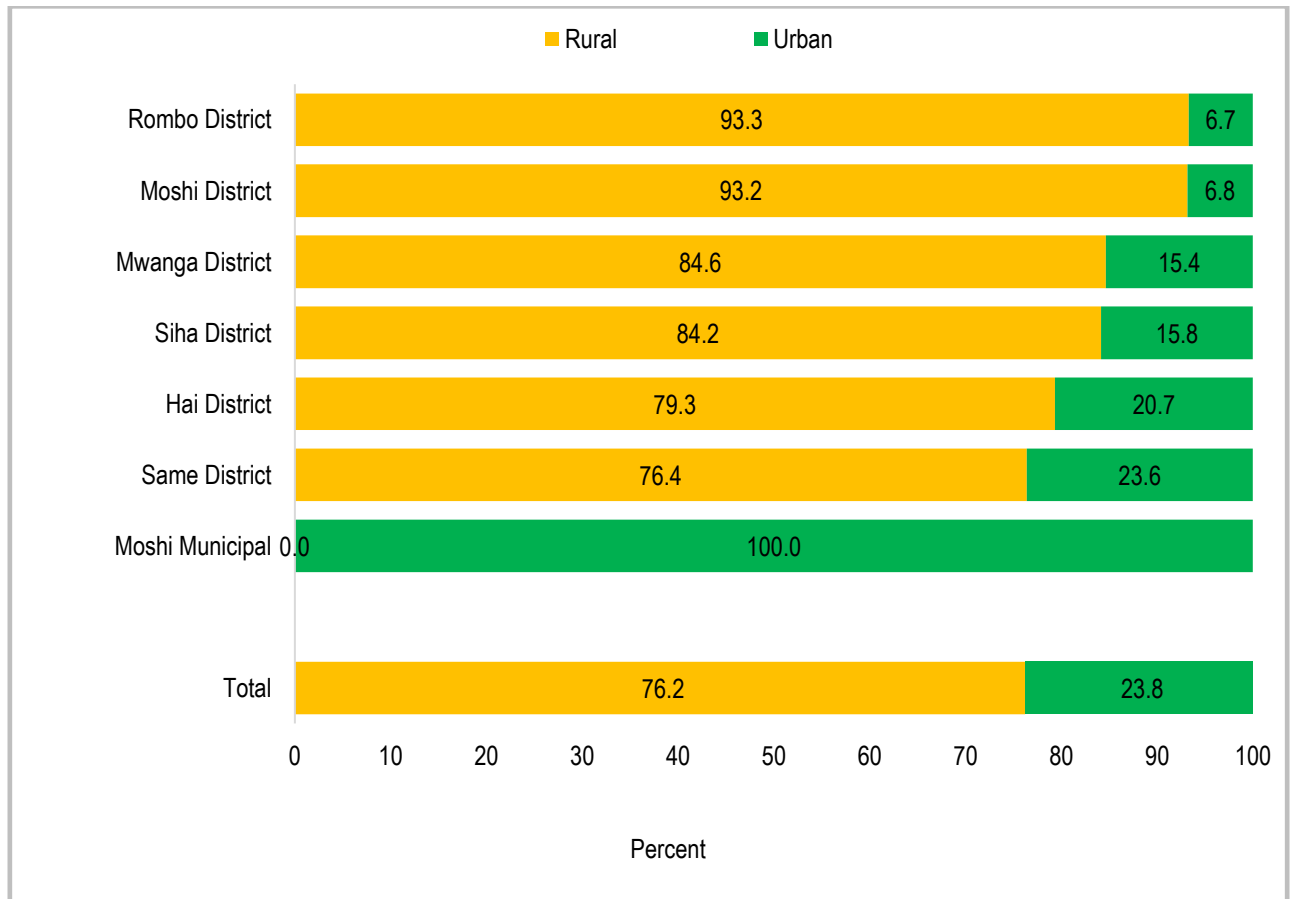
**Figure 2. 1: Percentage Distribution of Population by Council; Kilimanjaro Region, 2022 PHC**



**2.2.2 Rural and Urban Population**

The population of the Kilimanjaro Region is predominantly rural, with 76.2 percent of the population living in rural areas and 23.8 percent living in urban areas. Councils with highest percentages of their population living in rural areas are Rombo and Moshi Districts with 93.3 percent and 93.2 percent respectively. Additionally, Moshi Municipal is the most urbanized Council with its entire population residing in urban areas (Figure 2.2 and Table 2.2).

**Figure 2. 2: Percentage Distribution of Population by Council and Place of Residence; Kilimanjaro Region, 2022 PHC**



**Table 2.2: Number and Percentage Distribution of Population by Place of Residence, Sex and Council; Kilimanjaro Region, 2022 PHC**

Council	Total			Rural				Urban			
	Total	Male	Female	Both Sexes		Male	Female	Both sexes		Male	Female
				Number	Percent			Number	Percent		
<b>Total</b>	<b>1,861,934</b>	<b>907,636</b>	<b>954,298</b>	<b>1,419,512</b>	<b>76.2</b>	<b>694,000</b>	<b>725,512</b>	<b>442,422</b>	<b>23.8</b>	<b>213,636</b>	<b>228,786</b>
Rombo District	275,314	133,258	142,056	256,853	93.3	124,308	132,545	18,461	6.7	8,950	9,511
Mwanga District	148,763	72,157	76,606	125,912	84.6	61,337	64,575	22,851	15.4	10820	12031
Same District	300,303	147,293	153,010	229,414	76.4	113,492	115,922	70,889	23.6	33,801	37,088
Moshi Municipal	221,733	108,462	113,271	NA	NA	NA	N.A	221,733	100.0	108,462	113,271
Moshi District	535,803	261,950	273,853	499,137	93.2	244,318	254,819	36,666	6.8	17,632	19,034
Hai District	240,999	117,223	123,776	191193	79.3	93777	97416	49,806	20.7	23,446	26,360
Siha District	139,019	67,293	71,726	117,003	84.2	56,768	60,235	22,016	15.8	10,525	11,491

**Note:**

NA=Not Applicable.

Moshi Municipal Council has no rural component.

## 2.3 Population Change and Growth

### 2.3.1 Population Change

The population of Kilimanjaro Region has increased by 13.5 percent from 1,640,087 persons in 2012 to 1,861,934 persons in 2022. This is an indication of increasing population at decreasing growth rate over the two decades (Table 2.3).

### 2.3.2 Annual Population Growth Rate and Trends

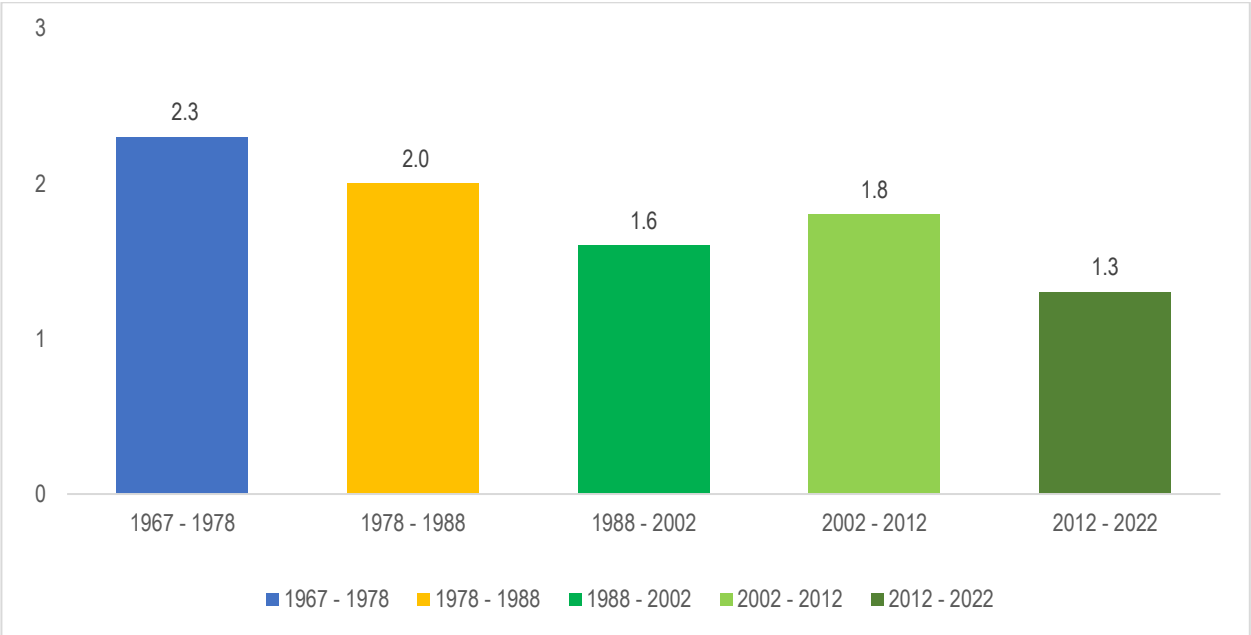
Kilimanjaro Region population grew at an annual average rate of 1.3 percent between 2012 and 2022 (Table 2.1). This growth rate is below the national average of 3.2 percent. At this rate, the population is expected to double in the next 55 years; that is in year 2077. The growth rate for the male population is higher (1.3%) compared to 1.2 percent for the female population (Table 2.3).

**Table 2. 3: Population Size and Growth Indicators by Sex; Kilimanjaro Region, 2012 and 2022 PHCs**

Sex	Population Size		Percent Changes	Percent Growth Rate (per annum)	Doubling Time from 2022 (Years)
	2012	2022	2012-2022	2012-2022	
Total	1,640,087	1,861,934	13.5	1.3	55
Male	793,140	907,636	14.4	1.3	51
Female	846,947	954,298	12.7	1.2	58

Figure 2.3 shows that the population average annual intercensal growth rate for Kilimanjaro Region decreased from 2.3 percent during 1967 – 1978 period to 1.3 percent in 2012 – 2022 period. However, the rate increased to 1.8 percent in 2002–2012 before decreased to 1.3 percent in 2012 – 2022.

**Figure 2. 3: Average Annual Intercensal Population Growth Rates; Kilimanjaro Region, 1967–2022 Censuses**



## Chapter 3

# Age and Sex Profile

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### Key Points

- More than thirty-five percent (35.1%) of the Kilimanjaro Regional population is aged below 15 years and 7.3 percent is aged 65 years and above, thus a youthful age structure.
- The median age of the Kilimanjaro Regional population is 22.2 years.
- The percentage of the working age population (15 - 64 years) in Kilimanjaro Region has increased from 47.3 percent in 1988 Census to 57.6 percent in 2022.
- The percentage of the population aged 60 years and above in Kilimanjaro Region is 10.4.
- The age dependency ratio for Kilimanjaro Region is 73.7

### 3.1 Introduction

This chapter discusses quality of age and sex data, presents age and sex profiles as well as population distribution by selected age groups and respective demographic attributes in Kilimanjaro Region. The Tanzania 2022 PHC collected information on age in completed years for all persons who spent the census night in the country. Age and sex are the most fundamental demographic characteristics of human population. They are important variables in the study of population dynamics, demographic analysis, social functions and responsibilities in socio-economic development processes.

Age, in particular, is a critical factor in planning and making important decisions in public administration for different population groups. For instance, age is a crucial input in population projection, social and economic development planning, and provision of social services such as health, education, food security and energy. Despite its importance, the results from previous censuses and experience from many developing countries, show that age and sex information is affected by misreporting.

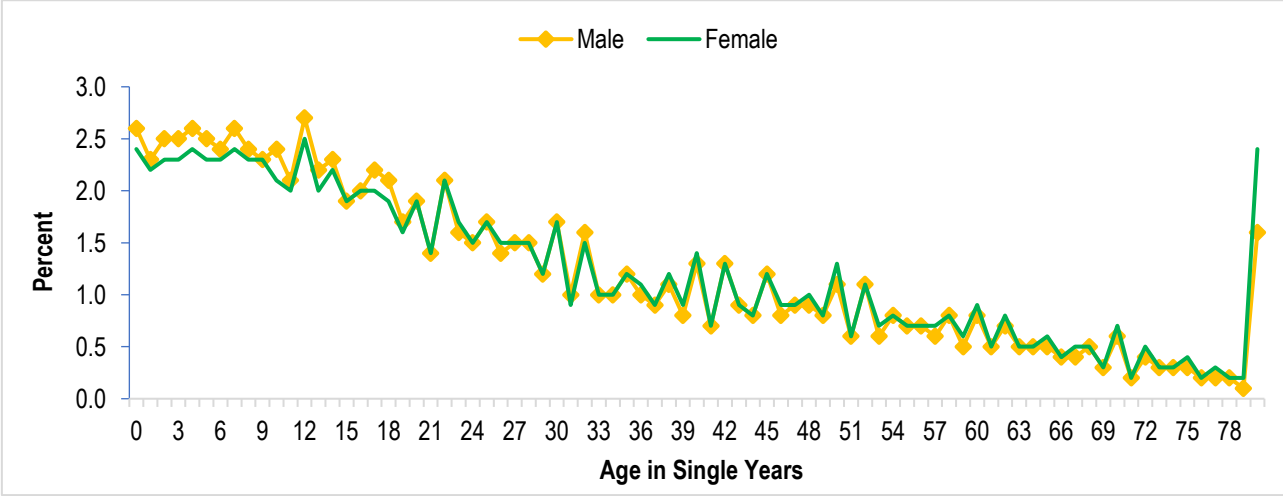
### 3.2 Quality of Age and Sex Data

The quality of age and sex data in the 2022 PHC was examined using an array of conventional methods and indices and was observed to have suffered errors associated with age misreporting which cannot be neglected. Based on experience gained from previous censuses, age data are characterized by a significant clustering at ages ending in

digits “0”, “5” and “8” and to a lesser extent to ages ending with even numbers, with corresponding deficiencies at ages ending in digits “1”, “3”, “7” or “9”. The tendency of respondents to report ages ending with certain digits at the expense of other digits is called age heaping, age preference or digit preference. Age misreporting is most pronounced among populations or population sub-groups with no birth registration systems or low literacy rates.

The 2022 Census results in Kilimanjaro Region show a significant heaping in ages ending with digits “0”, “2” and “8” and avoidance of ages ending with digits “1”, “3”, and “9”. There is a clear indication that, age misreporting for digit 5 is insignificant. This might be due to improved data collection techniques used in the 2022 Census, specifically the use of tablets, improved probing of age data and the use of National Identification Cards during enumeration to reconfirm the stated ages. The observed jagged edged pattern is a typical feature of single-year age distributions in most developing countries’ census data depicting age misstatements. Digit preference is observed to be relatively higher among females than males (Figures 3.1).

**Figure 3.1: Population Distribution by Age in Single Years and Sex; Kilimanjaro Region, 2022 PHC**



**3.2.1 Population Distribution by Five Year Age Groups**

Tables 3.1, 3.2 and 3.3 present the distribution of population by five-year age groups and sex for the Kilimanjaro Region. The data reveal a young population age structure with 35.1 percent of the population aged below 15 years and 7.3 percent aged 65 years and older. The median age of the Kilimanjaro Region is 22.2 years.

Sex ratio by age groups provides an important index of possible age misreporting. Normally, the sex ratio tends to gradual decrease with age, eventually falling below 100, where the number of females surpasses the number of males and the difference becomes more pronounced with advancing ages. The overall sex ratio for Kilimanjaro Region is approximately 95 males for every 100 females (96 for rural areas and 93 for urban), indicating a higher number of females compared to males. The sex ratio for the population aged 5 - 19 years is relatively high in rural areas (102 to 104 boys per 100 girls) while it is lower in urban areas (87 to 96 boys per 100 girls). This indicates a possible early out-migration of girls from rural to urban areas (Tables 3.1, 3.2 and 3.3).

**Table 3.1: Number and Percentage Distribution of Population by Sex and Five-Year Age Group; Kilimanjaro Region, 2022 PHC**

Age Group	Both Sexes		Male		Female		Sex Ratio
	Number	Percent	Number	Percent	Number	Percent	
<b>Total</b>	<b>1,861,934</b>	<b>100.0</b>	<b>907,636</b>	<b>100.0</b>	<b>954,298</b>	<b>100.0</b>	<b>95</b>
0-4	224,780	12.1	113,713	12.5	111,067	11.6	102
5-9	220,644	11.9	111,050	12.2	109,594	11.5	101
10-14	208,874	11.2	105,649	11.6	103,225	10.8	102
15-19	179,410	9.6	89,413	9.9	89,997	9.4	99
20-24	160,510	8.6	77,456	8.5	83,054	8.7	93
25-29	137,950	7.4	67,010	7.4	70,940	7.4	94
30-34	115,972	6.2	57,147	6.3	58,825	6.2	97
35-39	96,900	5.2	46,760	5.2	50,140	5.3	93
40-44	92,296	5.0	44,532	4.9	47,764	5.0	93
45-49	86,581	4.7	41,474	4.6	45,107	4.7	92
50-54	80,881	4.3	38,002	4.2	42,879	4.5	89
55-59	62,696	3.4	29,500	3.3	33,196	3.5	89
60-64	58,594	3.1	27,282	3.0	31,312	3.3	87
65-69	41,236	2.2	18,638	2.1	22,598	2.4	82
70-74	34,922	1.9	15,865	1.7	19,057	2.0	83
75-79	21,869	1.2	9,478	1.0	12,391	1.3	76
80-84	16,785	0.9	7,000	0.8	9,785	1.0	72
85+	21,034	1.1	7,667	0.8	13,367	1.4	57
<b>Median Age</b>	<b>22.2</b>		<b>21.4</b>		<b>23.3</b>		

**Table 3.2: Number and Percentage Distribution of Population by Sex and Five-Year Age Group; Kilimanjaro Rural, 2022 PHC**

Age Group	Both Sexes		Male		Female		Sex Ratio
	Number	Percent	Male	Percent	Female	Percent	
<b>Total</b>	<b>1,419,512</b>	<b>100.0</b>	<b>694,000</b>	<b>100.0</b>	<b>725,512</b>	<b>100.0</b>	<b>96</b>
0 – 4	171,555	12.1	86,882	12.5	84,673	11.7	103
5 – 9	172,612	12.2	87,135	12.6	85,477	11.8	102
10 – 14	165,458	11.7	84,335	12.2	81,123	11.2	104
15 – 19	135,460	9.5	68,961	9.9	66,499	9.2	104
20 – 24	110,444	7.8	53,422	7.7	57,022	7.9	94
25 – 29	94,678	6.7	45,857	6.6	48,821	6.7	94
30 – 34	82,201	5.8	40,647	5.9	41,554	5.7	98
35 – 39	70,709	5.0	34,294	4.9	36,415	5.0	94
40 – 44	69,537	4.9	33,746	4.9	35,791	4.9	94
45 – 49	66,771	4.7	32,034	4.6	34,737	4.8	92
50 – 54	64,178	4.5	29,957	4.3	34,221	4.7	88
55 – 59	50,981	3.6	23,973	3.5	27,008	3.7	89
60 – 64	48,398	3.4	22,464	3.2	25,934	3.6	87
65 – 69	34,633	2.4	15,583	2.2	19,050	2.6	82
70 – 74	29,878	2.1	13,634	2.0	16,244	2.2	84
75 – 79	18,898	1.3	8,205	1.2	10,693	1.5	77
80-84	14,629	1.0	6,096	0.9	8,533	1.2	71
85+	18,492	1.3	6,775	1.0	11,717	1.6	58
<b>Median Age</b>	<b>21.9</b>		<b>20.9</b>		<b>23.4</b>		

**Table 3.3: Number and Percentage Distribution of Population by Sex and Five-Year Age Group; Kilimanjaro Urban, 2022 PHC**

Age Group	Both Sexes		Male		Female		Sex Ratio
	Number	Percent	Male	Percent	Female	Percent	
<b>Total</b>	<b>442,422</b>	<b>100.0</b>	<b>213,636</b>	<b>100.0</b>	<b>228,786</b>	<b>100.0</b>	<b>93</b>
0 – 4	53,225	12	26,831	12.6	26,394	11.5	102
5 – 9	48,032	10.9	23,915	11.2	24,117	10.5	99
10 – 14	43,416	9.8	21,314	10.0	22,102	9.7	96
15 – 19	43,950	9.9	20,452	9.6	23,498	10.3	87
20 – 24	50,066	11.3	24,034	11.2	26,032	11.4	92
25 – 29	43,272	9.8	21,153	9.9	22,119	9.7	96
30 – 34	33,771	7.6	16,500	7.7	17,271	7.5	96
35 – 39	26,191	5.9	12,466	5.8	13,725	6.0	91
40 – 44	22,759	5.1	10,786	5.0	11,973	5.2	90
45 – 49	19,810	4.5	9,440	4.4	10,370	4.5	91
50 – 54	16,703	3.8	8,045	3.8	8,658	3.8	93
55 – 59	11,715	2.6	5,527	2.6	6,188	2.7	89
60 – 64	10,196	2.3	4,818	2.3	5,378	2.4	90
65 – 69	6,603	1.5	3,055	1.4	3,548	1.6	86
70 – 74	5,044	1.1	2,231	1.0	2,813	1.2	79

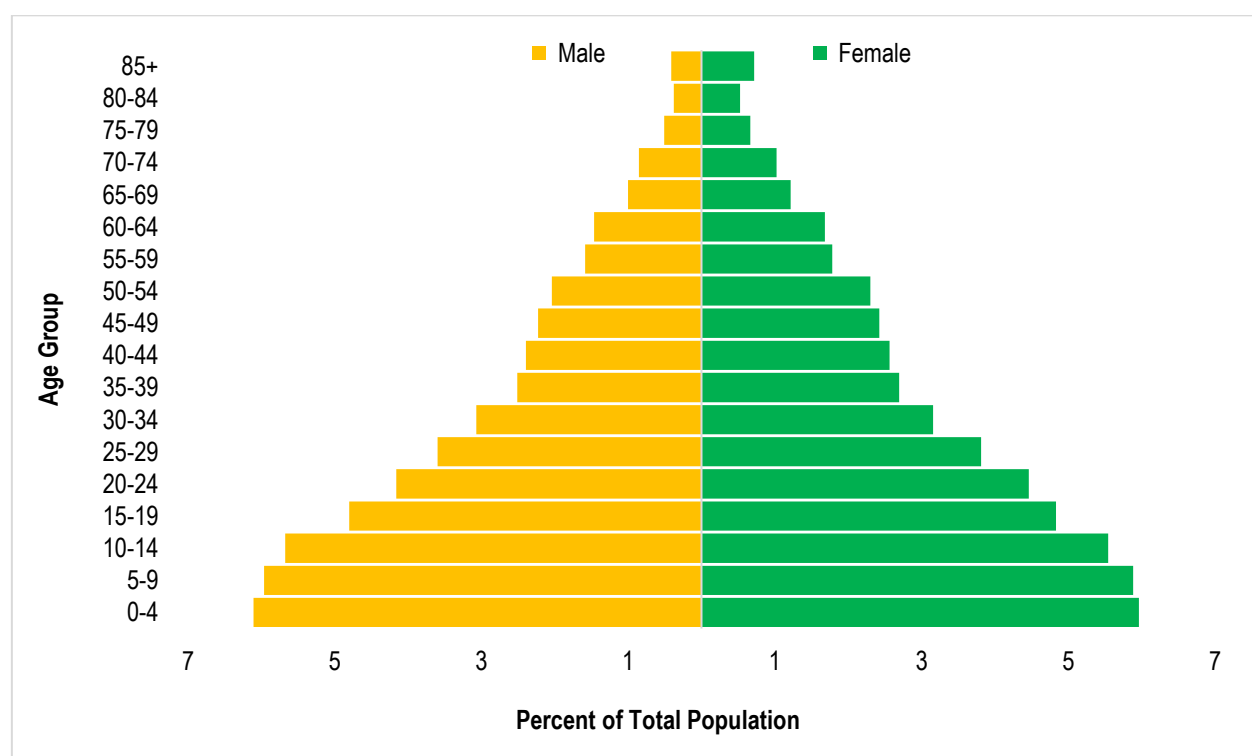
75 – 79	2,971	0.7	1,273	0.6	1,698	0.7	75
80-84	2,156	0.5	904	0.4	1,252	0.5	72
85+	2,542	0.6	892	0.4	1,650	0.7	54
<b>Median Age</b>	<b>22.8</b>		<b>22.5</b>		<b>23.0</b>		

### 3.2.2 Population Pyramid

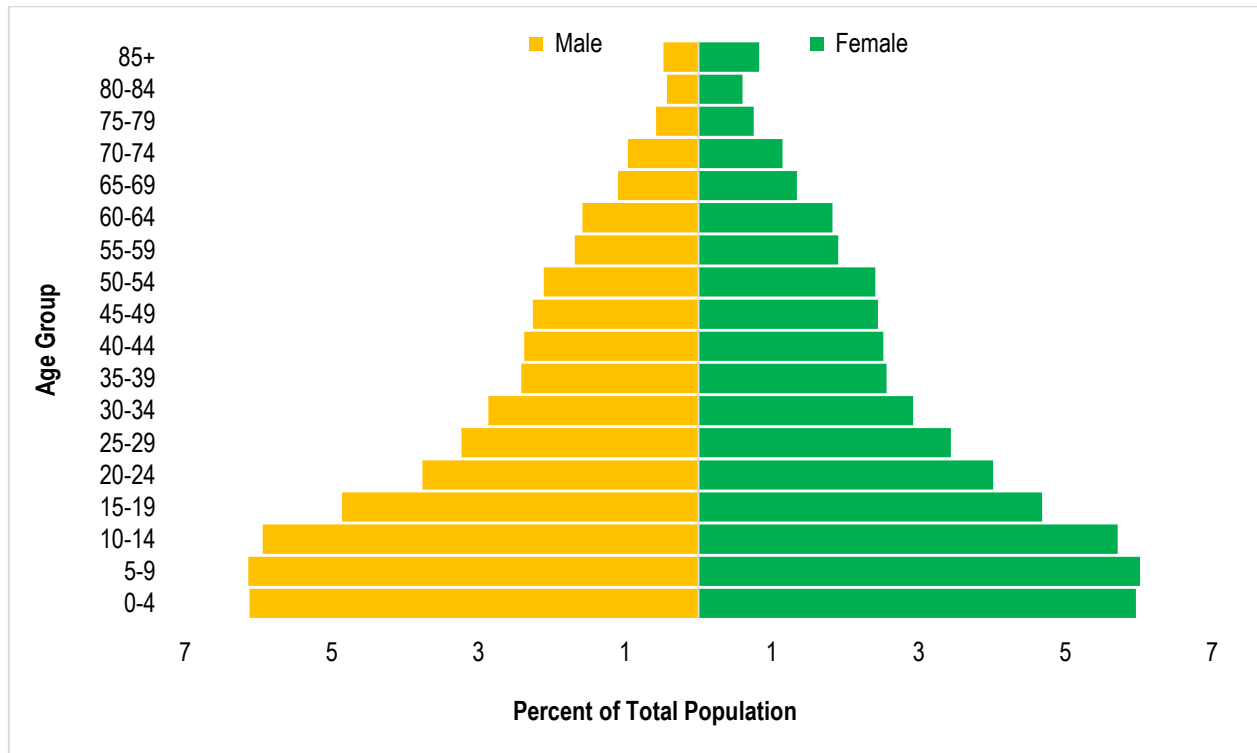
A population pyramid is a graphical representation of the age and sex composition of a specific population. It offers a snapshot of the population’s age and sex structure. It also provides valuable insights into patterns of vital events such as birth and death rates. The population pyramid for Kilimanjaro Region as per the 2022 PHC has a broad base indicative of high fertility and a youthful age structure (Figures 3.2 to 3.5). The population structure of Kilimanjaro Region is similar to that of other regions in the country.

However, pyramids for major urban centers may exhibit a different structure. For example, the pyramid for Moshi Municipal Council (Figure 3.5), the headquarter of Kilimanjaro Region shows a bulge in the 20 – 29 age group, indication a trend of youth in-migration from other parts of the country.

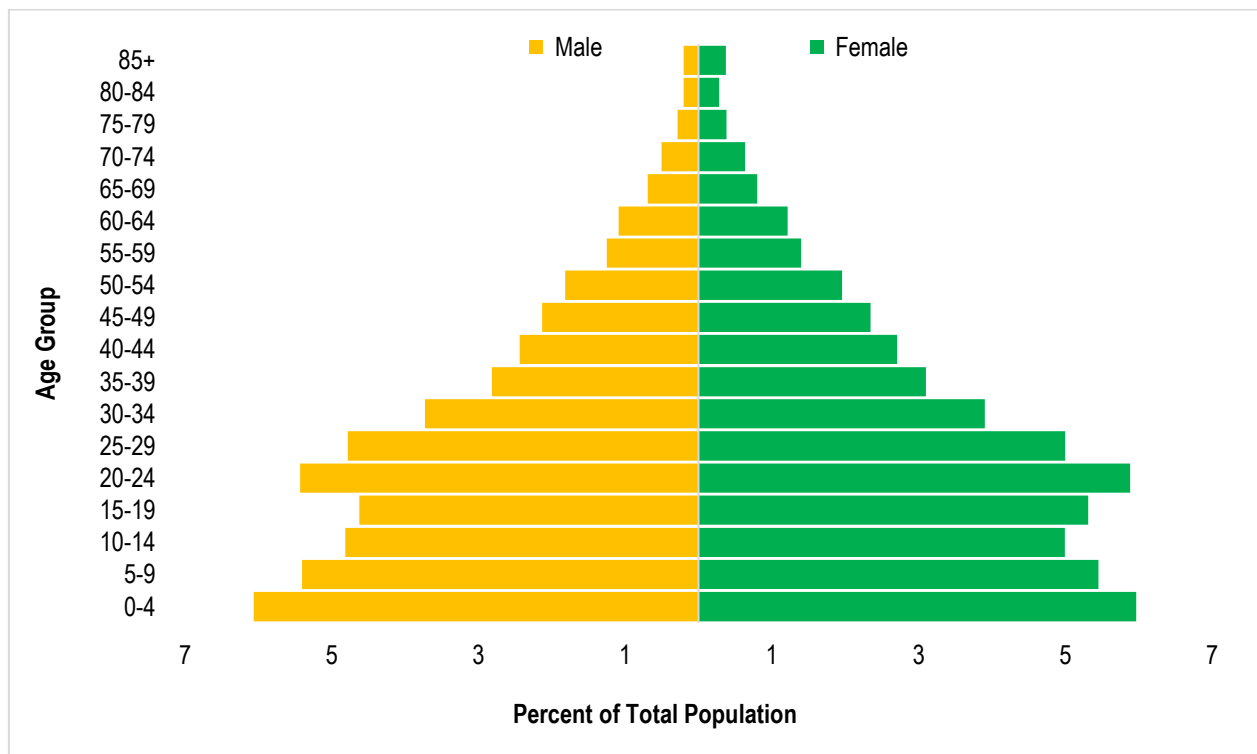
**Figure 3.2: Population Pyramid for Five Year Age Groups; Kilimanjaro Region, 2022 PHC**



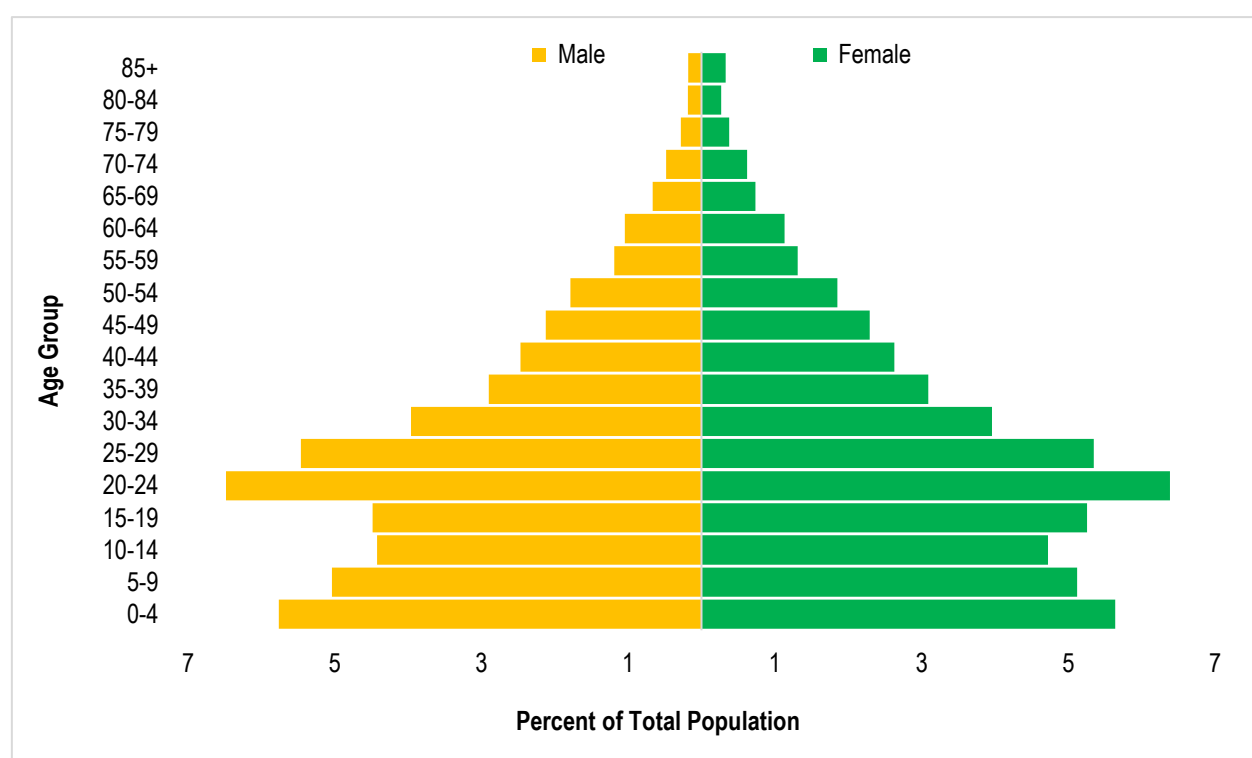
**Figure 3.3: Population Pyramid for Five Year Age Group; Kilimanjaro Rural, 2022 PHC**



**Figure 3.4: Population Pyramid for Five Year Age Group; Kilimanjaro Urban, 2022 PHC**



**Figure 3.5: Population Pyramid for Five Year Age Group; Moshi Municipal Council, 2022 PHC**



### 3.3 Population Distribution by Selected Age Groups

The 2022 PHC reveals that, Kilimanjaro Region has a young population with 35.1 percent of the total population below 15 years of age and 7.3 percent of the population aged 65 years and above (Table 3.4). This broad-based structure indicates a development stage where a country has successfully reduced infant mortality while fertility remains high.

**Table 3.4: Number and Percentage Distribution of Population by Place of Residence, Selected Age Groups and Sex; Kilimanjaro Region, 2022 PHC**

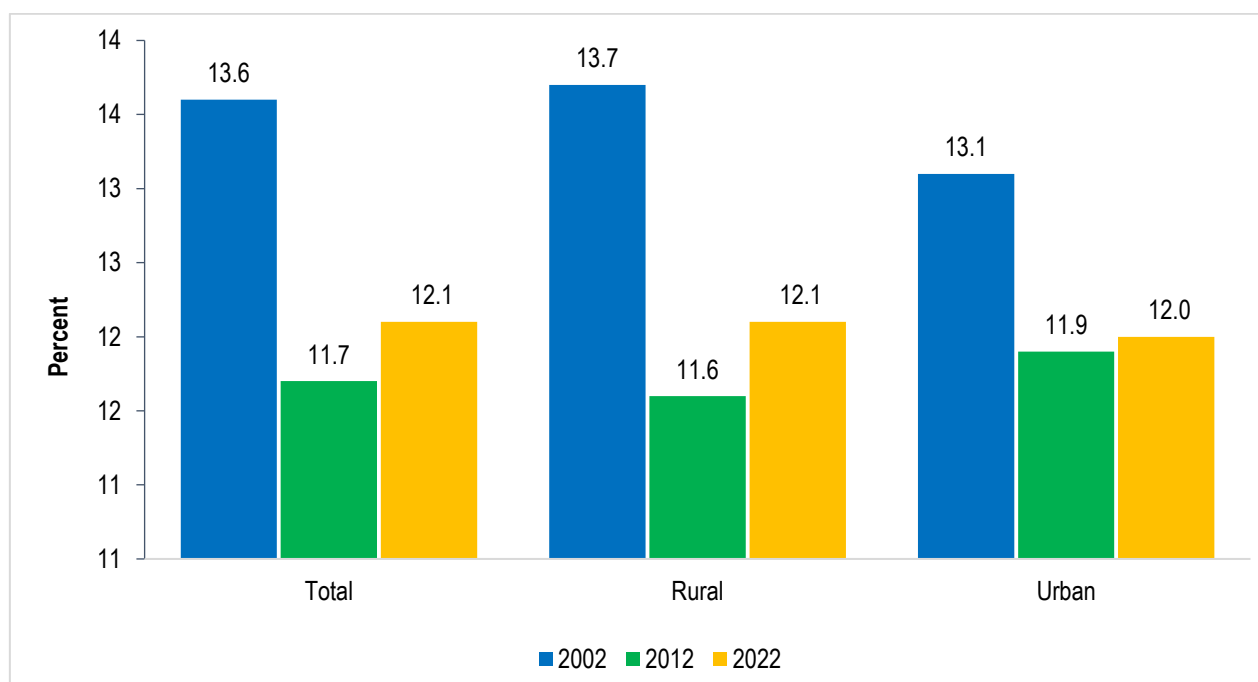
Age Group	Total		Rural		Urban	
	Number	Percent	Number	Percent	Number	Percent
<b>Total Population</b>	<b>1,861,934</b>	<b>100.0</b>	<b>1,419,512</b>	<b>100.0</b>	<b>442,422</b>	<b>100.0</b>
Male	907,636	48.7	694,000	48.9	213,636	48.3
Female	954,298	51.3	725,512	51.1	228,786	51.7
<b>Children (Under 1 year)</b>	<b>47,022</b>	<b>2.5</b>	<b>35,519</b>	<b>2.5</b>	<b>11,503</b>	<b>2.6</b>
Male	23,847	2.6	18,037	2.6	5,810	2.7
Female	23,175	2.4	17,482	2.4	5,693	2.5
<b>Children (0–4 years)</b>	<b>224,780</b>	<b>12.1</b>	<b>171,555</b>	<b>12.1</b>	<b>53,225</b>	<b>12.0</b>
Male	113,713	12.5	86,882	12.5	26,831	12.6
Female	111,067	11.6	84,673	11.7	26,394	11.5
<b>Children (0–8 years)</b>	<b>402,165</b>	<b>21.6</b>	<b>310,210</b>	<b>21.9</b>	<b>91,955</b>	<b>20.8</b>
Male	203,538	22.4	157,283	22.7	46,255	21.7
Female	198,627	20.8	152,927	21.1	45,700	20.0

Age Group	Total		Rural		Urban	
	Number	Percent	Number	Percent	Number	Percent
<b>Young Population (0–14 years)</b>	<b>654,298</b>	<b>35.1</b>	<b>509,625</b>	<b>35.9</b>	<b>144,673</b>	<b>32.7</b>
Male	330,412	36.4	258,352	37.2	72,060	33.7
Female	323,886	33.9	251,273	34.6	72,613	31.7
<b>Young Population (0–17 years)</b>	<b>766,731</b>	<b>41.2</b>	<b>596,101</b>	<b>42.0</b>	<b>170,630</b>	<b>38.6</b>
Male	386,165	42.5	302,068	43.5	84,097	39.4
Female	380,566	39.9	294,033	40.5	86,533	37.8
<b>Teenagers (13–19 years)</b>	<b>260,192</b>	<b>14.0</b>	<b>199,433</b>	<b>14.0</b>	<b>60,759</b>	<b>13.7</b>
Male	129,796	14.3	101,315	14.6	28,481	13.3
Female	130,396	13.7	98,118	13.5	32,278	14.1
<b>Youth Population (15–24 years)</b>	<b>339,920</b>	<b>18.3</b>	<b>245,904</b>	<b>17.3</b>	<b>94,016</b>	<b>21.3</b>
Male	166,869	18.4	122,383	17.6	44,486	20.8
Female	173,051	18.1	123,521	17.0	49,530	21.6
<b>Youth Population (15–35 years)</b>	<b>616,486</b>	<b>33.1</b>	<b>439,238</b>	<b>30.9</b>	<b>177,248</b>	<b>40.1</b>
Male	302,355	33.3	217,119	31.3	85,236	39.9
Female	314,131	32.9	222,119	30.6	92,012	40.2
<b>Primary School (6–12 years)</b>	<b>304,336</b>	<b>16.3</b>	<b>239,523</b>	<b>16.9</b>	<b>64,813</b>	<b>14.6</b>
Male	153,662	16.9	121,430	17.5	32,232	15.1
Female	150,674	15.8	118,093	16.3	32,581	14.2
<b>Primary School (7–13 years)</b>	<b>299,832</b>	<b>16.1</b>	<b>236,567</b>	<b>16.7</b>	<b>63,265</b>	<b>14.3</b>
Male	151,225	16.7	119,829	17.3	31,396	14.7
Female	148,607	15.6	116,738	16.1	31,869	13.9
<b>Secondary School (13-16 years)</b>	<b>153,571</b>	<b>8.2</b>	<b>120,442</b>	<b>8.5</b>	<b>33,129</b>	<b>7.5</b>
Male	75,989	8.4	60,466	8.7	15,523	7.3
Female	77,582	8.1	59,976	8.3	17,606	7.7
<b>Secondary School (14-17 years)</b>	<b>154,094</b>	<b>8.3</b>	<b>119,384</b>	<b>8.4</b>	<b>34,710</b>	<b>7.8</b>
Male	76,549	8.4	60,418	8.7	16,131	7.6
Female	77,545	8.1	58,966	8.1	18,579	8.1
<b>Females of Reproductive Age (15-49 years)</b>	<b>445,827</b>	<b>46.7</b>	<b>320,839</b>	<b>44.2</b>	<b>124,988</b>	<b>54.6</b>
<b>Working Age Population (15-64 years)</b>	<b>1,071,790</b>	<b>57.6</b>	<b>793,357</b>	<b>55.9</b>	<b>278,433</b>	<b>62.9</b>
Male	518,576	57.1	385,355	55.5	133,221	62.4
Female	553,214	58.0	408,002	56.2	145,212	63.5
<b>Elderly population (60+ years)</b>	<b>194,440</b>	<b>10.4</b>	<b>164,928</b>	<b>11.6</b>	<b>29,512</b>	<b>6.7</b>
Male	85,930	9.5	72,757	10.5	13,173	6.2
Female	108,510	11.4	92,171	12.7	16,339	7.1
<b>Elderly Population (65+ years)</b>	<b>135,846</b>	<b>7.3</b>	<b>116,530</b>	<b>8.2</b>	<b>19,316</b>	<b>4.4</b>
Male	58,648	6.5	50,293	7.2	8,355	3.9
Female	77,198	8.1	66,237	9.1	10,961	4.8
<b>Elderly Population (70+ years)</b>	<b>94,610</b>	<b>5.1</b>	<b>81,897</b>	<b>5.8</b>	<b>12,713</b>	<b>2.9</b>
Male	40,010	4.4	34,710	5.0	5,300	2.5
Female	54,600	5.7	47,187	6.5	7,413	3.2
<b>Age-Dependency Ratio</b>		<b>73.7</b>		<b>78.9</b>		<b>58.9</b>

### 3.3.1 Children Under Five Years

The 2022 PHC results show that, the population under five years in Kilimanjaro Region is 12.1 percent. Figure 3.6 indicates that the percentage of population under five years decreased from 13.6 percent in 2002 to 11.7 percent in 2012, then slightly increased to 12.1 percent in 2022. This decrease indicates a slow pace of fertility decline in the Region during the specified period.

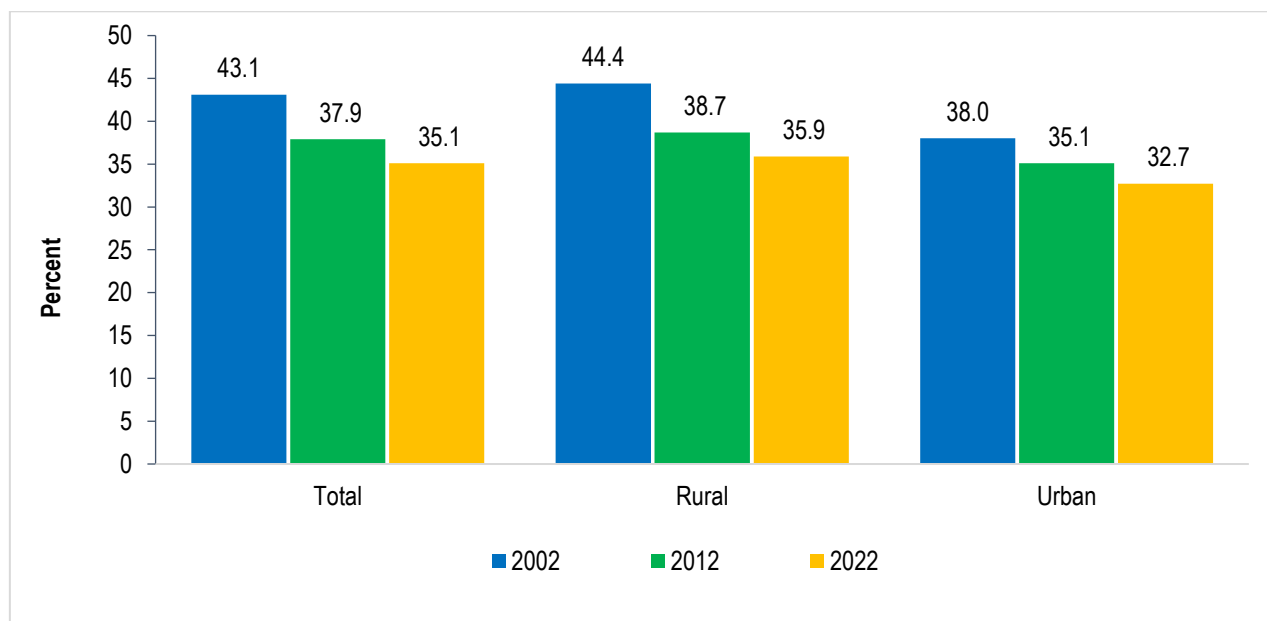
**Figure 3.6: Percentage of Children Under Five Years by Place of Residence; Kilimanjaro Region, 2002, 2012 and 2022 PHCs**



### 3.3.2 Young Population (0-14 Years)

Kilimanjaro Regional population is characterised by a young age structure with 35.1 percent of the total regional population below 15 years of age. Figure 3.7 shows that this percentage has declined from 43.1 percent in 2002 to 35.1 percent in 2022.

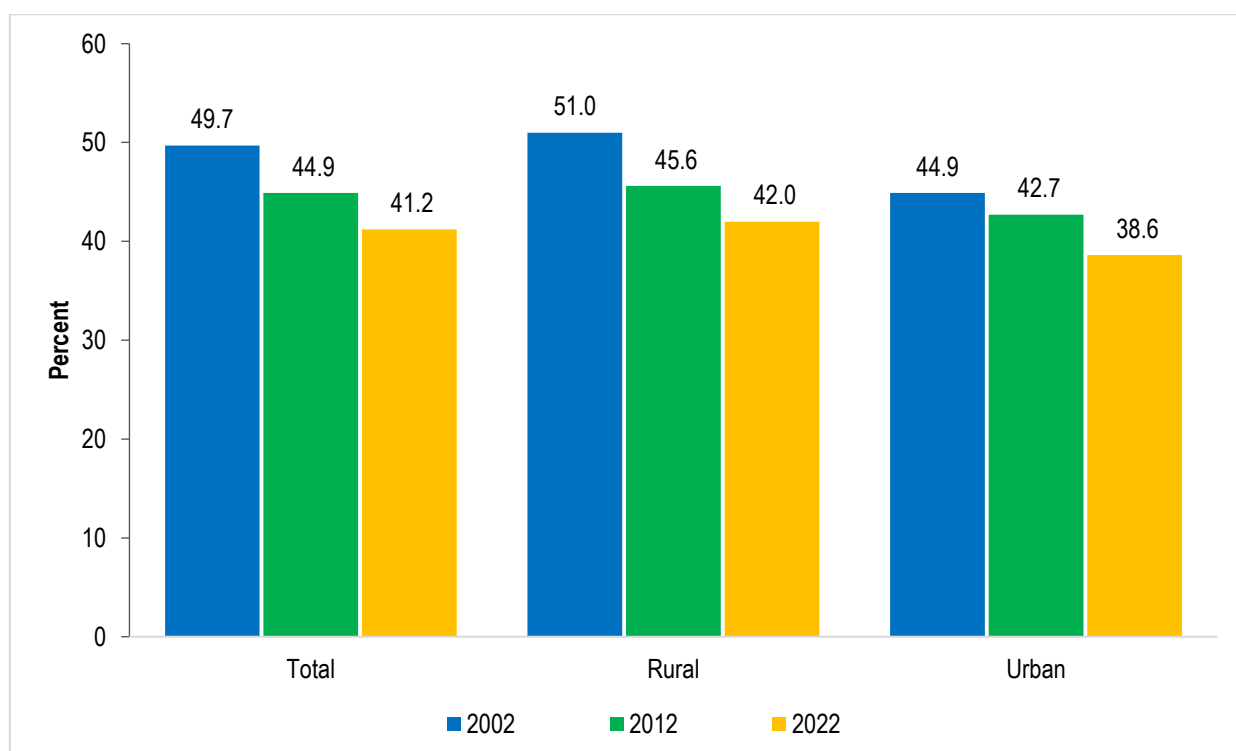
**Figure 3.7: Percentage of Young Population (0-14 Years) by Place of Residence; Kilimanjaro Region, 2002, 2012 and 2022 PHCs**



### 3.3.3 Young Population (0-17 Years)

Figure 3.8 shows that 41.2 percent of the population in Kilimanjaro Region is below 18 years. The percentage of population aged 0-17 years has declined from 49.7 percent in 2002 to 41.2 percent in 2022.

**Figure 3.8: Percentage of Young Population Aged 0-17 Years by Place of Residence; Kilimanjaro Region, 2002, 2012 and 2022 PHCs**

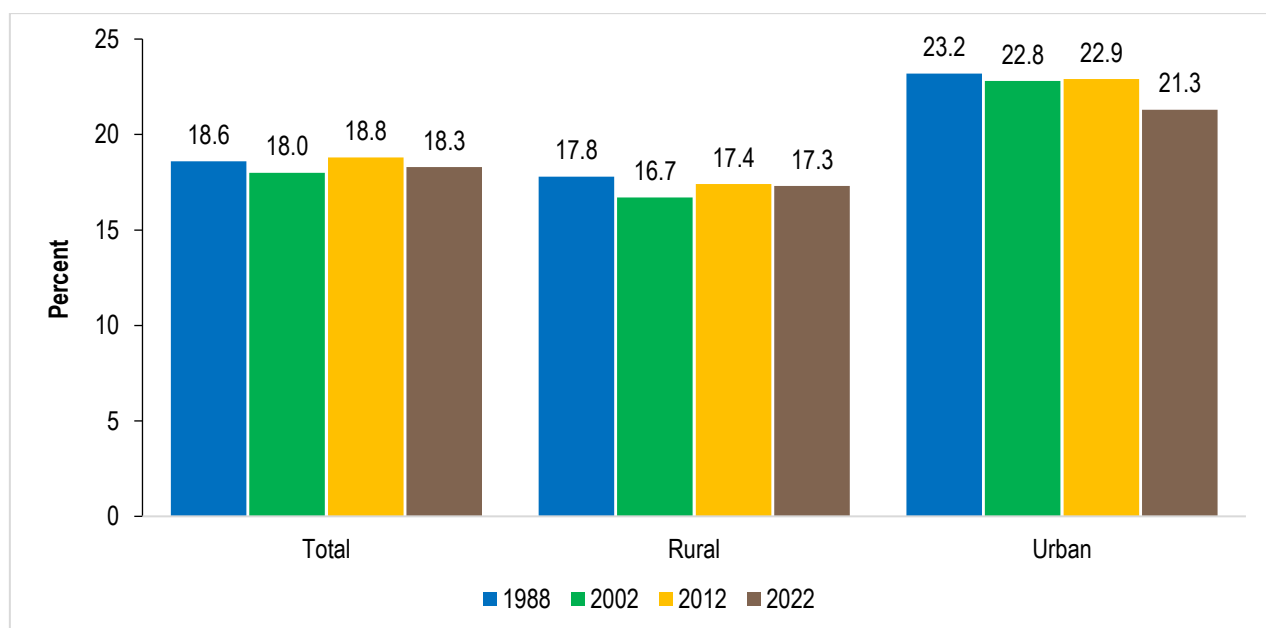


### 3.3.4 Youth Population (15-24 Years)

The Tanzania National Youth Development Policy, 2007 defines a youth as “a boy or girl who is in transition from childhood to adulthood”. According to the Policy, a youth is defined as a person aged 15 – 35 years. However, according to the United Nations, a youth is defined as a person aged 15 - 24 years. In this chapter, the analysis has employed both definitions.

Figure 3.9 presents census results on the youth population according to the United Nations definition (age 15 - 24) for the Kilimanjaro Region from 1988, 2002, 2012 and 2022 Censuses. The results from PHC 2022 indicate that the youth population (15 – 24 years) in Kilimanjaro Region accounts for 18.3 percent of the total regional population. Over the past three decades, the percentage of youth population in this age group has remained relatively stable, fluctuating between 18.0 and 18.8 percent during the intercensal periods from 1988 to 2022.

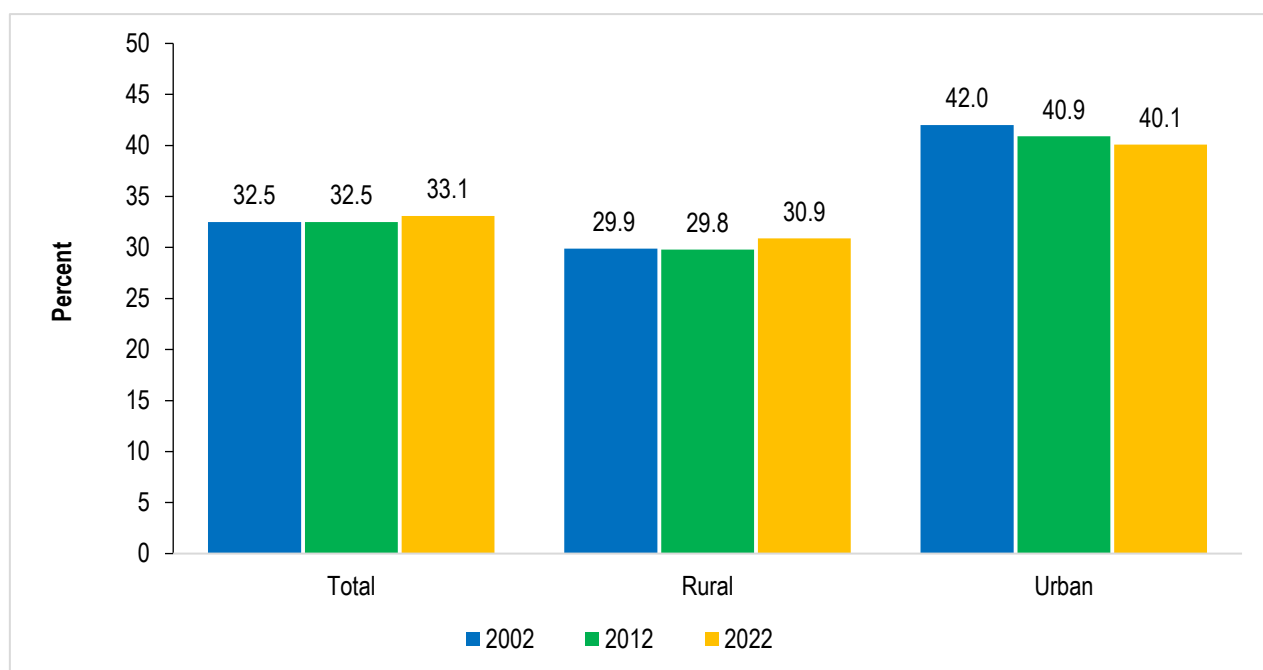
**Figure 3.9: Percentage of Youth Population (15-24 Years) by Place of Residence; Kilimanjaro Region, 1988, 2002, 2012 and 2022 PHCs**



### 3.3.5 Youth Population (15 - 35 Years)

The 2022 PHC results show that the youth population as per the National Youth Development Policy of 2007 (15 - 35 years) accounts for 33.1 percent of the Kilimanjaro regional population. The percentage of persons aged 15-35 years has remained relatively stable over the past two decades at 32.5 percent in both 2002 and 2012, and 33.1 percent in 2022 (Figure 3.10).

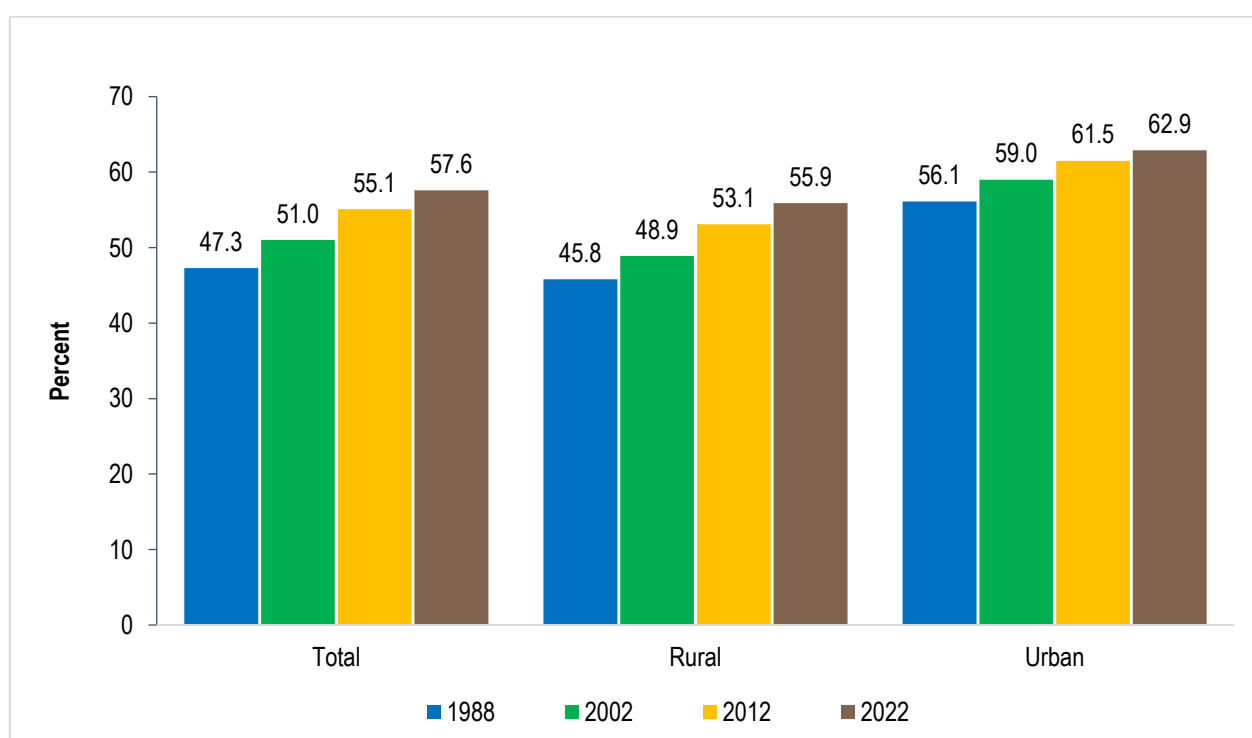
**Figure 3.10: Percentage of the Youth Population (15-35 Years) by Place of Residence; Kilimanjaro Region, 2002, 2012 and 2022 PHCs**



### 3.3.6 Working Age Population (15-64 Years)

The working age population (15 – 64 years) in Kilimanjaro Region constitutes 57.6 percent of the total regional population. This percentage of working age population has increased from 47.3 percent in 1988 Census to 57.6 percent in 2022 (Figure 3.11).

**Figure 3.11: Percentage of the Working Age Population (15-64 Years) by place of Residence; Kilimanjaro Region, 1988, 2002, 2012 and 2022 PHCs**



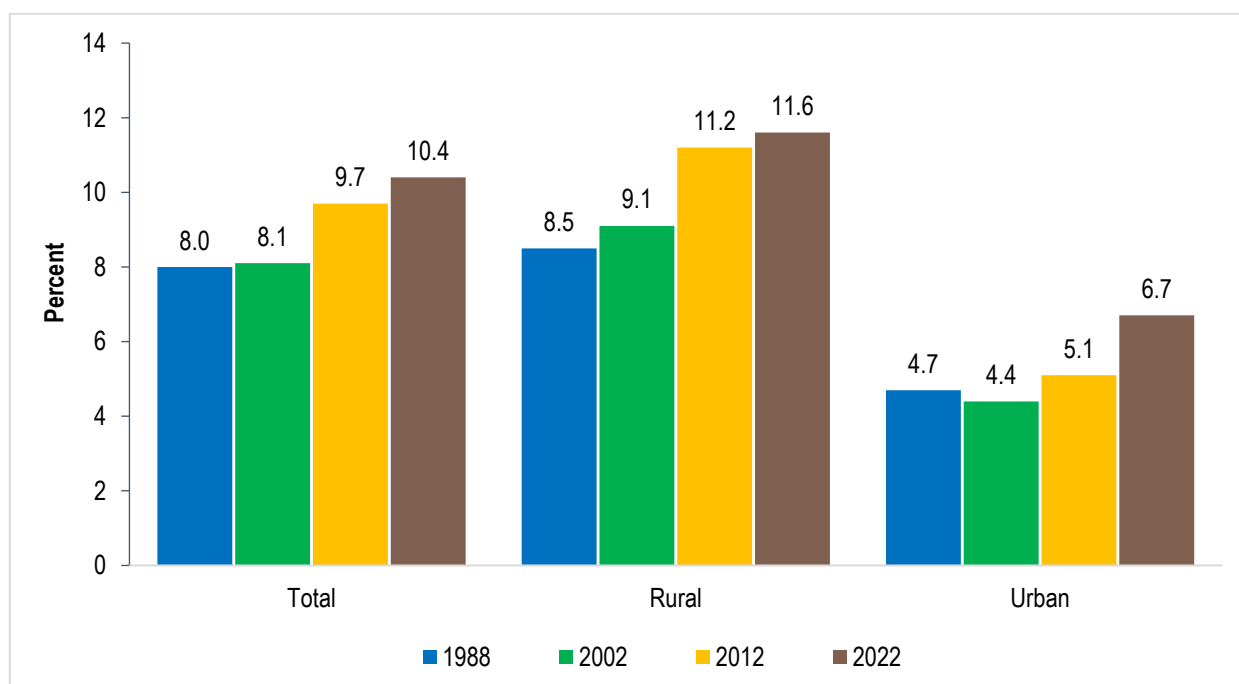
### 3.3.7 Elderly Population

According to the international definition, an elder is a person aged 65 years and above. However, according to the Tanzania National Ageing Policy of 2003, an elder is a person aged 60 years and above. In this chapter the analysis has taken into account both definitions.

#### Population Aged 60 Years and Above

Findings indicate that, the elderly constitute a small segment of Kilimanjaro regional population. The percentage of the population aged 60 years and above in the Region is 10.4 percent. The percentage of the elderly population aged 60 years and above in Kilimanjaro Region has increased slightly from 8.0 percent in 1988 census to 10.4 percent in 2022 (Figure 3.12).

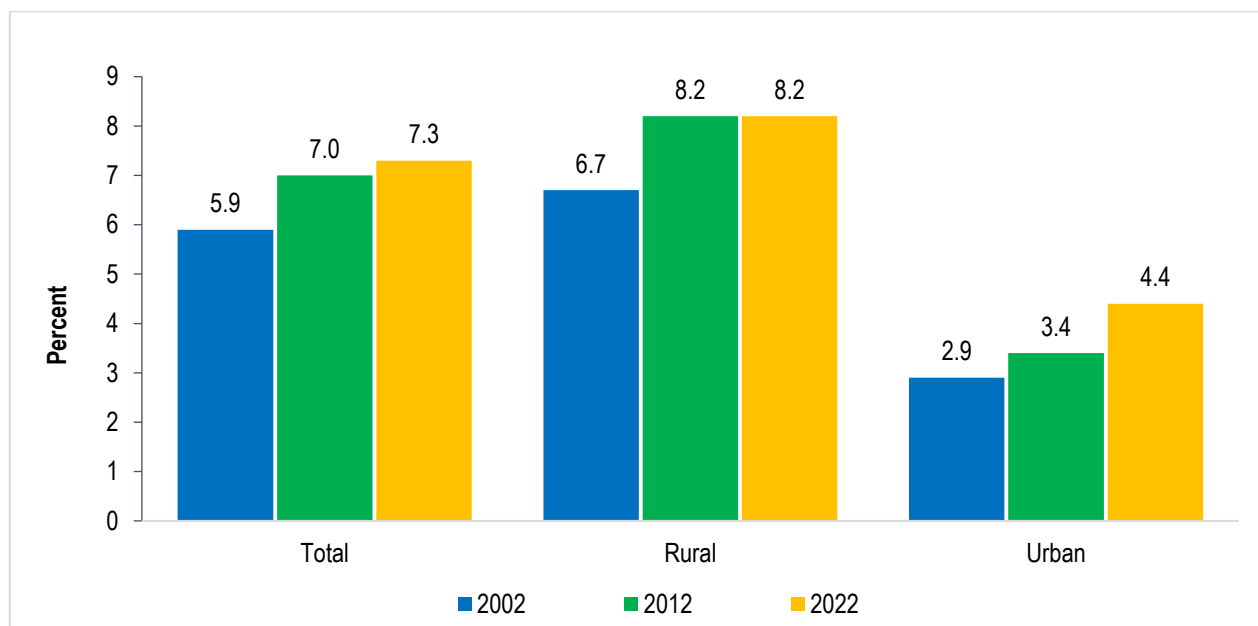
**Figure 3.12: Percentage of the Population Aged 60 Years and Above by Place of Residence; Kilimanjaro Region, 1988, 2002, 2012 and 2022 PHCs**



#### Population Aged 65 Years and Above

Findings indicate that, the elderly population constitutes a small segment (7.3%) of the Kilimanjaro regional population. The percentage of the elderly population aged 65 years and above in the region has increased from 5.9 percent in 2002 to 7.3 percent in 2022 (Figure 3.13).

**Figure 3.13: Percentage of the Population Aged 65 Years and Above by Place of Residence; Kilimanjaro Region, 2002, 2012 and 2022 PHCs**

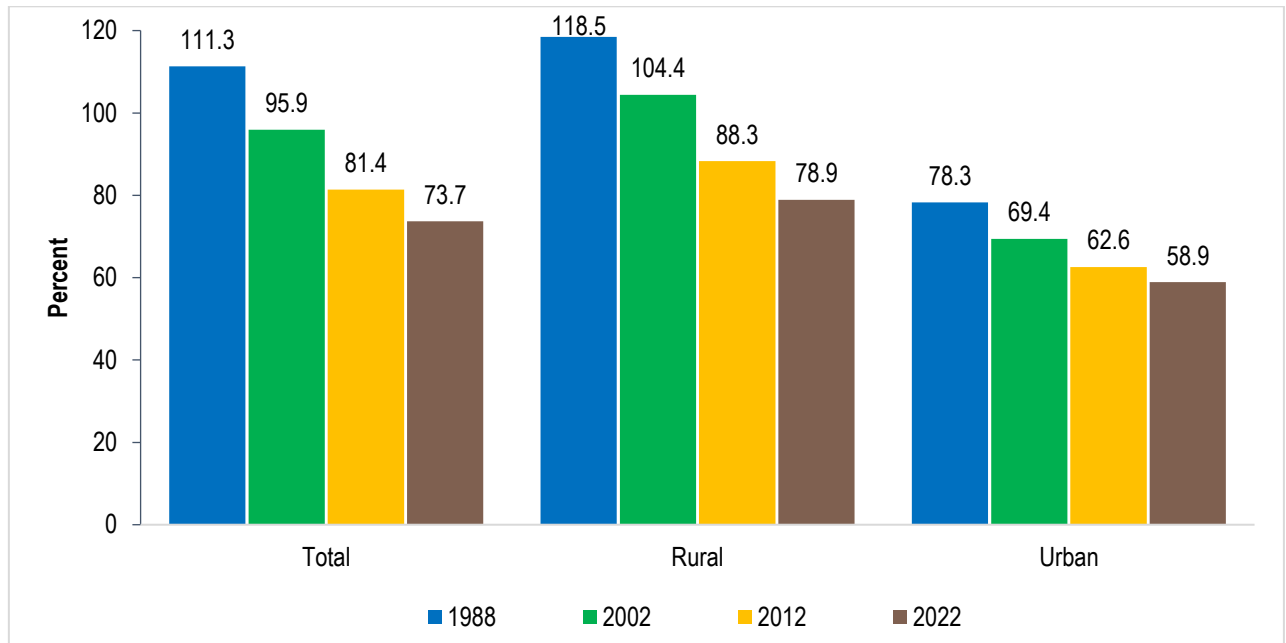


### 3.3.8 Age Dependency Ratio

Age-dependency ratio is the proportion of persons in the “dependent” ages (those under 15 years of age plus those aged 65 years and above) to the “working age population” (15-64 years). It is expressed as the number of dependents per 100 working-age-person. Ratios higher than a 100 are generally considered undesirable, as they indicate a higher economic burden and responsibility on the working-age-population. The age-dependency serve as proxy indicator of the economic challenges faced by the working-age-population.

According to the 2022 PHC results, the dependency ratio for Kilimanjaro Region is 73.7 meaning that there are about 74 dependents per 100 working-age-individuals. Additionally, the results show that over the three decades from 1988 to 2022, the age dependency ratio in the Region has decreased significantly from 111.3 in 1988 census to 73.7 in 2002 census (Figure 3.14).

**Figure 3.14: Age Dependency Ratio by Place of Residence; Kilimanjaro Region, 1988, 2002, 2012 and 2022 PHCs**



## Chapter 4

### Household Composition

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#### Key points

- Most of private households in Kilimanjaro Region (74.7%) are in rural areas.
- The average household size in Kilimanjaro Region is 3.7 persons; in rural areas it is 3.8 persons while in urban areas it is 3.4 persons.
- There is a decline in average household size from 4.2 persons in 2012 to 3.7 in 2022.
- The average number of persons per household in male-headed households is 3.8 and 3.5 in female-headed households.
- Female-headed households in Kilimanjaro Region increased from 36.6 percent in 2012 to 37.5 percent in 2022.

#### 4.1 Introduction

This chapter presents information on private households including household composition, number of households, average household size and household headship. Although the 2022 PHC collected information from private and collective households; this analysis is based on private households only.

A private household refers to a person or group of persons living together, sharing the same cooking arrangements and being accountable to one household head, but not necessarily living in the same dwelling unit. Since the 2022 PHC enumeration was conducted *de facto* some modifications were made to this definition. For instance, visitors present in the household on census night were also included as members of the household. Additionally, usual members of the household who were elsewhere on census night due to being on duty were still considered members of the household. On the other hand, collective households are those with members not necessarily related to each other, such as students in hostels, orphanages, prisons and patients in hospital wards.

#### 4.2 Number of Households

The 2022 PHC reveals that Kilimanjaro Region has a total of 494,428 private households out of which 125,244 (25.3%) are in urban areas and 369,184 (74.7%) in rural areas. Female headed households account for 37.5 percent of all private households. The percentage of female headed households is higher in urban areas (39.1%) than in rural areas (37.0%) (Table 4.1 and Table 4.4).

**Table 4.1: Number and Percentage of Private Households by Place of Residence, Sex of Household Head and Age Group; Kilimanjaro Region, 2022 PHC**

Age group	Total					Rural					Urban				
	Both Sexes	Male Headed	Percent	Female Headed	Percent	Both Sexes	Male Headed	Percent	Female Headed	Percent	Both Sexes	Male Headed	Percent	Female Headed	Percent
<b>Total</b>	<b>494,428</b>	<b>309,059</b>	<b>62.5</b>	<b>185,369</b>	<b>37.5</b>	<b>369,184</b>	<b>232,752</b>	<b>63.0</b>	<b>136,432</b>	<b>37.0</b>	<b>125,244</b>	<b>76,307</b>	<b>60.9</b>	<b>48,937</b>	<b>39.1</b>
< 10 <sup>2</sup>	81	36	44.4	45	55.6	64	29	45.3	35	54.7	17	7	41.2	10	58.8
10-14	676	376	55.6	300	44.4	501	282	56.3	219	43.7	175	94	53.7	81	46.3
15 - 19	6,042	3,645	60.3	2,397	39.7	3,922	2,321	59.2	1,601	40.8	2,120	1,324	62.5	796	37.5
20 - 24	28,989	17,882	61.7	11,107	38.3	17,179	10,736	62.5	6,443	37.5	11,810	7,146	60.5	4,664	39.5
25 - 29	47,214	31,042	65.7	16,172	34.3	29,043	19,562	67.4	9,481	32.6	18,171	11,480	63.2	6,691	36.8
30 - 34	49,253	33,122	67.2	16,131	32.8	32,469	22,423	69.1	10,046	30.9	16,784	10,699	63.7	6,085	36.3
35 - 39	45,724	30,173	66.0	15,551	34.0	31,922	21,586	67.6	10,336	32.4	13,802	8,587	62.2	5,215	37.8
40 - 44	47,494	31,075	65.4	16,419	34.6	34,829	23,282	66.8	11,547	33.2	12,665	7,793	61.5	4,872	38.5
45 - 49	48,028	31,105	64.8	16,923	35.2	36,356	23,937	65.8	12,419	34.2	11,672	7,168	61.4	4,504	38.6
50 - 54	48,120	30,442	63.3	17,678	36.7	37,787	24,113	63.8	13,674	36.2	10,333	6,329	61.3	4,004	38.7
55 - 59	39,797	24,880	62.5	14,917	37.5	32,130	20,288	63.1	11,842	36.9	7,667	4,592	59.9	3,075	40.1
60 - 64	39,509	23,744	60.1	15,765	39.9	32,414	19,625	60.5	12,789	39.5	7,095	4,119	58.1	2,976	41.9
65 - 69	28,652	16,545	57.7	12,107	42.3	23,940	13,928	58.2	10,012	41.8	4,712	2,617	55.5	2,095	44.5
70 - 74	25,310	14,311	56.5	10,999	43.5	21,705	12,379	57.0	9,326	43.0	3,605	1,932	53.6	1,673	46.4
75 - 79	15,688	8,497	54.2	7,191	45.8	13,635	7,413	54.4	6,222	45.6	2,053	1,084	52.8	969	47.2
80+	23,851	12,184	51.1	11,667	48.9	21,288	10,848	51.0	10,440	49.0	2,563	1,336	52.1	1,227	47.9

<sup>2</sup> Households headed by children under 10 years may include those households whose responsible heads were temporarily absent during the Census night

## Basic Demographic and Socio-Economic Profile

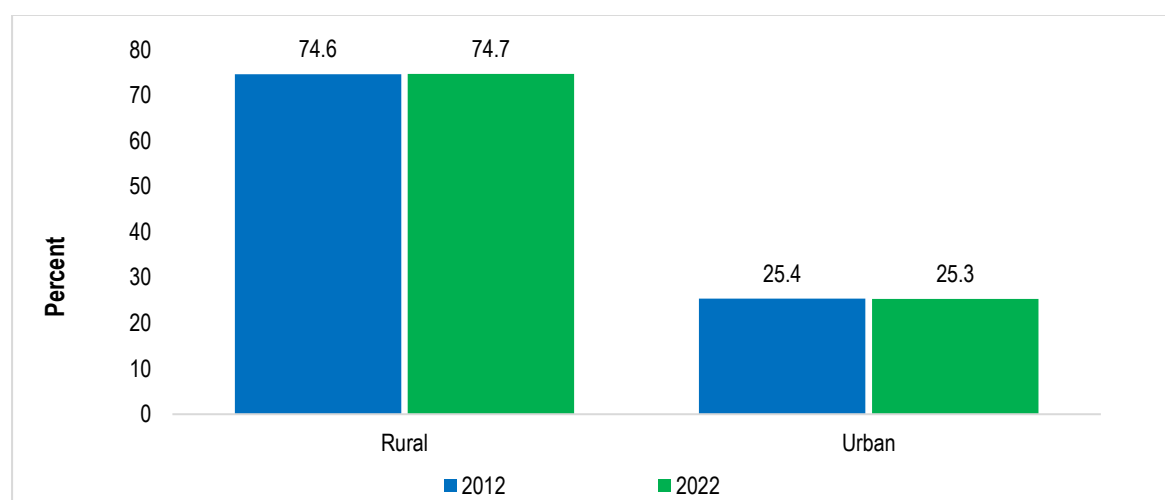
Results further reveal that, Moshi District Council has the largest number of households accounting for 29.3 percent of total private households in the region. The next four Councils with relatively high contributions to the total households are Same District (15.3%), Rombo District (14.4%), Hai District (13.1%) and Moshi Municipal (12.9%). On the other hand, Siha District has the smallest contribution of households (7.2%) (Table4.2).

**Table 4.2: Number and Percentage of Households by Place of Residence and Council; Kilimanjaro Region, 2022 PHC**

Council	Total		Rural		Urban	
	Number	Percent	Number	Percent	Number	Percent
<b>Total</b>	<b>494,428</b>	<b>100.0</b>	<b>369,184</b>	<b>74.7</b>	<b>125,244</b>	<b>25.3</b>
Rombo District	71,224	14.4	65,973	17.9	5,251	4.2
Mwanga District	38,751	7.8	32,466	8.8	6,285	5.0
Same District	75,731	15.3	56,364	15.3	19,367	15.5
Moshi Municipal	63,731	12.9	0	0.0	63,731	50.9
Moshi District	145,034	29.3	134,548	36.4	10,486	8.4
Hai District	64,549	13.1	50,343	13.6	14,206	11.3
Siha District	35,408	7.2	29,490	8.0	5,918	4.7

Figure 4.1 shows that the percentage of urban households has remained almost the same in 2012 and 2022 PHCs at 25.4 percent and 25.3 percent respectively. This is also true for rural areas with 74.6 percent and 74.7 percent respectively.

**Figure 4.1: Percentage Distribution of Private Households by Place of Residence; Kilimanjaro Region, 2012 and 2022 PHCs**



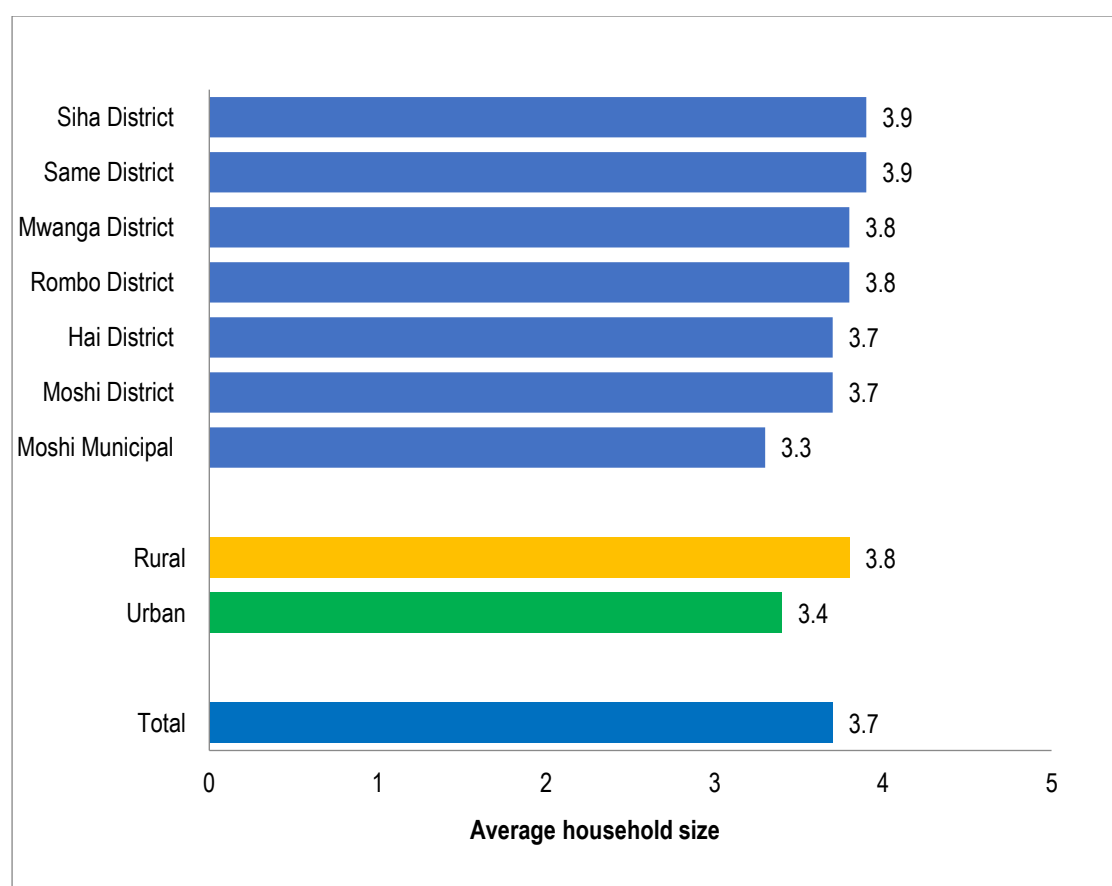
### 4.3 Average Household Size

Average household size is the mean number of persons in a private household. In Kilimanjaro Region the average household size decreased from 4.2 in 2012 to 3.7 persons in 2022. Households in rural areas have an average of 3.8 persons per household which is

## Basic Demographic and Socio-Economic Profile

slightly higher than the average in urban areas at 3.4 persons. The average household size in rural areas decreased from 4.3 persons in 2012 to 3.8 in 2022 while in urban areas it decreases from 3.9 persons in 2012 to 3.4 persons in 2022. The average household size in the Region varies across Councils, ranging from 3.3 persons in Moshi Municipal to 3.9 persons in Same and Siha Districts (Figure 4.2 and Table 4.3).

**Figure 4.2: Average Household Size by Council; Kilimanjaro Region, 2022 PHC**



**Table 4.3: Population in Private Households, Number of Households and Average Household Size by Place of Residence and Council; Kilimanjaro Region, 2012 and 2022 PHCs**

Place of Residence	Population		Number of Households		Average Household Size	
	2012	2022	2012	2022	2012 <sup>3</sup>	2022
<b>Total</b>	<b>1,640,087</b>	<b>1,835,321</b>	<b>381,526</b>	<b>494,428</b>	<b>4.2</b>	<b>3.7</b>
Rural	1,242,712	1,410,699	284,601	369,184	4.3	3.8
Urban	397,375	424,622	96,925	125,244	3.9	3.4
<b>Council</b>						
Rombo District	260,963	273,755	59,408	71,224	4.3	3.8
Mwanga District	131,442	148,071	29,996	38,751	4.3	3.8

<sup>3</sup> Data from Kilimanjaro Region Basic Demographic and Social-Economic Profile, 2012 PHC

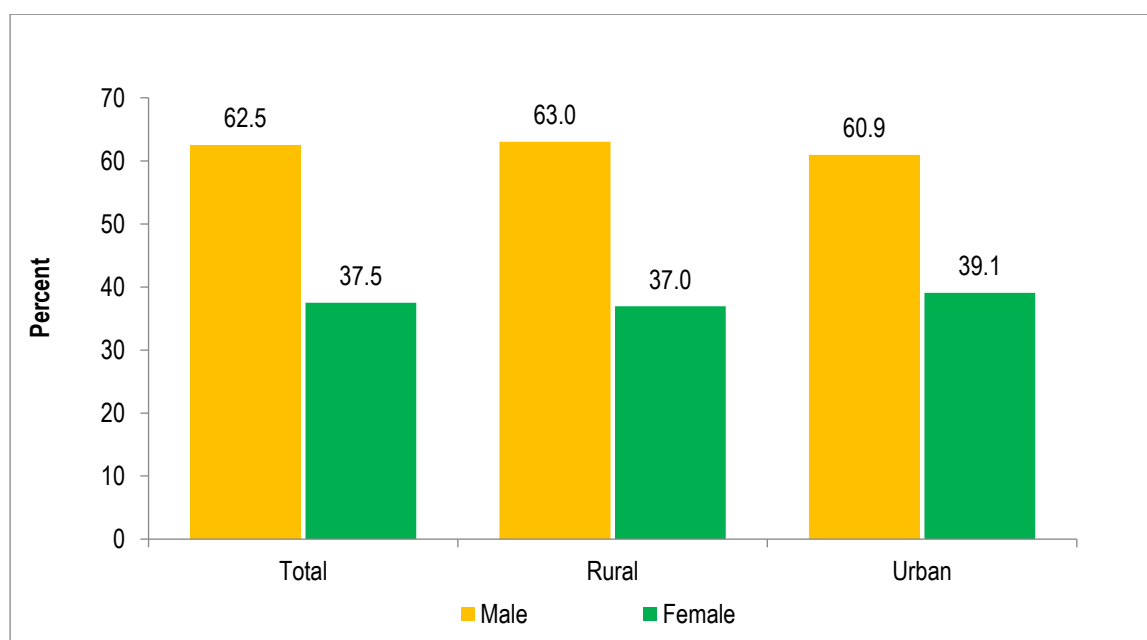
## Basic Demographic and Socio-Economic Profile

Place of Residence	Population		Number of Households		Average Household Size	
	2012	2022	2012	2022	2012 <sup>3</sup>	2022
Same District	269,807	297,672	59,480	75,731	4.4	3.9
Moshi Municipal	184,292	208,344	45,591	63,731	3.9	3.3
Moshi District	466,737	530,637	109,878	145,034	4.1	3.7
Hai District	210,533	238,822	50,242	64,549	4.1	3.7
Siha District	116,313	138,020	26,931	35,408	4.2	3.9

### 4.4 Household Headship

A household head is the individual normally recognized by other household members as their head. The 2022 PHC results show that, of the total 494,428 private households in Kilimanjaro Region, 62.5 percent are headed by males and 37.5 percent are headed by females (Figure 4.3 and Table 4.4).

**Figure 4.3: Percentage Distribution of Households by Sex of Household Head and Place of Residence; Kilimanjaro Region, 2022 PHC**



The results further reveal that percentage of male-headed households decreased slightly from 63.4 in 2012 to 62.5 percent in 2022 while female-headed households increased slightly from 36.6 in 2012 to 37.5 percent in 2022. A similar pattern is observed across Councils except for Mwangi District where the percentage of male headed households has remained almost the same (from 60.7 % in 2012 to 60.8% in 2022) and for Moshi District where it has remained the same (63.5% in both 2012 and 2022). For female headed households the pattern was also similar except for Moshi District where the percentage has remained the same in 2012 and 2022 censuses (Table 4.4).

**Table 4.4: Percentage Distribution of Households by Sex of Household Head, Place of Residence and Council; Kilimanjaro Region, 2012 and 2022 PHCs**

Place of Residence	2012		2022	
	Male Headed	Female-Headed	Male Headed	Female-Headed
<b>Total</b>	<b>63.4</b>	<b>36.6</b>	<b>62.5</b>	<b>37.5</b>
Rural	63.9	36.1	63.0	37.0
Urban	62.2	37.8	60.9	39.1
<b>Council</b>				
Rombo District	62.5	37.5	61.2	38.8
Mwanga District	60.7	39.3	60.8	39.2
Same District	64.9	35.1	64.0	36.0
Moshi Municipal	62.9	37.1	61.8	38.2
Moshi District	63.5	36.5	63.5	36.5
Hai District	64.8	35.2	63.1	36.9
Siha District	63.3	36.7	59.8	40.2

In Kilimanjaro Region, the average household size in male-headed households is slightly higher (3.8 persons) than in female-headed households (3.5 persons). A similar pattern is observed in rural and urban areas. Regardless of sex of head, average household size is highest in Siha and Same Districts (3.9 persons each), followed by Rombo and Mwanga Districts (3.8 persons each), and smallest in Moshi Municipal (3.3 persons) (Table 4.5).

**Table 4.5: Distribution of Population in Private Households by Sex of Household Head, Number of Households, Average Household Size, Place of Residence and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence	Population			Number of Household			Average Household Size		
	Both Sexes	Male Headed	Female-Headed	Both Sexes	Male Headed	Female-Headed	Both Sexes	Male Headed	Female-Headed
<b>Total</b>	<b>1,835,321</b>	<b>1,178,157</b>	<b>657,164</b>	<b>494,428</b>	<b>309,059</b>	<b>185,369</b>	<b>3.7</b>	<b>3.8</b>	<b>3.5</b>
Rural	1,410,699	912,341	498,358	369,184	232,752	136,432	3.8	3.9	3.7
Urban	424,622	265,816	158,806	125,244	76,307	48,937	3.4	3.5	3.2
<b>Council</b>									
Rombo District	273,755	171,596	102,159	71,224	43,615	27,609	3.8	3.9	3.7
Mwanga District	148,071	92,084	55,987	38,751	23,572	15,179	3.8	3.9	3.7
Same District	297,672	197,217	100,455	75,731	48,494	27,237	3.9	4.1	3.7
Moshi Municipal	208,344	131,205	77,139	63,731	39,381	24,350	3.3	3.3	3.2
Moshi District	530,637	345,833	184,804	145,034	92,074	52,960	3.7	3.8	3.5
Hai District	238,822	155,739	83,083	64,549	40,740	23,809	3.7	3.8	3.5
Siha District	138,020	84,483	53,537	35,408	21,183	14,225	3.9	4.0	3.8

#### **4.4.1 Households Living in Improved or Unimproved Houses**

This sub section discusses the heads of households, and the type of building materials used for construction the main dwellings (houses). For the purpose of this report, an improved house means a house that is built using improved building materials in at least two of the following: roofing, walling and flooring materials.

Table 4.6 shows that 85.6 percent of households in Kilimanjaro Region live in improved house, a percentage that is the same for both male-headed and female-headed households. Additionally, the percentage of households living in improved houses is higher in urban areas (96.5%) compared with rural areas (81.9%). A similar pattern is observed for both male-headed and female-headed households.

Councils with high percentages of households living in improved houses include Moshi Municipal (96.9%), Hai District (91.3%), Moshi District (87.5%) and Same District (86.7%). Conversely, Councils with high percentage of households living in unimproved houses are Rombo District (29.2%), Siha District (25.5%), Mwangi District (14.3%) and Same District (13.3%). This pattern is also observed for both male headed and female headed households. Councils with less than 80 percent of their households living in improved houses are Rombo District (70.8%) and Siha District (74.5%). Meanwhile, councils with more than 25 percent of their households living in unimproved houses are Siha District (25.5%) and Rombo District (29.2%). Only Moshi Municipal (3.1%) and Hai District (8.7%) have less than 10 percent of their households living in unimproved houses (Table 4.6).

**Table 4.6: Number and Percentage Distribution of Households living in Improved/ Unimproved Houses by Sex of Household Head, Place of Residence and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence	Total			Male Headed			Female Headed		
	Total	Improved House	Unimproved House	Total	Improved House	Unimproved House	Total	Improved House	Unimproved House
<b>Total</b>	<b>494,428</b>	<b>85.6</b>	<b>14.4</b>	<b>309,059</b>	<b>85.6</b>	<b>14.4</b>	<b>185,369</b>	<b>85.6</b>	<b>4.4</b>
Rural	369,184	81.9	18.1	232,752	82.1	17.9	136,432	81.6	18.4
Urban	125,244	96.5	3.5	76,307	96.3	3.7	48,937	96.7	3.3
<b>Council</b>									
Rombo District	71,224	70.8	29.2	43,615	70.3	29.7	27,609	71.8	28.2
Mwanga District	38,751	85.7	14.3	23,572	86.2	13.8	15,179	85.0	15.0
Same District	75,731	86.7	13.3	48,494	87.0	13.0	27,237	85.9	14.1
Moshi Municipal	63,731	96.9	3.1	39,381	96.8	3.2	24,350	97.2	2.8
Moshi District	145,034	87.5	12.5	92,074	87.0	13.0	52,960	88.3	11.7
Hai District	64,549	91.3	8.7	40,740	91.2	8.8	23,809	91.3	8.7
Siha District	35,408	74.5	25.5	21,183	75.6	24.4	14,225	72.9	27.1

Generally, the census results show no clear relationship between age of household head and the likelihood of living in improved/unimproved house in Kilimanjaro Region. This observation applies for both male headed and female headed households (Table 4.7).

**Table 4.7: Percentage Distribution of Households Living in Improved/Unimproved Houses by Sex of Household Head and Age Group; Kilimanjaro Region, 2022 PHC**

Age Group	Total			Male Headed			Female Headed		
	Total	Improved	Unimproved	Total	Improved	Unimproved	Total	Improved	Unimproved
<b>Total</b>	<b>494,428</b>	<b>85.6</b>	<b>14.4</b>	<b>309,059</b>	<b>85.6</b>	<b>14.4</b>	<b>185,369</b>	<b>85.6</b>	<b>14.4</b>
<b>Below 18</b>	2,826	80.6	19.4	1,635	81.6	18.4	1,191	79.3	20.7
<b>18- 24</b>	32,962	87.7	12.3	20,304	89.3	10.7	12,658	85.2	14.8
<b>25 - 29</b>	47,214	89.3	10.7	31,042	89.7	10.3	16,172	88.6	11.4
<b>30 - 34</b>	49,253	88.1	11.9	33,122	88.2	11.8	16,131	88.0	12.0
<b>35 - 39</b>	45,724	86.7	13.3	30,173	86.6	13.4	15,551	86.9	13.1
<b>40 - 44</b>	47,494	85.5	14.5	31,075	85.2	14.8	16,419	86.0	14.0
<b>45 - 49</b>	48,028	84.7	15.3	31,105	84.1	15.9	16,923	85.8	14.2
<b>50 - 54</b>	48,120	84.1	15.9	30,442	83.7	16.3	17,678	84.8	15.2
<b>55 - 59</b>	39,797	84.4	15.6	24,880	83.8	16.2	14,917	85.5	14.5
<b>60 - 64</b>	39,509	84.3	15.7	23,744	83.9	16.1	15,765	84.9	15.1
<b>65 - 69</b>	28,652	84.4	15.6	16,545	83.9	16.1	12,107	85.0	15.0

## Basic Demographic and Socio-Economic Profile, 2022 PHC

Age Group	Total			Male Headed			Female Headed		
	Total	Improved	Unimproved	Total	Improved	Unimproved	Total	Improved	Unimproved
70 - 74	25,310	83.5	16.5	14,311	83.3	16.7	10,999	83.7	16.3
75 - 79	15,688	84.4	15.6	8,497	84.4	15.6	7,191	84.4	15.6
80+	23,851	82.4	17.6	12,184	82.6	17.4	11,667	82.1	17.9

### 4.4.2 Heads of Households by Marital Status and Occupation

Results reveal that in Kilimanjaro Region majority of male heads of households, regardless of their marital status, are employed as agricultural and fishery workers (83,917 persons or 36.8%), followed by those engaged as crafts and related workers (54,052; 23.7%) and those in elementary occupations (46,072 or 20.2%). Among the 5,982 widowed males, 2,961 (49.5%) are engaged in agricultural and fishery activities; 1,361 (22.8%) are engaged as craft and related workers and 1,141 (19.1%) are in elementary occupations. (Tables 4.8 and 4.9).

**Table 4.8: Number of Male Heads of Households by Marital Status and Type of Occupation; Kilimanjaro Region, 2022 PHC**

Occupation	Total	Never Married	Married	Living Together	Divorced	Separated	Widowed
<b>Total</b>	<b>227,999</b>	<b>30,384</b>	<b>165,817</b>	<b>12,312</b>	<b>7,733</b>	<b>5,771</b>	<b>5,982</b>
Legislators administrators and managers.	1,834	214	1,489	77	14	23	17
Professionals.	8,248	1,533	6,173	379	54	46	63
Technicians and associate professionals.	17,299	2,951	12,221	1,062	437	393	235
Clerks.	927	201	651	55	9	5	6
Service workers and shop sales workers.	11,073	2,191	7,678	663	207	177	157
Agricultural and fishery workers.	83,917	7,037	64,326	3,861	3,322	2,410	2,961
Craft and related workers.	54,052	7,889	38,371	3,000	2,021	1,410	1,361
Plant and machine operators and assemblers.	4,577	828	3,157	369	97	85	41
Elementary occupations.	46,072	7,540	31,751	2,846	1,572	1,222	1,141

**Table 4.9: Percentage Distribution of Male Heads of Households by Marital Status and Occupation; Kilimanjaro Region, 2022 PHC**

Occupation	Total	Never Married	Married	Living Together	Divorced	Separated	Widowed
<b>Total</b>	<b>227,999</b>	<b>30,384</b>	<b>165,817</b>	<b>12,312</b>	<b>7,733</b>	<b>5,771</b>	<b>5,982</b>

## Basic Demographic and Socio-Economic Profile, 2022 PHC

Occupation	Total	Never Married	Married	Living Together	Divorced	Separated	Widowed
Legislators administrators and managers.	0.8	0.7	0.9	0.6	0.2	0.4	0.3
Professionals.	3.6	5.0	3.7	3.1	0.7	0.8	1.1
Technicians and associate professionals.	7.6	9.7	7.4	8.6	5.7	6.8	3.9
Clerks.	0.4	0.7	0.4	0.4	0.1	0.1	0.1
Service workers and shop sales workers.	4.9	7.2	4.6	5.4	2.7	3.1	2.6
Agricultural and fishery workers.	36.8	23.2	38.8	31.4	43.0	41.8	49.5
Craft and related workers.	23.7	26.0	23.1	24.4	26.1	24.4	22.8
Plant and machine operators and assemblers.	2.0	2.7	1.9	3.0	1.3	1.5	0.7
Elementary occupations.	20.2	24.8	19.1	23.1	20.3	21.2	19.1

On the other hand, results reveal that 41,460 (37.6%) female heads of household, regardless of their marital status, are employed as agricultural and fishery workers, followed by those in elementary occupations (25,736 female heads; 23.3%). Among the 29,152 widowed female heads of households 14,750 (50.6%) are engaged in agricultural and fishery activities; 6,366 (21.8%) are craft and related workers and 6,114 (21.0%) percent are in elementary occupations (Tables 4.10 and 4.11).

**Table 4.10: Number of Female Heads of Households by Marital Status and Occupation; Kilimanjaro Region, 2022 PHC**

Occupation	Total	Never Married	Married	Living Together	Divorced	Separated	Widowed
<b>Total</b>	<b>110,241</b>	<b>21,756</b>	<b>39,906</b>	<b>3,323</b>	<b>9,190</b>	<b>6,914</b>	<b>29,152</b>
Legislators administrators and managers.	642	206	289	18	29	38	62
Professionals.	3,738	1,414	1,637	120	116	142	309
Technicians and associate professionals.	2,711	973	1,132	76	138	142	250
Clerks.	740	347	218	26	41	31	77
Service workers and shop sales workers.	9,763	3,464	2,968	402	975	762	1,192
Agricultural and fishery workers.	41,460	4,636	15,450	1,057	3,279	2,288	14,750
Craft and related workers.	25,204	4,955	9,130	766	2,283	1,704	6,366
Plant and machine operators and assemblers.	247	99	78	11	13	14	32
Elementary occupations.	25,736	5,662	9,004	847	2,316	1,793	6,114

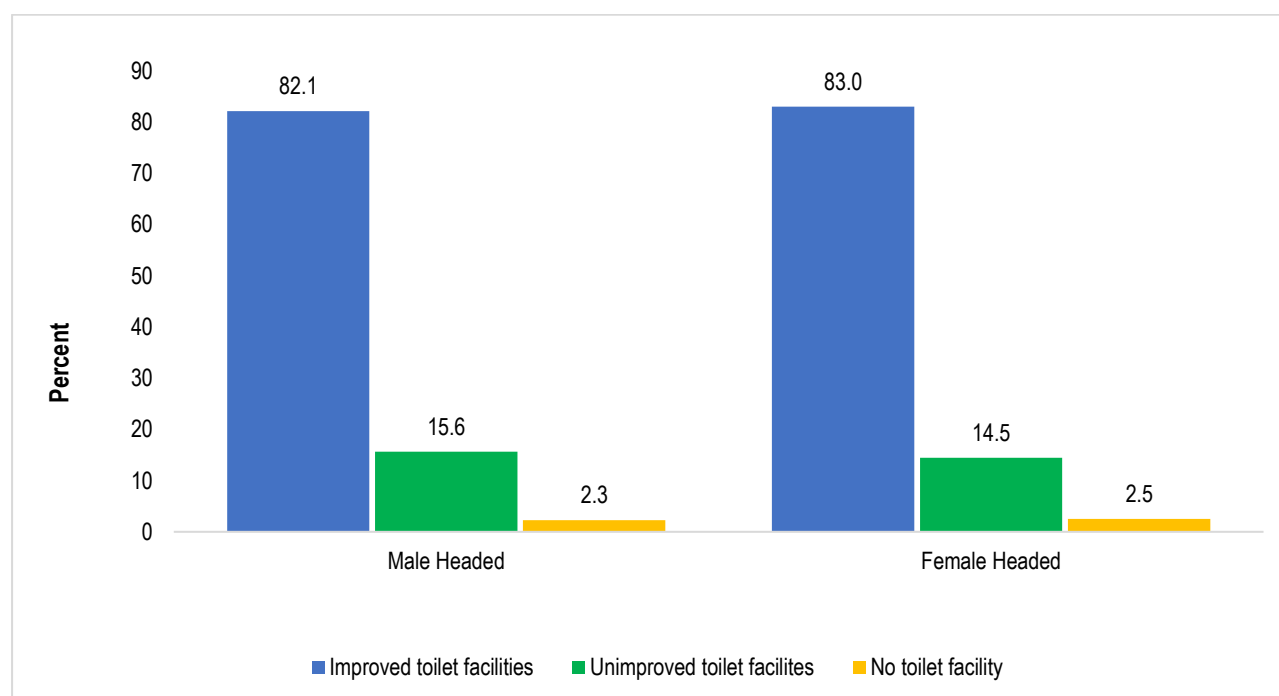
**Table 4.11: Percentage Distribution of Female Heads of Households by Marital Status and Type of Occupation; Kilimanjaro Region, 2022 PHC**

Occupation	Total	Never Married	Married	Living Together	Divorced	Separated	Widowed
<b>Total</b>	<b>110,241</b>	<b>19.7</b>	<b>36.2</b>	<b>3.0</b>	<b>8.3</b>	<b>6.3</b>	<b>26.4</b>
Legislators administrators and managers.	0.6	0.9	0.7	0.5	0.3	0.5	0.2
Professionals.	3.4	6.5	4.1	3.6	1.3	2.1	1.1
Technicians and associate professionals.	2.5	4.5	2.8	2.3	1.5	2.1	0.9
Clerks.	0.7	1.6	0.5	0.8	0.4	0.4	0.3
Service workers and shop sales workers.	8.9	15.9	7.4	12.1	10.6	11.0	4.1
Agricultural and fishery workers.	37.6	21.3	38.7	31.8	35.7	33.1	50.6
Craft and related workers.	22.9	22.8	22.9	23.1	24.8	24.6	21.8
Plant and machine operators and assemblers.	0.2	0.5	0.2	0.3	0.1	0.2	0.1
Elementary occupations.	23.3	26.0	22.6	25.5	25.2	25.9	21.0

#### 4.4.3 Heads of Household by Type of Toilet Facility

In Kilimanjaro Region, the percentage of male headed households using improved toilet facilities is 82.1 and for the female headed households it is 83.0. On the other hand, the percentage of female headed households with no toilet facilities is 2.5 percent compared with 2.3 percent of the male headed households (Figure 4.4).

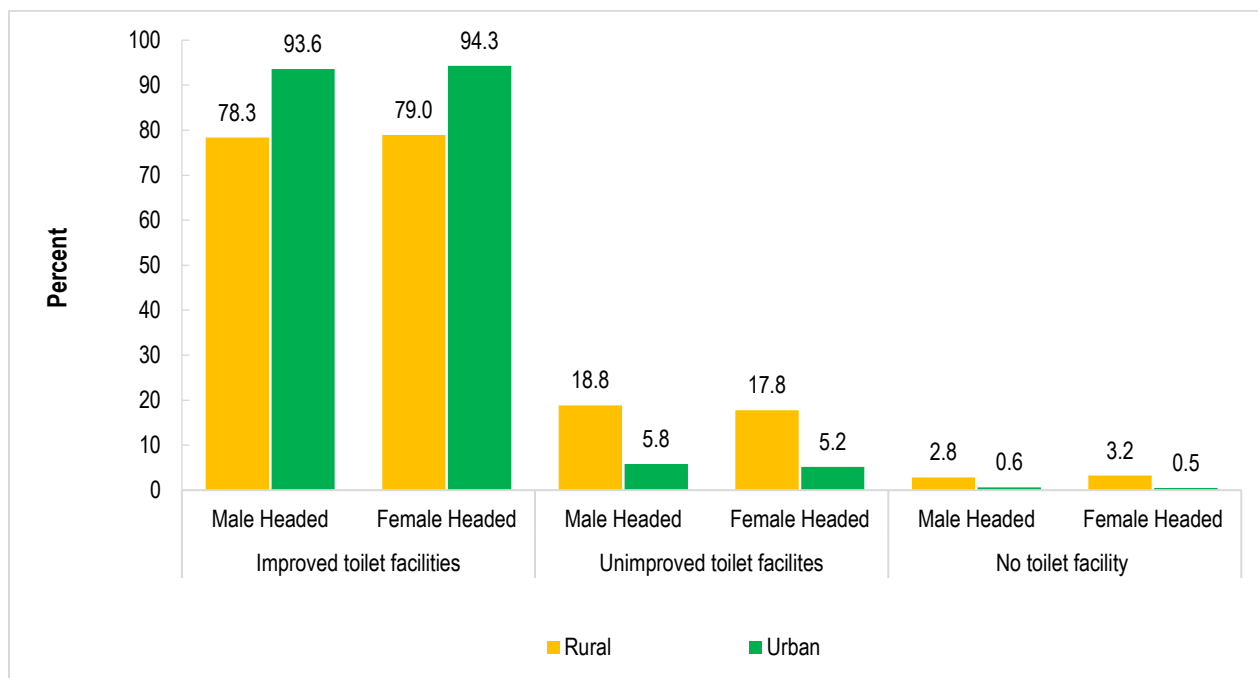
**Figure 4.4: Percentage Distribution of Households with Improved/Unimproved Toilet Facilities by Sex of Household Head; Kilimanjaro Region 2022 PHC**



The percentage using improved toilet facilities in Kilimanjaro Region is higher in urban compared with rural areas, with a percentage point difference of 15.3 for both female headed and male headed households. However, there is hardly any difference between male headed and female headed households for both rural and urban areas. In contrast,

the results further reveal that, households that use unimproved toilet facilities as well as those without toilet facilities are mostly found in rural areas (Figure 4.5).

**Figure 4.5: Percentage of Households with Improved/Unimproved Toilet Facilities by Sex of Household Head and Place of Residence; Kilimanjaro Region; 2022 PHC**



Across councils, results reveal that Moshi Municipal has the highest percentage of both male and female headed households with improved toilet facilities (95.7% and 96.3% respectively). Other Councils with relatively high percentages of male and female headed households using improved toilet facilities are Hai District (85.6% and 85.9% respectively), Moshi District (83.7% and 85.2% respectively) and Mwanga District (83.1% and 83.2% respectively).

Councils with high percentage of male headed household with no toilet facilities are Same District (3.5%) and Hai District. (3.3%) On the other hand, Councils with high percentage of female headed households with no toilet facilities are Siha District (5.0%), Same District (4.5%) and Mwanga District (4.4 %) (Table 4.12).

**Table 4.12: Percentage Distribution of Households with Improved/Unimproved Toilet Facilities by Sex of Household Head, Place of Residence and Council; Kilimanjaro Region, 2022 PHC**

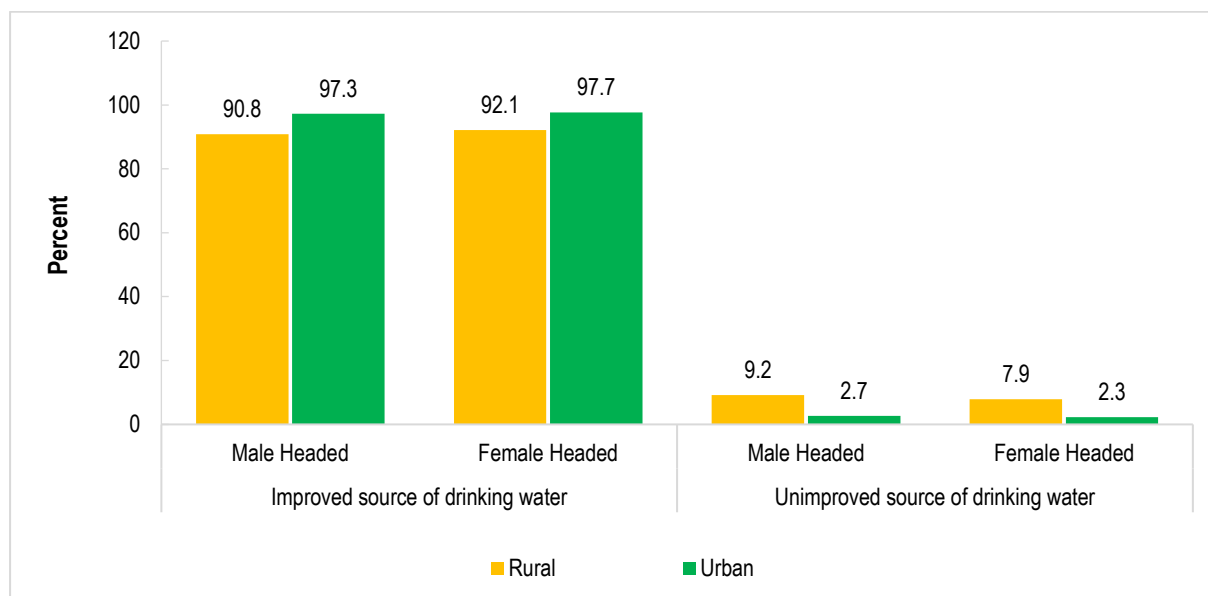
Place of Residence	Total				Male Headed				Female Headed			
	Total	Improved toilet facilities	Unimproved toilet Facilities	No toilet facility	Total	Improved toilet facilities	Unimproved toilet facilities	No toilet facility	Total	Improved toilet facilities	Unimproved toilet facilities	No toilet facility
<b>Total</b>	<b>494,428</b>	<b>82.4</b>	<b>15.2</b>	<b>2.4</b>	<b>309,059</b>	<b>82.1</b>	<b>15.6</b>	<b>2.3</b>	<b>185,369</b>	<b>83.0</b>	<b>14.5</b>	<b>2.5</b>
Rural	369,184	78.6	18.5	3.0	232,752	78.3	18.8	2.8	136,432	79.0	17.8	3.2
Urban	125,244	93.9	5.6	0.6	76,307	93.6	5.8	0.6	48,937	94.3	5.2	0.5
<b>Council</b>												
Rombo District	71,224	70.3	28.2	1.5	43,615	69.1	29.1	1.8	27,609	72.1	26.8	1.1
Mwanga District	38,751	83.2	13.2	3.6	23,572	83.1	13.8	3.1	15,179	83.2	12.4	4.4
Same District	75,731	77.8	18.3	3.9	48,494	77.7	18.8	3.5	27,237	78.0	17.5	4.5
Moshi Municipal	63,731	95.9	3.6	0.5	39,381	95.7	3.8	0.6	24,350	96.3	3.3	0.4
Moshi District	145,034	84.3	14.1	1.6	92,074	83.7	14.5	1.8	52,960	85.2	13.4	1.3
Hai District	64,549	85.7	10.7	3.6	40,740	85.6	11.1	3.3	23,809	85.9	10.1	4.0
Siha District	35,408	78.3	17.9	3.8	21,183	78.6	18.3	3.1	14,225	77.8	17.2	5.0

#### 4.4.4 Heads of Households by Source of Drinking Water

The results show that, in urban areas there is no significant difference between male headed households that use improved sources of drinking water (97.3%) and female headed households (97.7%). A similar pattern is observed in the proportion of male headed households (90.8%) and female headed households (92.1%) that use improved sources of drinking water in rural areas.

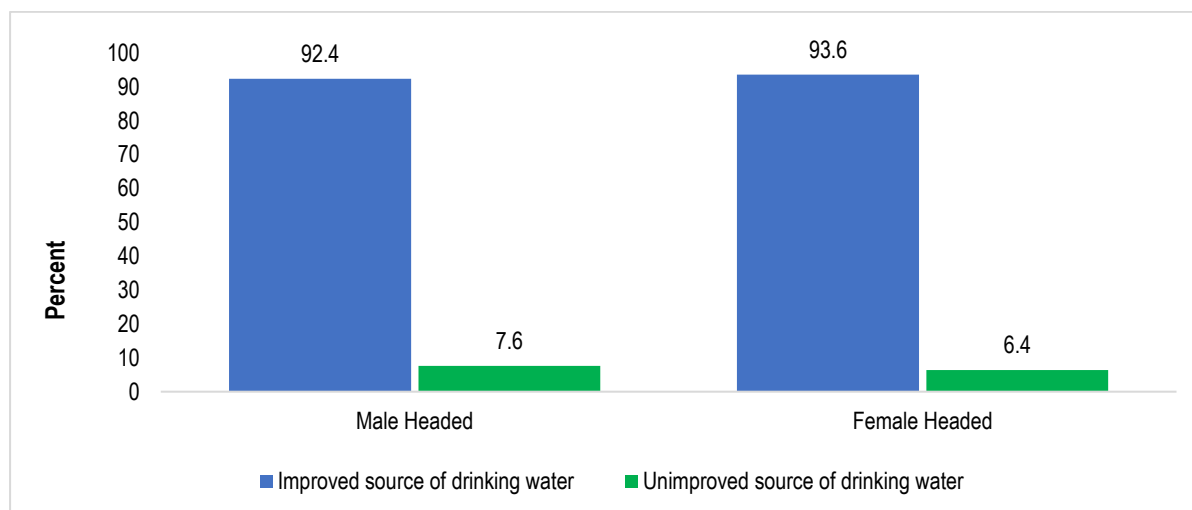
Both male and female headed households using improved source of drinking water are more dominant in urban areas than rural areas. The proportion of households that use unimproved source of drinking water in rural areas is slightly higher for male headed than female headed households (9.2% and 7.9% respectively). The percentages in urban areas are 2.7 and 2.3 for male and female headed households respectively (Figure 4.6).

**Figure 4.6: Percentage Distribution of Households Using Improved and Unimproved Sources of Drinking Water by Sex of Household Head and Place of Residence; Kilimanjaro Region, 2022 PHC**



The results also reveal that the percentage of male headed households that use unimproved source of drinking water is higher (7.6%) than that of female headed households (6.4%) (Figure 4.7).

**Figure 4.7: Percentage Distribution of Households Using Improved and Unimproved Sources of Drinking Water by Sex of Household Head; Kilimanjaro Region, 2022 PHC**



Across Councils, Moshi Municipal has the highest percentage of both male and female headed households that use improved sources of drinking water (98.2% and 98.5% respectively). Other councils with relatively high percentages of male and female headed households using improved sources of water for drinking are Siha District (96.7% and 97.6% respectively).

On the other hand, Councils with high percentages of male headed households and female headed households using unimproved sources of drinking water are Same District (19.4% and 16.5% respectively) and Mwanga District (17.3 % and 17.1% respectively) (Table 4.13).

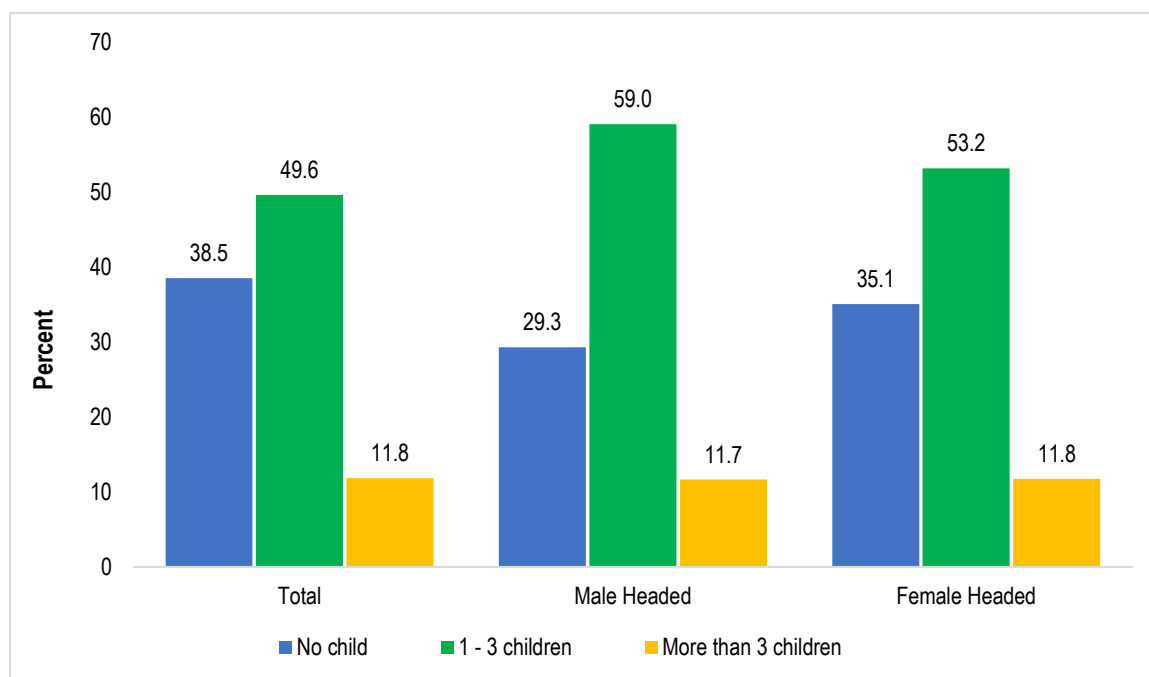
**Table 4.13: Percentage Distribution of Households Using Improved and Unimproved Sources of Drinking Water by Sex of Household Head, Place of Residence and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence	Total			Male Headed			Female Headed		
	Total	Improved source of drinking water	Unimproved source of drinking water	Total	Improved source of drinking water	Unimproved source of drinking water	Total	Improved source of drinking water	Unimproved source of drinking water
<b>Total</b>	<b>494,428</b>	<b>92.8</b>	<b>7.2</b>	309,059	92.4	7.6	185,369	93.6	6.4
Rural	369,184	91.2	8.8	232,752	90.8	9.2	136,432	92.1	7.9
Urban	125,244	97.4	2.6	76,307	97.3	2.7	48,937	97.7	2.3
<b>Council</b>									
Rombo District	71,224	96.4	3.6	43,615	96.0	4.0	27,609	97.1	2.9
Mwanga District	38,751	82.8	17.2	23,572	82.7	17.3	15,179	82.9	17.1
Same District	75,731	81.7	18.3	48,494	80.6	19.4	27,237	83.5	16.5
Moshi Municipal	63,731	98.3	1.7	39,381	98.2	1.8	24,350	98.5	1.5
Moshi District	145,034	95.4	4.6	92,074	95.1	4.9	52,960	95.9	4.1
Hai District	64,549	94.4	5.6	40,740	94.0	6.0	23,809	95.2	4.8
Siha District	35,408	97.0	3.0	21,183	96.7	3.3	14,225	97.6	2.4

#### 4.4.5 Household Heads with Children Under 18 Years

The results show that the majority of households have one to three children under 18 years. Out of 494,428 households 53.2 percent have one to three children under 18 years, 35.1 percent have no children and 11.8 percent have more than three children. Results further show that percentage of male headed households with one to three children under 18 years is higher (59.0%) than that of female headed households (53.2%). The percentage of male headed households with more than three children under 18 years is about the same (11.7%) as that of female headed households (11.8%). On the other hand, the percentage of female headed households with no children under 18 years is higher (35.1%) compared with that of male headed households (29.3%) (Figure 4.8).

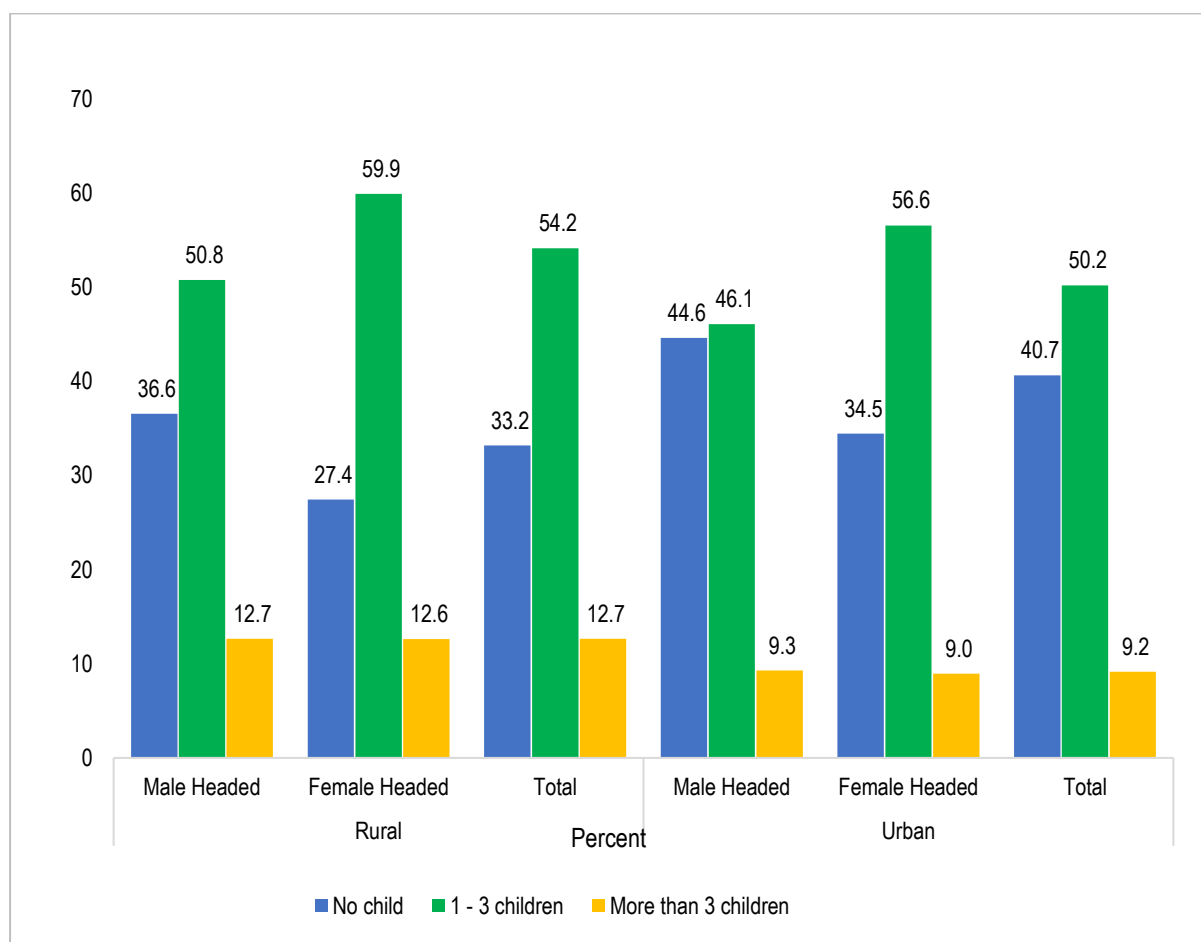
**Figure 4.8. Percentage Distribution of Households with Children under 18 Years by Sex of Household Head; Kilimanjaro Region, 2022 PHC**



Results further indicate that 59.9 percent of female headed households living in rural areas have one to three children under 18 years compared with 50.8 percent for male headed households. The same pattern is observed in urban areas. About 13 percent (12.7%) of male headed households with more than three children reside in rural areas compared with 12.6 percent of female headed households. On the other hand, the proportion of male headed households with no children under 18 years is higher in urban areas (44.6%) compared with female headed households (34.5%) (Figure 4. 9 and Table 4.14).

Across councils Same District has the highest percentage of households (56.3%) with one to three children followed by Siha District with 54.6 percent, while Moshi Municipal has the lowest percentage of households with one to three children (47.8%) (Table 4.14).

**Figure 4.9: Percentage Distribution of Households Having Children under 18 Years by Sex of Household Head, Number of Children and Place of Residence; Kilimanjaro Region, 2022 PHC**



**Table 4.14: Percentage Distribution of Households by Sex of Household Head, Number of Children Under 18 Years, Place of Residence and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence	Total				Male Headed				Female Headed			
	Total	No child	1 - 3 children	More than 3 children	Total	No child	1 - 3 children	More than 3 children	Total	No child	1 - 3 children	More than 3 children
<b>Total</b>	<b>494,428</b>	<b>35.1</b>	<b>53.2</b>	<b>11.8</b>	<b>309,059</b>	<b>38.5</b>	<b>49.6</b>	<b>11.8</b>	<b>185,369</b>	<b>29.3</b>	<b>59.0</b>	<b>11.7</b>
Rural	369,184	33.2	54.2	12.7	232,752	36.6	50.8	12.7	136,432	27.4	59.9	12.6
Urban	125,244	40.7	50.2	9.2	76,307	44.6	46.1	9.3	48,937	34.5	56.6	9.0
<b>Council</b>												
Rombo District	71,224	33.3	53.9	12.8	43,615	37.7	49.2	13.1	27,609	26.3	61.3	12.4
Mwanga District	38,751	33.6	52.7	13.7	23,572	37.6	48.9	13.5	15,179	27.4	58.7	13.9
Same District	75,731	29.4	56.3	14.3	48,494	31.5	54.1	14.4	27,237	25.6	60.4	14.1
Moshi Municipal	63,731	44.3	47.8	7.9	39,381	48.6	43.5	7.9	24,350	37.4	54.8	7.8
Moshi District	145,034	36.7	52.8	10.5	92,074	40.0	49.3	10.7	52,960	30.9	58.9	10.3
Hai District	64,549	34.8	54.2	11.0	40,740	37.5	51.5	11.0	23,809	30.2	58.8	11.0
Siha District	35,408	29.8	54.6	15.6	21,183	34.4	50.4	15.2	14,225	23.0	60.9	16.1

## Chapter 5

### Marital Status

#### Key Points

- About forty seven percent (47.2%) of the population aged 15 years and above in Kilimanjaro Region are married.
- Nearly seven percent (6.9%) of persons aged 15 years and above are widowed. The percentage of Females widowed is higher (11.1%) than that of Males (2.3%).
- About three percent (3.2%) of persons aged 15 years and above are divorced. Females are more likely to be divorced (3.5%) than males (3.0%).
- Mean age at First Marriage in Kilimanjaro Region is 26.6 years. Females are getting married at a younger age (24.5 years) than males (29.0 years).

#### 5.1 Introduction

This chapter focuses on analysis of marital status and Singulate Mean Age at First Marriage. The term "marital status" refers to the state of being unmarried, married, widowed, separated or divorced. Marital status is one of the most important factors in population dynamics as it affects fertility and other social and economic characteristics such as school attendance and labour force participation. The information on marital status helps Government Agencies and other users to understand marriage trends and forecast future needs of programs that provide spousal benefits. It also measures the effects of policies that focus on the well-being of families, including financial assistance plans.

In the 2022 PHC, questions on marital status were asked to all persons aged 10 years and above. However, to allow comparison of the 2022 Census results with the 2012 results, analysis is primarily focused on the population aged 15 years and above. Six categories namely never married, married, living together, separated, divorced and widowed were adopted to classify marital status.

## 5.2 Marital Status

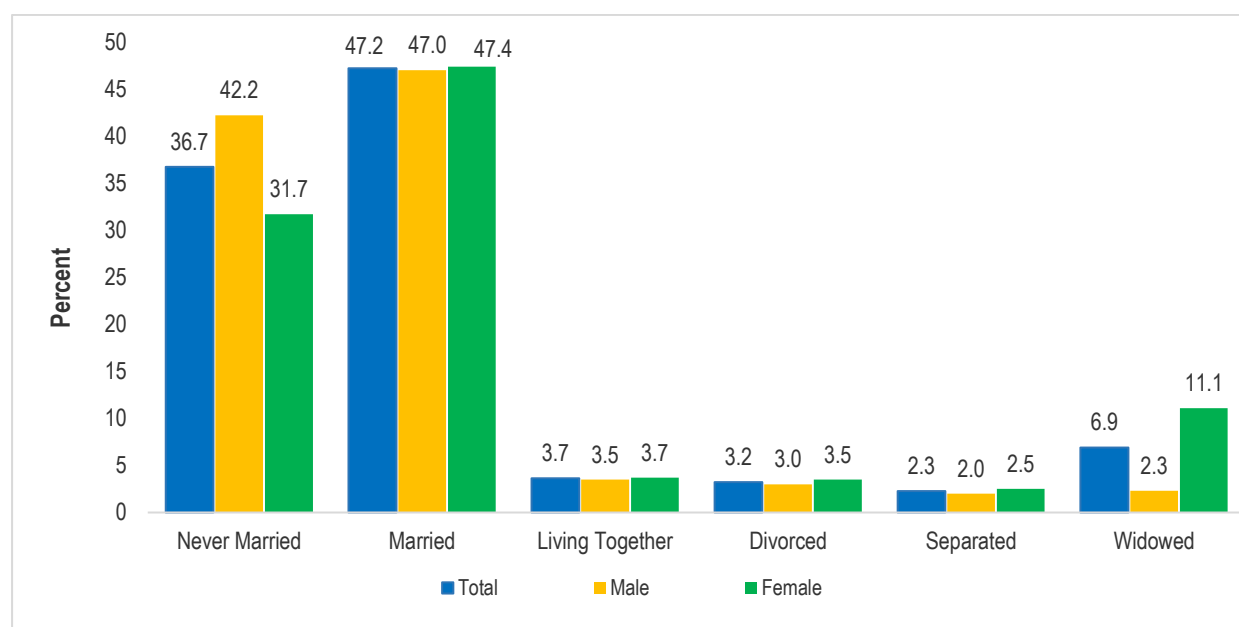
In Kilimanjaro Region, results show that 47.2 percent of persons aged 15 years and above are married with a slightly higher percentage among females (47.4%) than males (47.0%). Proportionately, the percentage of married persons in rural areas is higher (48.5%) than in urban areas (43.4%). More than one third (36.7%) of persons aged 15 years and above are never married; among males it is 42.2 percent while for females it is 31.7 percent. The results also show notable differences between rural and urban areas for the never married persons (34.9% and 42.2% respectively).

The results further indicate that 6.9 percent of persons aged 15 years and above are widowed, with higher percentage among females (11.1%) than males (2.3%). The percentage of widowed persons in rural areas in Kilimanjaro Region is 7.6 compared to 4.8 percent in urban areas. The large number of females who are widowed compared with males might be contributed by the tendency of most males to remarry after the death of their wives. This may also be due to the fact that males are more subjected to risky tasks hence more likely to die at younger ages than females. Moreover, biologically females live longer than males. However, further studies are needed to ascertain the root causes of the disparities (Table 5.1 and Figure 5.1).

**Table 5.1: Percentage Distribution of the Population Aged 15 Years and Above by Place of Residence, Sex and Marital Status; Kilimanjaro Region, 2022 PHC**

Marital Status	Total				Rural				Urban			
	Population	Both Sexes	Male	Female	Population	Both Sexes	Male	Female	Population	Both Sexes	Male	Female
<b>Total</b>	1,207,636	100.0	100.0	100.0	909,887	100.0	100.0	100.0	297,749	100.0	100.0	100.0
Never Married	443,528	36.7	42.2	31.7	317,914	34.9	41.0	29.4	125,614	42.2	46.1	38.7
Married	570,120	47.2	47.0	47.4	440,921	48.5	47.8	49.0	129,199	43.4	44.3	42.6
Living Together	44,087	3.7	3.5	3.7	31,152	3.4	3.3	3.5	12,935	4.3	4.3	4.4
Divorced	39,125	3.2	3.0	3.5	30,069	3.3	3.2	3.4	9,056	3.0	2.3	3.7
Separated	27,388	2.3	2.0	2.5	20,698	2.3	2.1	2.4	6,690	2.2	1.6	2.9
Widowed	83,388	6.9	2.3	11.1	69,133	7.6	2.6	12.2	14,255	4.8	1.5	7.8

**Figure 5.1: Percentage Distribution of Population Aged 15 Years and Above by Sex and Marital Status; Kilimanjaro Region, 2022 PHC**



The percentage of married persons increased sharply with age rising from 44.8 percent among those aged 25-29 years to 69.1 for those aged 50-54, and then gradually declines as age increases. The percentage of divorced persons also increases with age from 0.1 percent among those aged 15-19 years to 6.3 percent for those aged 45-49 years, and then gradually declines to 1.4 percent for those aged 80 and above. The proportion of widowed persons steadily increases as age increases from 0.1 percent among those age 20-24 to 53.4 percent for those aged 80+ years (Table 5.2).

**Table 5.2: Percentage Distribution of the Population Aged 15 Years and Above by Marital Status and Five-Year Age Groups; Kilimanjaro Region, 2022 PHC**

Age Group	Total Population	Marital Status					
		Never Married	Married	Living Together	Divorced	Separated	Widowed
<b>Total</b>	<b>1,207,636</b>	<b>36.7</b>	<b>47.2</b>	<b>3.7</b>	<b>3.2</b>	<b>2.3</b>	<b>6.9</b>
15 - 19	179,410	95.8	3.5	0.5	0.1	0.1	0.0
20 - 24	160,510	71.7	22.6	4.1	0.9	0.7	0.1
25 - 29	137,950	44.4	44.8	6.9	2.1	1.6	0.3
30 - 34	115,972	26.6	59.9	6.6	3.6	2.6	0.7
35 - 39	96,900	18.4	66.2	5.4	5.1	3.3	1.6
40 - 44	92,296	14.3	67.9	4.5	6.1	4.1	3.2
45 - 49	86,581	11.8	68.8	3.4	6.3	4.3	5.4
50 - 54	80,881	9.6	69.1	2.8	5.9	4.2	8.4
55 - 59	62,696	8.5	68.2	2.5	5.1	3.7	12.0
60 - 64	58,594	7.5	65.1	2.0	4.8	3.2	17.4
65 - 69	41,236	6.1	62.6	1.8	3.8	2.6	23.1

Age Group	Total Population	Marital Status					
		Never Married	Married	Living Together	Divorced	Separated	Widowed
70 - 74	34,922	4.6	58.4	1.7	3.1	2.3	30.0
75 - 79	21,869	3.8	53.3	1.5	2.4	1.9	37.1
80+	37,819	2.7	40.3	1.1	1.4	1.1	53.4

Results show that 51.1 percent of the male population aged 10 years and above are never married, 39.7 percent are married, and 3.0 percent are living together. Almost all male children in Kilimanjaro Region (99.9 %) aged 10 - 14 years and 98.9 percent of those aged 15 -19 are never married. The percentage of never married males decreases as age increases (Table 5.3).

**Table 5.3: Percentage Distribution of Male Population Aged 10 Years and Above by Marital Status and Five-Year Age Groups; Kilimanjaro Region, 2022 PHC**

Age Group	Total Population	Marital Status					
		Never Married	Married	Living Together	Divorced	Separated	Widowed
<b>Total</b>	<b>682,873</b>	<b>51.1</b>	<b>39.7</b>	<b>3.0</b>	<b>2.5</b>	<b>1.7</b>	<b>2.0</b>
10 – 14	105,649	99.9	0.1	0.0	0.0	0.0	0.0
15 – 19	89,413	98.9	1.0	0.1	0.0	0.0	0.0
20 – 24	77,456	87.3	10.2	1.9	0.4	0.2	0.0
25 – 29	67,010	55.9	35.4	6.3	1.3	1.0	0.1
30 – 34	57,147	32.2	55.8	6.9	3.0	1.9	0.2
35 – 39	46,760	21.8	64.4	5.9	4.7	2.8	0.4
40 – 44	44,532	16.1	68.3	5.0	6.0	3.7	0.9
45 – 49	41,474	12.5	71.3	3.8	6.6	4.0	1.8
50 – 54	38,002	9.1	74.9	3.3	5.9	4.2	2.7
55 – 59	29,500	7.1	77.3	3.1	5.0	3.6	3.9
60 – 64	27,282	5.7	78.3	2.6	4.7	3.0	5.7
65 – 69	18,638	4.8	78.9	2.4	3.6	2.6	7.8
70 – 74	15,865	3.5	77.6	2.4	3.1	2.5	10.9
75 – 79	9,478	3.0	75.4	2.3	2.7	2.3	14.1
80+	14,667	2.9	66.5	2.0	1.8	1.6	25.2

Among the female population aged 10 years and above, 40.8 percent are married, 41.3 percent are never married, and 3.2 percent are living together. Almost all female children (99.8%) aged 10 - 14 years and 92.7 percent of those aged 15 -19 are never married. The percentage of never married females decreases as age increases (Table 5.4).

**Table 5.4: Percentage Distribution of Female Population Aged 10 Years and Above by Marital Status and Five-Year Age Groups; Kilimanjaro Region, 2022 PHC**

Age Group	Total Population	Marital Status					
		Never Married	Married	Living Together	Divorced	Separated	Widowed
<b>Total</b>	<b>733,637</b>	<b>41.3</b>	<b>40.8</b>	<b>3.2</b>	<b>3.0</b>	<b>2.2</b>	<b>9.5</b>
10 – 14	103,225	99.8	0.1	0.0	0.0	0.0	0.0
15 – 19	89,997	92.7	6.1	0.9	0.1	0.2	0.0
20 – 24	83,054	57.1	34.2	6.1	1.4	1.1	0.1
25 – 29	70,940	33.5	53.7	7.5	2.8	2.1	0.4
30 – 34	58,825	21.1	63.8	6.3	4.3	3.2	1.2
35 – 39	50,140	15.2	67.8	5.0	5.5	3.8	2.7
40 – 44	47,764	12.6	67.6	4.0	6.2	4.4	5.3
45 – 49	45,107	11.1	66.6	3.0	6.1	4.5	8.6
50 – 54	42,879	10.1	64.0	2.4	5.9	4.2	13.5
55 – 59	33,196	9.7	60.1	2.0	5.2	3.7	19.2
60 – 64	31,312	9.0	53.6	1.6	4.9	3.3	27.6
65 – 69	22,598	7.2	49.2	1.3	3.9	2.6	35.7
70 – 74	19,057	5.6	42.3	1.1	3.1	2.1	45.9
75 – 79	12,391	4.3	36.4	0.9	2.2	1.5	54.6
80+	23,152	2.5	23.7	0.5	1.2	0.8	71.3

### 5.2.1 Marital Status for Selected Age Groups

Table 5.5 shows the percentage of population by marital status for selected age groups. The results reveal that 46.4 percent of persons aged 15-64 years in Kilimanjaro Region are married while 53.8 percent of those aged 65 years and above are also married. Additionally, 35.6 percent of persons aged 65 years and above are widowed. Results further show that by age 65 and above, only 4.4 percent of the population is still unmarried, implying that marriage in Kilimanjaro Region is almost universal. There is a relatively high proportion (4.2 and 3.9 %) of persons living together in age groups 15 – 35 and 15-64 respectively.

**Table 5.5: Percentage Distribution of the Population Aged 10 Years and Above by Marital Status and Selected Age Groups; Kilimanjaro Region, 2022 PHC**

Selected Age Group	Total Population	Marital Status					
		Never Married	Married	Living Together	Divorced	Separated	Widowed
<b>Total</b>	<b>1,416,510</b>	<b>46.0</b>	<b>40.3</b>	<b>3.1</b>	<b>2.8</b>	<b>1.9</b>	<b>5.9</b>
10 - 14	208,874	99.9	0.1	0.0	0.0	0.0	0.0
10 - 17	321,307	99.3	0.6	0.1	0.0	0.0	0.0
15 - 24	339,920	84.4	12.5	2.2	0.5	0.4	0.1

Selected Age Group	Total Population	Marital Status					
		Never Married	Married	Living Together	Divorced	Separated	Widowed
15 - 35	616,486	62.2	30.6	4.2	1.6	1.2	0.3
15 - 64	1,071,790	40.8	46.4	3.9	3.3	2.3	3.3
65+	135,846	4.4	53.8	1.5	2.7	2.0	35.6
70+	94,610	3.6	50.0	1.4	2.3	1.7	41.0

Tables 5.6 and 5.7 reveal that 42.2 percent of the male population and 31.7 percent of the female population aged 15 years and above are never married. In the divorced category, the proportion is higher for females (3.5 %) than males (3.0 %). Similarly, the percentage of widowed individuals is higher among females (11.1%) than males (2.3 %).

**Table 5.6: Percentage Distribution of Male Population Aged 15 Years and Above by Marital Status and Five-Year Age Groups; Kilimanjaro Region, 2022 PHC**

Age Group	Total Population	Marital Status					
		Never Married	Married	Living Together	Divorced	Separated	Widowed
<b>Total</b>	<b>655,139</b>	<b>42.2</b>	<b>47.0</b>	<b>3.5</b>	<b>3.0</b>	<b>2.0</b>	<b>2.3</b>
15 – 19	113,474	98.9	1.0	0.1	0.0	0.0	0.0
20 – 24	102,623	87.3	10.2	1.9	0.4	0.2	0.0
25 – 29	92,785	55.9	35.4	6.3	1.3	1.0	0.1
30 – 34	76,763	32.2	55.8	6.9	3.0	1.9	0.2
35 – 39	61,251	21.8	64.4	5.9	4.7	2.8	0.4
40 – 44	51,571	16.1	68.3	5.0	6.0	3.7	0.9
45 – 49	43,488	12.5	71.3	3.8	6.6	4.0	1.8
50 – 54	32,205	9.1	74.9	3.3	5.9	4.2	2.7
55 – 59	22,058	7.1	77.3	3.1	5.0	3.6	3.9
60 – 64	20,422	5.7	78.3	2.6	4.7	3.0	5.7
65 – 69	12,440	4.8	78.9	2.4	3.6	2.6	7.8
70 – 74	10,413	3.5	77.6	2.4	3.1	2.5	10.9
75 – 79	6,418	3.0	75.4	2.3	2.7	2.3	14.1
80+	9,228	2.9	66.5	2.0	1.8	1.6	25.2

**Table 5.7: Percentage Distribution of Female Population Aged 15 Years and Above by Marital Status and Five-Year Age Groups; Kilimanjaro Region, 2022 PHC**

Age Group	Total Population	Marital Status					
		Never Married	Married	Living Together	Divorced	Separated	Widowed
<b>Total</b>	<b>743,475</b>	<b>31.7</b>	<b>47.4</b>	<b>3.7</b>	<b>3.5</b>	<b>2.5</b>	<b>11.1</b>
15 – 19	124,915	92.7	6.1	0.9	0.1	0.2	0.0
20 – 24	124,337	57.1	34.2	6.1	1.4	1.1	0.1
25 – 29	104,416	33.5	53.7	7.5	2.8	2.1	0.4

Age Group	Total Population	Marital Status					
		Never Married	Married	Living Together	Divorced	Separated	Widowed
30 – 34	83,193	21.1	63.8	6.3	4.3	3.2	1.2
35 – 39	67,589	15.2	67.8	5.0	5.5	3.8	2.7
40 – 44	55,933	12.6	67.6	4.0	6.2	4.4	5.3
45 – 49	45,264	11.1	66.6	3.0	6.1	4.5	8.6
50 – 54	35,145	10.1	64.0	2.4	5.9	4.2	13.5
55 – 59	24,057	9.7	60.1	2.0	5.2	3.7	19.2
60 – 64	23,356	9.0	53.6	1.6	4.9	3.3	27.6
65 – 69	15,434	7.2	49.2	1.3	3.9	2.6	35.7
70 – 74	13,863	5.6	42.3	1.1	3.1	2.1	45.9
75 – 79	9,172	4.3	36.4	0.9	2.2	1.5	54.6
80+	16,801	2.5	23.7	0.5	1.2	0.8	71.3

Table 5.8 highlights the variations in marital status across councils for persons aged 15 years and above. Results show that the percentage of persons in the never married category ranges from 32.7 percent in Same District Council to 45.2 percent in Moshi Municipal. For the married category, the range is from 40.9 percent in Moshi Municipal Council to 52.5 percent in Same District Council. The percentage of persons in the widowed category ranges from 4.5 percent in Moshi Municipal Council to 7.8 percent in Moshi District Council.

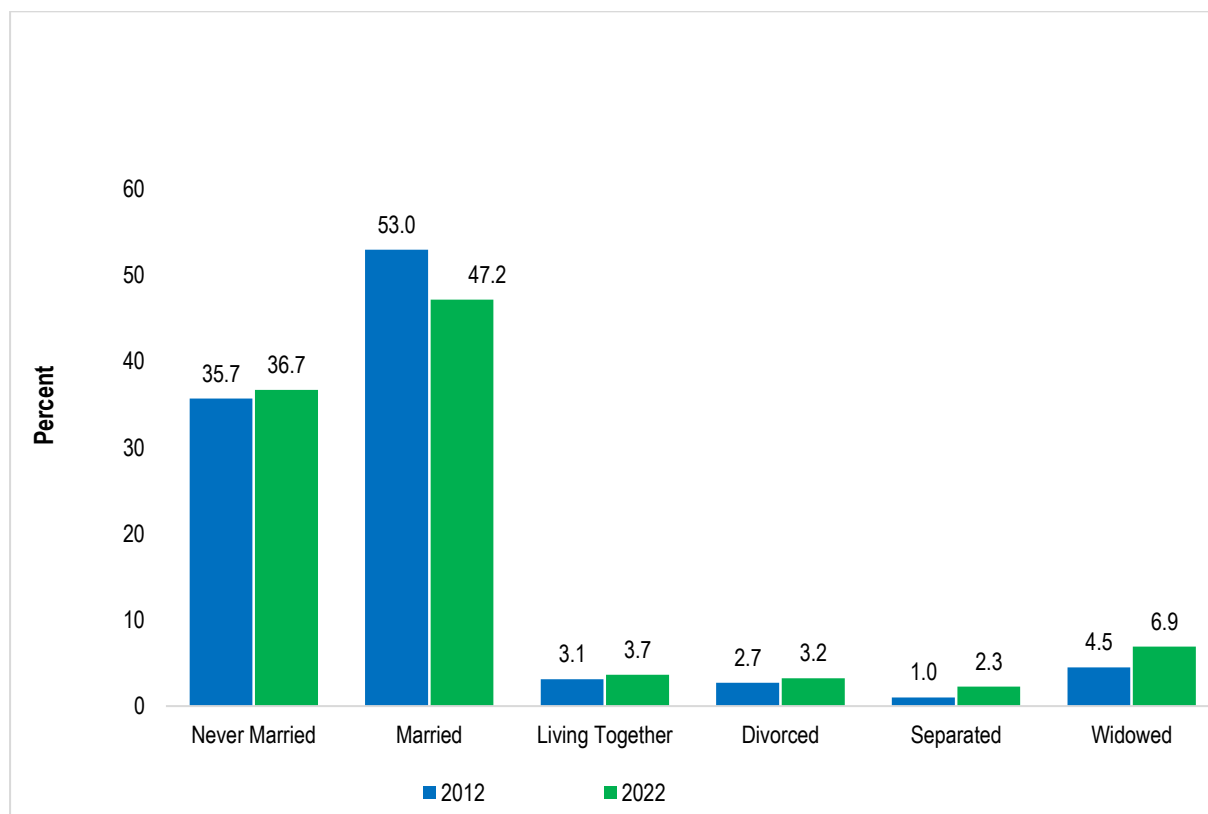
**Table 5.8: Percentage Distribution of Population Aged 15 Years and Above by Marital Status, Place of Residence and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence	Total Population	Marital Status					
		Never Married	Married	Living Together	Divorced	Separated	Widowed
<b>Total</b>	<b>1,207,636</b>	<b>36.7</b>	<b>47.2</b>	<b>3.7</b>	<b>3.2</b>	<b>2.3</b>	<b>6.9</b>
Rural	909,887	26.3	48.5	3.4	3.3	2.3	7.6
Urban	297,749	10.4	43.4	4.3	3.0	2.2	4.8
<b>Council</b>							
Rombo District	245,323	36.4	48.8	3.1	2.7	1.7	7.3
Mwanga District	94,291	36.2	46.5	3.3	4.0	2.5	7.5
Same District	186,621	32.7	52.5	3.1	3.4	1.9	6.4
Moshi Municipal	69,461	45.2	40.9	4.7	2.6	2.2	4.5
Moshi District	129,151	36.4	46.0	3.6	3.5	2.6	7.8
Hai City	56,035	35.6	48.0	3.3	3.4	2.4	7.3
Siha District	29,296	34.8	48.1	5.5	2.9	2.4	6.3

Figure 5.2 presents comparison of marital status of persons aged 15 years and above for the 2012 and 2022 Censuses. The results show an increase in the proportion of persons

in the categories of widowed, separated, never married, living together and divorced. On the other hand, a decreasing proportion is observed for the married categories (Figure 5.2).

**Figure 5.2: Percentage Distribution of Population Aged 15 Years and Above by Marital Status; Kilimanjaro Region, 2012 and 2022 PHCs.**

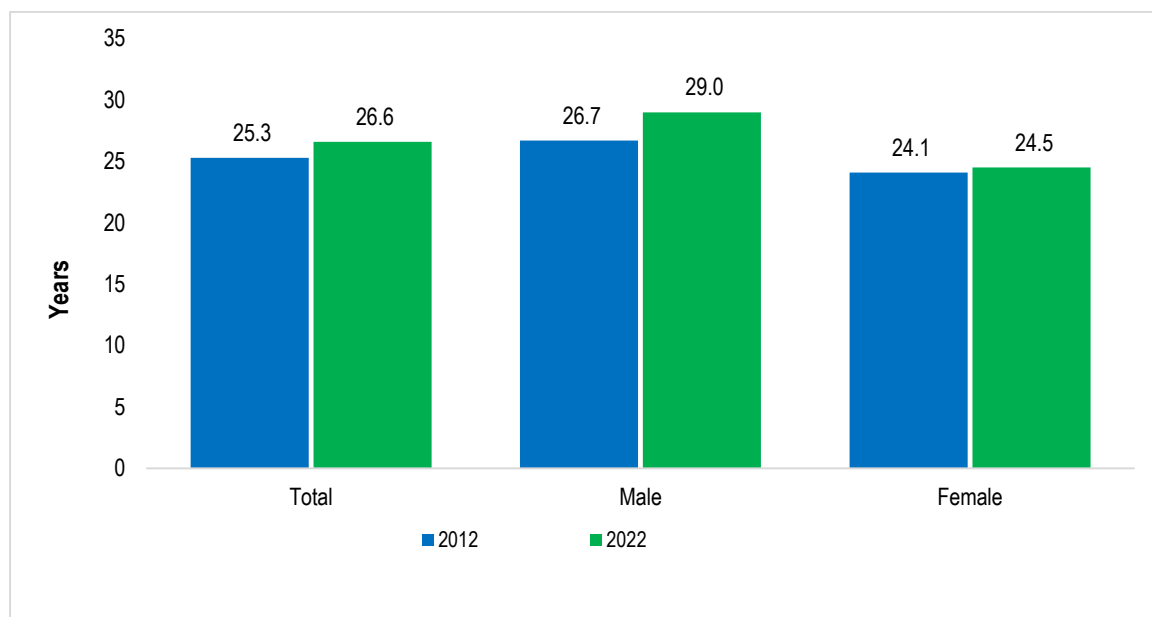


### 5.3 Mean Age at First Marriage

The Mean Age at First Marriage (MAFM) which is defined as the average length of single life (before marriage) expressed in years among those who marry before age 50, is one of the proxy determinants of fertility. The mean age at first marriage is estimated using the Singulate Mean Age at First Marriage (SMAM). A population with a low age at first marriage tends to experience early childbearing and high fertility rates.

The results show that, MAFM for Kilimanjaro region in 2022 is 26.6 years; females are getting married at a younger age (24.5 years) compared to males (29.0 years). Results further show a slight increase in the MAFM for females from 24.1 years in 2012 to 24.5 years in 2022. During the same period, the MAFM for males increased from 26.7 years in 2012 to 29.0 years in 2022 (Figure 5.3).

**Figure 5.3: Mean Age at First Marriage by Sex; Kilimanjaro Region, 2012 and 2022 PHC**



The MAFM is slightly higher in urban areas (25.4 years) compared to rural areas (24.0 years) for both males and females and for both censuses (Figure 5.4).

**Figure 5.4: Mean Age at First Marriage by Place of Residence and Sex; Kilimanjaro Region, 2012 and 2022 PHC**

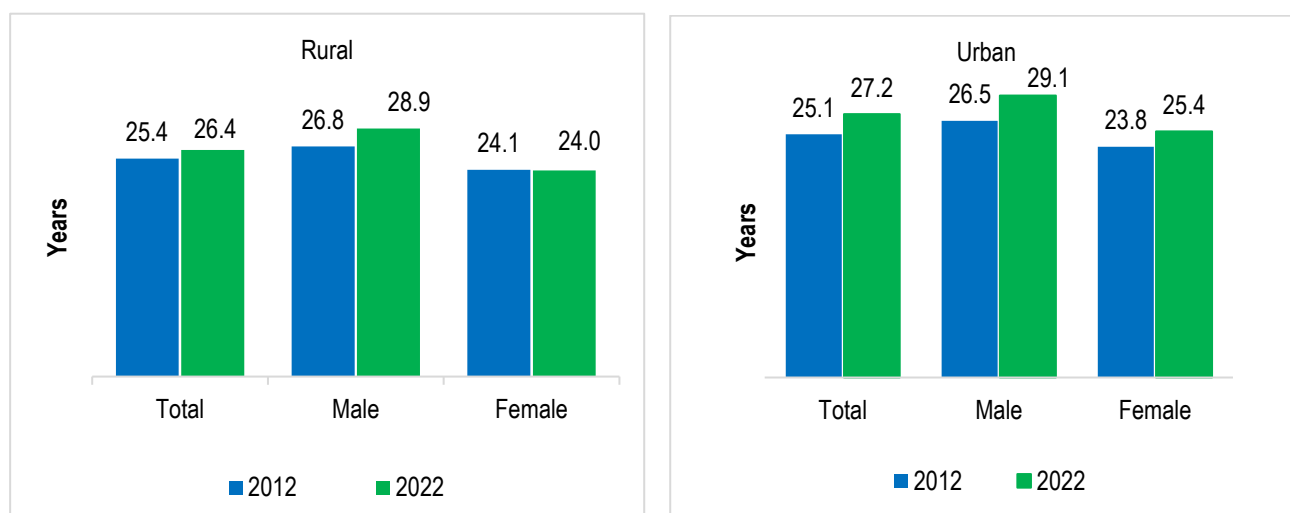


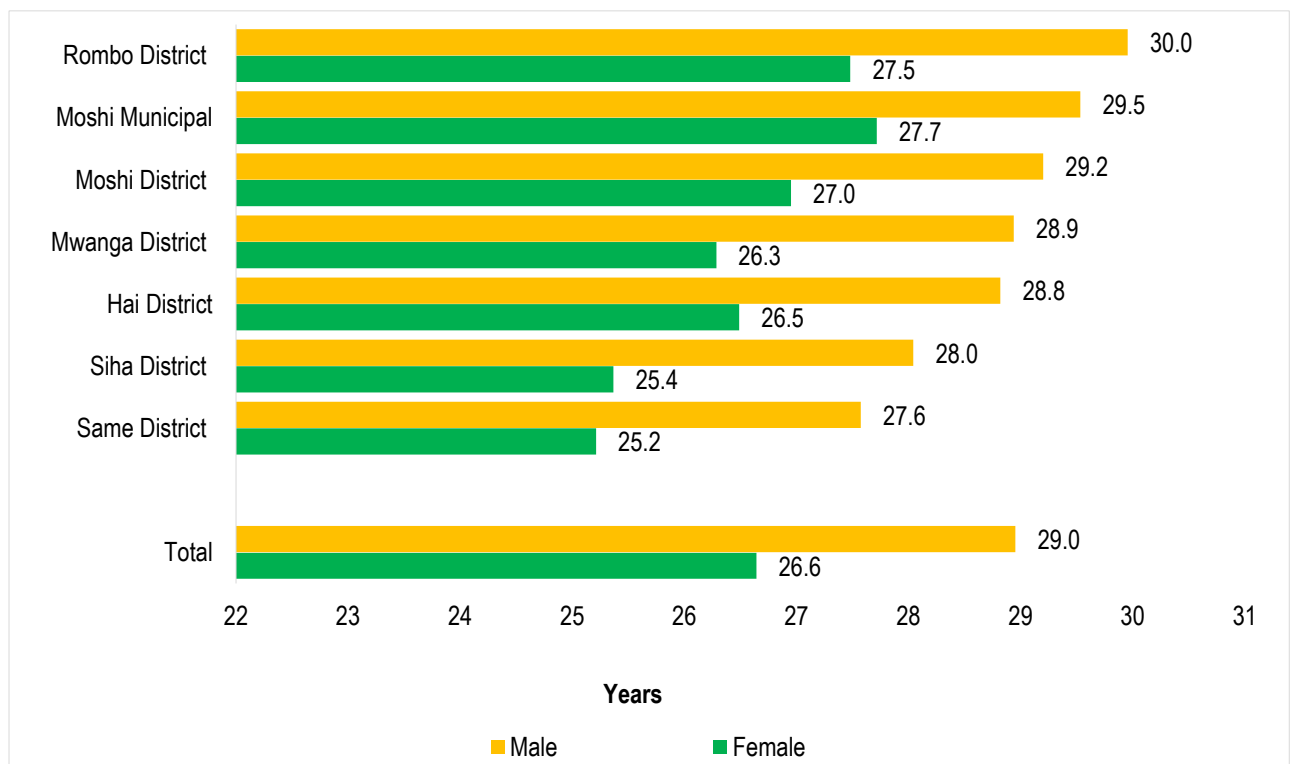
Table 5.3 shows that in Kilimanjaro Region, the MAFM for females slightly increased from 24.1 years in 2012 to 24.5 years in 2022 while for males it increased from 26.7 years in 2012 to 29.0 years in 2022. Overall, there are slight differences in the MAFM between urban and rural areas for both males and females in both censuses.

**Table 5.9: Mean Age at First Marriage by Sex, Place of Residence and Council; Kilimanjaro Region, 2012 and 2022 PHCs**

Place of Residence	2012			2022		
	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	<b>25.3</b>	<b>26.7</b>	<b>24.1</b>	<b>26.6</b>	<b>29.0</b>	<b>24.5</b>
Rural	25.4	26.8	24.1	25.4	26.8	24.1
Urban	<b>25.1</b>	26.5	23.8	27.2	29.1	25.4
<b>Council</b>						
Rombo District	26.1	27.4	24.9	27.5	30.0	25.2
Mwanga District	25.1	26.8	23.7	26.3	28.9	23.9
Same District	24.1	25.6	22.7	25.2	27.6	23.0
Moshi Municipal	25.3	26.8	23.9	27.7	29.5	25.8
Moshi District	25.8	27.3	24.4	27.0	29.2	24.8
Hai District	25.2	26.8	23.7	26.5	28.8	24.4
Siha District	23.8	25.7	22.3	25.4	28.0	23.1

Figure 5.5 illustrates council variations in the Mean Age at First Marriage (MAFM). Moshi Municipal has seen a significant increase in the Mean Age at First Marriage (MAFM), rising from 25.3 years in 2012 to 27.7 years in 2022 for both sexes, with a notable rise among males from 26.8 years to 29.5 years. Mwanga District shows a modest increase in MAFM from 25.1 years to 26.3 years, with a slightly greater rise among females, from 23.7 years to 23.9 years.

**Figure 5.5: Mean Age at First Marriage by Sex and Council; Kilimanjaro Region, 2022 PHC**



## Chapter 6

# National Identification Documents and Citizenship

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### Key Points

- About 57 percent (56.6%) of the population in Kilimanjaro Region have neither birth certificate nor birth notification.
- Almost 69 percent (68.6%) of children under-five years have birth certificates.
- More than 16 percent (16.3%) of persons aged 18 years and above have national identification number and 25.9 percent have national identification cards.
- More than twelve percent (12.2%) of the population in Kilimanjaro Region have health insurance from National Health Insurance Fund (NHIF) or Community Health Insurance Fund (CHIF).

### 6.1 Introduction

This chapter presents information on possession of national identification documents, which include birth certificate and notification, National Identification Card (NIDA), Zanzibar Identification Card (ZAN ID), Driving License, Voter's ID, Travel Passport and Small Entrepreneur ID. The chapter also presents citizenship status. The objective of national identification documents is to help eligible citizens to access various services including financial, health and education.

### 6.2 National Identification Documents

A national identification document is an official document that may be used to prove a person's identity such as the bearer's full name, birth date, address, an identification number, card number, sex, citizenship and the like. When issued in a small, standard smart card size, it is commonly referred to as an identity card or citizen card. Alternatively, it may be issued in other formats such as travel permit or passport. For a national identification document to be valid it must be issued by an authorized government/state institution.

### **6.2.1 Birth Certificate**

A birth certificate is a vital record that is used to document the birth of a child. The term "birth certificate" can refer to either the original document certifying the circumstances of the birth or a certified copy representing the registration of that birth.

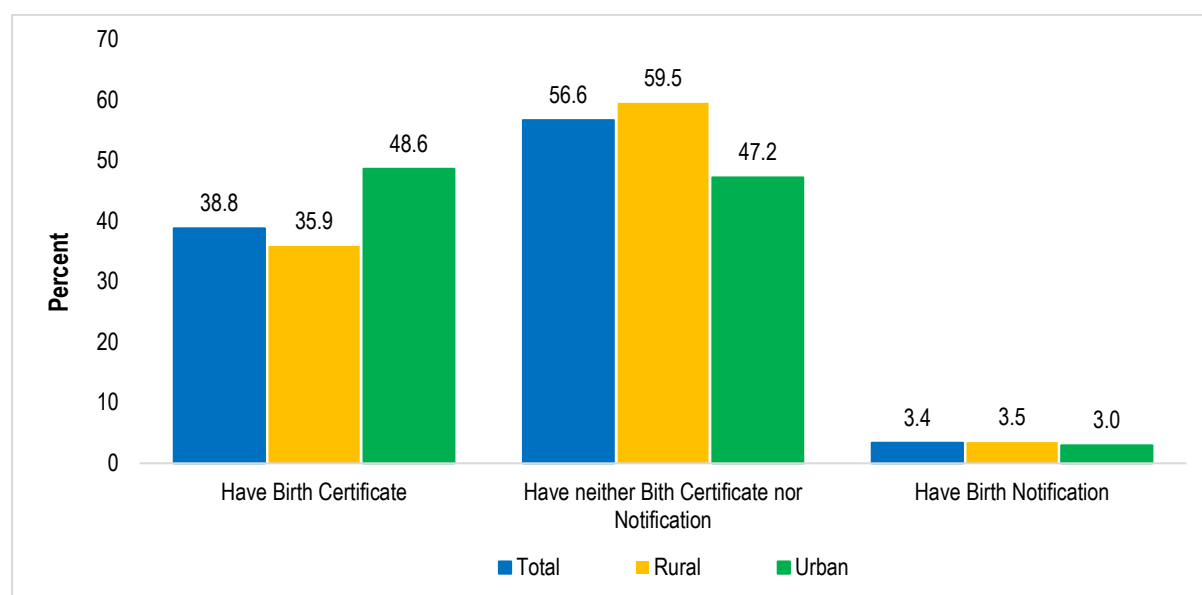
In the 2022 PHC, data on birth certificates were collected from all respondents regardless of their age. Results for Kilimanjaro Region indicate that 38.8 percent of the persons have birth certificates while 56.6 percent have neither birth certificates nor birth notifications. The percentage of the population with birth certificate decreases from younger to older age groups. It is highest in the age group 0 - 4 years at 68.6 percent followed by age group 5 - 9 (60.8%). The result also shows that the percentage of males with birth certificate is slightly higher (39.9%) than that of females (37.8%) (Table 6.1).

The percentage of persons with birth certificates is higher in urban areas (48.6%) compared with rural areas (35.9%). Further results show that in urban areas 50.2 percent of males and 47.2 percent of females have birth certificates whereas in rural areas the percentages are lower with 36.9 percent of males and 34.8 percent of females having birth certificates (Tables 6.2 and 6.3).

### **6.2.2 Birth Notification**

Birth notification is a document issued by a health facility to confirm the occurrence of birth. It serves as the initial document in the process of registering a child's birth, providing the first legal recognition of the child. This document is generally required for the child to obtain a birth certificate and other legal documents. In Kilimanjaro Region, 3.4 percent of the population has birth notification, with the percent being slightly higher in rural areas (3.5%) compared to urban areas (3.0%).

**Figure 6.1: Percentage Distribution of Population by Birth Certificate Status and Place of Residence; Kilimanjaro Region, 2022 PHC**



**Table 6.1: Percentage Distribution of Population by Birth Certificate Status, Sex and Age Groups; Kilimanjaro Region, 2022 PHC**

Age Group	Birth Certificate Status											
	Have Birth Certificates			Have Birth Notifications			Have Neither Birth Certificate Nor Notification			Don't know		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	<b>38.8</b>	<b>39.9</b>	<b>37.8</b>	<b>3.4</b>	<b>3.5</b>	<b>3.3</b>	<b>56.6</b>	<b>55.3</b>	<b>57.9</b>	<b>1.2</b>	<b>1.3</b>	<b>1.0</b>
0 – 4	68.6	68.6	68.6	6.8	6.9	6.8	23.9	23.9	23.9	0.7	0.7	0.7
5 – 9	60.8	60.7	60.9	5.0	4.9	5.0	33.1	33.3	33.0	1.1	1.1	1.2
10 – 14	45.6	45.1	46.2	5.4	5.5	5.2	47.6	48.0	47.3	1.4	1.4	1.3
15 – 19	44.8	43.9	45.7	3.6	3.7	3.5	50.1	50.9	49.4	1.4	1.5	1.4
20 – 24	43.6	43.5	43.8	2.4	2.3	2.4	52.2	51.9	52.4	1.8	2.3	1.4
25 – 29	37.8	39.2	36.5	2.1	2.0	2.2	58.6	56.7	60.3	1.6	2.1	1.1
30 – 34	32.5	34.4	30.8	2.0	2.0	1.9	64.1	61.8	66.3	1.4	1.8	1.0
35 – 39	25.5	27.3	23.8	1.9	1.8	1.9	71.3	69.3	73.2	1.4	1.7	1.1
40 – 44	20.1	21.4	18.9	1.8	1.8	1.8	77.0	75.4	78.5	1.1	1.3	0.9
45 – 49	17.3	18.0	16.6	1.7	1.6	1.8	79.9	79.1	80.7	1.1	1.3	0.9
50 – 54	15.4	16.3	14.6	1.7	1.8	1.6	82.1	81.0	83.0	0.8	0.9	0.8
55 – 59	14.5	15.2	14.0	1.5	1.5	1.5	83.2	82.5	83.7	0.8	0.8	0.8
60 – 64	13.8	14.6	13.1	1.5	1.5	1.5	84.1	83.4	84.7	0.6	0.6	0.6
65 – 69	11.5	13.1	10.1	1.6	1.6	1.5	86.4	84.7	87.8	0.6	0.5	0.7
70 – 74	7.7	9.8	5.9	1.4	1.4	1.4	90.4	88.3	92.1	0.6	0.5	0.6
75 – 79	6.0	8.0	4.5	1.3	1.3	1.3	92.2	90.3	93.5	0.6	0.4	0.7
80+	4.0	5.1	3.3	1.2	1.2	1.2	94.0	93.1	94.5	0.8	0.6	1.0

**Table 6.2: Percentage Distribution of Population by Birth Certificate status, Sex and Age Groups; Kilimanjaro Rural, 2022 PHC**

Age Group	Birth Certificate Status											
	Have Birth Certificates			Have Birth Notifications			Have Neither Birth Certificate Nor Notification			Don't know		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	<b>35.9</b>	<b>36.9</b>	<b>34.8</b>	<b>3.5</b>	<b>3.6</b>	<b>3.4</b>	<b>59.5</b>	<b>58.2</b>	<b>60.7</b>	<b>1.2</b>	<b>1.3</b>	<b>1.1</b>
0 – 4	66.8	66.8	66.7	7.0	7.1	7.0	25.5	25.4	25.6	0.7	0.7	0.7
5 – 9	58.1	58.0	58.2	5.3	5.2	5.3	35.4	35.6	35.3	1.2	1.1	1.2
10 – 14	42.2	41.6	42.9	5.7	5.8	5.5	50.7	51.1	50.2	1.4	1.5	1.4
15 – 19	41.6	40.6	42.7	3.9	3.9	3.8	53.1	54.0	52.1	1.4	1.5	1.4
20 – 24	40.0	39.6	40.4	2.5	2.5	2.4	55.7	55.6	55.7	1.8	2.3	1.4
25 – 29	33.8	34.9	32.8	2.2	2.1	2.2	62.5	61.0	63.9	1.6	2.0	1.1
30 – 34	29.2	30.7	27.8	2.0	2.1	2.0	67.4	65.5	69.2	1.4	1.7	1.0
35 – 39	22.3	23.9	20.7	1.9	1.8	2.0	74.5	72.7	76.2	1.3	1.6	1.1
40 – 44	17.6	18.9	16.4	1.8	1.8	1.7	79.5	78.1	80.9	1.1	1.2	1.0
45 – 49	15.1	15.9	14.5	1.7	1.6	1.8	82.1	81.4	82.8	1.0	1.2	0.9
50 – 54	13.5	14.4	12.7	1.6	1.7	1.6	84.1	83.1	85.0	0.8	0.8	0.8
55 – 59	12.7	13.4	12.1	1.5	1.5	1.4	85.1	84.4	85.7	0.8	0.8	0.7
60 – 64	12.3	13.2	11.5	1.5	1.4	1.5	85.7	84.8	86.4	0.6	0.6	0.6
65 – 69	10.3	12.0	8.9	1.5	1.6	1.4	87.6	85.9	89.1	0.6	0.5	0.7
70 – 74	6.9	9.0	5.1	1.4	1.3	1.4	91.2	89.2	92.8	0.6	0.5	0.6
75 – 79	5.4	7.2	4.0	1.2	1.3	1.2	92.8	91.1	94.1	0.6	0.4	0.7
80+	3.7	4.7	3.1	1.1	1.1	1.1	94.4	93.6	94.9	0.8	0.6	1.0

**Table 6.3: Percentage Distribution of Population by Birth Certificate status, Sex and Age Groups; Kilimanjaro Urban, 2022 PHC**

Age Group	Birth Certificate Status											
	Have Birth Certificates			Have Birth Notifications			Have Neither Birth Certificate Nor Notification			Don't know		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	<b>48.6</b>	<b>50.2</b>	<b>47.2</b>	<b>3.0</b>	<b>3.0</b>	<b>3.0</b>	<b>47.2</b>	<b>45.3</b>	<b>48.9</b>	<b>1.2</b>	<b>1.5</b>	<b>0.9</b>
0 – 4	74.4	74.3	74.6	6.3	6.2	6.4	18.6	18.9	18.4	0.6	0.6	0.6
5 – 9	70.4	70.3	70.4	3.9	3.8	3.9	24.8	24.9	24.8	0.9	0.9	0.9
10 – 14	58.7	58.9	58.5	4.2	4.4	3.9	36.0	35.5	36.4	1.2	1.2	1.1
15 – 19	54.9	55.4	54.4	2.8	2.9	2.7	40.9	40.1	41.6	1.4	1.6	1.3
20 – 24	52.5	53.4	51.7	2.1	1.9	2.3	43.6	42.3	44.8	1.8	2.5	1.2
25 – 29	47.0	49.3	44.9	1.9	1.7	2.1	49.4	46.5	52.1	1.7	2.5	1.0
30 – 34	41.0	44.1	38.1	1.8	1.8	1.9	55.7	52.0	59.2	1.4	2.2	0.8
35 – 39	34.4	36.9	32.3	1.7	1.6	1.8	62.4	59.5	65.0	1.4	2.0	0.9
40 – 44	27.8	29.6	26.2	2.0	2.1	1.9	69.0	66.4	71.1	1.3	1.9	0.8
45 – 49	24.7	25.6	23.9	1.7	1.7	1.8	72.3	70.9	73.5	1.3	1.8	0.9
50 – 54	23.0	23.8	22.3	1.9	1.9	1.8	74.1	73.0	75.0	1.0	1.2	0.8
55 – 59	22.7	23.2	22.2	1.8	1.6	2.0	74.6	74.2	74.9	0.9	1.0	0.9
60 – 64	21.1	21.0	21.1	1.8	1.8	1.7	76.5	76.4	76.5	0.7	0.8	0.6
65 – 69	17.7	18.9	16.6	1.8	1.7	1.9	79.7	78.4	80.9	0.8	1.0	0.6
70 – 74	12.4	15.0	10.4	1.5	1.5	1.4	85.6	82.7	87.8	0.6	0.8	0.4
75 – 79	10.0	13.2	7.7	1.4	1.2	1.6	87.8	85.2	89.8	0.7	0.4	1.0
80+	6.0	7.6	5.1	1.6	1.7	1.6	91.3	89.8	92.2	1.1	1.0	1.1

Table 6.4 indicates that Moshi Municipal has the highest percentage of population with birth certificates (54.0%) while Same District has the lowest percentage (28.8%). The councils with percentages above the regional average of 38.8 percent are Moshi Municipal (54.0%), Hai District (41.2%), Siha District (40.0%) and Moshi District (39.9%).

**Table 6.4: Percentage Distribution of Population by Birth Certificate status, Sex and Council; Kilimanjaro Region, 2022 PHC**

Council	Status of Birth Certificate											
	Have Birth Certificates			Have Birth Notifications			Have Neither Birth Certificate Nor Notification			Don't know		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Both Sexes	Both Sexes	Male	Female
<b>Total</b>	<b>38.8</b>	<b>39.9</b>	<b>37.8</b>	<b>3.4</b>	<b>3.5</b>	<b>3.3</b>	<b>56.6</b>	<b>55.3</b>	<b>57.9</b>	<b>1.2</b>	<b>1.3</b>	<b>1.0</b>
Rombo District	35.2	36.3	34.1	3.4	3.4	3.4	60.3	59.1	61.5	1.1	0.0	1.0
Mwanga District	35.5	36.6	34.4	2.8	2.9	2.7	60.3	58.8	61.8	1.4	0.2	1.2
Same District	28.8	29.5	28.1	2.7	2.8	2.6	67.4	66.4	68.4	1.1	0.1	0.9
Moshi Municipal	54.0	55.7	52.5	3.0	3.0	3.1	41.7	39.9	43.4	1.2	0.2	1.0
Moshi District	39.9	41.0	38.7	4.0	4.1	3.9	54.9	53.4	56.2	1.3	0.1	1.1
Hai District	41.2	42.4	40.1	3.1	3.2	3.1	54.7	53.4	56.0	0.9	0.3	0.8
Siha District	40.0	41.2	38.9	4.2	4.3	4.0	54.6	53.1	56.0	1.2	0.6	1.0

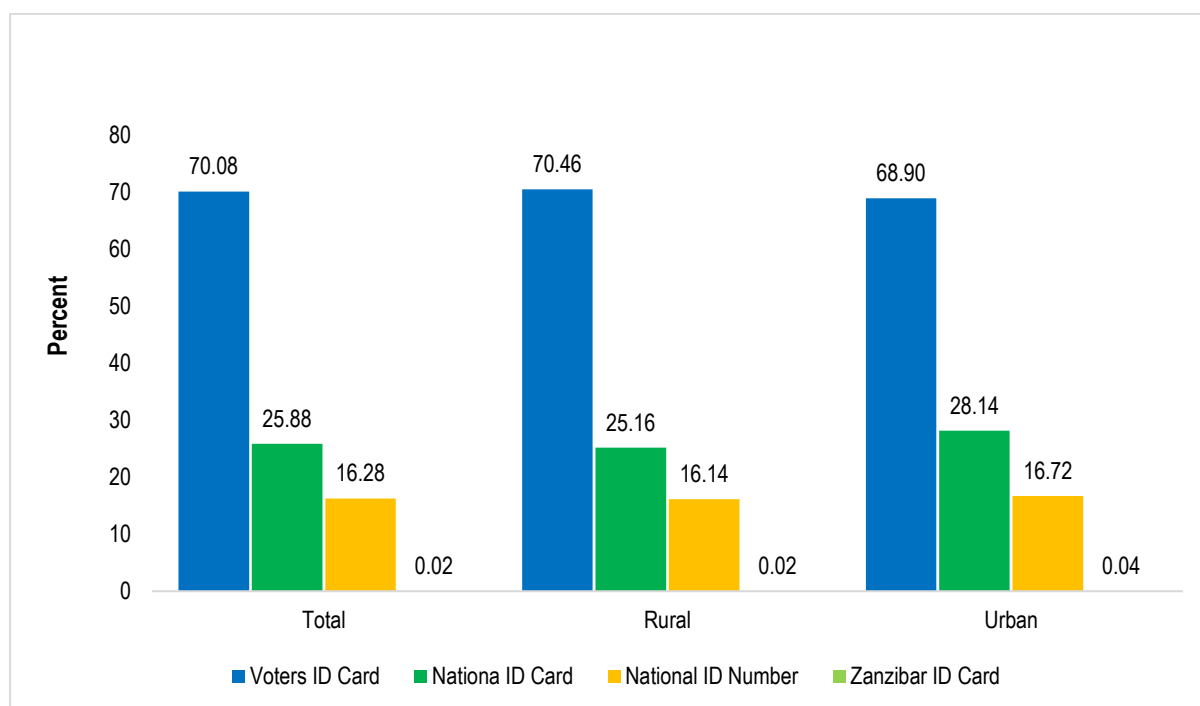
### 6.2.3 Other National Identification Documents

The Tanzania Population and Housing Census 2022 collected information on travel passport, national health insurance/community health insurance and other health insurance schemes from all persons regardless of their age. On the other hand, information on national identification card, national identification number, Zanzibar identification card, driving license and voters' identification card were collected for all persons aged 18 years and above. Additionally, persons aged 15 years and above provided information on possession of small entrepreneur identification card and those aged 60 years and above provided information whether they have card for elderly treatment.

#### 6.2.3.1 National Identification Cards

Table 6.5 and Figure 6.2 indicate that 277,429 persons (25.9%) aged 18 years and above in Kilimanjaro Region have national identification cards while 174,540 persons (16.3%) have only national identification numbers. Additionally, the results show a higher percentage (28.1%) of persons in urban areas with national identification cards than in rural areas (25.2%). Furthermore, 751,370 persons equivalent to 70.1 percent have voters' identification cards. Further results reveal that about 5.5 percent of persons aged 15 years and above who are engaged in informal activities have small entrepreneur identification cards.

**Figure 6.2: Percentage Distribution of Population Possessing Other National Identification Documents by Type and Place of Residence; Kilimanjaro Region, 2022 PHC**



**Table 6.5: Percentage of Population Possessing National Identification Documents by Selected Age Groups, Type, Place of Residence and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence	Type of National Documents						
	Persons Aged 18 and Above					Person of All Ages	Person Aged 15 and Above
	National Identification Card	National Identification Number	Zanzibar Identification Card	Driving License	Voter's Identification Card	Travel Passport	Small Entrepreneur Identification Card
<b>Total</b>	25.88	16.28	0.02	6.30	70.08	1.23	5.50
Rural	25.16	16.14	0.02	4.99	70.46	0.95	4.92
Urban	28.14	16.72	0.04	10.47	68.90	2.18	6.92
<b>Council</b>							
Rombo District	23.27	17.44	0.00	4.20	71.48	0.84	4.76
Mwanga District	37.73	7.05	0.05	4.79	68.70	0.94	4.98
Same District	25.27	12.25	0.03	3.25	68.97	0.70	5.16
Moshi Municipal	27.07	19.28	0.05	12.93	69.54	2.99	7.39

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Moshi District	16.13	22.93	0.02	6.58	70.97	1.20	4.39
Hai District	38.30	10.76	0.02	6.84	69.56	1.20	6.00
Siha District	35.3	10.0	0.0	5.5	69.3	1.0	7.5

### 6.2.3.2 Health Insurance

Table 6.6 indicates that out of 1,835,321 persons in Kilimanjaro Region, 223,104 persons (12.2%) have health insurance from the National Health Insurance Fund (NHIF) or Community Health Insurance Fund (CHIF). Moshi Municipal Council has the highest percentage (36,671 persons; 17.6%) of persons with NHIF/CHIF insurance, followed by Mwanga District Council (18,483; 12.5%) persons). Same District Council has the lowest percentage (26,116 persons; 8.8%). In addition, there are 27,348 persons (1.5%) with health insurance from other providers. A residential analysis indicates that more people in urban areas (66,550; 15.7%) have NHIF/CHIF compared to those in rural areas (156,554 persons; 11.1%). On the other hand, 7,172 persons (1.7%) in urban areas have other health insurance schemes compared with 20,176 persons (1.4%) in rural areas.

**Table 6.6: Percentage Distribution of Population in Private Households by Type of Health Insurance identification Card, Sex, Place of Residence and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence	Population	Type of Health Identification Card								
		National Health Insurance/Community Health Insurance (NHIF/CHIF)			Other Health Insurance			Card for elderly Treatment (60 years and above)		
		Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	<b>1,835,321</b>	<b>12.2</b>	<b>11.6</b>	<b>12.7</b>	<b>1.5</b>	<b>1.5</b>	<b>1.5</b>	<b>13.9</b>	<b>13.2</b>	<b>14.4</b>
Rural	1,410,699	11.1	10.4	11.7	1.4	1.4	1.4	14.0	13.4	14.5
Urban	424,622	15.7	15.3	16.0	1.7	1.7	1.7	13.0	12.0	13.8
<b>Council</b>										
Rombo District	273,755	11.5	10.9	12.2	1.5	1.5	1.6	25.5	24.1	26.6
Mwanga District	148,071	12.5	11.7	13.2	1.7	1.7	1.7	10.5	10.0	10.9
Same District	297,672	8.8	8.5	9.1	1.3	1.2	1.3	13.4	13.3	13.5
Moshi Municipal	208,344	17.6	17.3	17.9	1.8	1.9	1.8	13.1	11.5	14.4
Moshi District	530,637	12.7	11.9	13.5	1.5	1.6	1.5	9.1	8.6	9.4
Hai District	238,822	12.4	11.7	13.2	1.3	1.3	1.3	8.0	7.9	8.1
Siha District	138,020	9.4	9.1	9.7	1.3	1.3	1.4	22.6	20.9	24.0

### **6.3 Citizenship**

Tanzania citizenship is governed by the Tanzania Citizenship Act, Chapter 357 (Revised Edition of 2002) and its Regulations of 1997. The 2022 PHC collected information on citizenship status.

The results show that 1,857,194 persons (99.7%) out of 1,861,934 persons enumerated in Kilimanjaro Region are Tanzanians. Most non-Tanzanians are from other East African countries (1,962 persons), followed by those from countries outside Africa (1,723 persons) and other African countries (1,048 person) (Table 6.7).

**Table 6.7: Distribution of Population by Place of Residence, Sex and Country of Citizenship; Kilimanjaro Region, 2022 PHC**

Country of Citizenship	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	<b>1,861,934</b>	<b>907,636</b>	<b>954,298</b>	<b>1,419,512</b>	<b>694,000</b>	<b>725,512</b>	<b>442,422</b>	<b>213,636</b>	<b>228,786</b>
Tanzania	1,857,194	905,017	952,177	1,416,788	692,631	724,157	440,406	212,386	228,020
Other East African Countries	1,962	954	1,008	1,281	545	736	681	409	272
Other African Countries	1,048	724	324	492	276	216	556	448	108
Countries Outside Africa	1,723	934	789	950	547	403	773	387	386
Dual Citizenship	4	4	0	1	1	0	3	3	0
No Citizenship	3	3	0	0	0	0	3	3	0

## Chapter 7

### Survival of Parents

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#### Key Points

- Nine in ten t (91.3%) of children under 18 years have both parents alive.
- More than eight percent (8.7%) of children under 18 years are orphans with slightly higher proportion in urban areas (8.9%) than in rural areas (8.6%).
- More than six percent (6.6%) of children under 18 years are orphans with one parent dead.
- Two percent (2.1%) of children under 18 years are orphans with both parents dead.
- Moshi Municipal Council has the highest proportion (9.7%) of orphans in Kilimanjaro Region.

#### 7.1 Introduction

This chapter presents information on survival of parents at regional level. The information helps to determine the extent of orphanhood in a society and aids in making evidence-based decisions. In Tanzania, an orphan is defined as a child under 18 years of age who has lost one or both parents<sup>4</sup>. This definition is consistent with the United Nations definition.

The death of parents has a significant negative impact on the well-being and survival of young children, especially those who are young and most vulnerable (under 5 years old). The death of a mother, if other factors remain unchanged, has a substantial impact and is associated with 2 to 50 times increased risk of death among the under-5 children left behind<sup>5</sup>. Orphans with no family or community support face risky life situations including: lacking a family social network; inadequate food and healthcare and sometimes having to assume the role of heads of household and care for their younger siblings.

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<sup>4</sup> The law of Child Act Cap 56, 2019

<sup>5</sup> Hani K. Atrash, M.D., M.P.H.1, Parents' Death and its Implications for Child Survival 2011

Furthermore, information on survival of parents was collected from all children under 18 years specifically concerning their biological parents and not adopting or fostering parents.

## 7.2 Survival of Parents

Results indicate that 91.3 percent of all children under 18 years in Kilimanjaro Region have both parents alive. The percentage of children with both parents alive decreases with age starting from 96.4 percent for children aged one year to 83.3 percent for children aged 17 years. The results further show that the percentage of children with their fathers dead and mothers alive is higher (5.0%) than those with w their fathers alive and their mothers dead (1.7%). These of patterns of parental survival are consistent for both male and female children (Tables 7.1, 7.2 and 7.3).

**Table 7.1: Number and Percentage of Children Under 18 Years by Survival of Parents and Age; Kilimanjaro Region, 2022 PHC**

Age	Children Under 18 Years	Father Alive		Father Alive		Father Dead		Father Dead	
		Mother Alive		Mother Dead		Mother Alive		Mother Dead	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Total</b>	<b>766,731</b>	<b>699,984</b>	<b>91.3</b>	<b>12,655</b>	<b>1.7</b>	<b>38,156</b>	<b>5.0</b>	<b>15,936</b>	<b>2.1</b>
0	47,022	45,292	96.3	208	0.4	712	1.5	810	1.7
1	42,061	40,541	96.4	239	0.6	673	1.6	608	1.4
2	44,191	42,415	96.0	252	0.6	906	2.1	618	1.4
3	45,179	42,970	95.1	347	0.8	1,131	2.5	731	1.6
4	46,327	43,776	94.5	389	0.8	1,415	3.1	747	1.6
5	44,400	41,781	94.1	422	1.0	1,391	3.1	806	1.8
6	43,625	40,779	93.5	452	1.0	1,565	3.6	829	1.9
7	46,001	42,663	92.7	615	1.3	1,815	3.9	908	2.0
8	43,359	39,977	92.2	607	1.4	1,960	4.5	815	1.9
9	43,259	39,453	91.2	699	1.6	2,199	5.1	908	2.1
10	41,839	37,808	90.4	761	1.8	2,349	5.6	921	2.2
11	38,257	34,431	90.0	763	2.0	2,258	5.9	805	2.1
12	47,996	42,652	88.9	1,095	2.3	3,217	6.7	1,032	2.2
13	39,121	34,301	87.7	1,028	2.6	2,860	7.3	932	2.4
14	41,661	36,158	86.8	1,157	2.8	3,291	7.9	1,055	2.5
15	35,242	30,145	85.5	1,088	3.1	3,026	8.6	983	2.8
16	37,547	31,813	84.7	1,156	3.1	3,479	9.3	1,099	2.9
17	39,644	33,029	83.3	1,377	3.5	3,909	9.9	1,329	3.4

**Table 7.2: Number and Percentage Distribution of Male Children Under 18 Years by Survival of Parents and Age; Kilimanjaro Region, 2022 PHC**

Age	Male Children Under 18 Years	Father Alive Mother Alive		Father Alive Mother Dead		Father Dead Mother Alive		Father Dead Mother Dead	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Total</b>	<b>386,165</b>	<b>352,526</b>	<b>91.3</b>	<b>6,348</b>	<b>1.6</b>	<b>19,058</b>	<b>4.9</b>	<b>8,233</b>	<b>2.1</b>
0	23,847	22,971	96.3	102	0.4	381	1.6	393	1.6
1	21,238	20,489	96.5	122	0.6	322	1.5	305	1.4
2	22,287	21,352	95.8	142	0.6	479	2.1	314	1.4
3	22,837	21,734	95.2	161	0.7	568	2.5	374	1.6
4	23,504	22,215	94.5	213	0.9	689	2.9	387	1.6
5	22,654	21,290	94.0	232	1.0	713	3.1	419	1.8
6	22,024	20,583	93.5	222	1.0	789	3.6	430	2.0
7	23,408	21,691	92.7	306	1.3	922	3.9	489	2.1
8	21,739	20,057	92.3	295	1.4	964	4.4	423	1.9
9	21,225	19,368	91.3	342	1.6	1,089	5.1	426	2.0
10	21,557	19,435	90.2	397	1.8	1,241	5.8	484	2.2
11	19,372	17,466	90.2	379	2.0	1,128	5.8	399	2.1
12	24,337	21,626	88.9	528	2.2	1,636	6.7	547	2.2
13	19,587	17,114	87.4	517	2.6	1,475	7.5	481	2.5
14	20,796	18,039	86.7	592	2.8	1,639	7.9	526	2.5
15	17,548	14,989	85.4	569	3.2	1,470	8.4	520	3.0
16	18,058	15,303	84.7	559	3.1	1,618	9.0	578	3.2
17	20,147	16,804	83.4	670	3.3	1,935	9.6	738	3.7

**Table 7.3: Number and Percentage of Female Children Under 18 Years by Survival of Parents and Age; Kilimanjaro Region, 2022 PHC**

Age	Female Children Under 18 Years	Father Alive Mother Alive		Father Alive Mother Dead		Father Dead Mother Alive		Father Dead Mother Dead	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Total</b>	<b>380,566</b>	<b>347,458</b>	<b>91.3</b>	<b>6,307</b>	<b>1.7</b>	<b>19,098</b>	<b>5.0</b>	<b>7,703</b>	<b>2.0</b>
0	23,175	22,321	96.3	106	0.5	331	1.4	417	1.8
1	20,823	20,052	96.3	117	0.6	351	1.7	303	1.5
2	21,904	21,063	96.2	110	0.5	427	1.9	304	1.4
3	22,342	21,236	95.0	186	0.8	563	2.5	357	1.6
4	22,823	21,561	94.5	176	0.8	726	3.2	360	1.6
5	21,746	20,491	94.2	190	0.9	678	3.1	387	1.8
6	21,601	20,196	93.5	230	1.1	776	3.6	399	1.8
7	22,593	20,972	92.8	309	1.4	893	4.0	419	1.9
8	21,620	19,920	92.1	312	1.4	996	4.6	392	1.8
9	22,034	20,085	91.2	357	1.6	1,110	5.0	482	2.2
10	20,282	18,373	90.6	364	1.8	1,108	5.5	437	2.2
11	18,885	16,965	89.8	384	2.0	1,130	6.0	406	2.1
12	23,659	21,026	88.9	567	2.4	1,581	6.7	485	2.0
13	19,534	17,187	88.0	511	2.6	1,385	7.1	451	2.3
14	20,865	18,119	86.8	565	2.7	1,652	7.9	529	2.5
15	17,694	15,156	85.7	519	2.9	1,556	8.8	463	2.6
16	19,489	16,510	84.7	597	3.1	1,861	9.5	521	2.7
17	19,497	16,225	83.2	707	3.6	1,974	10.1	591	3.0

### 7.2.1 Survival of Parents by Council

Results from Table 7.4 show that survival of both parents for children under 18 years in all councils of Kilimanjaro Region ranges from 90.3 percent to 91.9 percent. Mwanga District Council has the highest percentage of children with both parents Alive (91.9%) while Moshi Municipal Council has the lowest (90.3%).

The results also indicate that Rombo District Council has the highest percentage (5.4%) of children with father dead and mother alive compared to other councils. Meanwhile Moshi District Council has the highest percentage of children with only fathers alive (mothers dead) at 1.8 percent. Additionally, Moshi Municipal Council has the highest percentage of children with both parents Dead (3.9%).

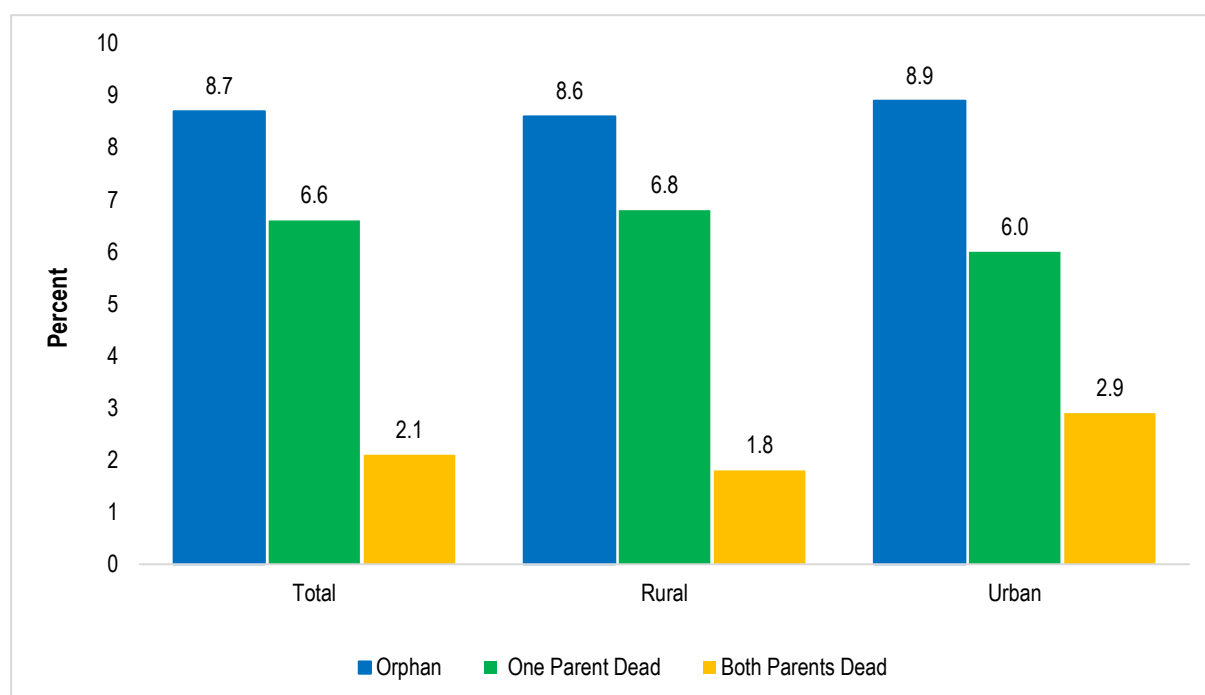
**Table 7.4: Number and Percentage Distribution of Children Under 18 Years by Survival of Parents, Place of Residence and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence	Children Under 18 Years	Father Alive Mother Alive		Father Alive Mother Dead		Father Dead Mother Alive		Father Dead Mother Dead	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Total</b>	<b>766,731</b>	<b>699,984</b>	<b>91.3</b>	<b>12,655</b>	<b>1.7</b>	<b>38,156</b>	<b>5.0</b>	<b>15,936</b>	<b>2.1</b>
Rural	596,101	544,583	91.4	10,113	1.7	30,407	5.1	10,998	1.8
Urban	170,630	155,401	91.1	2,542	1.5	7,749	4.5	4,938	2.9
<b>Council</b>									
Rombo District	115,197	105,094	91.2	1,841	1.6	6,278	5.4	1,984	1.7
Mwanga District	63,858	58,689	91.9	1,025	1.6	3,049	4.8	1,095	1.7
Same District	132,633	121,655	91.7	2,186	1.6	6,308	4.8	2,484	1.9
Moshi Municipal	80,529	72,694	90.3	1,187	1.5	3,498	4.3	3,150	3.9
Moshi District	213,128	194,260	91.1	3,779	1.8	10,776	5.1	4,313	2.0
Hai District	98,022	89,670	91.5	1,595	1.6	4,909	5.0	1,848	1.9
Siha District	63,364	57,922	91.4	1,042	1.6	3,338	5.3	1,062	1.7

### 7.3 Orphanhood

The results from Figure 7.1 reveal that in Kilimanjaro Region, 8.7 percent of children under 18 years are orphans. The results further show that about seven percent (6.6%) of the children lost either father or mother and about two percent (2.1%) lost both of their parents. The percentage of children who are orphans is slightly higher in urban areas (8.9%) than rural areas (8.6%). The percentage of orphans varies across councils, ranging from 8.1 percent in Mwanga District to 9.7 percent in Moshi Municipal. (Figure 7.1 and Table 7.5)

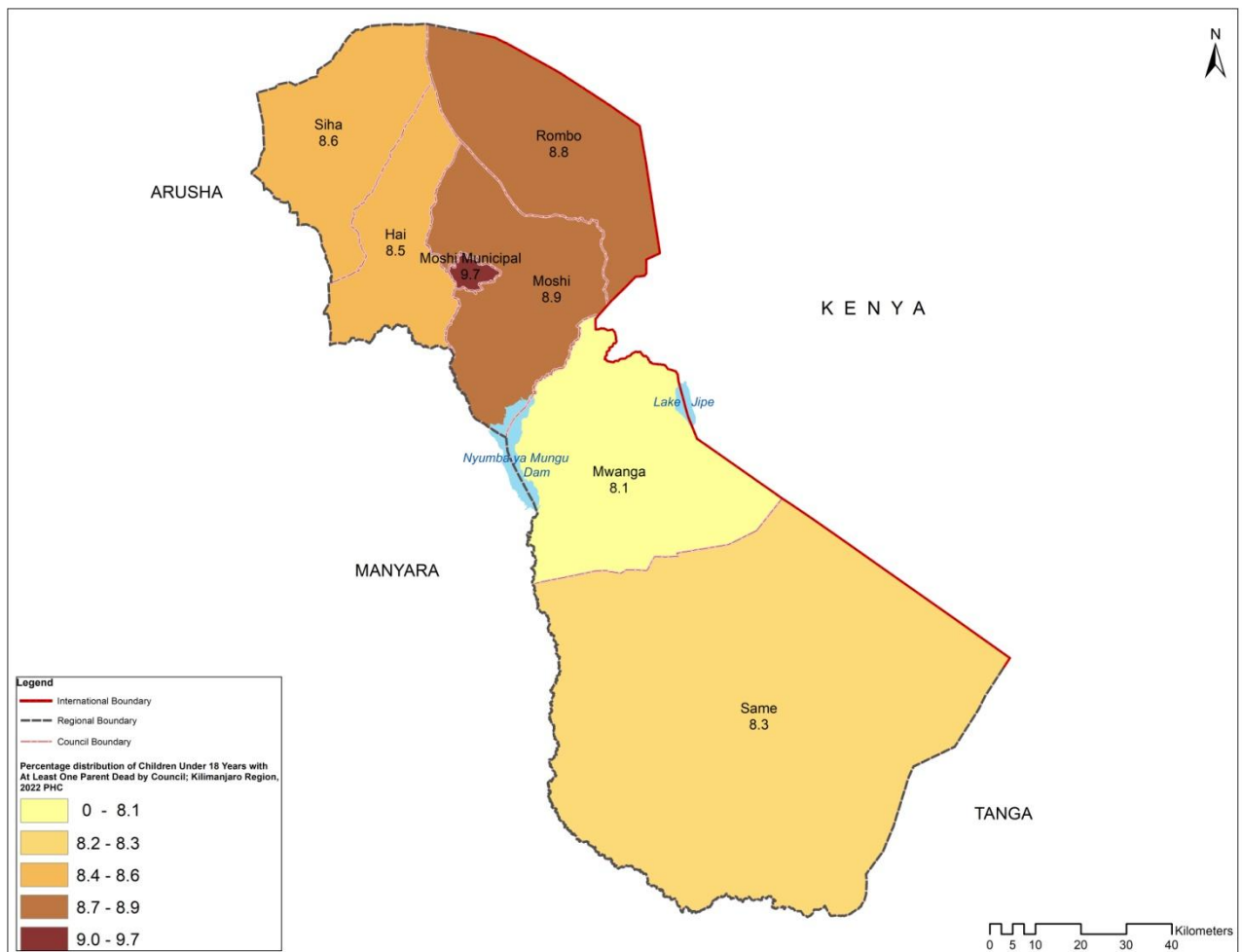
**Figure 7.1: Orphanhood Status by Place of Residence; Kilimanjaro Region, 2022 PHC**



**Table 7.5: Number and Percentage Distribution of Population Under 18 Years by Orphanhood Status, Place of Residence and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence	Children Under 18 Years	Both Parents Alive		One Parent Dead		Both Parents Dead		At least One parent Dead	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Total</b>	<b>766,731</b>	<b>699,984</b>	<b>91.3</b>	<b>50,811</b>	<b>6.6</b>	<b>15,936</b>	<b>2.1</b>	<b>66,747</b>	<b>8.7</b>
Rural	596,101	544,583	91.4	40,520	6.8	10,998	1.8	51,518	8.6
Urban	170,630	155,401	91.1	10,291	6.0	4,938	2.9	15,229	8.9
<b>Council</b>									
Rombo District	115,197	105,094	91.2	8,119	7.0	1,984	1.7	10,103	8.8
Mwanga District	63,858	58,689	91.9	4,074	6.4	1,095	1.7	5,169	8.1
Same District	132,633	121,655	91.7	8,494	6.4	2,484	1.9	10,978	8.3
Moshi Municipal	80,529	72,694	90.3	4,685	5.8	3,150	3.9	7,835	9.7
Moshi District	213,128	194,260	91.1	14,555	6.8	4,313	2.0	18,868	8.9
Hai District	98,022	89,670	91.5	6,504	6.6	1,848	1.9	8,352	8.5
Siha District	63,364	57,922	91.4	4,380	6.9	1,062	1.7	5,442	8.6

**Map 7.1: Percentage Distribution of Children Under 18 Years with At Least One Parent Dead by Council; Kilimanjaro Region, 2022 PHC**



## Chapter 8

### Education, Literacy and Numeracy

#### Key Points

- About ninety-four percent (94.2%) of persons aged 15 years and above in Kilimanjaro Region are literate; 93.3 percent in rural and 97.3 percent in urban areas.
- Numeracy rate among persons aged five years and above is 89.7 percent. It is higher among males (90.0%) than females (89.5%)
- About ninety six percent (96.4%) of the primary school age population (7-13 years) are attending school and 2.5 percent had never been to school.
- Net Enrolment Rate for primary schools is 96.4 percent. It is higher (97.3%) in urban than in rural areas (96.2%).
- Majority (66.0%) of population aged four years and above attained primary education and 23.1 percent completed ordinary level secondary school education.
- About eight percent (7.5%) of the population aged four years and above attained university and other related education level.

#### 8.1 Introduction

Education is one of the most important factors in social and economic development of any society. This chapter presents the status of education, literacy and numeracy for the persons aged five years and above in Kilimanjaro Region. It also provides information on school attendance, school dropout and education attainment for persons aged four years and above.

#### 8.2 Literacy

Literacy is defined as the ability to read and write with an understanding of a short simple sentence in any language. It excludes the ability to only write or sign one's own name or write memorized phrases. The literacy rate in 2022 PHC is measured for persons aged five years and above who could read and write in: Kiswahili only; English only; both Kiswahili and English or any other language. No test was administered to verify the actual literacy of the individuals.

Results show that out of 1,637,154 persons aged five years and above in Kilimanjaro Region, 1,521,397 persons (92.9%) are literate. The literacy rate is higher among males (93.6%) compared to females (92.3%). Generally, the literacy rates are higher among younger population compared with older population. The highest literacy rate of 97.3 percent is observed in the 10-14- and 15-19-years age groups. Literacy rates fall below 70 percent for persons aged 80 years and above. These results indicate a positive impact of universal primary education and increased enrolment in secondary education resulting from the free education programme (Table 8.1).

Literacy rate in urban areas is substantially higher (96.2%) than in rural areas (91.9%). Males are more literate than females in both rural and urban areas (Tables 8.2, 8.3 and Figure 8.1).

**Table 8.1: Number and Percentage of Population Aged Five Years and Above by Literacy Rate, Sex and Five-Year Age Groups; Kilimanjaro Region, 2022 PHC**

Age Group	Population			Literate			Literacy Rates		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	<b>1,637,154</b>	<b>793,923</b>	<b>843,231</b>	<b>1,521,397</b>	<b>743,343</b>	<b>778,054</b>	<b>92.9</b>	<b>93.6</b>	<b>92.3</b>
5 - 9	220,644	111,050	109,594	180,159	88,992	91,167	81.7	80.1	83.2
10-14	208,874	105,649	103,225	203,131	102,206	100,925	97.3	96.7	97.8
15 - 19	179,410	89,413	89,997	174,523	86,826	87,697	97.3	97.1	97.4
20 - 24	160,510	77,456	83,054	155,776	75,118	80,658	97.1	97.0	97.1
25 - 29	137,950	67,010	70,940	133,835	65,098	68,737	97.0	97.1	96.9
30 - 34	115,972	57,147	58,825	111,589	55,169	56,420	96.2	96.5	95.9
35 - 39	96,900	46,760	50,140	92,447	44,744	47,703	95.4	95.7	95.1
40 - 44	92,296	44,532	47,764	87,856	42,429	45,427	95.2	95.3	95.1
45 - 49	86,581	41,474	45,107	82,381	39,508	42,873	95.1	95.3	95.0
50 - 54	80,881	38,002	42,879	76,629	36,186	40,443	94.7	95.2	94.3
55 - 59	62,696	29,500	33,196	59,284	28,266	31,018	94.6	95.8	93.4
60 - 64	58,594	27,282	31,312	53,542	25,926	27,616	91.4	95.0	88.2
65 - 69	41,236	18,638	22,598	36,733	17,485	19,248	89.1	93.8	85.2
70 - 74	34,922	15,865	19,057	29,959	14,793	15,166	85.8	93.2	79.6
75 - 79	21,869	9,478	12,391	17,794	8,567	9,227	81.4	90.4	74.5
80+	37,819	14,667	23,152	25,759	12,030	13,729	68.1	82.0	59.3

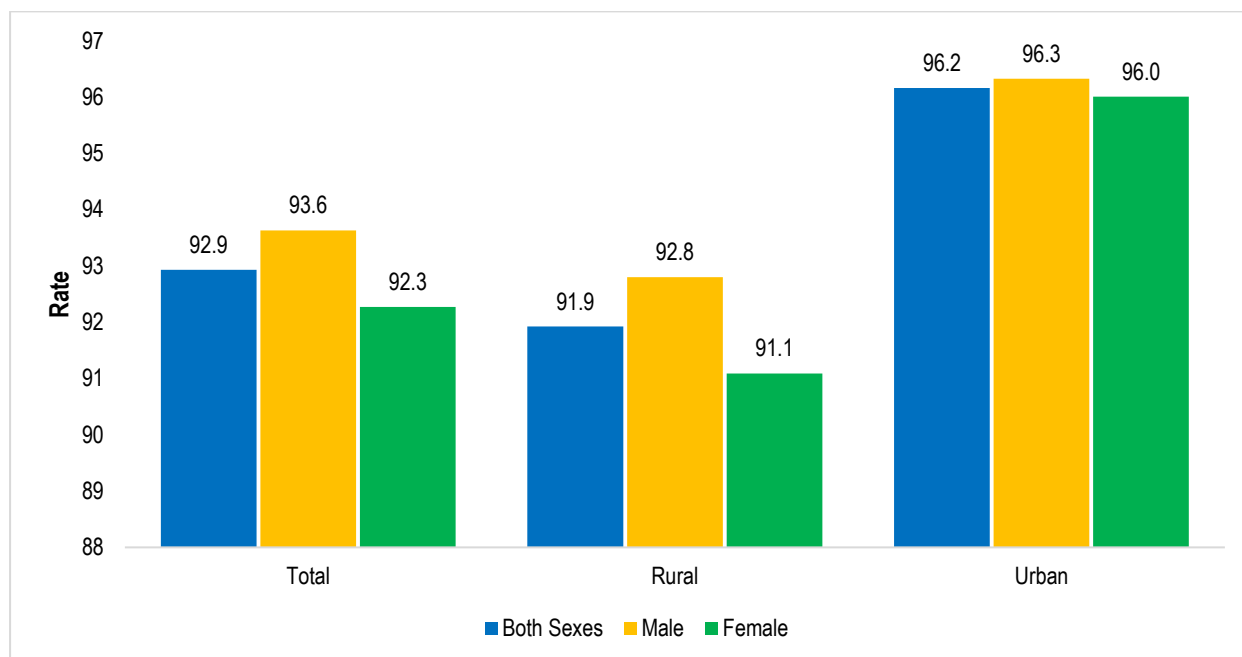
**Table 8.2: Number and Percentage of Population Aged Five Years and Above by Literacy Rate, Sex and Five Year Age Groups; Kilimanjaro Rural, 2022 PHC**

Age Group	Population			Literate			Literacy Rates		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	<b>1,247,957</b>	<b>607,118</b>	<b>640,839</b>	<b>1,147,150</b>	<b>563,404</b>	<b>583,746</b>	<b>91.9</b>	<b>92.8</b>	<b>91.1</b>
5 – 9	172,612	87,135	85,477	138,264	68,455	69,809	80.1	78.6	81.7
10-14	165,458	84,335	81,123	160,378	81,271	79,107	96.9	96.4	97.5
15 – 19	135,460	68,961	66,499	131,211	66,674	64,537	96.9	96.7	97.0
20 – 24	110,444	53,422	57,022	106,377	51,446	54,931	96.3	96.3	96.3
25 – 29	94,678	45,857	48,821	91,168	44,296	46,872	96.3	96.6	96.0
30 – 34	82,201	40,647	41,554	78,479	38,976	39,503	95.5	95.9	95.1
35 – 39	70,709	34,294	36,415	66,857	32,568	34,289	94.6	95.0	94.2
40 – 44	69,537	33,746	35,791	65,661	31,922	33,739	94.4	94.6	94.3
45 – 49	66,771	32,034	34,737	63,074	30,302	32,772	94.5	94.6	94.3
50 – 54	64,178	29,957	34,221	60,433	28,350	32,083	94.2	94.6	93.8
55 – 59	50,981	23,973	27,008	47,944	22,859	25,085	94.0	95.4	92.9
60 – 64	48,398	22,464	25,934	43,857	21,229	22,628	90.6	94.5	87.3
65 – 69	34,633	15,583	19,050	30,575	14,540	16,035	88.3	93.3	84.2
70 – 74	29,878	13,634	16,244	25,394	12,666	12,728	85.0	92.9	78.4
75 – 79	18,898	8,205	10,693	15,230	7,372	7,858	80.6	89.8	73.5
80+	33,121	12,871	20,250	22,248	10,478	11,770	67.2	81.4	58.1

**Table 8.3: Number and Percentage Aged Five Years and Above by Literacy Rate, Sex and Five-Year Age Groups; Kilimanjaro Urban, 2022 PHC**

Age Group	Population			Literate			Literacy Rates		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	<b>389,197</b>	<b>186,805</b>	<b>202,392</b>	<b>374,247</b>	<b>179,939</b>	<b>194,308</b>	<b>96.2</b>	<b>96.3</b>	<b>96.0</b>
5 – 9	48,032	23,915	24,117	41,895	20,537	21,358	87.2	85.9	88.6
10-14	43,416	21,314	22,102	42,753	20,935	21,818	98.5	98.2	98.7
15 – 19	43,950	20,452	23,498	43,312	20,152	23,160	98.5	98.5	98.6
20 – 24	50,066	24,034	26,032	49,399	23,672	25,727	98.7	98.5	98.8
25 – 29	43,272	21,153	22,119	42,667	20,802	21,865	98.6	98.3	98.9
30 – 34	33,771	16,500	17,271	33,110	16,193	16,917	98.0	98.1	98.0
35 – 39	26,191	12,466	13,725	25,590	12,176	13,414	97.7	97.7	97.7
40 – 44	22,759	10,786	11,973	22,195	10,507	11,688	97.5	97.4	97.6
45 – 49	19,810	9,440	10,370	19,307	9,206	10,101	97.5	97.5	97.4
50 – 54	16,703	8,045	8,658	16,196	7,836	8,360	97.0	97.4	96.6
55 – 59	11,715	5,527	6,188	11,340	5,407	5,933	96.8	97.8	95.9
60 – 64	10,196	4,818	5,378	9,685	4,697	4,988	95.0	97.5	92.7
65 – 69	6,603	3,055	3,548	6,158	2,945	3,213	93.3	96.4	90.6
70 – 74	5,044	2,231	2,813	4,565	2,127	2,438	90.5	95.3	86.7
75 – 79	2,971	1,273	1,698	2,564	1,195	1,369	86.3	93.9	80.6
80+	4,698	1,796	2,902	3,511	1,552	1,959	74.7	86.4	67.5

**Figure 8.1: Literacy Rates for Persons Aged Five Years and Above by Sex and Place of Residence; Kilimanjaro Region, 2022 PHC**



### 8.2.1 Literacy for Selected Age Groups

Results show that youth (using national and international definition) have literacy rates (96.9% and 97.2% respectively) and the rate is the highest (97.6%) among Secondary School age population (age group of 14 -17 years). Literacy rates are higher in urban than in rural areas, and for most of the selected age groups, males are more literate than females in both rural and urban areas.

Literacy rate among population in primary school age in Kilimanjaro Region is 94.8 percent and among secondary school age population is 97.6 percent. The literacy rate among primary school's population is higher among females than males in both rural and urban areas (Table 8.4).

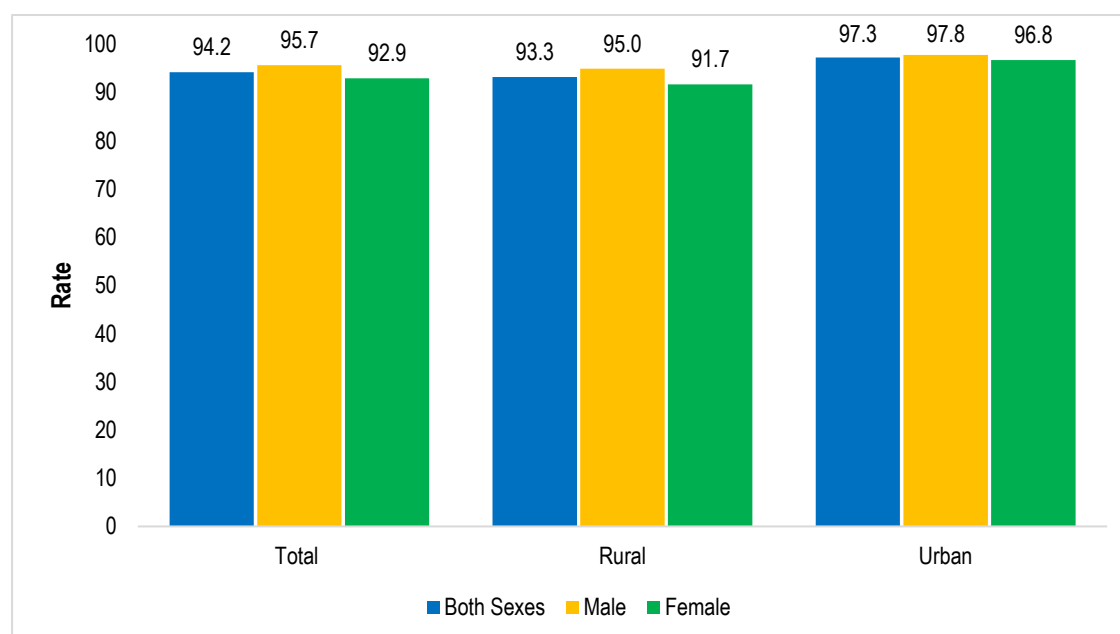
**Table 8.4: Literacy Rates by Place of Residence, Sex and Selected Age Groups; Kilimanjaro Region, 2022 PHC**

Selected Age Group	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Youth Population</b>									
Teenagers (13–19 years)	97.4	97.1	97.6	97.0	96.8	97.3	98.6	98.5	98.6
Youth Population (15–24 years)	97.2	97.0	97.3	96.6	96.5	96.7	98.6	98.5	98.7
Youth Population (15–35 years)	96.9	96.9	96.8	96.2	96.3	96.1	98.5	98.4	98.6
<b>Other Population Groups</b>									
Working Age Population (15-64 years)	95.9	96.3	95.5	95.2	95.7	94.7	98.0	98.1	97.9
Elderly population (60+ years)	84.2	91.7	78.3	83.3	91.1	77.1	89.7	95.0	85.5
Population Aged 4 years and above	91.5	92.1	91.0	90.4	91.2	89.7	95.0	95.1	94.9
Population Aged 14+ years and above	94.4	95.7	93.1	93.4	95.0	91.9	97.3	97.8	96.8
Adult Population Aged 18+ years and above	93.9	95.5	92.5	92.8	94.7	91.1	97.1	97.7	96.6
<b>School Age Population</b>									
Primary School (7–13 years)	94.8	94.0	95.6	94.2	93.4	95.1	96.9	96.3	97.4
Secondary School (14-17 years)	97.6	97.3	97.9	97.3	96.9	97.6	98.6	98.6	98.6

### 8.2.2 Adult Literacy

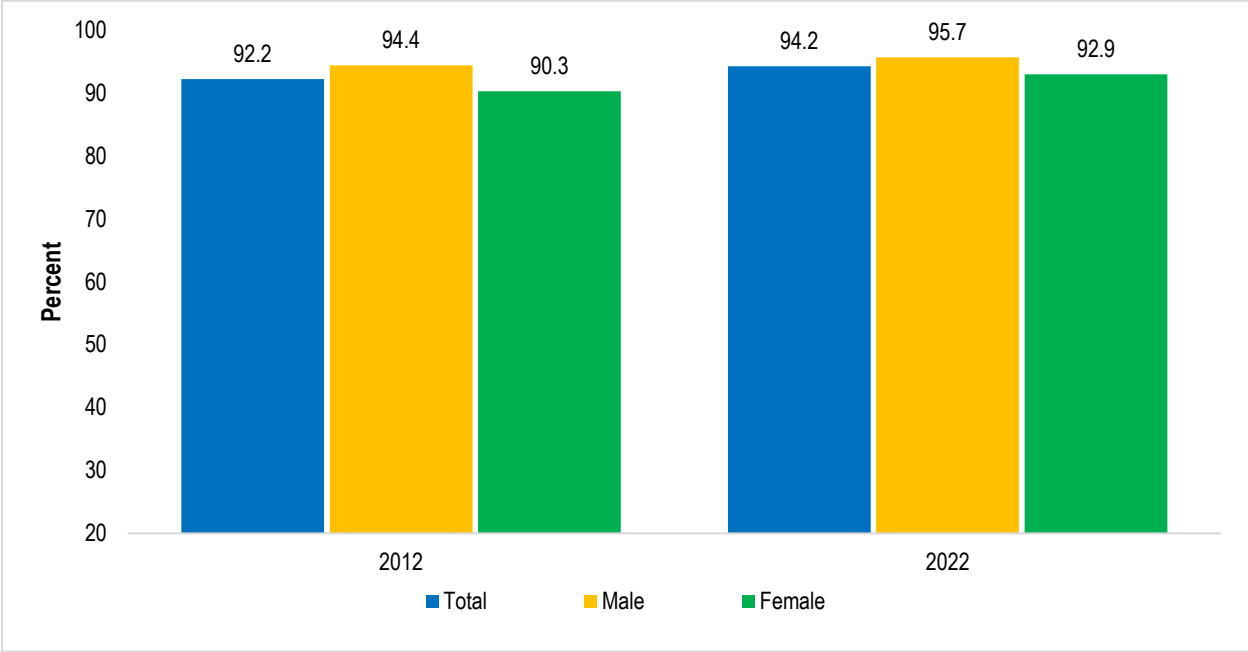
The results show that, the adult literacy rate for persons aged 15 years and above in Kilimanjaro Region is 94.2 percent. The literacy rate is higher among males (95.7%) than females (92.9%). Furthermore, results reveal that the adult literacy rate is higher (97.3%) in urban areas than in rural areas (93.3%). Males are more likely to be literate than females in both rural and urban areas (Figure 8.2).

**Figure 8.2: Adult Literacy Rates for Persons Aged 15 Years and Above by Sex and Place of Residence; Kilimanjaro Region, 2022 PHC**



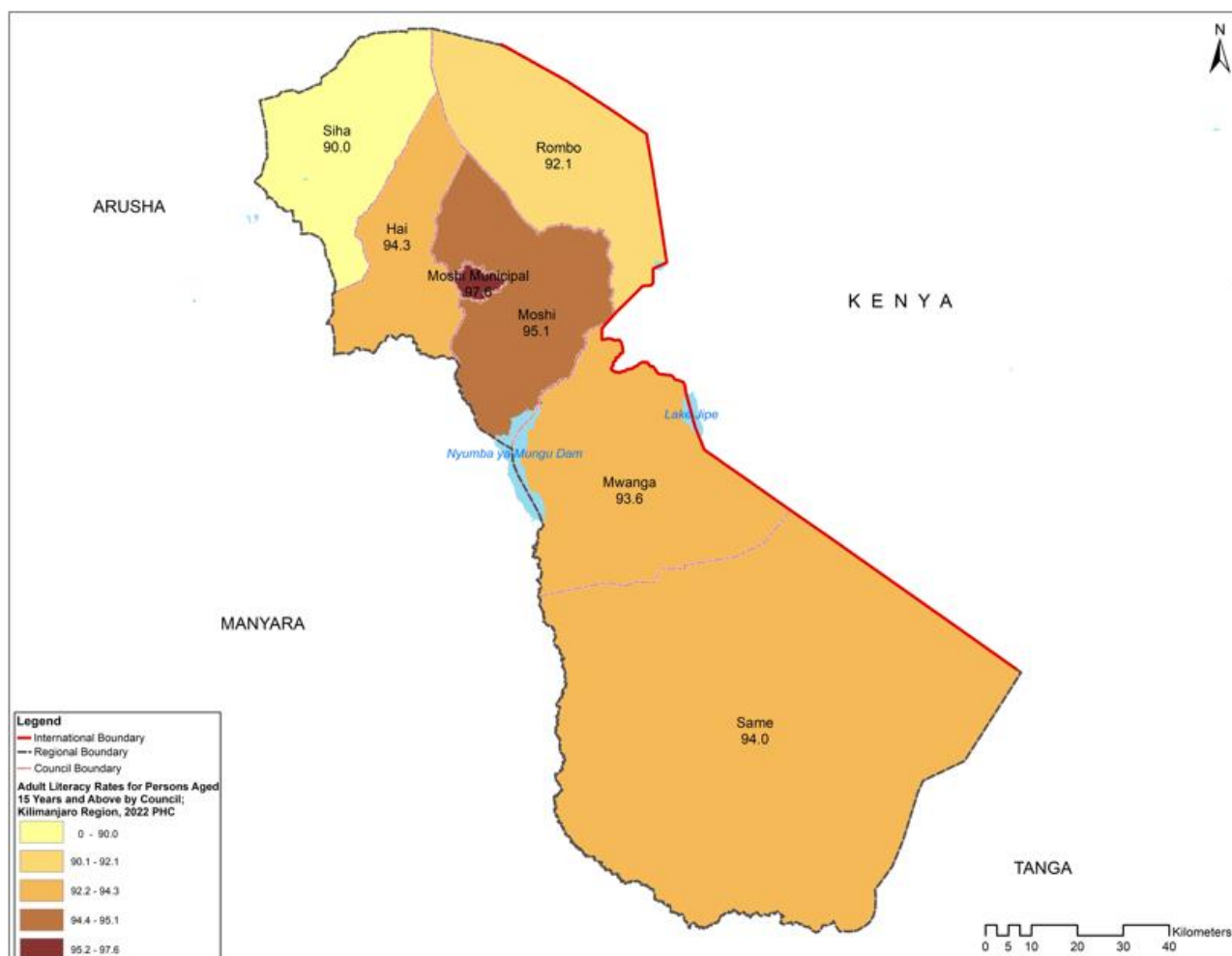
Literacy rates among adults in Kilimanjaro Region increased from 92.2 percent in 2012 to 94.2 percent in 2022. Results also indicate that, the increase in adult literacy rate is more pronounced among females (2.6 percentage point difference) than males (1.3 percentage point difference) (Figure 8.3).

**Figure 8.3: Adult Literacy Rates for Persons Aged 15 Years and Above by Sex; Kilimanjaro Region, 2012 and 2022 PHCs**



Adult literacy rates vary across councils, ranging from 90.0 percent in Siha District to 97.6 percent in Moshi Municipal. All councils except Siha District have adult literacy rates that are above 90 percent (Map 8.1).

**Map 8.1: Adult Literacy Rates for Persons Aged 15 Years and Above by Council; Kilimanjaro Region, 2022 PHC**



Results reveal that, adult literacy rates in Kilimanjaro Region increased from 92.2 percent in 2012 to 94.2 percent in 2022 censuses with an overall difference of 2.0 percentage points. Across councils, the highest percentage point change is 4.7 percent observed in Siha District (Table 8.5).

**Table 8.5: Literacy Rates for Persons Aged 15 Years and Above by Sex, Place of Residence and Council; Kilimanjaro Region, 2012 and 2022 PHCs**

Place of Residence	Literacy Rate						Percentage Points Difference		
	2012 Census			2022 Census			Both Sexes	Male	Female
	Both Sexes	Male	Female	Both Sexes	Male	Female			
<b>Total</b>	92.2	94.4	90.3	94.2	95.7	92.9	2.0	1.3	2.6
Rural	90.8	93.4	88.5	93.3	95.0	91.7	3.4	2.3	4.4
Urban	96.5	97.5	95.6	97.3	97.8	96.8	0.8	0.3	1.2
<b>Council</b>									
Rombo District	87.9	91.7	84.7	92.1	94.6	89.9	4.2	2.9	5.1
Mwanga District	92.5	94.4	90.8	93.6	95.0	92.4	1.1	0.5	1.6

Place of Residence	Literacy Rate						Percentage Points Difference		
	2012 Census			2022 Census			Both Sexes	Male	Female
	Both Sexes	Male	Female	Both Sexes	Male	Female			
Same District	93.0	94.6	91.5	94.0	95.3	92.8	1.0	0.7	1.3
Moshi Municipal	97.9	98.5	97.4	97.6	98.0	97.2	(0.3)	(0.4)	(0.2)
Moshi District	93.6	95.7	91.8	95.1	96.4	94.0	1.5	0.7	2.2
Hai District	92.1	93.7	90.7	94.3	95.4	93.3	2.2	1.7	2.6
Siha District	85.4	88.7	82.4	90.0	92.4	87.9	4.7	3.8	

### 8.2.3 Adult Literacy in Different Languages

The results in Table 8.6 and Figure 8.4 show that in Kilimanjaro Region, literacy rate is 94.2. It is highest in Kiswahili only (60.9%) followed by literacy in both Kiswahili and English (32.5%) and is lowest for other languages (0.2%). In addition, results show that illiteracy rates increase with age.

**Table 8.6: Percentage of Adult Population Aged 15 Years and Above by Literacy Status and Five Year Age Groups; Kilimanjaro Region, 2022 PHC**

Age Group	Literacy Status					Total	
	Literacy In				Total Literate		Illiterate
	Kiswahili Only	English Only	Both English and Kiswahili	Other Language(s)			
<b>Total</b>	<b>60.9</b>	<b>0.6</b>	<b>32.5</b>	<b>0.2</b>	<b>94.2</b>	<b>5.8</b>	<b>1,207,636</b>
15 – 19	37.9	0.6	58.6	0.2	97.3	2.7	179,410
20 – 24	46.6	0.9	49.2	0.3	97.1	2.9	160,510
25 – 29	52.5	0.6	43.6	0.2	97.0	3.0	137,950
30 – 34	59.3	0.6	36.1	0.3	96.2	3.8	115,972
35 – 39	69.8	0.5	24.8	0.2	95.4	4.6	96,900
40 – 44	75.3	0.5	19.2	0.2	95.2	4.8	92,296
45 – 49	77.7	0.5	16.8	0.2	95.1	4.9	86,581
50 – 54	79.4	0.4	14.7	0.2	94.7	5.3	80,881
55 – 59	78.9	0.4	15.1	0.2	94.6	5.4	62,696
60 – 64	73.6	0.3	17.3	0.2	91.4	8.6	58,594
65 – 69	70.2	0.3	18.3	0.2	89.1	10.9	41,236
70 – 74	68.4	0.3	16.8	0.3	85.8	14.2	34,922
75 – 79	67.9	0.3	12.7	0.4	81.4	18.6	21,869
80+	60.6	0.3	6.5	0.6	68.1	31.9	37,819

**Figure 8.4: Percentage Distribution of Adult Population Aged 15 Years and Above by Literacy Rate; Kilimanjaro Region, 2022 PHC**

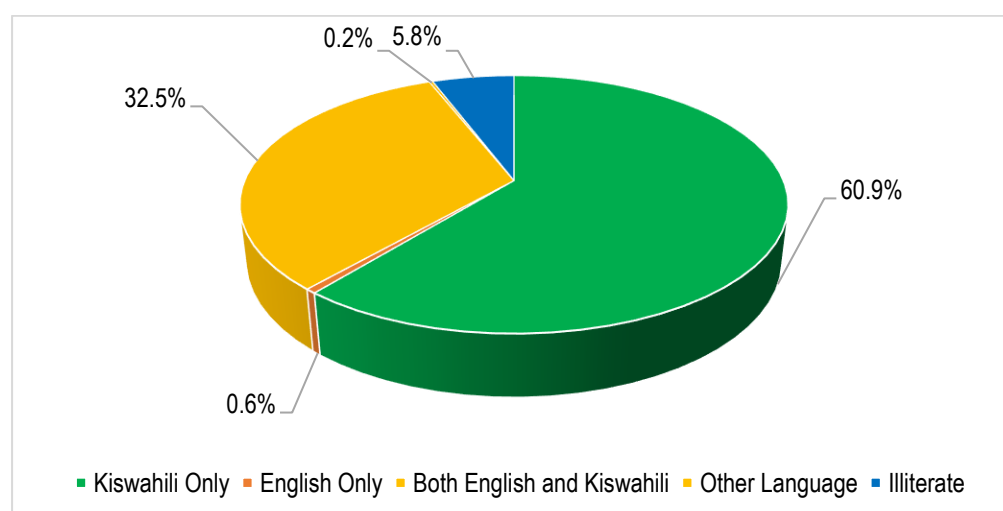
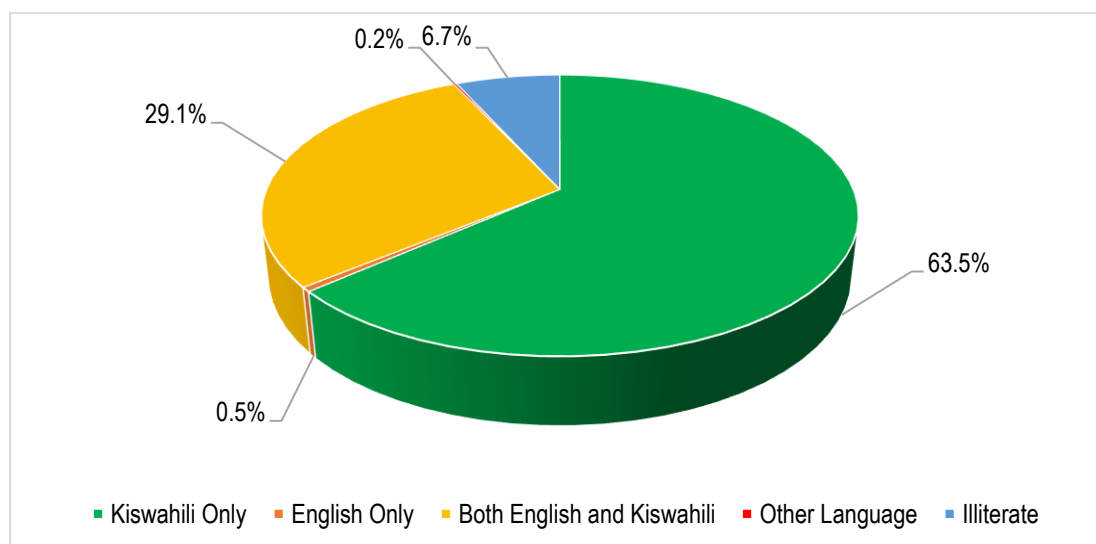


Table 8.7, Figures 8.5 and 8.6 show that the percentage of individuals who are literate in Kiswahili only is higher in rural (63.5%) than in urban areas (53.0%). On the other hand, the percentage of those who are literate in both Kiswahili and English is higher in urban (43.1%) than in rural areas (29.1%). In urban areas, females are more literate in Kiswahili only (54.7%) than males (51.2%).

**Table 8.7: Literacy Rates for Adult Population Aged 15 Years and Above by Literacy Status, Place of Residence and Sex; Kilimanjaro Region, 2022 PHC**

Place of Residence/ Sex	Literacy Status						Total
	Literacy In				Total Literate	Illiterate	
	Kiswahili Only	English Only	Both English and Kiswahili	Other Language(s)			
<b>Total</b>	<b>60.9</b>	<b>0.6</b>	<b>32.5</b>	<b>0.2</b>	<b>94.2</b>	<b>5.8</b>	<b>1,207,636</b>
Male	60.7	0.6	34.1	0.3	95.7	4.3	577,224
Female	61.2	0.5	31.1	0.2	92.9	7.1	630,412
<b>Rural</b>	<b>63.5</b>	<b>0.5</b>	<b>29.1</b>	<b>0.2</b>	<b>93.3</b>	<b>6.7</b>	<b>909,887</b>
Male	63.7	0.5	30.5	0.2	95.0	5.0	435,648
Female	63.3	0.5	27.7	0.2	91.7	8.3	474,239
<b>Urban</b>	<b>53.0</b>	<b>0.7</b>	<b>43.1</b>	<b>0.4</b>	<b>97.3</b>	<b>2.7</b>	<b>297,749</b>
Male	51.2	0.9	45.1	0.6	97.8	2.2	141,576
Female	54.7	0.6	41.2	0.3	96.8	3.2	156,173

**Figure 8.5: Literacy Rates for Adult Population Aged 15 Years and Above; Kilimanjaro Rural, 2022 PHC**



**Figure 8.6: Literacy Rates for Adult Population Aged 15 Years and Above; Kilimanjaro Urban, 2022 PHC**

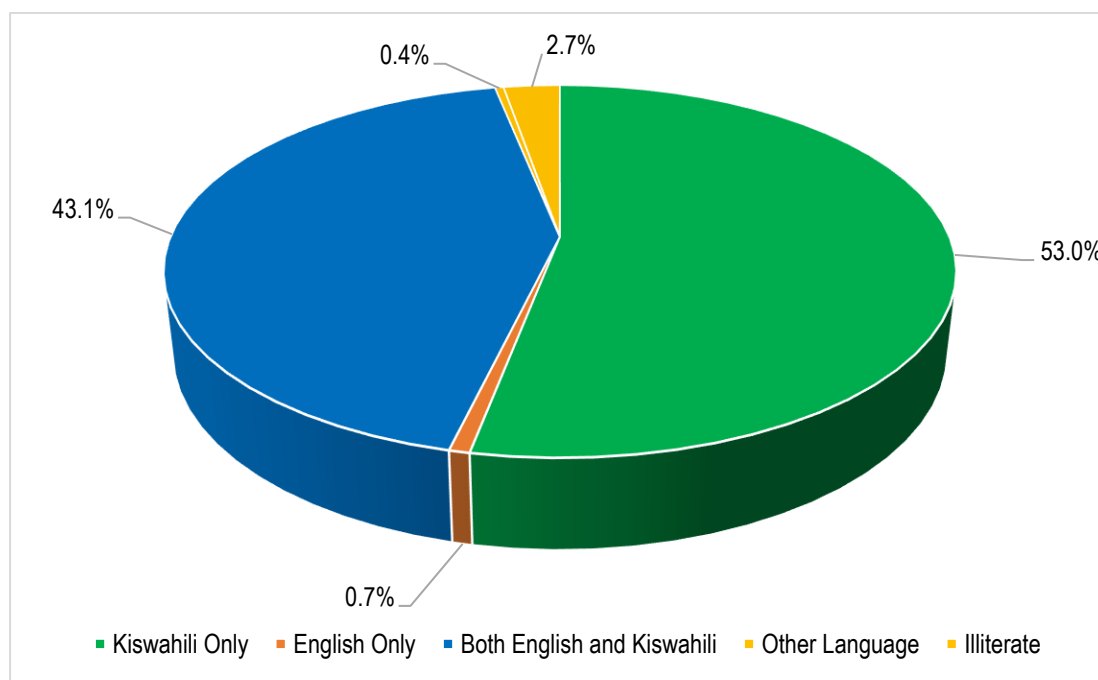


Table 8.8 shows that adult illiteracy levels differ across councils with Siha District having the highest illiteracy rate (10.0%), followed by Rombo District (7.9%). The Council with the lowest illiteracy rate is Moshi Municipal (2.4%), followed by Moshi District (4.9%).

**Table 8.8: Literacy Rates for Adult Population Aged 15 Years and Above by Place of Residence and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence	Literacy Status						Total
	Literacy In				Total Literate	Illiterate	
	Kiswahili Only	English Only	Both English and Kiswahili	Other Language(s)			
<b>Total</b>	<b>60.9</b>	<b>0.6</b>	<b>32.5</b>	<b>0.2</b>	<b>94.2</b>	<b>5.8</b>	<b>1,207,636</b>
Rural	63.5	0.5	29.1	0.2	93.3	6.7	909,887
Urban	53.0	0.7	43.1	0.4	97.3	2.7	297,749
<b>Council</b>							
Rombo District	64.4	0.4	27.2	0.1	86.7	7.9	176,723
Mwanga District	62.6	0.4	30.4	0.2	93.6	6.4	94,291
Same District	66.9	0.5	26.4	0.2	94.0	6.0	186,621
Moshi Municipal	48.7	0.9	47.4	0.7	97.6	2.4	153,633
Moshi District	61.4	0.6	33.0	0.2	95.1	4.9	354,613
Hai District	60.4	0.5	33.3	0.2	94.3	5.7	157,503
Siha District	60.1	0.5	29.1	0.3	90.0	10.0	84,252

### 8.3 Numeracy

Numeracy is the ability to access, use, interpret and communicate simple mathematical information and ideas, to engage in and manage mathematical demands for a range of situations in adult life. Basic numeracy skills consist of comprehending fundamental arithmetic operations such as addition, subtraction, multiplication and division.

Numeracy rate in this chapter is defined as the percentage of a population aged five years and above who can perform simple arithmetic calculations. No test was administered to verify those who were numerate. The questions on numeracy were asked in private households only.

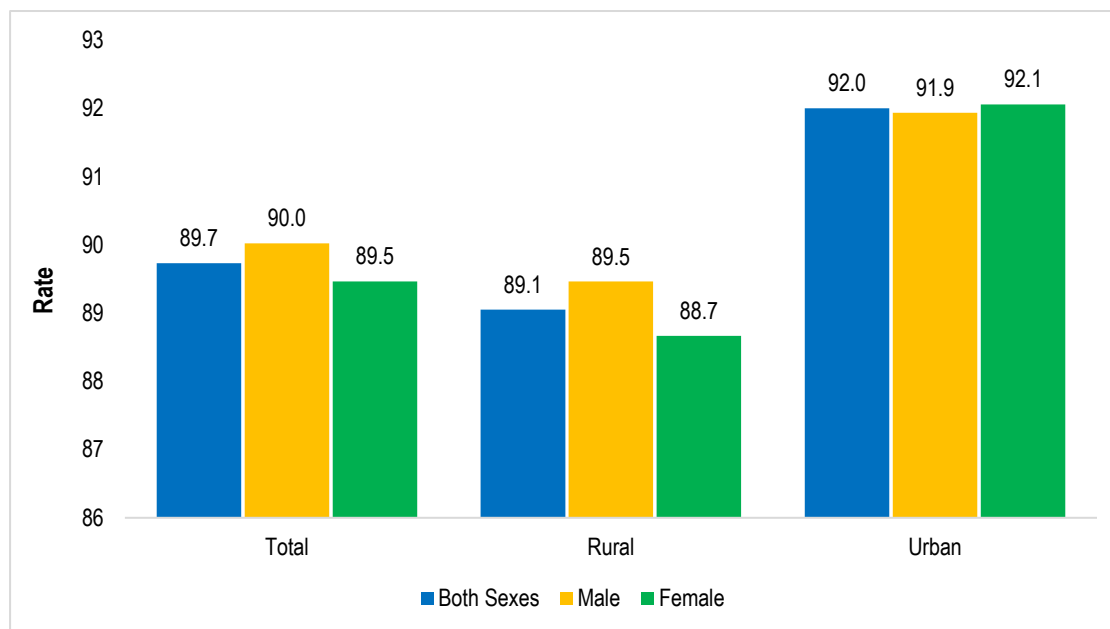
Out of 1,611,497 persons aged 5 years and above in Kilimanjaro Region, 1,446,057 persons (89.7%) are numerate. The numeracy rate is slightly higher among males (90.0%) than females (89.5%). It is also noted that numeracy rates are higher (more than 90%) for youth aged 10 to 69 years and is relatively low (67.9%) for young population (aged 5 -9 years) and older ages (80 years and above) which is 67.9 percent. Numeracy rate is higher (92.0%) in urban areas than in rural areas (89.1%). Furthermore, the results show that in rural areas the rate is slightly higher among males (89.5%) than among females (88.7%) while in urban areas the rate is almost the same (92.1% for females and 91.9% for males) (Table 8.9 and Figure 8.7).

**Table 8.9: Numeracy Rate of Population Aged Five Years and Above by Place of Residence, Sex and Five-Year Age Groups; Kilimanjaro Region, 2022 PHC**

Age Group	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	<b>89.7</b>	<b>90.0</b>	<b>89.5</b>	<b>89.1</b>	<b>89.5</b>	<b>88.7</b>	<b>92.0</b>	<b>91.9</b>	<b>92.1</b>
5-9	69.6	67.9	71.3	68.6	66.9	70.3	73.2	71.4	74.9
10-14	93.9	93.2	94.6	93.6	92.9	94.3	95.0	94.6	95.4
15 – 19	94.7	94.3	95.0	94.4	94.0	94.8	95.5	95.5	95.6
20 – 24	94.4	94.1	94.7	93.9	93.6	94.2	95.7	95.2	96.1
25 – 29	94.7	94.6	94.8	94.2	94.2	94.3	95.8	95.6	96.0
30 – 34	94.3	94.4	94.2	93.8	93.9	93.6	95.7	95.6	95.7
35 – 39	93.8	93.9	93.7	93.2	93.4	93.1	95.3	95.3	95.2
40 – 44	93.8	94.1	93.6	93.4	93.8	93.0	95.2	95.1	95.3
45 – 49	94.0	94.3	93.8	93.7	93.9	93.4	95.2	95.4	95.0
50 – 54	93.8	94.3	93.4	93.5	94.0	93.1	94.8	95.1	94.5
55 – 59	93.8	94.9	92.9	93.5	94.5	92.7	95.2	96.3	94.2
60 – 64	91.8	94.4	89.5	91.4	94.1	89.1	93.6	95.7	91.8
65 – 69	90.4	93.5	87.8	90.0	93.2	87.4	92.5	95.0	90.3
70 – 74	87.1	92.6	82.6	86.8	92.3	82.1	89.2	94.3	85.2

Age Group	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
75–79	83.3	90.4	77.8	82.9	90.1	77.5	85.4	92.7	80.1
80+	67.9	79.8	60.3	67.6	79.7	59.9	69.7	80.7	63.0

**Figure 8.7: Numeracy Rates for Persons Aged Five Years and Above by Sex and Place of Residence; Kilimanjaro Region, 2022 PHC**



The results reveal that in Kilimanjaro Region numeracy rate for the youth aged 15–35 years is 94.5 percent. The rate is slightly higher (94.7%) for females than males (94.3%) whereas among teenagers, the rate is higher (95.1%) for females than males (94.4%). Numeracy rate for working age population (15-64 years) is higher (95.4%) in urban than in rural areas (93.7%). A similar pattern is observed for other selected age groups.

Results reveal that in the Region, numeracy rate for persons in the secondary school age (14-17 years) is 95.1 percent and 88.7 percent for persons in the primary school age (7–13 years). The rate of numeracy for secondary school age is higher (95.5%) for females than for males (94.7%). A similar pattern is observed in rural and urban areas for persons in both primary and secondary school age (Table 8.10).

**Table 8.10: Numeracy Rates for Selected Age Groups by Place of Residence and Sex; Kilimanjaro Region, 2022 PHC**

Selected Age Group	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Youth Population</b>									
Teenagers (13–19 years)	94.7	94.4	95.1	94.5	94.1	94.9	95.6	95.5	95.7
Youth Population (15–24 years)	94.6	94.2	94.9	94.2	93.8	94.5	95.6	95.4	95.8
Youth Population (15–35 years)	94.5	94.3	94.7	94.0	93.9	94.2	95.6	95.5	95.8
<b>School Age Population</b>									
Primary School (7–13 years)	88.7	87.7	89.7	88.3	87.3	89.3	90.3	89.4	91.2
Secondary School (14-17 years)	95.1	94.7	95.5	94.9	94.4	95.3	96.0	95.8	96.1
<b>Other Selected Groups</b>									
Working Age Population (15-64 years)	94.1	94.3	93.9	93.7	93.9	93.4	95.4	95.5	95.4
Elderly population (60+ years)	85.0	90.9	80.4	84.5	90.6	79.7	88.0	93.0	84.0
Population Aged 14+ years and above	87.9	88.1	87.8	87.2	87.5	86.9	90.3	90.1	90.5
Adult Population Aged 18+ years and above	92.8	93.8	91.9	92.2	93.4	91.2	94.7	95.2	94.3

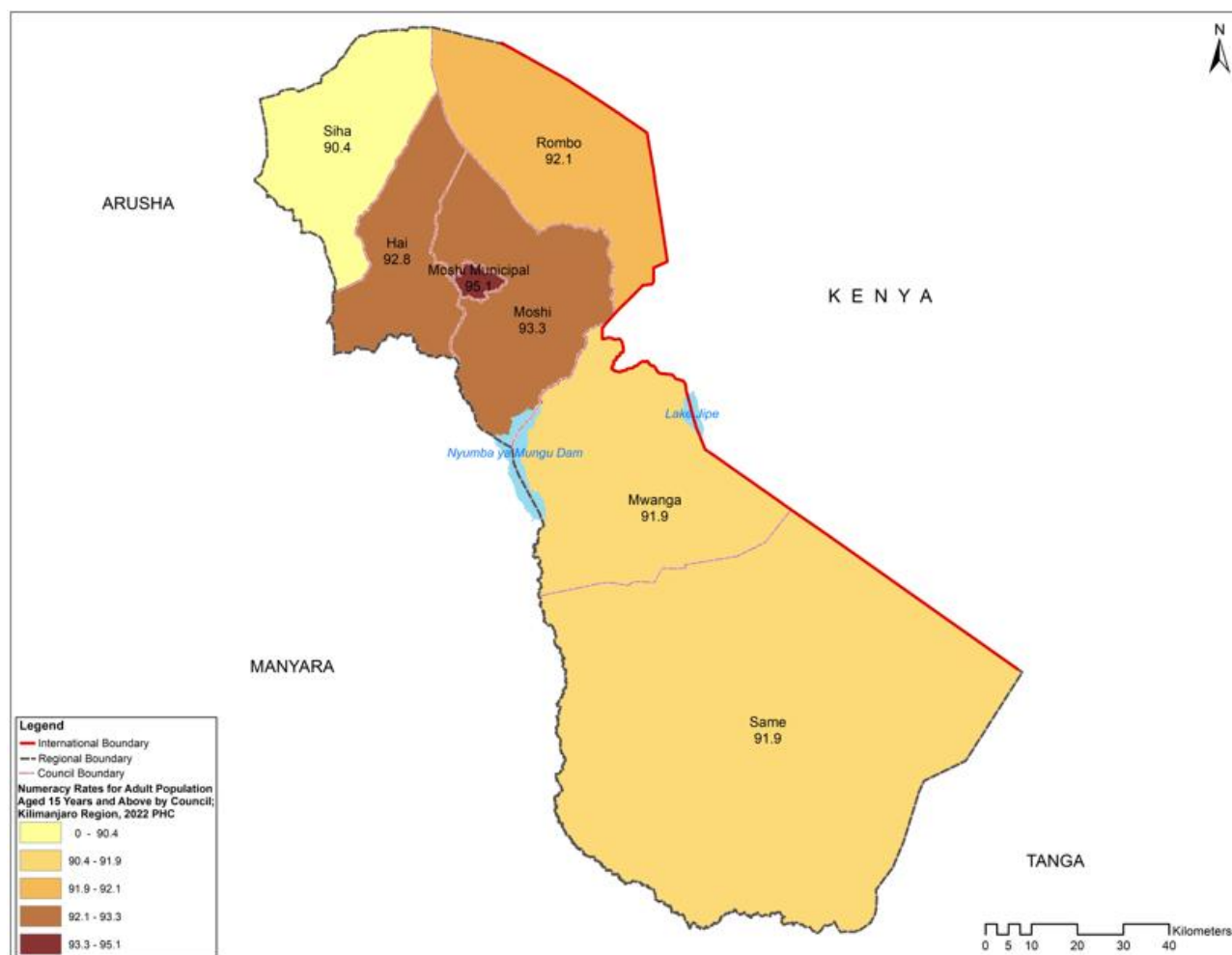
### 8.3.1 Adult Numeracy Rates

Numeracy rate for persons aged 15 years and above in Kilimanjaro Region is 92.7percent and is higher (94.7%) in urban areas than in rural areas (92.1%). The numeracy rate is higher for males than females across all councils. The rates vary across councils ranging from 90.4 percent in Siha District to 95.1 percent in Moshi Municipal (Table 8.11 and Map 8.2).

**Table 8. 11: Number and Numeracy Rates for Adult Population Aged 15 Years and Above by Sex, Place of Residence and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence	Population			Numerate			Numeracy Rates		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	<b>1,183,637</b>	<b>560,994</b>	<b>622,643</b>	<b>1,097,757</b>	<b>526,098</b>	<b>571,659</b>	<b>92.7</b>	<b>93.8</b>	<b>91.8</b>
Rural	901,767	429,831	471,936	830,794	401,230	429,564	92.1	93.3	91.0
Urban	281,870	131,163	150,707	266,963	124,868	142,095	94.7	95.2	94.3
<b>Council</b>									
Rombo District	175,259	82,702	92,557	161,392	77,332	84,060	92.1	93.5	90.8
Mwanga District	93,658	44,393	49,265	86,077	41,298	44,779	91.9	93.0	90.9
Same District	184,181	87,711	96,470	169,285	81,614	87,671	91.9	93.0	90.9
Moshi Municipal	141,910	66,908	75,002	134,994	63,854	71,140	95.1	95.4	94.9
Moshi District	349,778	166,843	182,935	326,277	157,250	169,027	93.3	94.3	92.4
Hai District	155,532	73,398	82,134	144,380	68,787	75,593	92.8	93.7	92.0
Siha District	83,319	39,039	44,280	75,352	35,963	39,389	90.4	92.1	89.0

**Map 8.2: Numeracy Rates for Adult Population Aged 15 Years and Above by Council; Kilimanjaro Region, 2022 PHC**



## 8.4 Education

This section provides information on school attendance status, education attainment, net and gross school enrolment in Kilimanjaro Region.

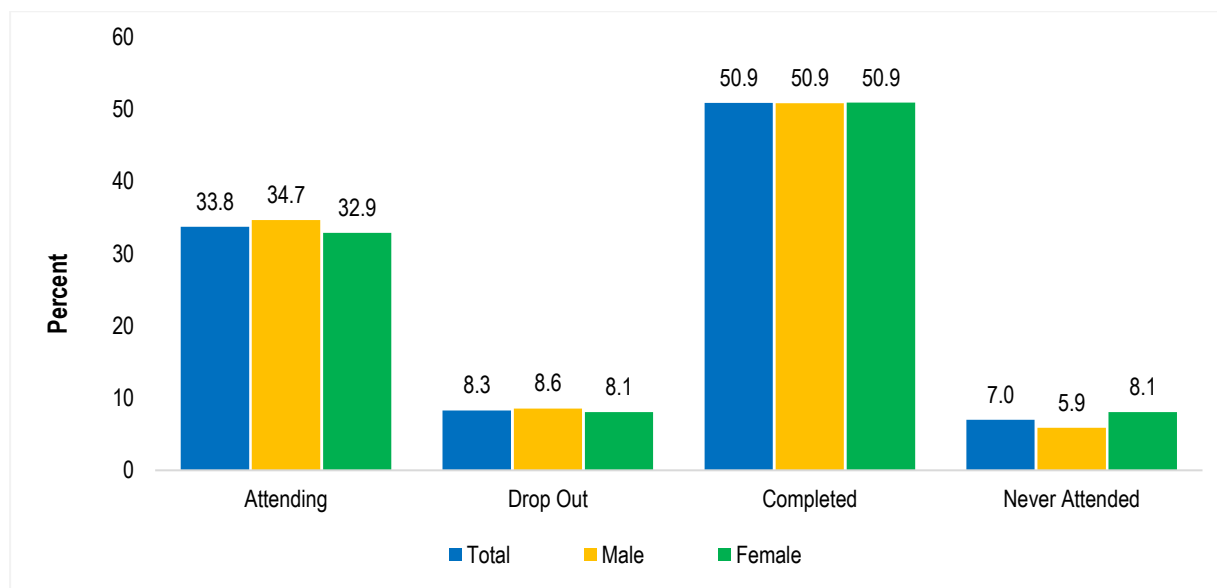
### 8.4.1 School Attendance Status

School attendance refers to attendance at any regular authorized or licensed educational institution or program for organized learning at any level of education at the time of the census. Informal training in particular skills, which is not part of the recognised educational structure is not considered under school attendance.

Results show that, out of 1,683,481 persons aged four years and above in Kilimanjaro Region, 50.9 percent have completed school at different levels of education system, 33.8 percent are attending school, 8.3 percent have dropped out and 7.0 percent have never

been to school. Percentage of females who have never been to school is higher (8.1%) compared with that of males (5.9%). Furthermore, results show that there is an insignificant difference in the percentage of dropouts among males (8.6%) and females (8.1%) (Figure 8.8).

**Figure 8.8: Percentage Distribution of Population Aged Four Years and Above by Sex and School Attendance Status; Kilimanjaro Region, 2022 PHC**



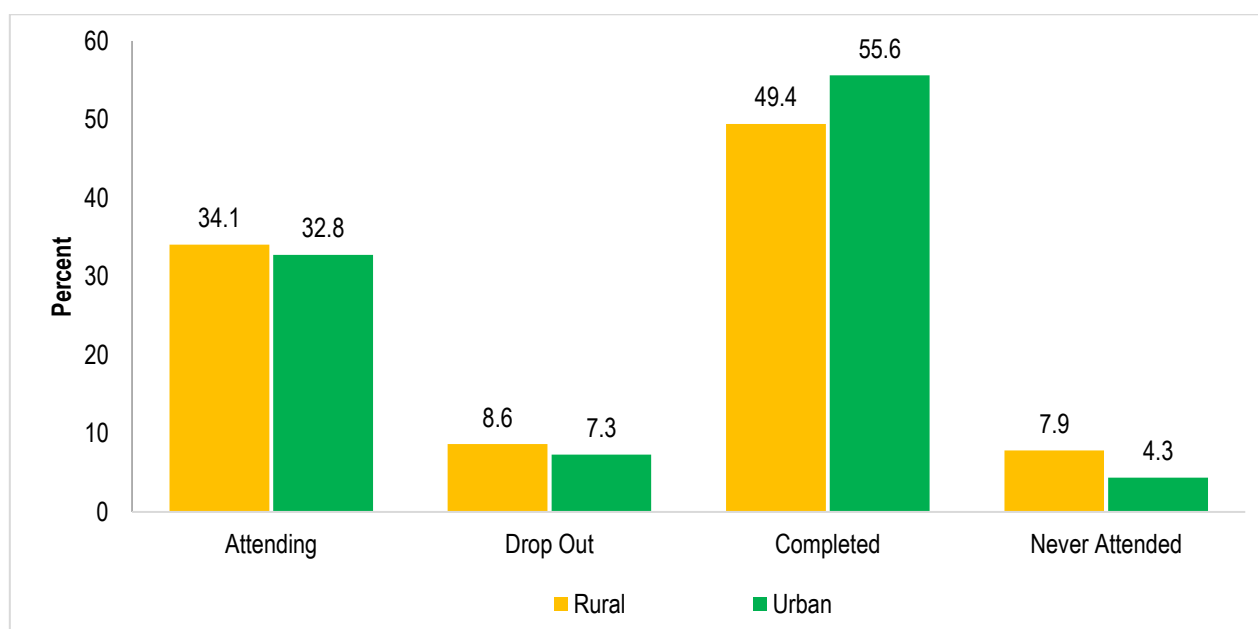
More than 96 percent (96.4%) of the primary school age population (7-13) are attending school and 2.5 percent had never been to school. Among secondary school population aged 14-17 years, 79.7 percent are attending, 2.2 percent had never been to school, while 13.5 percent have completed school. The rate of dropouts is higher among secondary school age population (4.6%) than among the primary school age population (0.5%) (Table 8.12).

**Table 8.12: Percentage Distribution of Population Aged Four Years and Above by Sex, School Attendance Status and Age; Kilimanjaro Region, 2022 PHC**

Age	Both Sexes					Male					Female				
	Total	Attending	Drop Out	Completed	Never Attended	Total	Attending	Drop Out	Completed	Never Attended	Total	Attending	Drop Out	Completed	Never Attended
<b>Total</b>	<b>1,683,481</b>	<b>33.8</b>	<b>8.3</b>	<b>50.9</b>	<b>7.0</b>	<b>817,427</b>	<b>34.7</b>	<b>8.6</b>	<b>50.9</b>	<b>5.9</b>	<b>866,054</b>	<b>32.9</b>	<b>8.1</b>	<b>50.9</b>	<b>8.1</b>
4	46,327	49.0	0.0	0.1	50.9	23,504	47.3	0.0	0.1	52.6	22,823	50.7	0.0	0.1	49.2
5	44,400	79.6	0.1	0.1	20.2	22,654	79.0	0.1	0.2	20.7	21,746	80.1	0.0	0.1	19.8
6	43,625	91.7	0.1	0.2	8.1	22,024	91.2	0.1	0.2	8.6	21,601	92.1	0.1	0.2	7.6
<b>4-6</b>	<b>134,352</b>	<b>72.9</b>	<b>0.1</b>	<b>0.1</b>	<b>26.9</b>	<b>68,182</b>	<b>72.0</b>	<b>0.1</b>	<b>0.1</b>	<b>27.8</b>	<b>66,170</b>	<b>73.9</b>	<b>0.1</b>	<b>0.1</b>	<b>26.0</b>
7	46,001	95.3	0.1	0.2	4.4	23,408	95.1	0.1	0.2	4.6	22,593	95.5	0.1	0.2	4.2
8	43,359	96.6	0.2	0.2	3.0	21,739	96.2	0.3	0.2	3.3	21,620	96.9	0.1	0.2	2.8
9	43,259	97.2	0.2	0.3	2.3	21,225	96.9	0.3	0.3	2.5	22,034	97.5	0.2	0.3	2.0
10	41,839	97.0	0.3	0.4	2.3	21,557	96.5	0.4	0.4	2.6	20,282	97.4	0.3	0.4	2.0
11	38,257	97.5	0.5	0.5	1.6	19,372	97.1	0.7	0.6	1.7	18,885	97.9	0.3	0.3	1.5
12	47,996	96.4	0.8	1.0	1.9	24,337	95.8	1.1	1.0	2.1	23,659	97.0	0.5	0.9	1.7
13	39,121	94.8	1.2	2.1	1.8	19,587	94.4	1.5	2.1	2.0	19,534	95.3	1.0	2.0	1.7
<b>7-13</b>	<b>299,832</b>	<b>96.4</b>	<b>0.5</b>	<b>0.6</b>	<b>2.5</b>	<b>151,225</b>	<b>96.0</b>	<b>0.6</b>	<b>0.7</b>	<b>2.7</b>	<b>148,607</b>	<b>96.8</b>	<b>0.3</b>	<b>0.6</b>	<b>2.3</b>
14	41,661	90.4	1.9	5.8	1.9	20,796	89.2	2.3	6.4	2.1	20,865	91.5	1.6	5.2	1.8
15	35,242	84.0	3.3	10.2	2.5	17,548	82.0	4.0	11.3	2.6	17,694	86.0	2.5	9.1	2.3
16	37,547	78.0	5.3	14.5	2.2	18,058	75.5	6.3	15.9	2.3	19,489	80.3	4.4	13.3	2.0
17	39,644	66.4	7.9	23.4	2.2	20,147	64.2	9.2	24.5	2.2	19,497	68.7	6.6	22.4	2.3
<b>14 - 17</b>	<b>154,094</b>	<b>79.7</b>	<b>4.6</b>	<b>13.5</b>	<b>2.2</b>	<b>76,549</b>	<b>77.7</b>	<b>5.5</b>	<b>14.5</b>	<b>2.3</b>	<b>77,545</b>	<b>81.7</b>	<b>3.8</b>	<b>12.4</b>	<b>2.1</b>
18	36,428	44.2	10.9	41.7	3.2	18,660	43.8	12.4	40.8	3.0	17,768	44.7	9.5	42.5	3.3
19	30,549	31.6	12.3	53.4	2.7	15,000	31.3	13.9	52.2	2.6	15,549	31.9	10.7	54.6	2.8
<b>18 - 19</b>	<b>66,977</b>	<b>38.5</b>	<b>11.6</b>	<b>47.0</b>	<b>2.9</b>	<b>33,660</b>	<b>38.2</b>	<b>13.0</b>	<b>45.9</b>	<b>2.8</b>	<b>33,317</b>	<b>38.7</b>	<b>10.0</b>	<b>48.2</b>	<b>3.1</b>
20	35,877	21.8	13.4	61.2	3.6	17,303	21.9	15.2	59.5	3.4	18,574	21.7	11.6	62.8	3.9
21	25,964	20.2	12.4	64.7	2.7	12,458	20.1	14.5	62.5	2.9	13,506	20.2	10.5	66.7	2.5
22	39,213	13.7	12.9	70.7	2.8	19,093	14.1	14.5	68.6	2.8	20,120	13.2	11.3	72.6	2.8
23	31,123	10.0	12.0	75.7	2.3	14,956	10.9	13.4	73.2	2.5	16,167	9.2	10.7	78.0	2.1
24	28,333	7.2	11.7	78.6	2.5	13,646	8.4	13.2	76.1	2.3	14,687	6.0	10.4	81.0	2.6
<b>20 - 24</b>	<b>160,510</b>	<b>14.7</b>	<b>12.5</b>	<b>70.0</b>	<b>2.8</b>	<b>77,456</b>	<b>15.2</b>	<b>14.2</b>	<b>67.8</b>	<b>2.8</b>	<b>83,054</b>	<b>14.2</b>	<b>11.0</b>	<b>72.0</b>	<b>2.8</b>
<b>25+</b>	<b>867,716</b>	<b>1.1</b>	<b>11.9</b>	<b>79.6</b>	<b>7.5</b>	<b>410,355</b>	<b>1.2</b>	<b>12.1</b>	<b>81.8</b>	<b>4.9</b>	<b>457,361</b>	<b>0.9</b>	<b>11.8</b>	<b>77.6</b>	<b>9.7</b>

In Kilimanjaro Region, the percentage of persons aged four years and above who have never attended school in rural areas is almost twice (7.9%) that of urban areas (4.3%). Likewise, dropouts are more common in rural (8.6%) than in urban areas (7.3%). However, the proportion of those who completed school is higher (55.6%) in urban areas than in rural areas (49.4%) (Figure 8.9, Tables 8.13 and 8.14).

**Figure 8.9: Percentage Distribution of Population Aged Four Years and Above by School Attendance Status and Place of Residence; Kilimanjaro Region, 2022 PHC**



**Table 8.13: Percentage Distribution of Population Aged Four Years and Above by Sex, School Attendance Status and Age; Kilimanjaro Rural, 2022 PHC**

Age	Both Sexes					Male					Female				
	Total	Attending	Drop Out	Completed	Never Attended	Total	Attending	Drop Out	Completed	Never Attended	Total	Attending	Drop Out	Completed	Never Attended
<b>Total</b>	<b>1,283,729</b>	<b>34.1</b>	<b>8.6</b>	<b>49.4</b>	<b>7.9</b>	<b>625,274</b>	<b>35.0</b>	<b>8.9</b>	<b>49.6</b>	<b>6.5</b>	<b>658,455</b>	<b>33.1</b>	<b>8.4</b>	<b>49.3</b>	<b>9.1</b>
4	35,772	46.3	0.0	0.1	53.6	18,156	44.7	0.0	0.1	55.2	17,616	48.0	0.1	0.1	51.9
5	34,574	78.1	0.1	0.1	21.7	17,686	77.5	0.1	0.1	22.2	16,888	78.7	0.0	0.1	21.2
6	34,021	90.9	0.1	0.1	8.8	17,253	90.4	0.1	0.2	9.3	16,768	91.5	0.1	0.1	8.3
<b>4-6</b>	<b>104,367</b>	<b>71.4</b>	<b>0.1</b>	<b>0.1</b>	<b>28.4</b>	<b>53,095</b>	<b>70.5</b>	<b>0.1</b>	<b>0.1</b>	<b>29.3</b>	<b>51,272</b>	<b>72.3</b>	<b>0.1</b>	<b>0.1</b>	<b>27.5</b>
7	36,093	94.9	0.1	0.2	4.9	18,416	94.7	0.1	0.2	4.9	17,677	95.0	0.1	0.2	4.8
8	33,967	96.3	0.2	0.2	3.3	17,046	95.9	0.3	0.2	3.6	16,921	96.8	0.1	0.2	3.0
9	33,957	97.1	0.2	0.3	2.4	16,734	96.7	0.3	0.3	2.7	17,223	97.5	0.2	0.2	2.1
10	32,965	96.6	0.4	0.4	2.7	17,071	96.1	0.5	0.4	3.1	15,894	97.2	0.3	0.3	2.3
11	30,245	97.3	0.5	0.4	1.7	15,418	96.9	0.7	0.5	1.9	14,827	97.7	0.3	0.4	1.6
12	38,275	96.3	0.7	0.9	2.1	19,492	95.7	1.1	1.0	2.3	18,783	96.9	0.4	0.8	1.9
13	31,065	94.8	1.2	2.0	2.0	15,652	94.0	1.5	2.2	2.2	15,413	95.5	0.9	1.8	1.8
<b>7-13</b>	<b>236,567</b>	<b>96.2</b>	<b>0.5</b>	<b>0.6</b>	<b>2.8</b>	<b>119,829</b>	<b>95.7</b>	<b>0.6</b>	<b>0.7</b>	<b>3.0</b>	<b>116,738</b>	<b>96.6</b>	<b>0.3</b>	<b>0.5</b>	<b>2.5</b>
14	32,908	90.4	1.9	5.6	2.0	16,702	88.7	2.4	6.7	2.2	16,206	92.2	1.4	4.5	1.9
15	27,454	83.8	3.3	10.1	2.8	13,903	81.0	4.2	11.8	3.0	13,551	86.7	2.5	8.3	2.5
16	29,015	78.2	5.3	14.1	2.4	14,209	74.4	6.6	16.4	2.6	14,806	81.8	4.1	11.9	2.2
17	30,007	66.3	8.1	23.0	2.5	15,604	63.2	9.7	24.7	2.4	14,403	69.8	6.5	21.2	2.5
<b>14 - 17</b>	<b>119,384</b>	<b>79.9</b>	<b>4.6</b>	<b>13.1</b>	<b>2.4</b>	<b>60,418</b>	<b>77.0</b>	<b>5.7</b>	<b>14.8</b>	<b>2.5</b>	<b>58,966</b>	<b>82.9</b>	<b>3.6</b>	<b>11.3</b>	<b>2.3</b>
18	26,997	43.7	11.1	41.5	3.7	14,192	42.9	12.6	41.2	3.4	12,805	44.7	9.4	41.9	3.9
19	21,987	30.9	12.8	53.1	3.2	11,053	30.6	14.4	51.9	3.0	10,934	31.1	11.2	54.3	3.4
<b>18 - 19</b>	<b>48,984</b>	<b>38.0</b>	<b>11.9</b>	<b>46.7</b>	<b>3.5</b>	<b>25,245</b>	<b>37.5</b>	<b>13.4</b>	<b>45.9</b>	<b>3.2</b>	<b>23,739</b>	<b>38.5</b>	<b>10.2</b>	<b>47.6</b>	<b>3.7</b>
20	25,619	20.5	14.4	60.8	4.4	12,591	20.6	16.2	59.3	3.9	13,028	20.4	12.5	62.2	4.8
21	18,103	18.9	13.1	64.7	3.3	8,749	19.3	15.2	62.0	3.4	9,354	18.5	11.1	67.1	3.3
22	27,041	12.8	13.6	70.2	3.3	13,196	13.4	15.6	67.7	3.3	13,845	12.3	11.7	72.6	3.4
23	20,738	9.1	12.9	75.2	2.9	9,820	10.3	14.9	71.6	3.1	10,918	8.0	11.0	78.3	2.7
24	18,943	6.6	12.6	78.0	2.9	9,066	7.6	14.4	75.5	2.5	9,877	5.6	10.9	80.2	3.2
<b>20 - 24</b>	<b>110,444</b>	<b>13.8</b>	<b>13.4</b>	<b>69.4</b>	<b>3.4</b>	<b>53,422</b>	<b>14.5</b>	<b>15.4</b>	<b>66.8</b>	<b>3.3</b>	<b>57,022</b>	<b>13.2</b>	<b>11.5</b>	<b>71.8</b>	<b>3.5</b>

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Age	Both Sexes					Male					Female				
	Total	Attending	Drop Out	Completed	Never Attended	Total	Attending	Drop Out	Completed	Never Attended	Total	Attending	Drop Out	Completed	Never Attended
25+	663,983	0.9	12.6	78.0	8.5	313,265	1.0	12.7	80.7	5.5	350,718	0.8	12.4	75.6	11.1

**Table 8.14: Percentage Distribution of Population Aged Four Years and Above by Sex, School Attendance Status and Age; Kilimanjaro Urban, 2022 PHC**

Age	Both Sexes					Male					Female				
	Total	Attending	Drop Out	Completed	Never Attended	Total	Attending	Drop Out	Completed	Never Attended	Total	Attending	Drop Out	Completed	Never Attended
<b>Total</b>	<b>399,752</b>	<b>32.8</b>	<b>7.3</b>	<b>55.6</b>	<b>4.3</b>	<b>192,153</b>	<b>33.4</b>	<b>7.5</b>	<b>55.1</b>	<b>4.0</b>	<b>207,599</b>	<b>32.1</b>	<b>7.1</b>	<b>56.1</b>	<b>4.7</b>
4	10,555	58.0	0.0	0.1	41.9	5,348	56.1	0.0	0.1	43.7	5,207	59.8	0.0	0.1	40.1
5	9,826	84.7	0.1	0.2	15.0	4,968	84.4	0.1	0.3	15.2	4,858	85.1	0.1	0.1	14.8
6	9,604	94.1	0.1	0.3	5.5	4,771	93.8	0.0	0.3	6.0	4,833	94.5	0.1	0.3	5.1
<b>4-6</b>	<b>29,985</b>	<b>78.3</b>	<b>0.1</b>	<b>0.2</b>	<b>21.4</b>	<b>15,087</b>	<b>77.3</b>	<b>0.1</b>	<b>0.2</b>	<b>22.4</b>	<b>14,898</b>	<b>79.3</b>	<b>0.1</b>	<b>0.2</b>	<b>20.5</b>
7	9,908	96.9	0.2	0.3	2.7	4,992	96.3	0.1	0.3	3.2	4,916	97.5	0.2	0.2	2.1
8	9,392	97.5	0.2	0.3	2.0	4,693	97.4	0.2	0.3	2.1	4,699	97.6	0.1	0.4	1.9
9	9,302	97.8	0.2	0.4	1.6	4,491	97.9	0.1	0.4	1.5	4,811	97.8	0.2	0.3	1.7
10	8,874	98.3	0.3	0.5	1.0	4,486	98.3	0.3	0.4	1.0	4,388	98.2	0.3	0.5	1.0
11	8,012	98.1	0.4	0.5	0.9	3,954	97.8	0.5	0.8	0.9	4,058	98.5	0.3	0.3	0.9
12	9,721	96.9	0.9	1.2	1.0	4,845	96.5	1.0	1.2	1.2	4,876	97.4	0.7	1.3	0.7
13	8,056	95.2	1.3	2.3	1.2	3,935	95.9	1.3	1.7	1.1	4,121	94.5	1.4	2.9	1.2
<b>7-13</b>	<b>63,265</b>	<b>97.3</b>	<b>0.5</b>	<b>0.8</b>	<b>1.5</b>	<b>31,396</b>	<b>97.1</b>	<b>0.5</b>	<b>0.7</b>	<b>1.6</b>	<b>31,869</b>	<b>97.4</b>	<b>0.4</b>	<b>0.8</b>	<b>1.4</b>
14	8,753	90.1	1.9	6.5	1.5	4,094	91.5	1.6	5.3	1.6	4,659	88.8	2.3	7.5	1.4
15	7,788	84.8	3.0	10.8	1.3	3,645	85.7	3.6	9.5	1.2	4,143	84.0	2.5	12.0	1.5
16	8,532	77.2	5.3	16.1	1.4	3,849	79.3	5.2	14.2	1.3	4,683	75.4	5.4	17.7	1.6
17	9,637	66.6	7.3	24.7	1.4	4,543	67.6	7.6	23.5	1.2	5,094	65.7	7.1	25.7	1.6
<b>14 - 17</b>	<b>34,710</b>	<b>79.2</b>	<b>4.5</b>	<b>14.9</b>	<b>1.4</b>	<b>16,131</b>	<b>80.6</b>	<b>4.6</b>	<b>13.5</b>	<b>1.3</b>	<b>18,579</b>	<b>78.0</b>	<b>4.4</b>	<b>16.1</b>	<b>1.5</b>
18	9,431	45.7	10.6	42.0	1.7	4,468	46.9	11.6	39.7	1.9	4,963	44.5	9.7	44.1	1.7
19	8,562	33.5	10.9	54.2	1.4	3,947	33.3	12.5	52.9	1.3	4,615	33.7	9.5	55.4	1.4
<b>18 - 19</b>	<b>17,993</b>	<b>39.9</b>	<b>10.7</b>	<b>47.8</b>	<b>1.6</b>	<b>8,415</b>	<b>40.5</b>	<b>12.0</b>	<b>45.9</b>	<b>1.6</b>	<b>9,578</b>	<b>39.3</b>	<b>9.6</b>	<b>49.6</b>	<b>1.5</b>
20	10,258	24.9	10.9	62.4	1.8	4,712	25.2	12.5	60.2	2.0	5,546	24.6	9.5	64.2	1.6
21	7,861	23.1	10.7	64.9	1.3	3,709	21.9	12.7	63.7	1.8	4,152	24.1	9.0	65.9	0.9

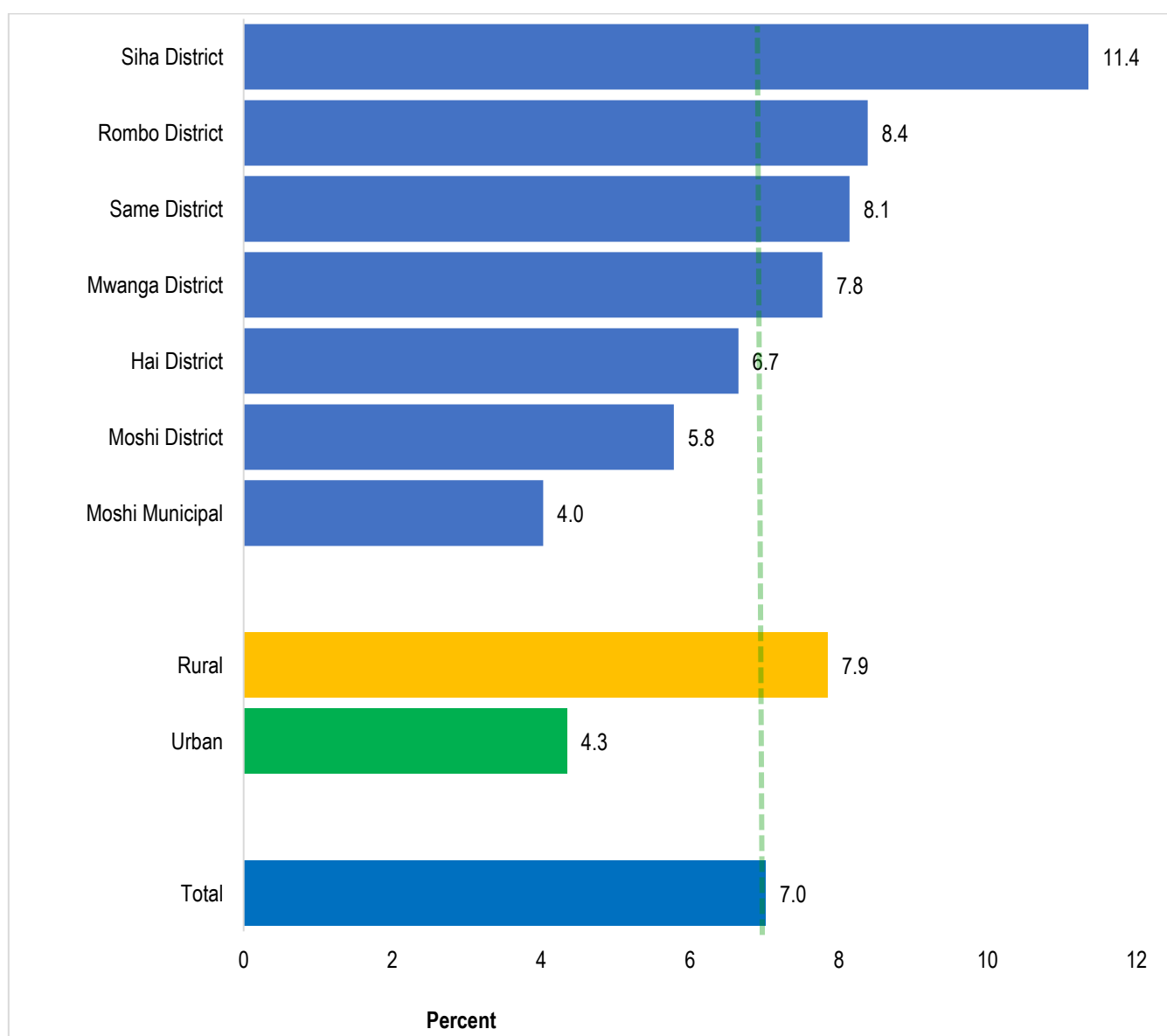
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Age	Both Sexes					Male					Female				
	Total	Attending	Drop Out	Completed	Never Attended	Total	Attending	Drop Out	Completed	Never Attended	Total	Attending	Drop Out	Completed	Never Attended
22	12,172	15.5	11.2	71.7	1.5	5,897	15.7	11.9	70.7	1.7	6,275	15.3	10.6	72.7	1.4
23	10,385	11.8	10.3	76.8	1.2	5,136	11.9	10.5	76.3	1.3	5,249	11.6	10.1	77.3	1.0
24	9,390	8.4	10.0	79.9	1.6	4,580	10.1	10.9	77.3	1.8	4,810	6.8	9.2	82.5	1.5
<b>20 - 24</b>	<b>50,066</b>	<b>16.5</b>	<b>10.7</b>	<b>71.3</b>	<b>1.5</b>	<b>24,034</b>	<b>16.6</b>	<b>11.6</b>	<b>70.0</b>	<b>1.7</b>	<b>26,032</b>	<b>16.4</b>	<b>9.8</b>	<b>72.5</b>	<b>1.3</b>
<b>25+</b>	<b>203,733</b>	<b>1.5</b>	<b>9.8</b>	<b>84.6</b>	<b>4.2</b>	<b>97,090</b>	<b>1.7</b>	<b>9.9</b>	<b>85.3</b>	<b>3.1</b>	<b>106,643</b>	<b>1.2</b>	<b>9.7</b>	<b>83.9</b>	<b>5.2</b>

Across councils, Siha District has the highest percentage of persons who had never attended school (11.4%) and Moshi Municipal has the lowest (4.0%). Regarding sex differentials for never attended school category, the percentage is higher for females than males in both rural and urban areas as well as in all councils (Figure 8.10 and Table 8.15).

Hai District is the Council with the highest (9.0%) dropout rate while Moshi Municipal has the lowest rate (7.1%). Results further show that the percentage of dropouts is higher among males than females in all councils (Tables 8.15, 8.16 and 8.17).

**Figure 8.10: Percentage Distribution of Population Aged Four Years and Above Who Never Attended School by Council; Kilimanjaro Region, 2022 PHC**



**Table 8.15: Percentage Distribution of Population Aged Four Years and Above by Sex, School Attendance Status and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence	Both Sexes					Male					Female				
	Total	Attending	Drop Out	Completed	Never Attended	Total	Attending	Drop Out	Completed	Never Attended	Total	Attending	Drop Out	Completed	Never Attended
<b>Total</b>	<b>1,683,481</b>	<b>33.8</b>	<b>8.3</b>	<b>50.9</b>	<b>7.0</b>	<b>817,427</b>	<b>34.7</b>	<b>8.6</b>	<b>50.9</b>	<b>5.9</b>	<b>866,054</b>	<b>32.9</b>	<b>8.1</b>	<b>50.9</b>	<b>8.1</b>
Rural	1,283,729	34.1	8.6	49.4	7.9	625,274	35.0	8.9	49.6	6.5	658,455	33.1	8.4	49.3	9.1
Urban	399,752	32.8	7.3	55.6	4.3	192,153	33.4	7.5	55.1	4.0	207,599	32.1	7.1	56.1	4.7
<b>Council</b>															
Rombo District	249,859	34.6	8.5	48.6	8.4	120,274	35.7	9.2	49.2	6.0	129,585	33.5	7.9	48.0	10.7
Mwanga District	134,211	35.0	7.7	49.6	7.8	64,843	36.5	7.7	48.9	6.8	69,368	33.6	7.6	50.2	8.7
Same District	268,933	34.2	8.2	49.4	8.1	131,547	35.2	8.3	49.2	7.3	137,386	33.3	8.2	49.6	8.9
Moshi Municipal	201,434	31.5	7.1	57.3	4.0	98,213	31.7	7.4	57.3	3.7	103,221	31.4	6.9	57.4	4.4
Moshi District	486,936	33.1	8.6	52.5	5.8	237,362	33.9	8.7	52.6	4.8	249,574	32.3	8.6	52.4	6.7
Hai District	218,156	33.6	9.0	50.7	6.7	105,563	34.5	9.6	50.2	5.8	112,593	32.7	8.6	51.3	7.5
Siha District	123,952	36.3	8.3	44.1	11.4	59,625	37.5	8.7	43.9	9.8	64,327	35.2	7.9	44.1	12.8

**Table 8.16: Percentage Distribution of Population Aged Four Years and Above by Sex, School Attendance Status and Council; Kilimanjaro Rural, 2022 PHC**

Council	Both Sexes					Male					Female				
	Total	Attending	Drop Out	Completed	Never Attended	Total	Attending	Drop Out	Completed	Never Attended	Total	Attending	Drop Out	Completed	Never Attended
<b>Total</b>	<b>1,283,729</b>	<b>34.1</b>	<b>8.6</b>	<b>49.4</b>	<b>7.9</b>	<b>625,274</b>	<b>35.0</b>	<b>8.9</b>	<b>49.6</b>	<b>6.5</b>	<b>658,455</b>	<b>33.1</b>	<b>8.4</b>	<b>49.3</b>	<b>9.1</b>
Rombo District	233,318	34.7	8.6	48.0	8.7	112,284	35.9	9.3	48.7	6.1	121,034	33.7	8.0	47.3	11.1
Mwanga District	113,678	34.6	7.8	49.2	8.4	55,154	36.2	7.9	48.6	7.3	58,524	33.2	7.7	49.8	9.3
Same District	205,170	34	8	48	9	101,314	35	9	48	8	103,856	33	8	48	10
Moshi Municipal	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Moshi District	453,911	33.2	8.7	52.2	5.9	221,568	34.0	8.7	52.4	4.9	232,343	32.4	8.7	52.0	6.9
Hai District	173,490	34	9	50	7	84,710	34	10	50	6	88,780	32.8	8.9	50.0	8.3
Siha District	104,162	36.5	8.3	42.9	12.4	50,244	37.6	8.8	42.9	10.7	53,918	35.4	7.8	42.8	13.9

**Table 8.17: Percentage Distribution of Population Aged Four Years and Above by Sex, School Attendance Status and Council; Kilimanjaro Urban, 2022 PHC**

Council	Both Sexes					Male					Female				
	Total	Attending	Drop Out	Completed	Never Attended	Total	Attending	Drop Out	Completed	Never Attended	Total	Attending	Drop Out	Completed	Never Attended
<b>Total</b>	<b>399,752</b>	<b>32.8</b>	<b>7.3</b>	<b>55.6</b>	<b>4.3</b>	<b>192,153</b>	<b>33.4</b>	<b>7.5</b>	<b>55.1</b>	<b>4.0</b>	<b>207,599</b>	<b>32.1</b>	<b>7.1</b>	<b>56.1</b>	<b>4.7</b>
Rombo District	16,541	31.9	6.7	57.0	4.4	7,990	32.0	7.1	56.8	4.1	8,551	31.8	6.3	57.2	4.7
Mwanga District	20,533	37.0	6.9	51.6	4.5	9,689	38.5	6.9	50.7	4.0	10,844	35.6	7.0	52.5	5.0
Same District	63,763	34.3	7.7	53.3	4.8	30,233	35.9	7.5	52.5	4.2	33,530	32.9	7.8	54.0	5.3
Moshi Municipal	201,434	31.5	7.1	57.3	4.0	98,213	31.7	7.4	57.3	3.7	103,221	31.4	6.9	57.4	4.4
Moshi District	33,025	31.9	7.3	56.4	4.3	15,794	32.6	7.7	55.4	4.3	17,231	31.4	6.9	57.3	4.4
Hai District	44,666	34	8	54	4	20,853	36	8	53	4	23,813	32	7	56	5
Siha District	19,790	35.5	8.1	50.2	6.1	9,381	37.0	8.1	49.4	5.4	10,409	34.2	8.2	51.0	6.7

Among persons aged four years and above who joined primary school education, 57.4 percent completed, 33.2 percent are still attending and 9.3 percent dropped out. Those who joined ordinary level secondary school education, 52.7 percent completed, 34.5 percent are still attending and 12.8 percent dropped out. Those who were admitted for university education, 72.5 percent completed, 26.6 percent are still attending and 0.8 percent dropped out. Drop out is minimal at the university level compared with other levels of education. The percentages of persons who completed primary education, secondary education (ordinary and advanced level) and university level are higher in urban areas compared with rural areas (Tables 8.18, 8.19 and 8.20).

**Table 8.18: Percentage Distribution of Population Aged Four Years and Above by School Attendance Status and Level of Education; Kilimanjaro Region, 2022 PHC**

Level of Education	Both Sexes				Male				Female			
	Total	Attending	Drop Out	Completed	Total	Attending	Drop Out	Completed	Total	Attending	Drop Out	Completed
Pre-Primary	73,194	97.8	1.3	0.9	37,753	97.9	1.1	1.0	35,441	97.8	1.5	0.8
Primary School (1 - 8)	985,660	33.2	9.3	57.4	485,788	34.2	9.4	56.4	499,872	32.3	9.3	58.4
Training After Primary	6,163	0.0	2.5	97.5	3,684	0.0	2.5	97.5	2,479	0.0	2.6	97.4
Pre-Form One	281	0.0	26.7	73.3	157	0.0	28.7	71.3	124	0.0	24.2	75.8
Secondary School O - level (1 - 4)	351,669	34.5	12.8	52.7	165,829	34.4	13.8	51.8	185,840	34.5	11.9	53.5
Secondary School A - level (5 - 6)	26,393	58.2	2.3	39.5	13,613	53.0	2.6	44.4	12,780	63.8	2.0	34.2
Training After Secondary Education	14,641	0.0	1.8	98.2	7,032	0.0	1.7	98.3	7,609	0.0	1.9	98.1
University and Other Related	101,758	26.6	0.8	72.5	52,600	25.4	0.8	73.8	49,158	28.0	0.9	71.2
Education for people with mental disabilities/ mental health disabilities	63	0.0	41.3	58.7	37	0.0	48.6	51.4	26	0.0	30.8	69.2

**Table 8.19: Percentage Distribution of Population Aged Four Years and Above by School Attendance Status and Level of Education; Kilimanjaro Rural, 2022 PHC**

Level of Education	Both Sexes				Male				Female			
	Total	Attending	Drop Out	Completed	Total	Attending	Drop Out	Completed	Total	Attending	Drop Out	Completed
Pre Primary	55,536	97.7	1.4	0.9	28,748	97.7	1.2	1.0	26,788	97.6	1.6	0.8
Primary School (1 - 8)	782,177	33.0	9.7	57.2	388,547	33.9	9.8	56.4	393,630	32.2	9.7	58.1
Training After Primary	4,917	0.0	2.5	97.5	2,981	0.0	2.3	97.7	1,936	0.0	2.7	97.3
Pre-Form One	190	0.0	25.3	74.7	104	0.0	23.1	76.9	86	0.0	27.9	72.1
Secondary School O - level (1 - 4)	247,067	37.7	13.2	49.1	116,466	37.7	14.4	47.9	130,601	37.6	12.2	50.2
Secondary School A - level (5 - 6)	17,453	60.5	2.2	37.4	9,047	55.8	2.4	41.9	8,406	65.5	2.0	32.5
Training After Secondary Education	9,671	0.0	1.7	98.3	4,638	0.0	1.5	98.5	5,033	0.0	1.8	98.2
University and Other Related	62,315	28.2	0.8	71.0	32,350	26.9	0.7	72.4	29,965	29.6	0.9	69.5
Education for people with mental disabilities/ mental health disabilities	40	0.0	37.5	62.5	23	0.0	47.8	52.2	17	0.0	23.5	76.5

**Table 8.20: Percentage Distribution of Population Aged Four Years and Above by School Attendance Status and Level of Education; Kilimanjaro Urban, 2022 PHC**

Level of Education	Both Sexes				Male				Female			
	Total	Attending	Drop Out	Completed	Total	Attending	Drop Out	Completed	Total	Attending	Drop Out	Completed
Pre Primary	17,658	98.3	0.8	0.9	9,005	98.3	0.7	1.0	8,653	98.2	0.9	0.9
Primary School (1 - 8)	203,483	34.0	7.8	58.2	97,241	35.5	8.0	56.4	106,242	32.6	7.6	59.7
Training After Primary	1,246	0.0	2.8	97.2	703	0.0	3.3	96.7	543	0.0	2.2	97.8
Pre-Form One	91	0.0	29.7	70.3	53	0.0	39.6	60.4	38	0.0	15.8	84.2
Secondary School O - level (1 - 4)	104,602	26.9	11.8	61.3	49,363	26.5	12.2	61.2	55,239	27.2	11.4	61.4
Secondary School A - level (5 - 6)	8,940	53.8	2.6	43.6	4,566	47.5	3.2	49.4	4,374	60.4	2.1	37.5
Training After Secondary Education	4,970	0.0	2.0	98.0	2,394	0.0	2.0	98.0	2,576	0.0	2.1	97.9
University and Other Related	39,443	24.2	0.9	75.0	20,250	23.0	0.9	76.1	19,193	25.4	0.9	73.7
Education for people with mental disabilities/ mental health disabilities	23	0.0	47.8	52.2	14	0.0	50.0	50.0	9	0.0	44.4	55.6

### 8.4.2 Net and Gross School Enrolment

Enrolment rate depicts the proportions of children currently attending school which is an important indicator in assessing access to education among the population. In primary education, Net Enrolment Rate (NER) is defined as the number of children aged 7-13 years who are attending school divided by the total number of children in that age group. The 7-13 years age group is the official primary school age in Tanzania. On the other hand, Gross Enrolment Rate (GER) is defined as the number of children attending primary school regardless of age divided by the total number of children aged 7-13 years.

#### Net Enrolment Rate

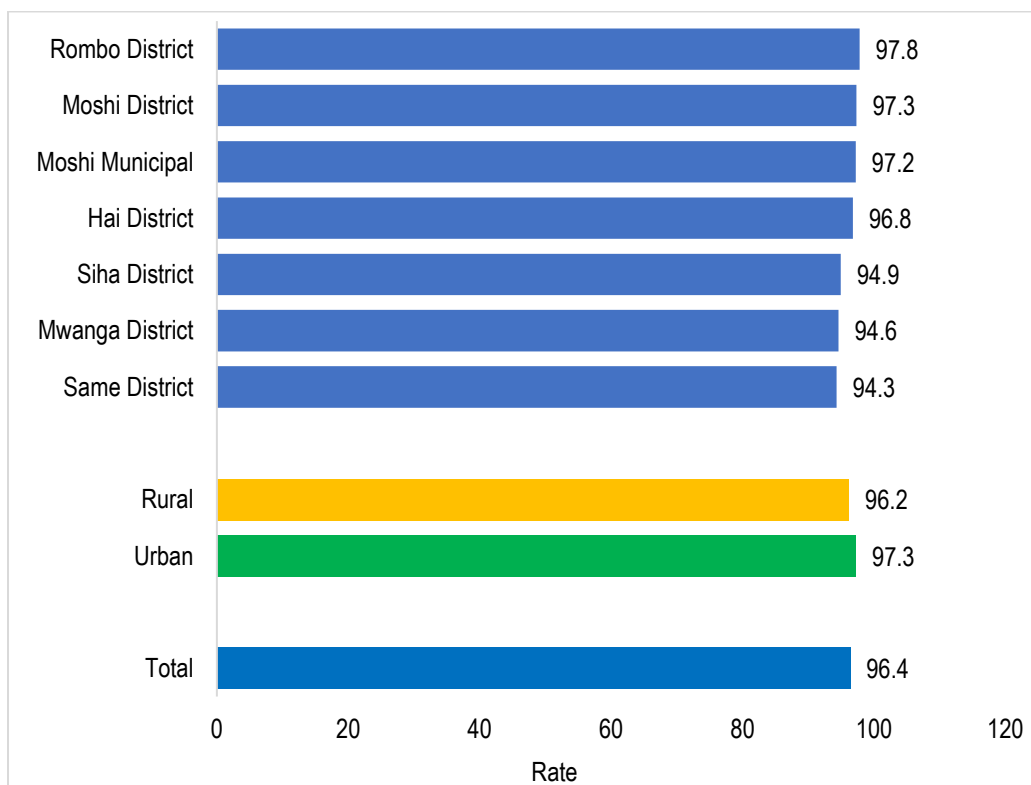
Results show that, for primary schools NER is 96.4 percent; it is higher (97.3%) in urban areas compared with rural areas (96.2%). Furthermore, results show that NER is slightly higher (96.8%) for females than for males (96.0%) (Table 8.21).

**Table 8.21: Net Enrolment Rates in Primary Schools by Place of Residence, Sex and Council; Kilimanjaro Region, 2022 PHC**

Council	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	<b>96.4</b>	<b>96.0</b>	<b>96.8</b>	<b>96.2</b>	<b>95.7</b>	<b>96.6</b>	<b>97.3</b>	<b>97.1</b>	<b>97.4</b>
Rombo District	97.8	97.7	98.0	97.9	97.8	98.0	96.7	96.3	97.0
Mwanga District	94.6	94.3	94.9	94.1	93.7	94.5	97.6	97.7	97.4
Same District	94.3	93.7	94.9	93.5	92.8	94.2	97.2	97.0	97.5
Moshi Municipal	97.2	97.2	97.3	NA	NA	NA	97.2	97.2	97.3
Moshi District	97.3	97.0	97.7	97.4	97.0	97.8	96.9	97.0	96.7
Hai District	96.8	96.2	97.4	96.6	95.9	97.3	97.7	97.4	98.0
Siha District	94.9	94.3	95.6	94.5	93.9	95.2	97.4	96.9	98.0

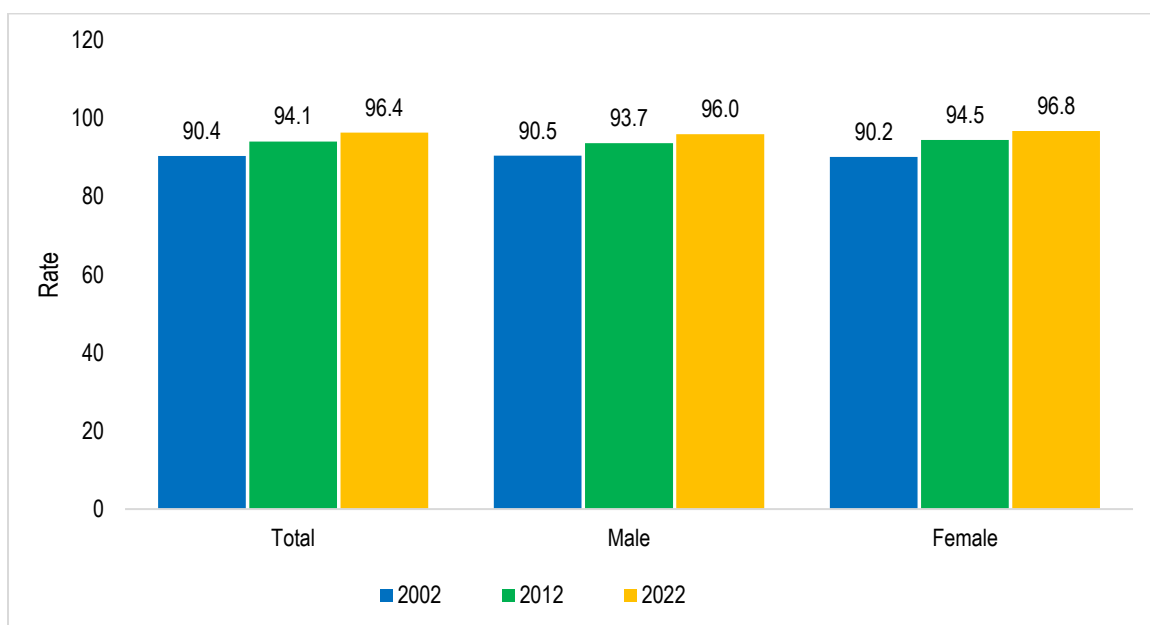
NER in primary schools varies across councils ranging from 94.3 percent in Same District to 97.8 percent in Rombo District. Four (4) Councils have NER above the regional average of 96.4 percent (Figure 8.11).

**Figure 8.11: Net Enrolment Rates in Primary Schools by Council; Kilimanjaro Region, 2022 PHC**



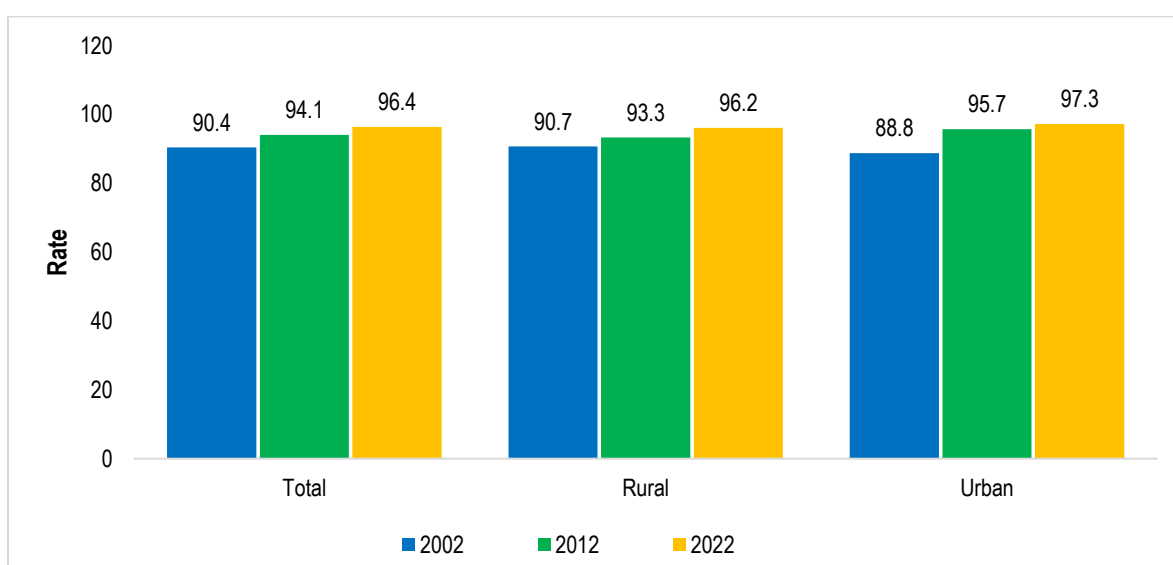
Results show an improvement in net enrolment rates from 2002 to 2022 censuses. The overall NER in primary schools increased from 90.4 percent in 2002 to 96.4 percent in 2022. Improvement is more remarkable among females (from 90.2% to 96.8%) compared with males (from 90.5 % to 96.0%) (Figure 8.12).

**Figure 8.12: Primary School Net Enrolment Rates by Sex; Kilimanjaro Region, 2002, 2012 and 2022 PHCs**



The rural NER in primary schools increased from 90.7 percent in 2002 to 96.2 percent in 2022 and the urban NER increased from 88.8 percent in 2002 to 97.3 percent in 2022 (Figure 8.13).

**Figure 8.13: Primary School Net Enrolment Rates by Place of Residence; Kilimanjaro Region, 2002, 2012 and 2022 PHCs**

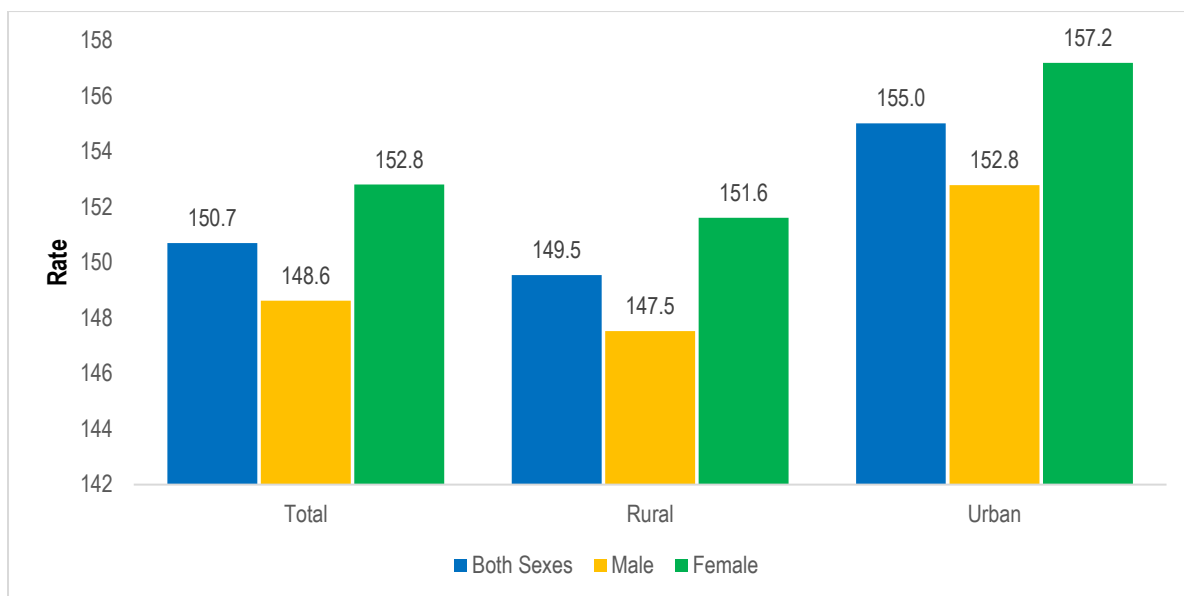


### 8.4.3 Gross Enrolment Rate

The primary school Gross Enrolment Rate (GER) in Kilimanjaro Region is 150.7 percent. GER is higher (155.0%) in urban areas than in rural areas (149.5%) and is higher (152.8%)

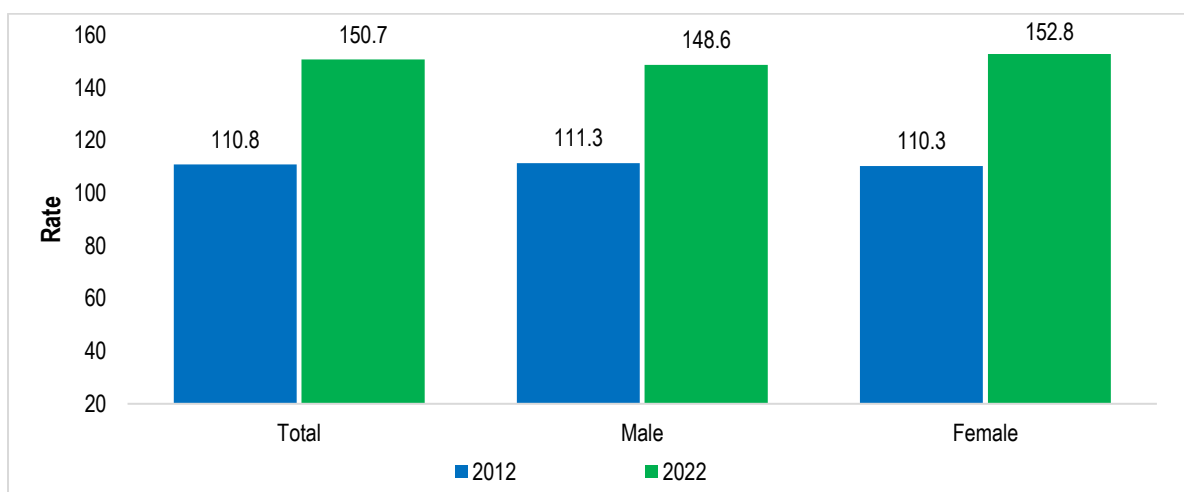
for females than males (148.6%). A gross rate exceeding hundred percent could be due to over age and underage enrolment of children (Figure 8.14).

**Figure 8.14: Primary Schools Gross Enrolment Rates by Place of Residence and Sex; Kilimanjaro Region, 2022 PHC**



Results show that the GER in the Region increased from 110.8 percent in the 2012 to 150.7 percent in 2022. The increase is higher among females (from 110.3% to 152.8%) compared with males (from 111.3% to 148.6%) as shown in Figure 8.15.

**Figure 8.15: Primary School Gross Enrolment Rates by Sex; Kilimanjaro Region, 2012 and 2022 PHCs**



#### 8.4.4 Education Attainment

Education attainment is the highest level completed by an individual within the country's official education system. Table 8.22 shows that, majority (66.0%) of population aged four years and above attained primary education and 23.1 percent completed ordinary level secondary school education. More females had attained primary education (66.2%) compared with males (65.8%). The same pattern is observed in urban areas. Results also show that 7.5 percent of the population aged four years and above in the Region attained university education.

**Table 8.22: Number and Percentage of Population Aged Four Years and Above by Sex, Level of Educational Attainment and Place of Residence; Kilimanjaro Region, 2022 PHC**

Level of Education	Population			Percent		
	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	<b>996,971</b>	<b>485,844</b>	<b>511,127</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Pre-Primary	1,599	803	796	0.2	0.2	0.2
Primary School (1 - 8)	658,053	319,682	338,371	66.0	65.8	66.2
Training After Primary	6,163	3,684	2,479	0.6	0.8	0.5
Pre-Form One	281	157	124	0.0	0.0	0.0
Secondary School O - level (1 - 4)	230,486	108,802	121,684	23.1	22.4	23.8
Secondary School A - level (5 - 6)	11,029	6,401	4,628	1.1	1.3	0.9
Training After Secondary Education	14,641	7,032	7,609	1.5	1.4	1.5
University and Other Related	74,656	39,246	35,410	7.5	8.1	6.9
Education for people with mental disabilities/ mental health disabilities	63	37	26	0.0	0.0	0.0
<b>Rural</b>	<b>745,560</b>	<b>365,590</b>	<b>379,970</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Pre-Primary	1,295	654	641	0.2	0.2	0.2
Primary School (1 - 8)	523,818	257,005	266,813	70.3	70.3	70.2
Training After Primary	4,917	2,981	1,936	0.7	0.8	0.5
Pre-Form One	190	104	86	0.0	0.0	0.0
Secondary School O - level (1 - 4)	153,977	72,530	81,447	20.7	19.8	21.4
Secondary School A - level (5 - 6)	6,900	4,002	2,898	0.9	1.1	0.8
Training After Secondary Education	9,671	4,638	5,033	1.3	1.3	1.3
University and Other Related	44,752	23,653	21,099	6.0	6.5	5.6
Education for people with mental disabilities/ mental health disabilities	40	23	17	0.0	0.0	0.0
<b>Urban</b>	<b>251,411</b>	<b>120,254</b>	<b>131,157</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Pre-Primary	304	149	155	0.1	0.1	0.1
Primary School (1 - 8)	134,235	62,677	71,558	53.4	52.1	54.6
Training After Primary	1,246	703	543	0.5	0.6	0.4
Pre-Form One	91	53	38	0.0	0.0	0.0
Secondary School O - level (1 - 4)	76,509	36,272	40,237	30.4	30.2	30.7
Secondary School A - level (5 - 6)	4,129	2,399	1,730	1.6	2.0	1.3
Training After Secondary Education	4,970	2,394	2,576	2.0	2.0	2.0
University and Other Related	29,904	15,593	14,311	11.9	13.0	10.9
Education for people with mental disabilities/ mental health disabilities	23	14	9	0.0	0.0	0.0

## Chapter 9

### Employment and Economic Activities

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#### Key Points

- The current unemployment rate in Kilimanjaro Region is 4.8 percent; the rate is higher for females (5.9 %) than for males (3.8%).
- The overall Labour Force Participation Rate (LFPR) of Kilimanjaro Region is 82.4 percent; it is higher in rural than in urban areas.
- Agriculture, forestry and fishing industry has the highest proportion (62.2%) of the total employment.
- Majority of employed persons (44.8%) are agricultural and fishery workers.
- Agricultural sector constitutes the highest share of employed persons (61.1%).
- There are 248,115 persons aged 15 years and above engaged in informal non-agricultural economic activities with more females (134,922 persons) than males (113,193 persons).

#### 9.1 Introduction

This chapter presents findings on current economic activities for persons aged 15 years and above in Kilimanjaro Region. In particular, it provides information on people's participation in economic activities, occupation, sector of employment and industry. Further, information on informal non-agricultural economic activities is also presented. Analysis in this chapter does not include institutional population.

Statistics on employment and economic activities are important inputs for planning labour related policies and programmes to ascertain the size and structure of the working age population. They help to determine the size and structure of the working age population and its distribution by main occupation, industry and employment status. Information from census on employment and economic activities is critical in setting the baseline data for making appropriate interventions to enhance labour force participation.

## 9.2 Current Economic Activity Status

Economic activity status refers broadly to economically active population which includes employed and unemployed population. It also includes inactive population covering all persons who were without work during the reference period and were not available for work.

Table 9.1 indicates that, out of 1,183,637 persons aged 15 years and above in Kilimanjaro Region, 927,702 persons are in employment, 47,232 are unemployed and 208,703 are economically inactive. Moreover, results show that there are 708,465 employed persons in rural areas and 219,237 in urban areas. Further, results show that there are 166,925 inactive persons in rural areas and 41,778 in urban areas.

**Table 9.1: Number of Persons Aged 15 Years and Above by Economic Activity Status (Relaxed International Definition of Employment), Sex and Place of Residence; Kilimanjaro Region, 2022 PHC**

Sex/Place of Residence	Economic Activity Status			Total
	Employed	Unemployed	Inactive	
<b>Both Sexes</b>	<b>927,702</b>	<b>47,232</b>	<b>208,703</b>	<b>1,183,637</b>
Male	457,137	17,973	85,884	560,994
Female	470,565	29,259	122,819	622,643
<b>Place of Residence</b>				
Rural	708,465	26,377	166,925	901,767
Urban	219,237	20,855	41,778	281,870

The results further show that in Kilimanjaro Region, 78.4 percent of persons aged 15 and above are employed. The council with the highest percentage of employed persons is Same (80.0%) while the council with the lowest percentage is Mwanga (77.0%) (Figure 9.1).

**Figure 9.1: Percentage Distribution of Persons Aged 15 Years and Above by Economic Activity Status (Relaxed International Definition of Employment) and Councils; Kilimanjaro Region, 2022 PHC**

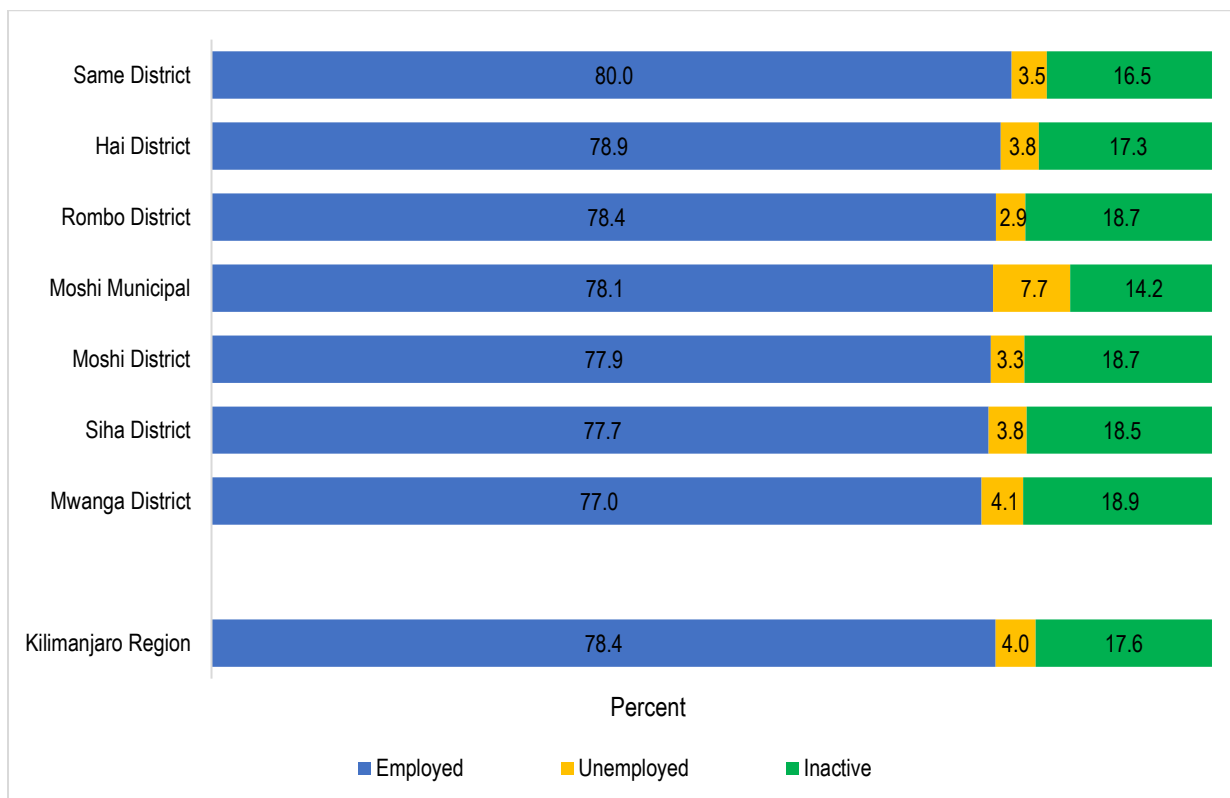


Table 9.2 shows that in rural areas the total number of persons aged 15 years and above who are employed ranges from 53,860 in Siha District to 253,984 in Moshi District Council. In urban areas the number of employed persons ranges from 8,828 in Rombo District Council to 110,854 in Moshi Municipal Council. It is important to note that all the population in Moshi Municipal Council is urban.

**Table 9.2: Number of Persons Aged 15 Years and Above by Economic Activity Status (Relaxed International Definition of Employment), Council and Place of Residence; Kilimanjaro Region, 2022 PHC**

Place of Residence		Economic Activity Status			Total
		Employed	Unemployed	Inactive	
Kilimanjaro Region	<b>Total</b>	<b>927,702</b>	<b>47,232</b>	<b>208,703</b>	<b>1,183,637</b>
	Rural	708,465	26,377	166,925	901,767
	Urban	219,237	20,855	41,778	281,870
<b>Councils</b>					
Rombo District	<b>Total</b>	<b>137,430</b>	<b>5,143</b>	<b>32,686</b>	<b>175,259</b>
	Rural	128,602	4,375	30,974	163,951
	Urban	8,828	768	1,712	11,308
Mwanga District	<b>Total</b>	<b>72,097</b>	<b>3,880</b>	<b>17,681</b>	<b>93,658</b>

Place of Residence		Economic Activity Status			Total
		Employed	Unemployed	Inactive	
	Rural	61,018	2,721	15,475	79,214
	Urban	11,079	1,159	2,206	14,444
Same District	<b>Total</b>	<b>147,333</b>	<b>6,469</b>	<b>30,379</b>	<b>184,181</b>
	Rural	113,152	3,298	23,166	139,616
	Urban	34,181	3,171	7,213	44,565
Moshi Municipal	<b>Total</b>	<b>110,854</b>	<b>10,972</b>	<b>20,084</b>	<b>141,910</b>
	Rural	NA	NA	NA	NA
	Urban	110,854	10,972	20,084	141,910
Moshi District	<b>Total</b>	<b>272,537</b>	<b>11,681</b>	<b>65,560</b>	<b>349,778</b>
	Rural	253,984	10,257	61,920	326,161
	Urban	18,553	1,424	3,640	23,617
Hai District	<b>Total</b>	<b>122,732</b>	<b>5,914</b>	<b>26,886</b>	<b>155,532</b>
	Rural	97,849	3,535	22,066	123,450
	Urban	24,883	2,379	4,820	32,082
Siha District	<b>Total</b>	<b>64,719</b>	<b>3,173</b>	<b>15,427</b>	<b>83,319</b>
	Rural	53,860	2,191	13,324	69,375
	Urban	10,859	982	2,103	13,944

Table 9.3 shows that out of the employed persons aged 15 years and above, the number of employed persons is the largest (442,763) for youths aged 15-35 years, followed by adults in the age group 36-64 years (389,832).

**Table 9.3: Number of Persons Aged 15 Years and Above by Economic Activity Status (Relaxed International Definition of Employment) and Selected Age Groups; Kilimanjaro Region, 2022 PHC**

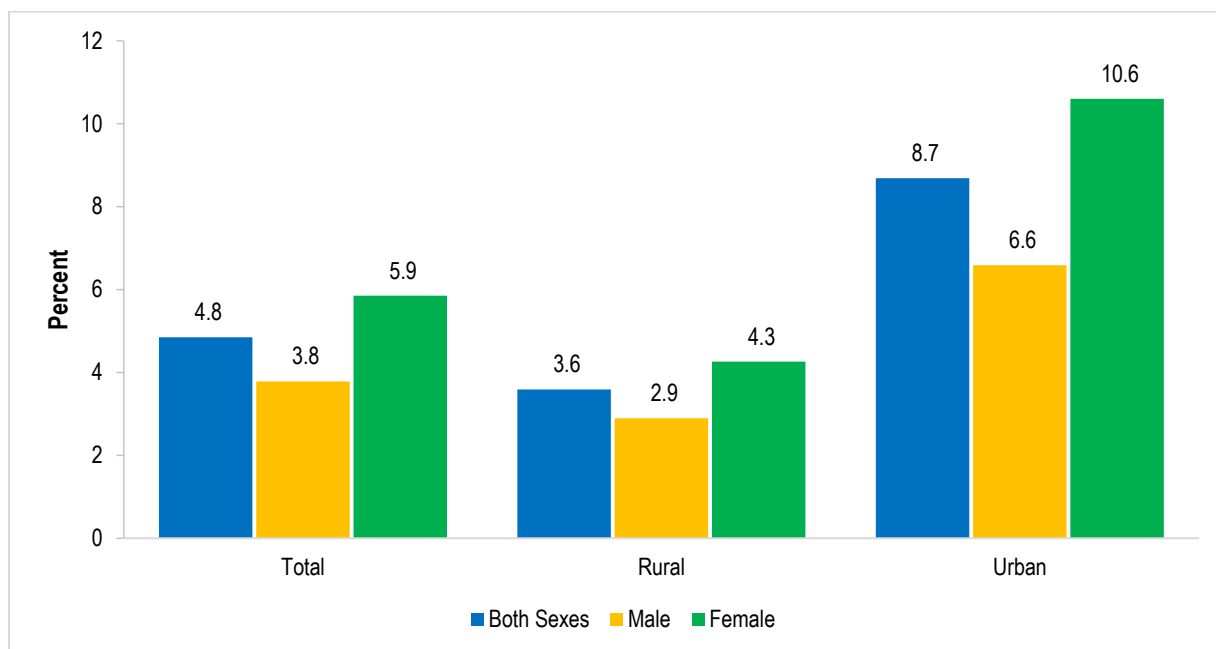
Age Group	Economic Activity Status			Total
	Employed	Unemployed	Inactive	
<b>Total</b>	<b>927,702</b>	<b>47,232</b>	<b>208,703</b>	<b>1,183,637</b>
15-35	442,763	32,171	124,277	599,211
36-64	389,832	13,947	45,468	449,247
65 years and above	95,107	1,114	38,958	135,179

### 9.3 Current Unemployment

Unemployment is an indicator of labour under-utilization and it is measured as a percentage of the labour force that is currently unemployed. According to the relaxed international definition of unemployment, unemployed persons comprise those who in the seven days prior to the census enumeration were not engaged in any economic activity but were available for work regardless of whether they took any effort to look for work or not.

Figure 9.2 presents current unemployment rates in Kilimanjaro Region based on the relaxed international definition of unemployment. The results reveal that the current unemployment in Kilimanjaro Region is 4.8 percent. The rate is higher (8.7%) in urban than in rural areas (3.6%). Unemployment rate is higher (5.9%) among females than males (3.8%).

**Figure 9.2: Current Unemployment Rate of Persons Aged 15 Years and Above by Sex and Place of Residence; Kilimanjaro Region, 2022 PHC**

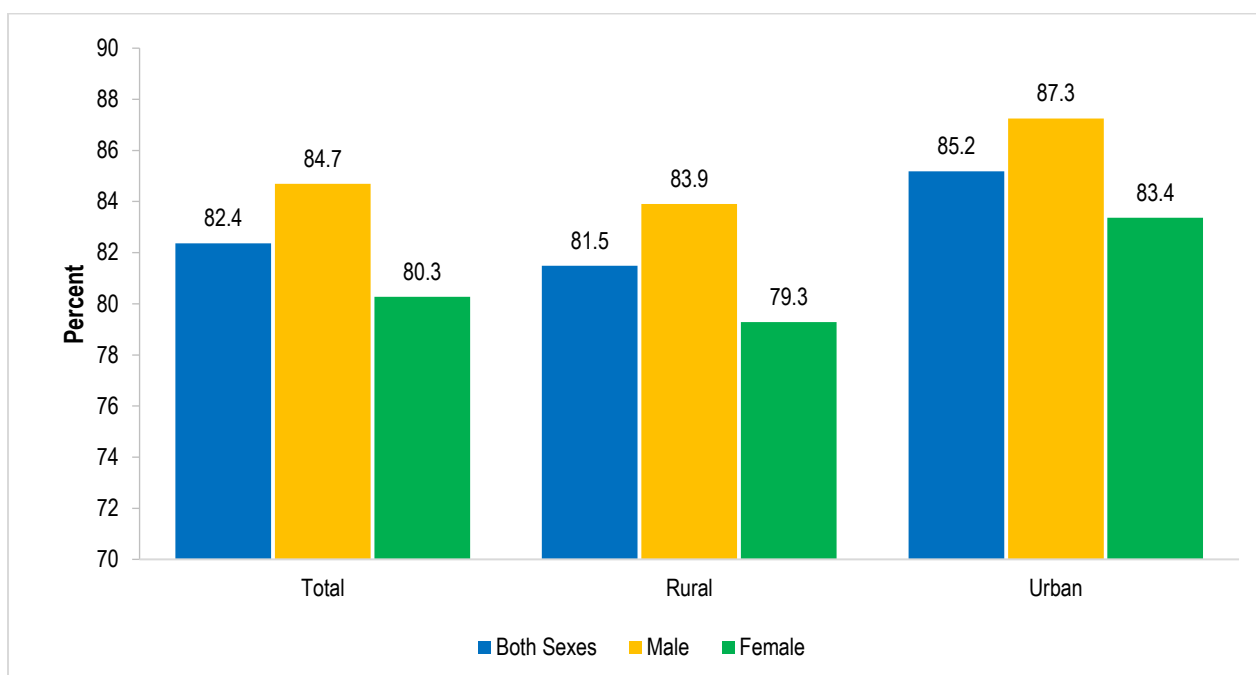


#### 9.4 Labour Force Participation Rate

The Labour Force Participation Rate (LFPR) provides an estimate of the size of the labour supply currently available for production of goods and services in a country. It is defined as the number of persons in the labour force as a percentage of the population Aged fifteen years and above. It provides important insight into various policy decisions to enhance performance of the labour market.

Figure 9.3 shows that, the overall Labour Force Participation Rate (LFPR) of Kilimanjaro Region is 82.4 percent; it is higher in rural than in urban areas. Results also reveal that LFPR is higher for males (84.7%) than for females (80.3%).

**Figure 9.3: Labour Force Participation Rates for Persons Aged 15 Years and Above by Place of Residence and Sex; Kilimanjaro Region, 2022 PHC**



### 9.5 Employment by Industry

Employment by industry provides information on relative importance of different economic activities in the labour market. This information is useful for identifying broad shifts in employment and stages of development. Classification of employment by industry in this report is based on the International Standard Industrial Classification of all Economic Activities (ISIC) Revision 4.

Results show that agriculture, forestry and fishing industry has the highest proportion (62.2%) of the total employment. The industry of ‘other services activities’ ranked second with 9.3 percent, followed by ‘whole sale and retail trade, repair of motor vehicles and motorcycles’ industry with 6.7 percent (Table 9.4).

**Table 9.4: Percentage Distribution of Employed Population Aged 15 Years and Above by Place of Residence, Sex and Industry of Employment; Kilimanjaro Region 2022 PHC**

Industry of Employment	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total Number</b>	<b>927,702</b>	<b>457,137</b>	<b>470,565</b>	<b>708,465</b>	<b>350,232</b>	<b>358,233</b>	<b>219,237</b>	<b>106,905</b>	<b>112,332</b>
Agriculture, forestry and fishing	62.2	60.8	63.5	69.2	67.5	70.9	39.5	39.1	39.9
Mining and quarrying	1.9	1.7	2.1	1.7	1.6	1.9	2.4	2.0	2.7
Manufacturing	2.4	3.8	1.1	2.0	3.2	0.9	3.8	6.0	1.8
Electricity, gas, steam and air conditioning supply	0.2	0.4	0.0	0.1	0.2	0.0	0.4	0.8	0.1
Water supply sewage waste management and remediation activities	0.1	0.2	0.1	0.1	0.2	0.0	0.2	0.3	0.1
Construction	2.1	4.0	0.1	1.9	3.7	0.1	2.6	5.1	0.3
Whole sale and retail trade, repair of motor vehicles and motorcycles	6.7	5.6	7.8	5.0	4.1	5.8	12.4	10.4	14.2
Transportation and storage	1.8	3.4	0.3	1.4	2.6	0.2	3.2	5.8	0.8
Accommodation and food services activities	3.1	1.6	4.6	2.4	1.3	3.5	5.5	2.8	8.0
Information and communication	0.2	0.3	0.1	0.1	0.2	0.1	0.4	0.5	0.3
Financial and insurance activities	0.4	0.4	0.4	0.2	0.2	0.3	0.8	0.8	0.8
Real estate activities	0.2	0.3	0.1	0.2	0.2	0.1	0.4	0.5	0.2
Professional scientific and technical activities	1.2	1.3	1.1	1.0	1.1	0.8	1.9	2.0	1.8
Administrative and support services activities	4.7	4.6	4.7	3.8	3.8	3.7	7.5	7.2	7.9
Public administration and defence compulsory social security	0.6	0.8	0.4	0.4	0.6	0.3	1.1	1.5	0.8
Education	1.8	1.6	2.0	1.5	1.4	1.6	2.7	2.2	3.2
Human health and social work activities	0.8	0.6	1.0	0.6	0.5	0.8	1.5	1.1	1.8
Arts entertainment and recreation	0.3	0.3	0.3	0.2	0.2	0.2	0.6	0.6	0.6
Other services activities	9.3	8.4	10.2	8.1	7.4	8.8	13.2	11.4	14.9

## 9.6 Occupation Status

This section highlights the distribution of employed persons aged 15 years and above by occupation and sex. The information provides critical insights into the economic, societal and individual aspects of the labour market. It also helps to make right decisions related to labour policies, education and skills training programmes as well as facilitating effective manpower planning. Occupation is classified according to the Tanzania Standard Classification of Occupations (TASCO). Results reveal that 44.8 percent of employed persons in Kilimanjaro Region are agricultural and fishery workers followed by those employed in elementary occupations (23.1%) and crafts and related workers (18.2%) (Table 9.5).

**Table 9.5: Percentage Distribution of Employed Population Aged 15 Years and Above by Sex and Occupation; Kilimanjaro Region, 2022  
PHC**

Occupation	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total Number</b>	<b>927,702</b>	<b>457,137</b>	<b>470,565</b>	<b>708,465</b>	<b>350,232</b>	<b>358,233</b>	<b>219,237</b>	<b>106,905</b>	<b>112,332</b>
Legislators, administrators and managers	0.5	0.6	0.4	0.4	0.4	0.3	0.9	1.0	0.8
Professionals	2.5	2.6	2.4	1.9	2.0	1.9	4.4	4.4	4.3
Technicians and associate professionals	4.2	6.4	2.0	3.4	5.3	1.6	6.8	10.3	3.5
Clerks	0.5	0.4	0.6	0.4	0.3	0.4	0.9	0.8	1.1
Service workers and shop sales workers	5.3	4.0	6.5	4.0	3.1	4.9	9.4	7.0	11.6
Agricultural and fishery workers	44.8	42.6	47.0	50.4	47.9	52.9	26.8	25.2	28.2
Craft and related workers	18.2	19.7	16.7	17.5	19.1	15.9	20.4	21.8	19.2
Plant and machine operators and assemblers	0.9	1.7	0.2	0.8	1.5	0.2	1.4	2.6	0.3
Elementary occupations	23.1	22.0	24.2	21.3	20.5	22.0	29.0	27.0	30.9

## 9.7 Employment by Sector

This section presents distribution of employed persons aged 15 years and above by sex and sector of employment. The information is an important component for conducting macroeconomic analysis, policy formulation and effective labour interventions. Table 9.6 reveals that the agricultural sector accounts for the highest (61.1%) share of employed persons followed by the private sector (22.9%) and household activities (11.9%).

**Table 9.6: Percentage Distribution of Employed Persons Aged 15 Years and Above by Place of Residence, Sex and Sector; Kilimanjaro Region, 2022 PHC**

Sector	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	<b>927,702</b>	<b>457,137</b>	<b>470,565</b>	<b>708,465</b>	<b>350,232</b>	<b>358,233</b>	<b>219,237</b>	<b>106,905</b>	<b>112,332</b>
Public	4.1	4.8	3.5	3.5	4.1	2.9	6.1	7.0	5.3
Private	22.9	26.7	19.2	17.5	21.3	13.8	40.1	44.2	36.2
Agriculture	61.1	57.7	64.4	66.6	63.0	70.0	43.6	40.6	46.5
Household activities	11.9	10.8	12.9	12.4	11.6	13.2	10.2	8.3	11.9

## 9.8 Informal Non-Agricultural Economic Activities

The 2022 PHC refers to informal non-agricultural economic activities as activities which are unregulated and often without formal recorded business transactions and normally occurring outside the framework of formal business regulations and systems. It needs small capital and typically involves individuals such as street vendors and small-scale production activities without legal licenses or adhering to formal reporting and taxation requirements. These activities often operate within local communities to cater for immediate needs and therefore contribute to informal sector's overall economic performance.

Table 9.7 shows that there are 248,115 persons aged 15 years and above engaged in informal non-agricultural economic activities with 134,922 females and 113,193 males. Moreover, results reveal that the highest percentage of persons engaged in informal sector comprise youths aged 15-35 years; accounting for 50.3 percent of total employment, followed by adults aged 36-64 years with 40.2 percent. The lowest participation in the informal sector is observed in adults aged 65 years and above with 9.5 percent. A similar distribution is observed in rural and urban areas.

**Table 9. 7: Percentage Distribution of Population Aged 15 Years and Above Engaged in Informal Non-Agricultural Economic Activities by Place of Residence, Sex and Selected Age Groups; Kilimanjaro Region, 2022 PHC**

Place of Residence	Sex	Age Group (Years)			Total Number
		15 – 35	36 – 64	65+	
<b>Total</b>	<b>Both Sexes</b>	<b>50.3</b>	<b>40.2</b>	<b>9.5</b>	<b>248,115</b>
	Male	52.3	38.8	8.9	113,193
	Female	48.5	41.5	10.0	134,922
<b>Rural</b>	<b>Both Sexes</b>	<b>46.9</b>	<b>41.7</b>	<b>11.4</b>	<b>174,166</b>
	Male	49.1	40.3	10.6	80,527
	Female	45.0	42.9	12.1	93,639
<b>Urban</b>	<b>Both Sexes</b>	<b>58.2</b>	<b>36.7</b>	<b>5.1</b>	<b>73,949</b>
	Male	60.3	34.9	4.9	32,666
	Female	56.6	38.2	5.2	41,283

## Chapter 10

### Disability

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#### Key Points

- There are 233,388 persons in Kilimanjaro Region, equivalent to 15.3 percent of the total population aged 7 years and above living with some form of disability.
- The most common type of disability in the Region is seeing (3.9%) followed by walking (2.1%).
- Most Persons With Disabilities (57.5%) reported disease as a major cause of their disabilities.
- Almost eight percent (7.9%) of Persons With Disabilities reported accidents as a cause of their disabilities.
- The use of assistive devices among Persons with seeing, hearing and communication disabilities is relatively low (below three percent).

#### 10.1 Introduction

This chapter presents information on disability including prevalence of disability by sex and region/council, causes of disability and use of assistive devices. Disability is a broad term with various definitions depending on different aspects at international, regional and national levels. For instance; the Washington Group on disability statistics defines Persons With Disabilities (PWDs) as *“all those persons who are at greater risk than the general population in experiencing restrictions in completing specific tasks or activities due to limitations in their basic functioning such as walking, seeing, hearing or memory – even if such limitations are ameliorated by use of assistive devices, a supportive environment or plentiful resources”* (United Nations, 2001). The World Health Organisation explains that disability refers to an umbrella term covering impairments, activity limitations and participation.

At the National level, the Tanzania National Policy on Disability of 2004 defines disability as a loss or limitation of opportunities to take part in the normal life in the community on an equal level with others due to physical, mental or social factors. All three definitions use the concept of activity limitation in defining disability rather than physical impairment.

Tanzania started collecting data on disability through the population census for the first time in 2002. However, the definition of disability used was based on impairment rather than activity limitation. The 2012 and 2022 PHCs used the broad definition of disability that is based on activity limitation to collect disability statistics. More specifically, the 2022 PHC defines PWDs as all persons with physical, mental, intellectual or sensory impairment which may hinder or limit their full and effective participation in society on an equal footing with others.

The main domains of disabilities included in the 2022 PHC were: visual, hearing, communication, mental, physical and self-care. The 2022 PHC also collected information on other disabilities including: albinism, cleft palate, hydrocephalus, spinal bifida, spinal cord injuries, epilepsy psoriasis and storiasis. Other types were autism, mental health, mental disorder, persons with short stature, leprosy and persons with hunchbacks. The following are illustrations of some types of “other disabilities”. Ethical clearance for using the pictures on types of disability was obtained from the relevant authority<sup>6</sup>

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<sup>6</sup> *Shirikisho la Vyama vya Watu wenye Ulemavu Tanzania (SHIVYAWATA)*



Albinism



Cleft Palate



Hydrocephalus



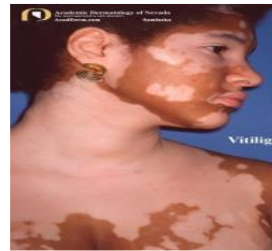
Spinal bifida



Spinal cord injuries



psoriasis



Storiasis



Autism



Mental health



Persons with short stature



Leprosy



Persons with Hunchback

Disability statistics are important for promotion of evidence-based policy and programming decisions and effective monitoring. Moreover, disability statistics are essential for governments and stakeholders for enhancement of inclusiveness of PWDs in all aspects of life by removing the barriers faced by people with disabilities. Data on disability from the Census also provides a benchmark for collecting disability statistics from other household-based sample surveys.

Note that, the number of PWDs and total population used to compute disability prevalence does not include persons that were enumerated in institutions.

## 10.2 Prevalence of Disability

The 2022 PHC results show that 233,588 persons in Kilimanjaro Region (104,428 males and 129,160 female), which is equivalent to 15.3 percent of the total regional population aged 7 years and above have some form of disability; the rate is slightly higher among those living in rural (16.2%) than in urban areas (12.4%).

Among the six major domains of disabilities, seeing (3.9%) and walking (2.1%) are the most common while self-care with less than 1.0 percent (0.3%) of the population aged seven years and above is the least common type of disability. The percentage of males with hearing and communication disabilities in Kilimanjaro Region is slightly higher than that of females whereas the percentage of females with seeing and hearing disabilities is slightly higher than that of males (Table 10.1).

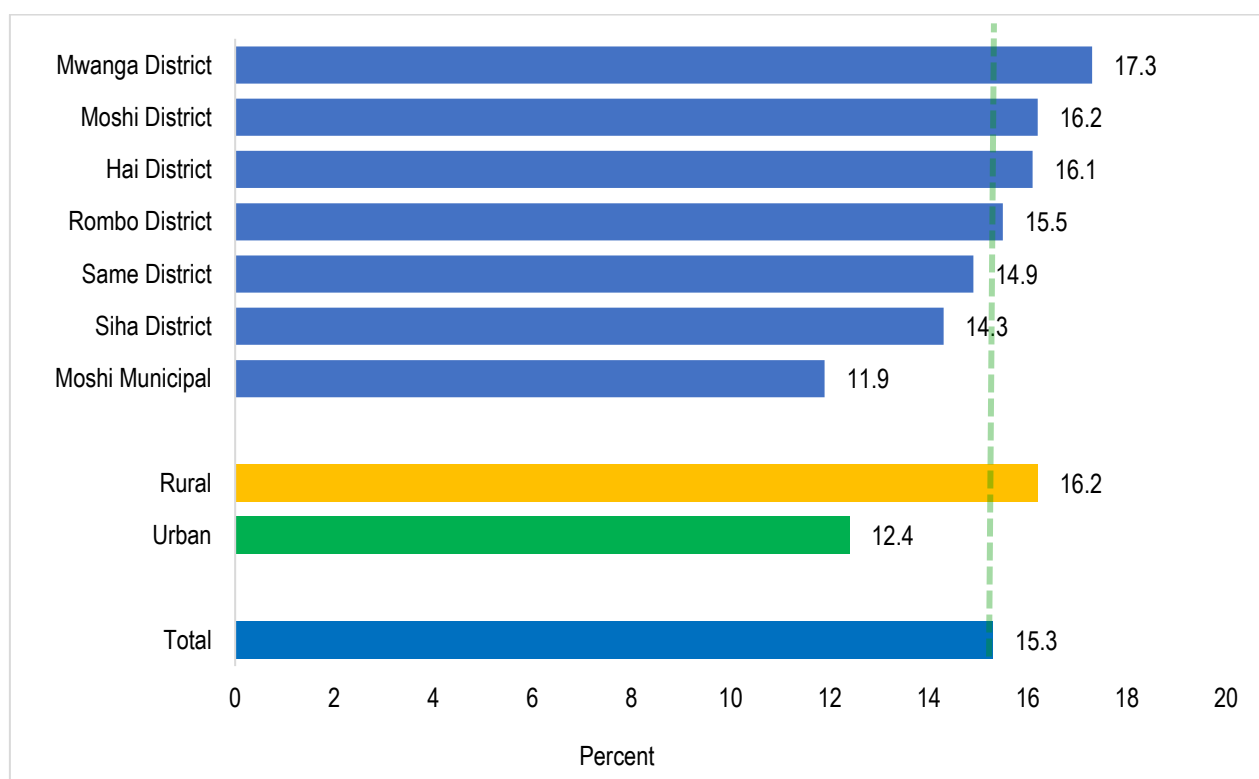
### 10.2.1 Prevalence of Disability by Councils

The prevalence of disability varies across councils, ranging from 11.9 percent in Moshi Municipal to 17.3 percent in Mwanga District. Four councils have prevalence of disability above the regional average of 15.3 percent (Table 10.1 and Figure 10.1).

**Table 10.1: Disability Prevalence among Persons Aged 7 Years and Above by Type of Disability, Place of Residence and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence	Prevalence	Total Number of PWDs	Type of Disability																				
			Seeing			Hearing			Walking			Remembering			Self-care			Communication			Other		
			Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	<b>15.3</b>	<b>233,588</b>	<b>3.9</b>	<b>3.5</b>	<b>4.2</b>	<b>1.0</b>	<b>1.0</b>	<b>0.9</b>	<b>2.1</b>	<b>2.0</b>	<b>2.1</b>	<b>0.8</b>	<b>0.8</b>	<b>0.8</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>1.0</b>	<b>1.0</b>	<b>0.9</b>	<b>6.4</b>	<b>5.6</b>	<b>7.1</b>
Rural	16.2	189,842	4.0	3.6	4.3	1.0	1.0	1.0	2.1	2.1	2.2	0.8	0.8	0.8	0.3	0.3	0.3	1.0	1.0	1.0	7.0	6.2	7.8
Urban	12.4	43,746	3.6	3.2	3.9	0.9	0.9	0.9	1.8	1.8	1.8	0.7	0.7	0.7	0.3	0.3	0.3	0.9	1.0	0.9	4.2	3.7	4.6
<b>Council</b>																							
Rombo District	15.5	35,402	3.8	3.4	4.1	1.0	1.0	0.9	2.2	2.2	2.2	0.7	0.8	0.7	0.3	0.3	0.3	0.5	0.5	0.4	7.1	6.4	7.7
Mwanga District	17.3	21,199	4.3	3.9	4.7	1.0	1.0	1.0	2.1	2.0	2.1	0.8	0.8	0.8	0.2	0.3	0.2	2.2	2.2	2.2	6.7	5.7	7.6
Same District	14.9	36,299	3.8	3.5	4.0	0.9	1.0	0.9	1.9	1.9	1.9	0.8	0.8	0.8	0.3	0.3	0.3	1.6	1.6	1.5	5.7	5.0	6.3
Moshi Municipal	11.9	20,729	3.6	3.2	3.9	0.9	0.9	0.9	1.8	1.8	1.9	0.7	0.7	0.7	0.3	0.3	0.3	0.5	0.6	0.5	4.1	3.6	4.5
Moshi District	16.2	71,909	4.2	3.7	4.5	1.0	1.0	1.0	2.2	2.1	2.3	0.8	0.8	0.8	0.3	0.3	0.2	0.5	0.5	0.5	7.3	6.3	8.2
Hai District	16.1	32,081	3.9	3.6	4.2	0.9	1.0	0.9	2.1	2.0	2.1	0.8	0.8	0.8	0.3	0.3	0.3	1.3	1.3	1.3	6.8	6.0	7.6
Siha District	14.3	15,969	3.6	3.3	3.8	1.0	1.1	0.9	1.9	2.0	1.9	0.7	0.7	0.7	0.3	0.3	0.3	1.5	1.5	1.5	5.3	4.7	5.8

**Figure 10.1: Prevalence of Disability for Persons Aged 7 Years and Above by Council; Kilimanjaro Region, 2022 PHC**



### 10.2.2 Prevalence of Disability by Sex and Council

The 2022 PHC results show that, the prevalence of disability is slightly higher for females than for males in all councils. Mwanga District has the highest prevalence of disability for both males (15.9%) and females (18.7%) whereas Moshi Municipal has the lowest prevalence for both males (11.0%) and females (12.6%) (Table 10.2).

**Table 10.2: Disability Prevalence by Sex, Place of Residence and Council; Kilimanjaro Region, 2022 PHC**

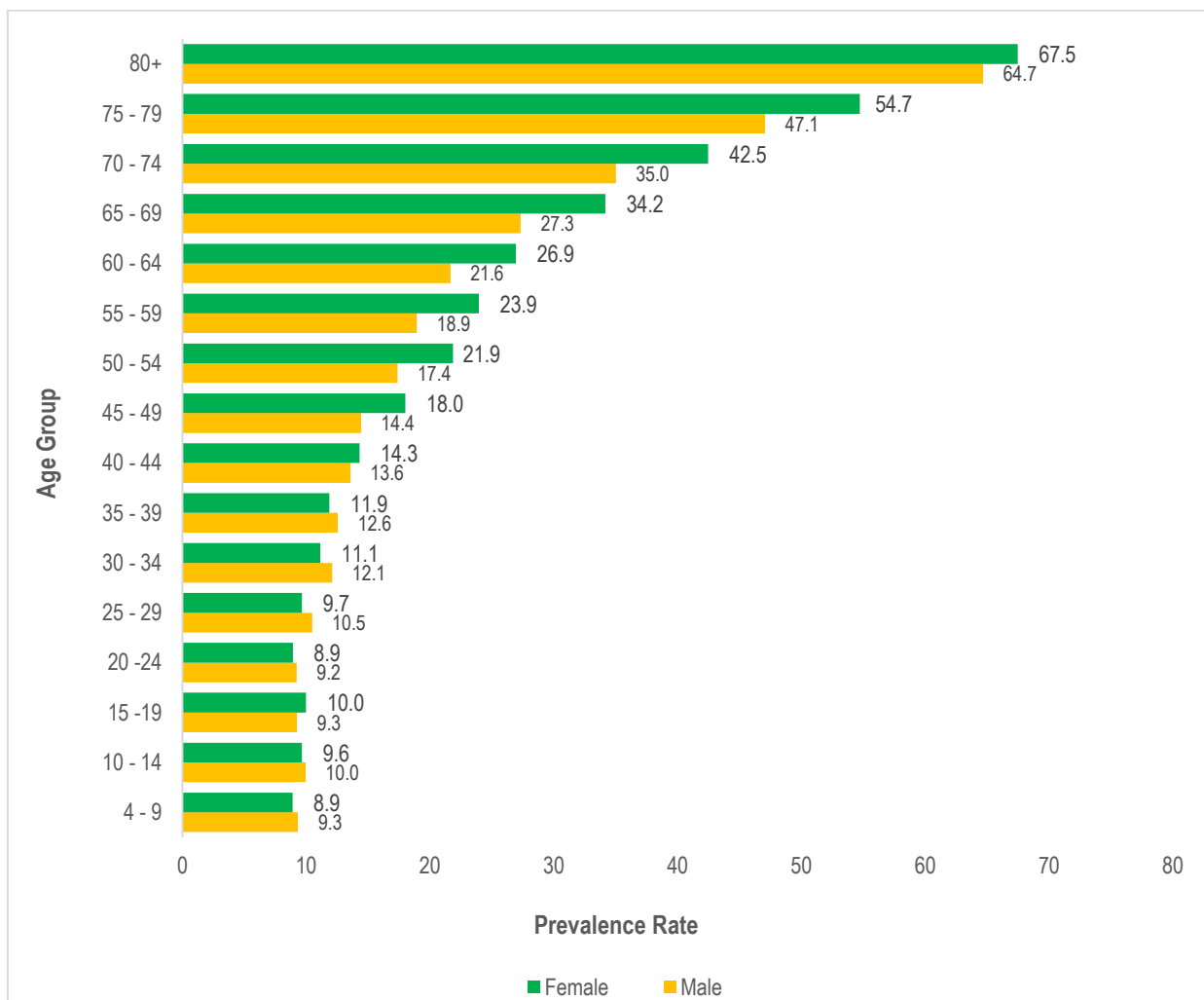
Place of Residence	Number of PWDs			Prevalence of Disability		
	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	<b>233,588</b>	<b>104,428</b>	<b>129,160</b>	<b>15.3</b>	<b>14.3</b>	<b>16.3</b>
Rural	189,842	85,130	104,712	16.2	15.0	17.3
Urban	43,746	19,298	24,448	12.4	11.6	13.1
<b>Council</b>						
Rombo District	35,402	15,949	19,453	15.5	14.6	16.3
Mwanga District	21,199	9,361	11,838	17.3	15.9	18.7
Same District	36,299	16,628	19,671	14.9	14.1	15.7
Moshi Municipal	20,729	9,154	11,575	11.9	11.0	12.6
Moshi District	71,909	31,875	40,034	16.2	14.9	17.4

Place of Residence	Number of PWDs			Prevalence of Disability		
	Both Sexes	Male	Female	Both Sexes	Male	Female
Hai District	32,081	14,227	17,854	16.1	14.9	17.2
Siha District	15,969	7,234	8,735	14.3	13.6	15.0

### 10.2.3 Prevalence of Disabilities by Age and Sex

Results show that disability prevalence increases with age for both males and females. The level of disability prevalence for persons aged less than 45 years in Kilimanjaro Region is about the same for females and males. Thereafter, the rate increases relatively sharply for females than for males reaching 67.5 percent for females and 64.7 percent for males aged 80 years and above (Figure 10.2).

**Figure 10.2: Prevalence of Disability by Age Groups and Sex; Kilimanjaro Region, 2022 PHC**



### 10.3 Prevalence of Persons with Albinism

Kilimanjaro Region has a total of 2,143 persons with albinism which is less than 1 percent (0.12%) of the total population in the region. Out of that, 1,174 persons (0.13%) are males and 969 (0.10%) are females. Seven out ten persons (73.4%) with albinism are living in rural areas. Councils with large numbers of persons with albinism are Moshi District (809 persons; 0.15%), Rombo District (298 persons; 0.11%), Same District (258 persons 0.09%) and Moshi Municipal (253 persons; 0.12%). Mwanga District has the smallest number of persons (133 persons; 0.09%) with albinism in the Region (Table 10.3 and Table 10.4).

**Table 10.3: Number and Percentage of Persons with Albinism by Sex, Place of Residence and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence	Total Population in Private Households			Albinism					
	Total	Male	Female	Total		Male		Female	
				Number	Percent	Number	Percent	Number	Percent
<b>Total</b>	<b>1,835,321</b>	<b>890,004</b>	<b>945,317</b>	<b>2,143</b>	<b>0.12</b>	<b>1,174</b>	<b>0.13</b>	<b>969</b>	<b>0.10</b>
Rural	1,410,699	687,778	722,921	1,572	0.11	856	0.12	716	0.10
Urban	424,622	202,226	222,396	571	0.13	318	0.16	253	0.11
<b>Council</b>									
Rombo District	273,755	132,503	141,252	294	0.11	150	0.11	144	0.10
Mwanga District	148,071	71,851	76,220	133	0.09	74	0.10	59	0.08
Same District	297,672	145,397	152,275	258	0.09	158	0.11	100	0.07
Moshi Municipal	208,344	99,824	108,520	253	0.12	134	0.13	119	0.11
Moshi District	530,637	258,116	272,521	809	0.15	433	0.17	376	0.14
Hai District	238,822	115,683	123,139	254	0.11	144	0.12	110	0.09
Siha District	138,020	66,630	71,390	142	0.10	81	0.12	61	0.09

**Table 10.4: Number and Percentage of Persons with Albinism by Sex and Five-Year Age Groups; Kilimanjaro Region, 2022 PHC**

Age Group	Both Sexes		Male		Female		Total Population in Private Households		
	Number	Percent	Number	Percent	Number	Percent	Both Sexes	Male	Female
<b>Total</b>	<b>2,143</b>	<b>0.12</b>	<b>1,174</b>	<b>0.13</b>	<b>969</b>	<b>0.10</b>	<b>1,835,321</b>	<b>890,004</b>	<b>945,317</b>
0 – 4	152	0.07	86	0.08	66	0.06	223,824	113,196	110,628
5 – 9	162	0.07	84	0.08	78	0.07	219,835	110,627	109,208
10 – 14	122	0.06	65	0.06	57	0.06	208,025	105,187	102,838
15 – 19	130	0.07	64	0.07	66	0.07	177,390	88,299	89,091
20 – 24	169	0.11	84	0.12	85	0.11	153,273	72,921	80,352

Age Group	Both Sexes		Male		Female		Total Population in Privatete Households		
	Number	Percent	Number	Percent	Number	Percent	Both Sexes	Male	Female
25 – 29	184	0.14	97	0.15	87	0.12	133,410	63,773	69,637
30 – 34	190	0.17	96	0.17	94	0.16	113,041	54,952	58,089
35 – 39	145	0.15	92	0.20	53	0.11	94,802	45,131	49,671
40 – 44	157	0.17	97	0.22	60	0.13	90,725	43,324	47,401
45 – 49	144	0.17	83	0.20	61	0.14	85,403	40,609	44,794
50 – 54	127	0.16	71	0.19	56	0.13	79,970	37,354	42,616
55 – 59	97	0.16	50	0.17	47	0.14	62,211	29,182	33,029
60 – 64	110	0.19	62	0.23	48	0.15	58,233	27,098	31,135
65 – 69	71	0.17	40	0.22	31	0.14	41,024	18,534	22,490
70 – 74	67	0.19	33	0.21	34	0.18	34,767	15,799	18,968
75 – 79	47	0.22	29	0.31	18	0.15	21,764	9,433	12,331
80+	69	0.18	41	0.28	28	0.12	37,624	14,585	23,039

#### 10.4 Population with Other Types of Disability

Results reveal that 17,230 persons in Kilimanjaro Region which is equivalent to 2.41 percent of the regional population have other types of disability. Psoriasis (0.38%) and mental health (0.37%) are the most common types of other disability in the Region. The percentage of females with spinal cord injuries (0.18%) and psoriasis (0.39%) is higher than that of males and for all types. The same pattern is observed in both rural and urban areas (Table 10.5).

**Table 10.5: Number and Percentage of Persons Aged 7 years and Above with Other Types of Disability by Place of Residence and Sex; Kilimanjaro Region, 2022 PHC**

Other Types of Disability	Number of Persons			Percent								
	Both sexes	Male	Female	Total			Rural			Urban		
				Both sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	17,230	8,472	8,758	2.41	2.52	2.32	2.47	2.53	2.41	2.40	2.51	2.30
Cleft Palate	2,218	1,021	1,197	0.31	0.30	0.32	0.28	0.28	0.27	0.32	0.31	0.33
Hydrocephalus	178	99	79	0.02	0.03	0.02	0.06	0.06	0.06	0.02	0.02	0.01
Spinal bifida	160	78	82	0.02	0.02	0.02	0.06	0.07	0.06	0.01	0.01	0.01
Spinal cord injuries	1,089	416	673	0.15	0.12	0.18	0.17	0.15	0.19	0.15	0.12	0.18
Epilepsy or seizures	1,513	759	754	0.21	0.23	0.20	0.21	0.22	0.21	0.21	0.23	0.20
Psoriasis	2,718	1,238	1,480	0.38	0.37	0.39	0.39	0.37	0.40	0.38	0.37	0.39
Storiasis	933	436	497	0.13	0.13	0.13	0.17	0.19	0.15	0.12	0.11	0.13
Autism	392	203	189	0.05	0.06	0.05	0.05	0.05	0.04	0.06	0.06	0.05
Mental health	2,625	1,463	1,162	0.37	0.43	0.31	0.29	0.32	0.26	0.39	0.46	0.32

Other Types of Disability	Number of Persons			Percent								
				Total			Rural			Urban		
	Both sexes	Male	Female	Both sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Mental disorder	1,790	995	795	0.25	0.30	0.21	0.22	0.23	0.21	0.26	0.31	0.21
Dwarfism	347	153	194	0.05	0.05	0.05	0.09	0.09	0.09	0.04	0.04	0.04
Leprosy	73	39	34	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01
Hunch Back	121	67	54	0.02	0.02	0.01	0.02	0.01	0.02	0.02	0.02	0.01
Other	3,073	1,505	1,568	0.43	0.45	0.42	0.46	0.48	0.43	0.42	0.44	0.41

## 10.5 Causes of Disabilities

There are different causes of disabilities within the population. Some persons are born with disabilities (congenital malformations), or a disability may be a result of a disease, accident, physical violence, drug abuse or pregnancy complications.

The 2022 PHC results reveal that diseases are major causes of all types of disability in Kilimanjaro Region. Almost 6 out of 10 PWDs (57.5%) reported disease as a cause of their disability while 12.8 percent were born with disability. Relatively high proportion of PWDs (61.4%) living in urban areas reported diseases as the major cause of their disabilities compared with 56.6 percent of those living in rural areas. Another notable cause of disabilities in the Region is accidents (7.9%).

More males with disabilities (11.5%) reported accidents as a major cause of their disability compared with females (5.0%) (Tables 10.6 and 10.7).

**Table 10.6: Percentage Distribution of Persons with Disability by Cause of Disability, Place of Residence and Sex; Kilimanjaro Region, 2022 PHC**

Place of Residence/Sex	Cause of Disability								
	Total	Percent	Inborn	Disease	Accident	Beaten	Drug abuse	Pregnancy	Others
<b>Total</b>	<b>65,891</b>	<b>100.0</b>	<b>12.8</b>	<b>57.5</b>	<b>7.9</b>	<b>0.6</b>	<b>0.2</b>	<b>0.4</b>	<b>20.7</b>
Rural	54,772	83.1	12.5	56.6	8.0	0.7	0.2	0.3	21.6
Urban	11,119	16.9	13.8	61.4	7.3	0.5	0.1	0.5	16.3
<b>Sex</b>									
Male	29,081	44.1	15.9	56.0	11.5	0.9	0.3	NA	15.5
Female	36,810	55.9	10.3	58.6	5.0	0.4	0.0	0.6	24.9



**Table 10.7: Percentage Distribution of Persons with Disability by Sex, Cause of Disability and Type of Disability; Kilimanjaro Region, 2022 PHC**

Type of Disability	Cause of Disability																							
	Both Sexes								Male								Female							
	Total	Inborn	Disease	Accident	Beaten	Drug Abuse	Pregnancy	Others	Total	Inborn	Disease	Accident	Beaten	Drug Abuse	Pregnancy	Others	Total	Inborn	Disease	Accident	Beaten	Drug Abuse	Pregnancy	Others
Seeing	20,243	7.3	55.0	5.4	1.0	0.1	0.3	30.9	8,020	9.5	51.8	9.2	1.6	0.2	-	27.7	12,223	5.8	57.1	3.0	0.6	0.0	0.5	33.0
Hearing	8,063	23.3	37.4	3.5	1.1	0.1	0.3	34.2	3,417	27.9	38.8	5.4	1.4	0.1	-	26.4	4,646	20.0	36.4	2.1	0.9	0.1	0.6	39.9
Walking	25,410	9.3	42.3	15.3	0.4	0.0	0.4	32.2	10,450	12.4	40.3	23.0	0.7	0.0	-	23.6	14,960	7.1	43.8	10.0	0.3	-	0.6	38.2
Remembering	11,035	24.1	33.8	3.0	0.5	0.8	0.4	37.4	4,862	30.6	36.2	4.5	0.7	1.6	-	26.4	6,173	19.0	32.0	1.8	0.4	0.1	0.8	46.0
Self-care	10,470	21.8	37.5	6.2	0.5	0.3	0.3	33.5	4,561	28.8	40.8	8.5	0.7	0.6	-	20.5	5,909	16.4	35.0	4.3	0.2	0.0	0.5	43.5
Communication	18,735	16.9	77.4	0.5	0.1	0.2	0.3	4.6	9,237	20.3	76.0	0.6	0.1	0.3	-	2.7	9,498	13.7	78.8	0.5	0.1	0.0	0.6	6.4

## 10.6 Use of Assistive Devices

Assistive devices help PWDs to perform their daily activities more effectively. Devices enable PWDs to participate in social economic activities such as education and employment, and hence improve their social-economic conditions.

Results reveal that, the use of assistive devices among PWDs is very low, except for the persons with Albinism, of whom 17.9 percent are using assistive devices. For example, less than one percent (0.6%) of persons with hearing and 1.8 percent of those with communication (%) disabilities are using assistive devices. Use of assistive devices is relatively higher in urban than rural areas for all types of disability (Table 10.8).

**Table 10.8: Percentage of Persons with Disability Using Assistive Devices by Sex and Type of Disability; Kilimanjaro Region, 2022 PHC**

Type of Disability	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Albinism	17.9	19.5	15.7	16.8	18.5	14.4	19.3	21.0	17.3
Seeing	2.4	2.1	2.6	1.8	1.7	1.9	3.3	2.8	3.7
Hearing	0.6	0.5	0.6	0.5	0.5	0.4	0.7	0.6	0.9
Walking	6.2	6.6	5.8	5.4	5.9	5.0	7.5	7.7	7.3
Self-care	4.9	4.8	5.0	4.2	4.0	4.4	6.0	6.2	5.9
Communication	1.8	2.2	1.5	1.2	1.2	1.1	2.9	3.8	2.1

## Chapter 11

### Land Ownership

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#### Key Points

- About thirty- four percent (33.5%) of the population aged 15 years and above in Kilimanjaro Region own land.
- Nearly twenty- three percent (22.5%) of males in Kilimanjaro Region own land alone compared with 13.1 percent of females.
- More than fifty percent (52.6%) of persons aged 15 years and above who own land in Kilimanjaro Region do not possess legal documents.
- Among the land owners possessing legal documents in Kilimanjaro Region, 23.1 percent own land alone.

#### 11.1 Introduction

This chapter describes the status of land ownership which includes information on persons owning land, type of ownership and possession of legal land ownership documents. Land ownership is a process of acquiring land tenure or right of occupancy from a relevant Government authority. The process provides the legal notes or documents to own or occupy the land. Land ownership in Tanzania can be categorized into three main tenure systems namely Customary Land Tenure, Right of Occupancy (ROO) and Government Land.

Respondents were asked about possession of any legal documents pertaining to land ownership. Legal documents for land ownership in this chapter comprise Certificate of Right of Occupancy (title deed), residential license, letter of offer/acknowledgment of payment, customary ownership, contract, land registration card (Zanzibar) and official documents from Mtaa/Village/Shehia.

## 11.2 Land Ownership Status

Information on land ownership status was collected from individuals in private households only and is categorised into individuals owning land alone; jointly; both alone and jointly; or do not own land. In this report land ownership is irrespective of type of use.

Results reveal that 33.5 percent of persons aged 15 years and above in Kilimanjaro Region owns land. Ownership of land is higher (36.8%) among rural population compared with the urban population (23.2%). Land ownership by sex reveals that proportion of females owning land is lower than that of males (Table 11.1).

**Table 11.1: Percentage Distribution of Persons Aged 15 Years and Above Owning Land by Sex and Place of Residence; Kilimanjaro Region, 2022 PHC**

Place of Residence	Sex	Land Ownership		Percent of Persons Owning Land
		Total Population	Number of Individuals Owning Land	
Total	<b>Both Sexes</b>	<b>1,183,637</b>	<b>397,089</b>	<b>33.5</b>
	Male	560,994	212,509	37.9
	Female	622,643	184,580	29.6
Rural	<b>Both Sexes</b>	<b>901,767</b>	<b>331,795</b>	<b>36.8</b>
	Male	429,831	176,782	41.1
	Female	471,936	155,013	32.8
Urban	<b>Both Sexes</b>	<b>281,870</b>	<b>65,294</b>	<b>23.2</b>
	Male	131,163	35,727	27.2
	Female	150,707	29,567	19.6

About sixty-five percent (65.2%) of persons aged 15 years and above in the Region do not own land, 17.5 percent own land alone and 14.9 percent own land jointly. The ownership pattern in Kilimanjaro Region reveals that the percentage of females owning land alone (13.1%) is significantly lower than that of males (22.5%). However, the percentage of females owning land jointly is slightly higher (15.6%) than that of males (14.2%). The results further show that the percentage of females owning land jointly is higher in both rural and urban areas (17.7% and 9.0% respectively) compared with that of males (15.9% and 8.6% respectively) (Table 11.2).

**Table 11.2: Percentage Distribution of Persons Aged 15 Years and Above by Land Ownership Status, Place of Residence and Sex; Kilimanjaro Region, 2022 PHC.**

Place of Residence	Sex	Land Ownership Status					
		Total	Alone	Jointly	Both Alone and Jointly	Does Not Own	Don't Know
Total	<b>Both Sexes</b>	<b>1,183,637</b>	<b>17.5</b>	<b>14.9</b>	<b>1.1</b>	<b>65.2</b>	<b>1.2</b>
	Male	560,994	22.5	14.2	1.2	61.0	1.2
	Female	622,643	13.1	15.6	1.0	69.1	1.3
Rural	<b>Both Sexes</b>	<b>901,767</b>	<b>18.8</b>	<b>16.8</b>	<b>1.2</b>	<b>61.9</b>	<b>1.3</b>
	Male	429,831	24.0	15.9	1.3	57.7	1.2
	Female	471,936	14.1	17.7	1.0	65.8	1.3
Urban	<b>Both Sexes</b>	<b>281,870</b>	<b>13.5</b>	<b>8.8</b>	<b>0.9</b>	<b>75.8</b>	<b>1.1</b>
	Male	131,163	17.7	8.6	0.9	71.7	1.1
	Female	150,707	9.8	9.0	0.8	79.3	1.1

Results show that percentage of persons who do not own land in Kilimanjaro Region is 65.2 percent, while those who own land (alone, jointly or both) is 33.5 percent. Out of all persons who own land, the proportion is higher (37.9%) for males than for females (29.7%) (Figure 11.1).

**Figure 11.1: Percentage Distribution of Persons aged 15 Years and Above by Land Ownership Status and Sex; Kilimanjaro Region, 2022 PHC.**

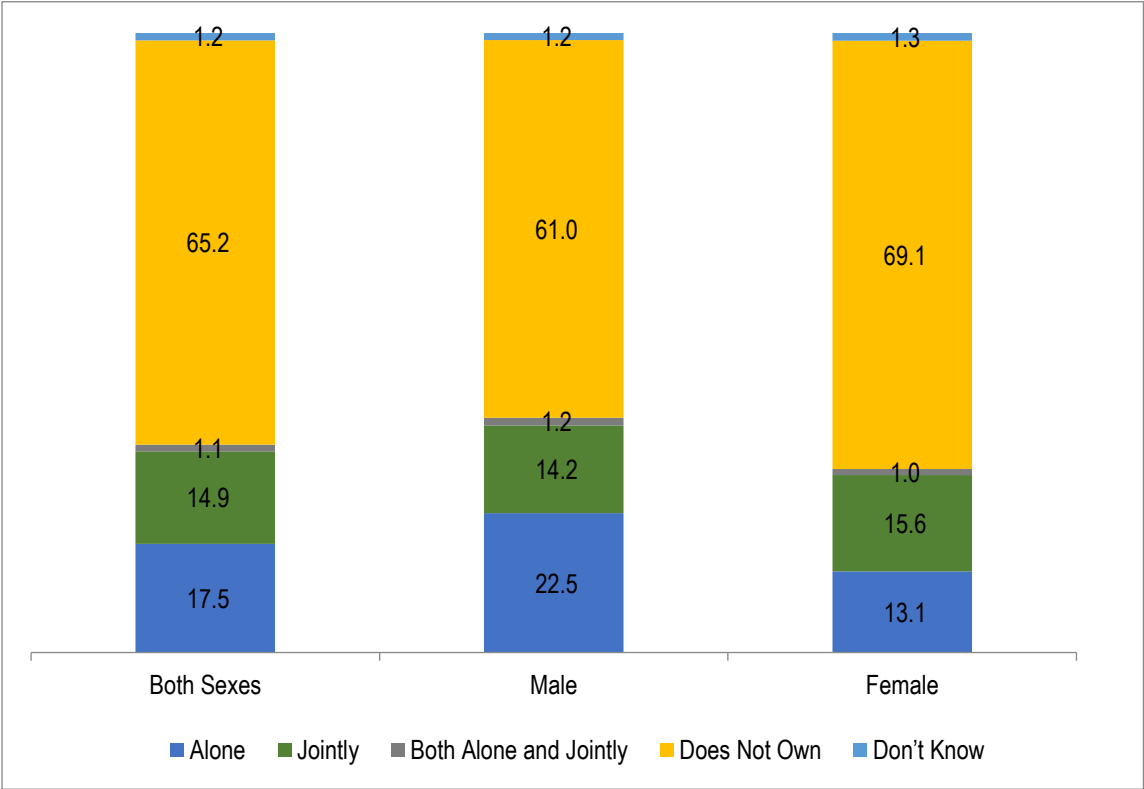


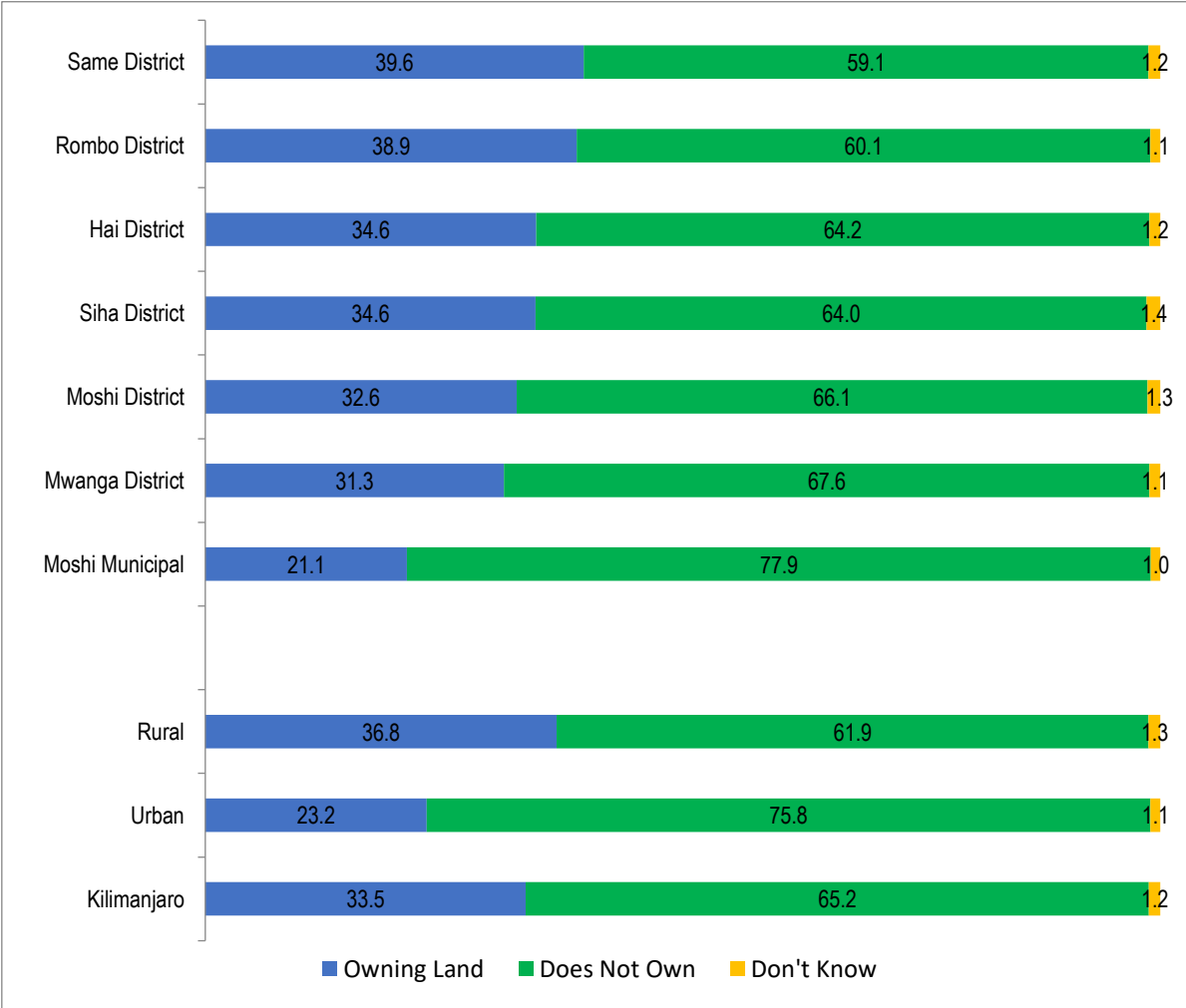
Table 11.3 presents land ownership status for persons aged 15 years and above in Kilimanjaro Region disaggregated into broad age groups and place of residence. It is observed that land is mostly owned by persons aged 20-64 years (76.7%), followed by those aged 65 years and above (21.2%). Similar ownership patterns by age with differentiated magnitudes are observed in rural and urban areas for persons aged 20-64 years (75.5% and 82.3% respectively). On the other hand, the proportion of persons aged 15-19 years owning land in rural areas is slightly higher (2.2%) than that in urban areas (2.0%). Regardless of whether a person lives in rural or urban areas, both males and females of age group 20-64 are more likely to own land than any other age group

**Table 11.3: Percentage Distribution of Persons Aged 15 Years and Above by Place of Residence, Age Groups, Land Ownership Status and Sex Kilimanjaro Region, 2022 PHC.**

Land Ownership Status	Total				Rural				Urban			
	Total	15 - 19	20 - 64	65+	Total	15 - 19	20 - 64	65+	Total	15 - 19	20 - 64	65+
<b>Total</b>	<b>397,089</b>	<b>2.2</b>	<b>76.7</b>	<b>21.2</b>	<b>331,795</b>	<b>2.2</b>	<b>75.5</b>	<b>22.2</b>	<b>65,294</b>	<b>2.0</b>	<b>82.3</b>	<b>15.7</b>
Male	212,509	2.3	77.8	19.9	176,782	2.3	76.7	21.0	176,782	0.4	16.9	2.9
Female	184,580	2.1	75.3	22.6	155,013	2.1	74.3	23.6	29,567	2.0	80.8	17.1
<b>Owning land</b>												
Total	187,609	2.5	78.1	19.4	146,500	2.6	76.7	20.7	41,109	2.1	83.1	14.9
Male	99,606	2.6	79.2	18.2	77,101	2.7	77.7	19.6	22,505	2.1	84.3	13.6
Female	88,003	2.5	76.8	20.8	69,399	2.6	75.5	21.9	18,604	2.1	81.6	16.4
<b>Does not own</b>												
Total	208,699	1.9	75.4	22.8	184,731	1.9	74.6	23.5	23,968	1.9	81.1	17.0
Male	112,413	2.0	76.6	21.5	99,336	2.0	75.8	22.2	13,077	1.9	82.3	15.9
Female	96,286	1.7	74.0	24.3	85,395	1.7	73.3	25.0	10,891	1.9	79.6	18.5
<b>Don't Know</b>												
Total	781	5.1	81.3	13.6	564	6.2	79.1	14.7	217	2.3	87.1	10.6
Male	490	4.3	84.9	10.8	345	5.5	82.0	12.5	145	1.4	91.7	6.9
Female	291	6.5	75.3	18.2	219	7.3	74.4	18.3	72	4.2	77.8	18.1

Findings reveal that Same District Council has a relatively higher proportion (39.6%) of persons aged 15 years and above owning land compared with other councils. On the other hand, the council with the lowest proportion of persons owning land is Moshi Municipal (21.1%) (Figure 11.2).

**Figure 11.2: Percentage Distribution of Population Aged 15 Years and Above by Land Ownership Status and Council; Kilimanjaro Region, 2022 PHC**



**11.3 Possession of Legal Land Ownership Documents**

The 2022 PHC results show that 52.6 percent of persons aged 15 years and above in Kilimanjaro Region own land without any legal documents. Among those possessing legal documents, 23.1 percent own land alone, 22.5 percent own land jointly and 1.6 percent own land alone and jointly. The results further reveal that ownership of legal documents is in favour of females owning land jointly (26.9%) compared with males (18.8%) (Table 11.4).

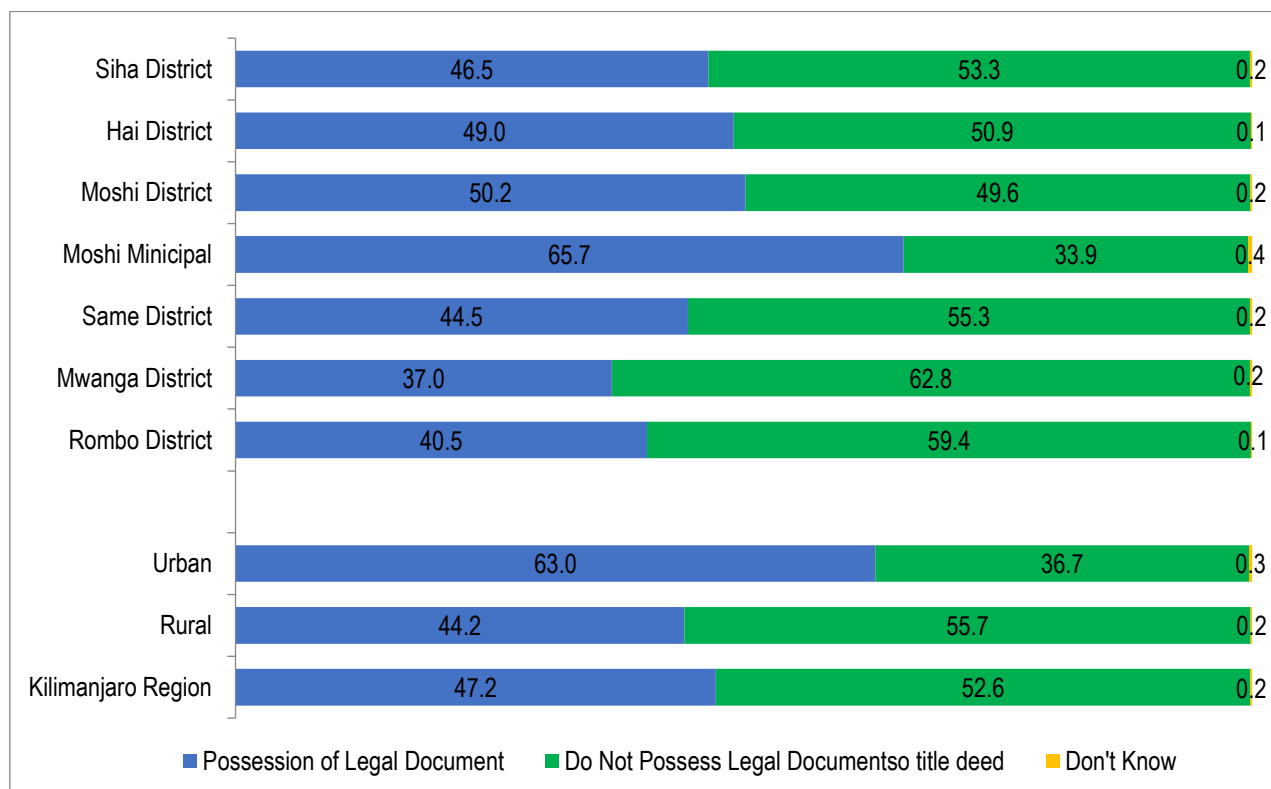
Further, almost fifty six percent (55.7%) of persons owning land in rural areas do not have any legal documents compared with 36.7 percent of persons in urban areas. Among persons owning land with legal documents in rural areas, 22.1 percent own land jointly and 20.6 percent own land alone. On the other hand, 36.0 percent of persons possessing legal documents in urban areas own land alone while 24.9 percent own land jointly. Results also show that in rural areas, possession of legal documents is higher among females owning land jointly (26.2%) whereas in urban areas, it is higher (40.8%) among males owning land alone (Table 11.4).

**Table 11.4: Percentage Distribution of Persons Aged 15 Years and Above by Sex, Place of Residence and Legal Documents Status; Kilimanjaro Region, 2022 PHC**

Ownership of Legal Document	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	397,089	212,509	184,580	331,795	176,782	155,013	65,294	35,727	29,567
Alone	23.1	26.6	19.1	20.6	23.7	17.0	36.0	40.8	30.1
Jointly	22.5	18.8	26.9	22.1	18.5	26.2	24.9	20.2	30.6
Both alone and jointly	1.6	1.5	1.7	1.5	1.4	1.6	2.1	1.9	2.2
No legal document	52.6	52.9	52.2	55.7	56.2	55.1	36.7	36.6	36.8
Don't Know	0.2	0.2	0.2	0.2	0.2	0.1	0.3	0.4	0.2

The Council with the highest proportion of land owners with legal documents is Moshi Municipal Council (65.7%) followed by Moshi District (50.2%). On the other hand, Council with the lowest proportion of land owners with legal documents is Mwanga District (37.0%) (Figure 11.3).

**Figure 11.3: Percentage Distribution of Persons Aged 15 Years and Above by Legal Documents Status and Council; Kilimanjaro 2022 PHC**



## Chapter 12

# Housing Characteristics, Assets Ownership and Environmental Control

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### Key Points

- About seven in ten (65.2%) households in Kilimanjaro Region own the houses where they live.
- More than ninety two percent (92.8%) of households use improved sources of drinking water.
- More than eighty two percent (82.4%) of households use improved toilet facilities.
- More than seventy six percent (76.5%) of households in rural areas and 29.1 percent in urban areas use firewood for cooking.
- Percentage of households using electricity from national grid for lighting increased from 28.9 percent in 2012 to 63.1 percent in 2022.
- Nearly six in ten (59.9%) households use burning of solid waste as the main method of solid disposal.

### 12.1 Introduction

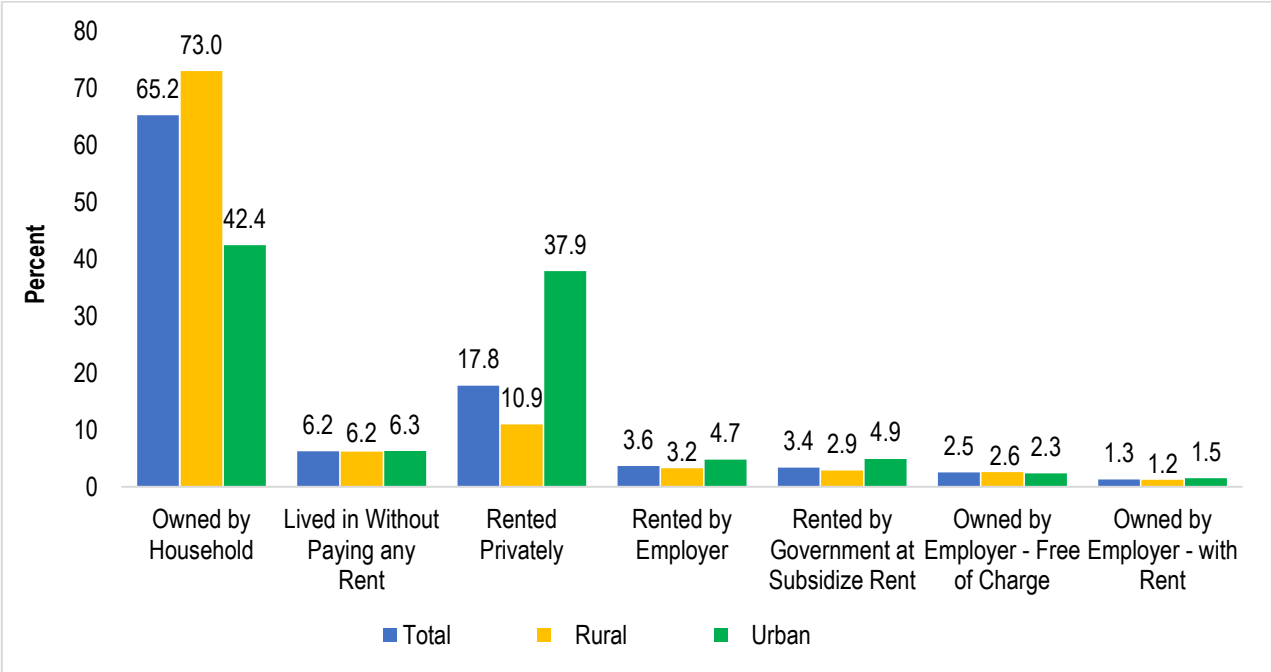
The 2022 PHC collected information on household ownership and characteristics as an indicator on household's wealth information. This chapter presents information on tenure and ownership status of the household's main dwelling; legal right over the ownership of land where the main dwelling is built; building materials for the main dwelling and number of rooms available for sleeping. In addition, it also presents information on the main source of drinking water; sanitation; main source of energy used for cooking and lighting; environmental control methods used by households; ownership of assets and equipment. The questions on housing characteristics, assets ownership and environmental control were asked in private households only.

### 12.2 Housing Ownership and Tenure Status

Households were asked about the ownership of houses where they live and the availability of legal documents over the land where the house is built. In Kilimanjaro Region, 65.2 percent of private households are living in their own houses; it is higher (73.0%) in rural

areas than in urban (42.4%). The percentages of male and female headed households owning houses are the same (65.2% each). Across councils, Rombo District has the highest percentage (74.9 %) of households living in their own houses while Moshi Municipal has the lowest percentage (38.9 %) (Figure 12.1 and Table 12.1).

**Figure 12. 1: Percentage Distribution of Households by Ownership Status of the Main Dwelling and Place of Residence; Kilimanjaro Region, 2022 PHC**



**Table 12.1: Percentage Distribution of Households by Ownership Status of the Main Dwelling, Place of Residence and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence/Headship	Total Number of Households	Ownership Status						
		Owned by Household	Lived in Without Paying any Rent	Rented Privately	Rented by Employer	Rented by Government at Subsidize Rent	Owned by Employer - Free of Charge	Owned by Employer - with Rent
<b>Total</b>	<b>494,428</b>	<b>65.2</b>	<b>6.2</b>	<b>17.8</b>	<b>3.6</b>	<b>3.4</b>	<b>2.5</b>	<b>1.3</b>
Rural	369,184	73.0	6.2	10.9	3.2	2.9	2.6	1.2
Urban	125,244	42.4	6.3	37.9	4.7	4.9	2.3	1.5
Male Headed Households	309,059	65.2	6.1	17.2	3.7	3.5	2.9	1.4
Female Headed Households	185,369	65.2	6.5	18.6	3.6	3.1	1.9	1.1
<b>Council</b>								
Rombo District	71,224	74.9	5.5	9.5	3.3	3.1	2.5	1.2
Mwanga District	38,751	68.0	7.3	14.5	4.0	2.5	2.5	1.2
Same District	75,731	63.8	8.0	14.2	5.3	4.0	3.1	1.6
Moshi Municipal	63,731	38.9	5.7	44.2	3.6	4.2	2.1	1.3
Moshi District	145,034	71.0	5.7	15.2	2.2	2.7	2.2	1.1
Hai District	64,549	65.4	6.5	15.3	4.7	4.0	2.7	1.5
Siha District	35,408	69.1	5.3	13.2	4.3	3.6	3.1	1.5

### 12.2.1 Legal Ownership of Land

In Kilimanjaro Region, 32.6 percent of the households do not have legal documents for the land where their houses are built while 10.9 percent have title deeds. Among households that live in their own houses 29.9 percent have customary type of ownership. Rural households living in their own houses are more likely (61.2%) to have customary type of ownership than those living in urban areas (28.8%), On the other hand, households living in urban areas are more likely (32.8%) to have title deeds than those in rural areas (6.5%). Female-headed households are more likely (11.5%) to have title deeds than male-headed households (10.5%).

Across councils the percentage of households with title deeds ranges from 3.4 percent in Rombo Districts to 42.0 percent in Moshi Municipal (Table 12.2).

**Table 12.2: Percentage Distribution of Households Living in Own Houses by Type of Legal Rights, Document Possessed, Place of Residence, Headship and Council; Kilimanjaro Region, 2022 PHC**

Residence/ Headship/Council	Total Number of Households Living in Own Houses	Type of Legal Right							
		Title Deed	Residential Licence	Letter of Offer or Acknowledgement of Payment	Customary Ownership	Contract	Land Registration Card (Zanzibar)	Official Document from Mtaa/Kijiji/Shehia	No Legal Right
<b>Total</b>	<b>322,463</b>	<b>10.9</b>	<b>4.0</b>	<b>3.3</b>	<b>29.9</b>	<b>4.0</b>	<b>0.0</b>	<b>13.0</b>	<b>32.6</b>
Rural	269,361	6.5	0.8	1.2	61.2	1.5	0.0	3.9	24.8
Urban	53,102	32.8	2.5	4.4	28.8	3.7	0.0	8.2	19.6
Male Headed	201,555	10.5	1.1	1.7	56.2	1.9	0.0	4.7	23.9
Female Headed	120,908	11.5	1.1	1.8	55.5	1.8	0.0	4.5	24.0
<b>Council</b>									
Rombo District	53,353	3.4	0.8	0.7	70.4	1.0	0.0	1.5	22.3
Mwanga District	26,340	7.0	1.7	2.8	29.0	0.9	0.0	3.6	55.0
Same District	48,339	9.2	1.9	2.2	56.0	1.8	0.0	5.8	23.2
Moshi Municipal	24,796	42.0	1.9	3.2	25.9	4.1	0.0	6.3	16.5
Moshi District	102,943	9.7	0.6	1.2	63.6	1.7	0.0	4.7	18.6
Hai District	42,231	10.3	0.9	2.2	56.8	1.7	0.0	4.9	23.2
Siha District	24,461	9.0	1.3	2.0	49.9	3.5	0.0	7.8	26.6

## 12.3 Household Characteristics

Household characteristics describe the living conditions of households that are useful in guiding policy interventions. The living conditions include the type of building materials for roofing, walls and floor as well as number of rooms for sleeping.

### 12.3.1 Roofing Materials

In Kilimanjaro Region, 97.1 percent of households are living in houses with improved roofing materials (iron sheet, tiles, concrete and asbestos). At the Council level, more than 90 percent of households in all councils in the Region are living in houses with improved roofing materials (Figure 12.2).

**Figure 12.2: Percentage Distribution of Households with Improved and Unimproved Roofing Material by Council; Kilimanjaro Region, 2022 PHC**

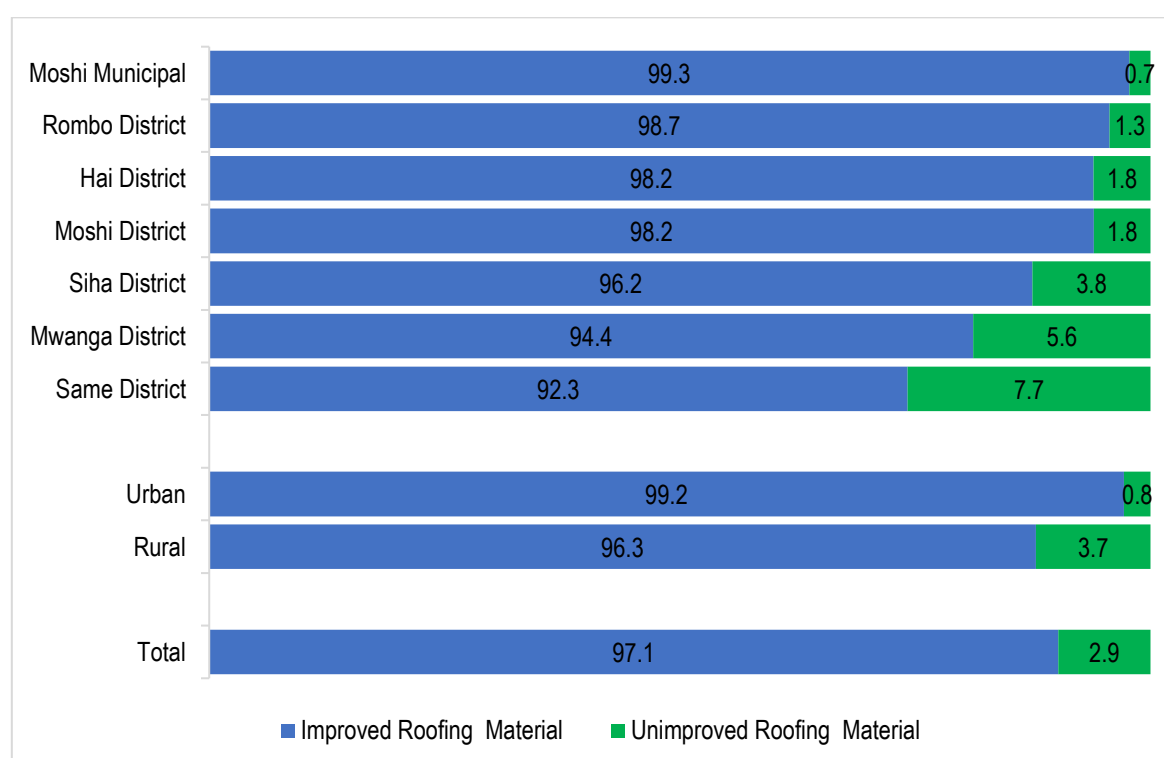


Table 12.3 show that, the majority of households in urban areas (98.0%) are living in houses roofed with iron sheets compared with 95.7 percent of households in rural areas. The percentage of households living in houses roofed with iron sheets ranges from 91.5 percent in Same District Council to 98.3 percent in Rombo District Council. The Council with the highest percentage (6.4%) of households living in houses roofed with grass or leaves is Same District.

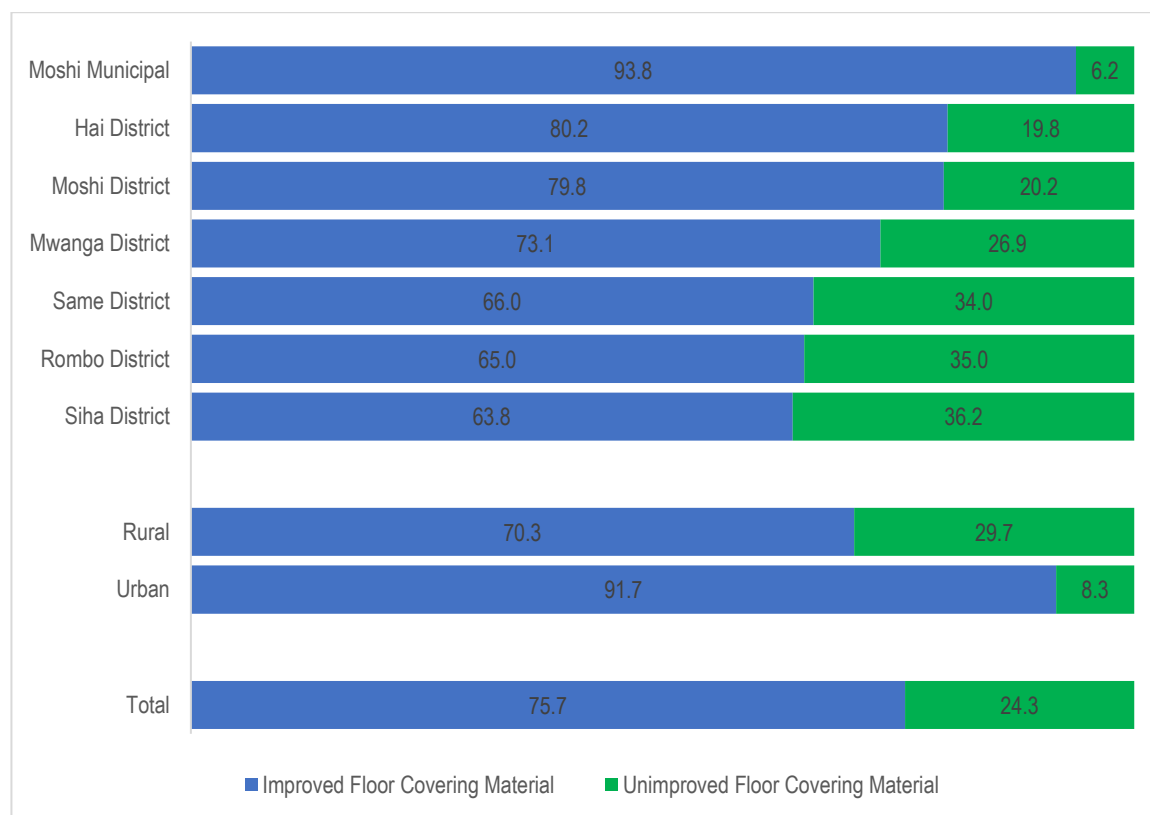
**Table 12.3: Percentage Distribution of Households by Type of Roofing Material of Main Dwelling, Place of Residence and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence	Total Number of Household	Type of Roofing Materials							
		Iron sheets	Tiles	Concrete	Asbestos	Grass/Leaves	Mud and Leaves	Plastics/Box	Tent
<b>Total</b>	<b>494,428</b>	<b>96.3</b>	<b>0.5</b>	<b>0.1</b>	<b>0.1</b>	<b>2.3</b>	<b>0.4</b>	<b>0.1</b>	<b>0.2</b>
Rural	369,184	95.7	0.4	0.1	0.1	2.9	0.4	0.1	0.2
Urban	125,244	98.0	0.8	0.2	0.2	0.6	0.1	0.0	0.1
<b>Council</b>									
Rombo District	71,224	98.3	0.2	0.0	0.1	0.7	0.4	0.2	0.1
Mwanga District	38,751	93.3	0.7	0.1	0.2	4.9	0.4	0.2	0.2
Same District	75,731	91.5	0.5	0.1	0.2	6.4	0.6	0.1	0.6
Moshi Municipal	63,731	97.8	1.0	0.3	0.2	0.5	0.1	0.0	0.1
Moshi District	145,034	97.7	0.3	0.1	0.1	1.3	0.3	0.1	0.1
Hai District	64,549	97.4	0.6	0.1	0.1	1.3	0.3	0.1	0.1
Siha District	35,408	95.5	0.5	0.1	0.2	2.9	0.5	0.2	0.2

### 12.3.2 Floor Covering Materials

The percentage of households in Kilimanjaro Region living in houses with improved floor covering materials (cement, ceramic tiles, parquet or polished wood, terrazzo, vinyl or asphalt strips) is 75.7 while 24.3 percent live in houses with non-improved materials (wood planks, palm or bamboo, earth or sand, dung, containers or tents). Across councils, households with improved floor covering materials range from 63.8 percent in Siha District to 93.8 percent in Moshi Municipal (Figure 12.3).

**Figure 12.3: Percentage Distribution of Households Living in Households with Improved and Unimproved Floor Covering Materials by Council; Kilimanjaro Region, 2022 PHC**



The results further show that, 64.5 percent of households in Kilimanjaro Region are living in dwellings with cement floors followed by those living in dwellings with earth or sand floors (22.2%). In urban areas, about eight out of ten households (75.6%) are living in houses with cement as floor covering material followed by households living in houses with ceramic tile floors (14.7%). In rural areas, most households (60.7%) are living in houses that have cement as floor covering materials followed by those living in houses with earth or sand floors (27.2%).

Percentage of households living in houses with cement as floor covering material in the main dwelling is highest (76.8%) in Moshi Municipal Council, followed by Hai District Council (68.5%). The Council with the lowest percentage (55.0%) of households living in houses with cement as floor covering material in the main dwelling is Siha District (Table 12.4).

**Table 12.4: Percentage Distribution of Households by Type of Floor Covering Material of Main Dwelling, Place of Residence and Council; Kilimanjaro, 2022 PHC**

Place of Residence	Total Number of Households	Type of Flooring Materials									
		Cement	Ceramic Tiles	Parquet or Polished Wood	Terrazzo	Vinyl or Asphalt Strips	Wood Planks	Palm/Bamboo	Earth/Sand	Dung	Others <sup>7</sup>
<b>Total</b>	<b>494,428</b>	<b>64.5</b>	<b>10.0</b>	<b>0.5</b>	<b>0.7</b>	<b>0.1</b>	<b>0.7</b>	<b>0.2</b>	<b>22.2</b>	<b>0.3</b>	<b>0.9</b>
Rural	369,184	60.7	8.4	0.5	0.7	0.1	0.9	0.2	27.2	0.4	0.9
Urban	125,244	75.6	14.7	0.6	0.7	0.1	0.2	0.1	7.4	0.1	0.6
<b>Council</b>											
Rombo District	71,224	56.9	6.4	1.3	0.3	0.0	2.1	0.3	32.5	0.1	0.1
Mwanga District	38,751	62.6	9.3	0.1	1.1	0.1	0.2	0.2	23.4	0.4	2.6

<sup>7</sup> Others include households living in containers or tents.

Place of Residence	Total Number of Households	Type of Flooring Materials									
		Cement	Ceramic Tiles	Parquet or Polished Wood	Terrazzo	Vinyl or Asphalt Strips	Wood Planks	Palm/Bamboo	Earth/Sand	Dung	Others <sup>7</sup>
Same District	75,731	57.7	6.7	0.7	0.8	0.1	0.2	0.2	31.0	0.6	2.0
Moshi Municipal	63,731	76.8	16.3	0.2	0.5	0.0	0.1	0.1	5.8	0.1	0.1
Moshi District	145,034	67.3	11.4	0.4	0.6	0.1	0.7	0.2	19.0	0.2	0.2
Hai District	64,549	68.5	10.4	0.2	1.1	0.0	0.4	0.2	17.6	0.5	1.1
Siha District	35,408	55.0	6.9	0.8	1.0	0.2	1.5	0.2	31.8	1.1	1.6

### 12.3.3 Wall Materials

Most households in Kilimanjaro Region, have their house walls built with cement bricks/rock bricks (41.4%), followed by baked bricks (31.0%) and pole and mud (11.1%). In urban areas, more than a half of households (54.6%) use cement bricks as wall materials, followed by baked bricks (32.6%). In rural areas, 36.9 percent of the households are living in houses built with cement bricks as the main wall materials, followed by baked bricks (30.5%).

Hai District Council has the highest (65.1%) percentage of households with houses built using cement/rock bricks. Mwanga and Same District Councils have less than 20 percent (17.2% and 11.1% respectively) of households living in houses built with cement/rock bricks (Table 12.5).

**Table 12.5: Percentage Distribution of Households by Type of Wall Materials of the Main Dwelling, Place of Residence and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence	Total Number of Households	Type of Wall Materials									
		Stones	Cement Bricks/Rock Bricks	Sundried Bricks	Baked Bricks	Timber	Timber and Sheets	Poles and Mud	Grass	Glass/Aluminium	Tent/Containers
<b>Total</b>	<b>494,428</b>	<b>2.7</b>	<b>41.4</b>	<b>6.0</b>	<b>31.0</b>	<b>6.1</b>	<b>1.1</b>	<b>11.1</b>	<b>0.3</b>	<b>0.0</b>	<b>0.3</b>
Rural	369,184	2.5	36.9	6.6	30.5	7.5	1.3	14.0	0.3	0.0	0.4
Urban	125,244	3.3	54.6	4.2	32.6	2.1	0.4	2.6	0.1	0.0	0.2
<b>Council</b>											
Rombo District	71,224	3.3	40.3	4.1	6.0	24.6	3.2	18.2	0.2	0.0	0.1
Mwanga District	38,751	2.2	17.2	11.2	52.7	0.7	0.3	14.4	0.3	0.0	0.8
Same District	75,731	3.5	11.1	3.6	67.7	0.7	0.2	11.5	0.6	0.0	0.9
Moshi Municipal	63,731	2.2	60.4	4.1	29.1	1.0	0.3	2.6	0.1	0.0	0.1
Moshi District	145,034	2.9	44.8	5.2	30.9	3.6	1.0	11.2	0.2	0.0	0.2
Hai District	64,549	1.8	65.1	9.9	13.1	1.2	0.5	7.9	0.1	0.0	0.3
Siha District	35,408	1.7	43.5	8.8	15.7	14.6	1.9	12.8	0.4	0.1	0.5

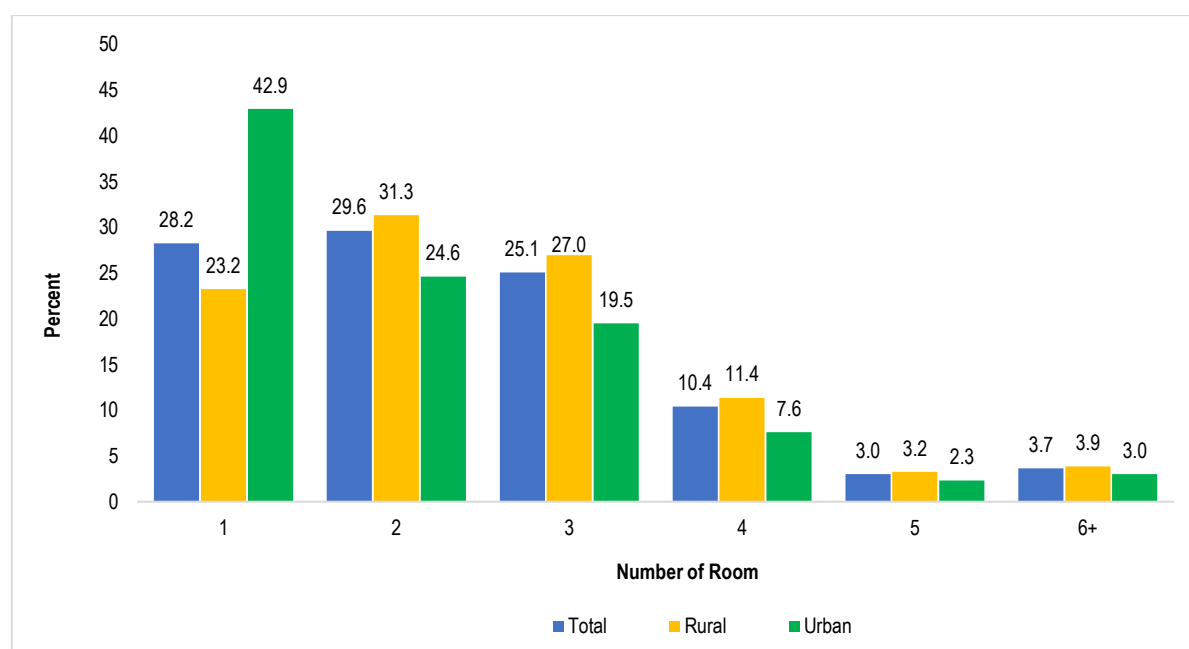
### 12.3.4 Rooms for Sleeping

The number of people sleeping in a room is a major determinant of crowding and hence affects household members' health. A room for sleeping in the 2022 PHC is defined as any space within or outside the dwelling of the household which is currently used by household members for sleeping. This implies that any space within the dwelling can be termed as a room for sleeping if currently used by household members for sleeping purpose. By this definition any other space such as a sitting room, dining room or even stores were included if they were used for sleeping.

About three in ten (28.2%) households in Kilimanjaro Region have one room for sleeping, 29.6 percent have two rooms and 25.1 percent have three rooms. On the other hand, 17.1 percent of households have more than three rooms for sleeping. There is no difference between male and female headed households in regard to the average number of rooms for sleeping.

The proportion of households with only one room for sleeping is higher (42.9%) in urban than in rural areas (23.2%). Moshi Municipal Council has the highest (48.3%) percentage of households with one room for sleeping compared with other councils. The Council with the lowest percentage of households with one room for sleeping is Rombo District (20.8%) (Figure 12.4 and Table 12.6).

**Figure 12.4: Percentage Distribution of Households by Number of Rooms for Sleeping and Place of Residence; Kilimanjaro Region, 2022 PHC**



**Table 12.6: Percentage Distribution of Households by Number of Rooms for Sleeping, Place of Residence, Headship and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence/Headship	Total Number of Households	Average Household size	Number of Rooms						Average Number of Rooms
			1	2	3	4	5	6+	
<b>Total</b>	<b>494,428</b>	<b>3.7</b>	<b>28.2</b>	<b>29.6</b>	<b>25.1</b>	<b>10.4</b>	<b>3.0</b>	<b>3.7</b>	<b>2.5</b>
Rural	369,184	3.8	23.2	31.3	27.0	11.4	3.2	3.9	2.6
Urban	125,244	3.5	42.9	24.6	19.5	7.6	2.3	3.0	2.2
Male Headed Households	309,059	3.8	28.8	28.6	25.2	10.6	3.1	3.7	2.5
Female Headed Households	185,369	3.5	27.4	31.4	24.8	10.1	2.9	3.5	2.5
<b>Council</b>									
Rombo District	71,224	3.8	20.8	35.8	25.6	10.9	3.4	3.5	2.5
Mwanga District	38,751	3.8	21.1	24.1	27.7	14.9	4.9	7.3	3.0
Same District	75,731	3.9	26.4	28.9	28.2	9.7	2.3	4.5	2.6
Moshi Municipal	63,731	3.3	48.3	23.3	17.1	6.9	2.3	2.0	2.0
Moshi District	145,034	3.7	26.6	29.4	26.7	11.3	3.3	2.7	2.5
Hai District	64,549	3.7	26.1	31.4	25.0	10.5	2.9	4.0	2.5
Siha District	35,408	3.9	29.4	33.6	22.2	8.4	2.1	4.2	2.4

## 12.4 Water and Sanitation

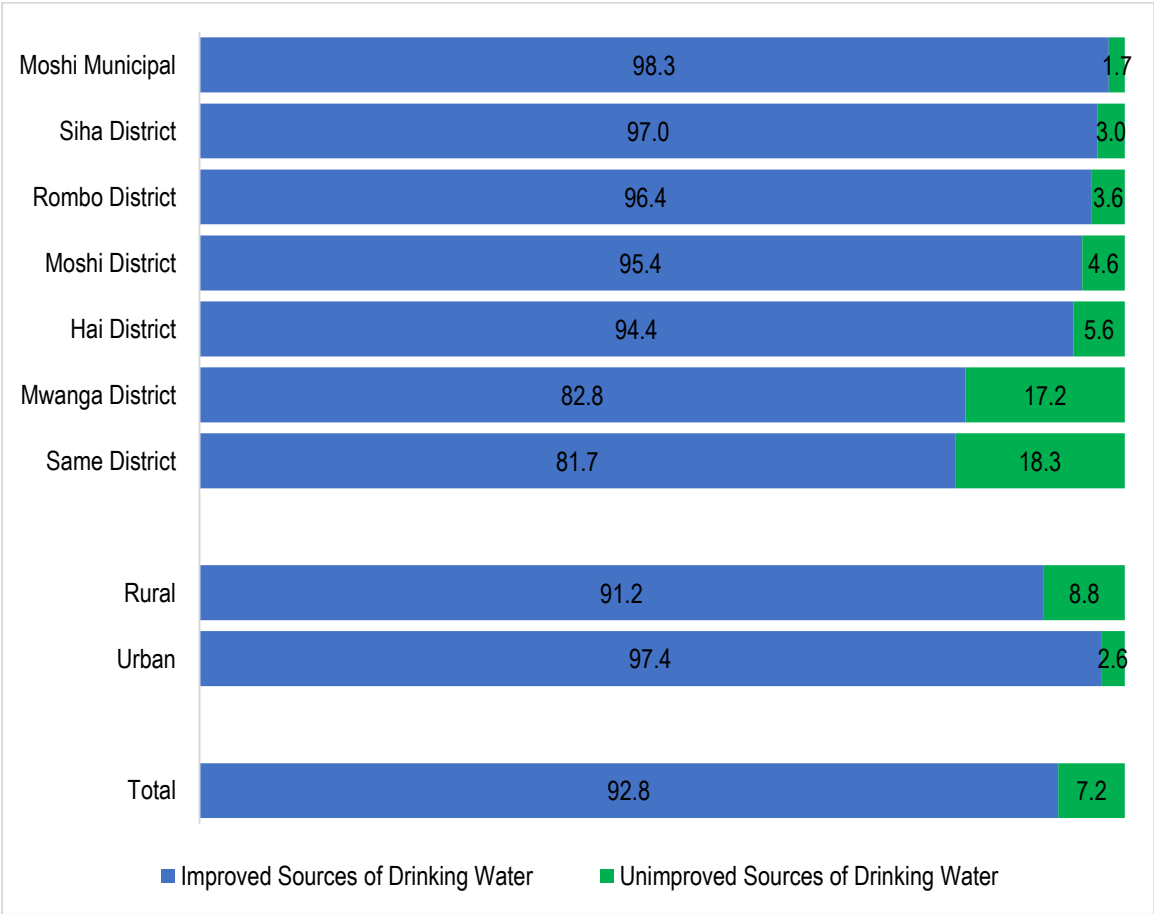
Inadequate and inequitable access to water and sanitation services along with inappropriate hygiene practices at household level, largely contributes to barriers that hinder efforts to support realisation of personal rights to live in a safe and clean environment.

### 12.4.1 Source of Drinking Water

Sources of drinking water are categorised into improved and unimproved sources. Improved sources of water include piped water, tube well/borehole, protected dug well, protected spring, rainwater, bottled water, carts with small tank/drum and tanker truck. On the other hand, unimproved sources include unprotected dug well, unprotected spring and surface water.

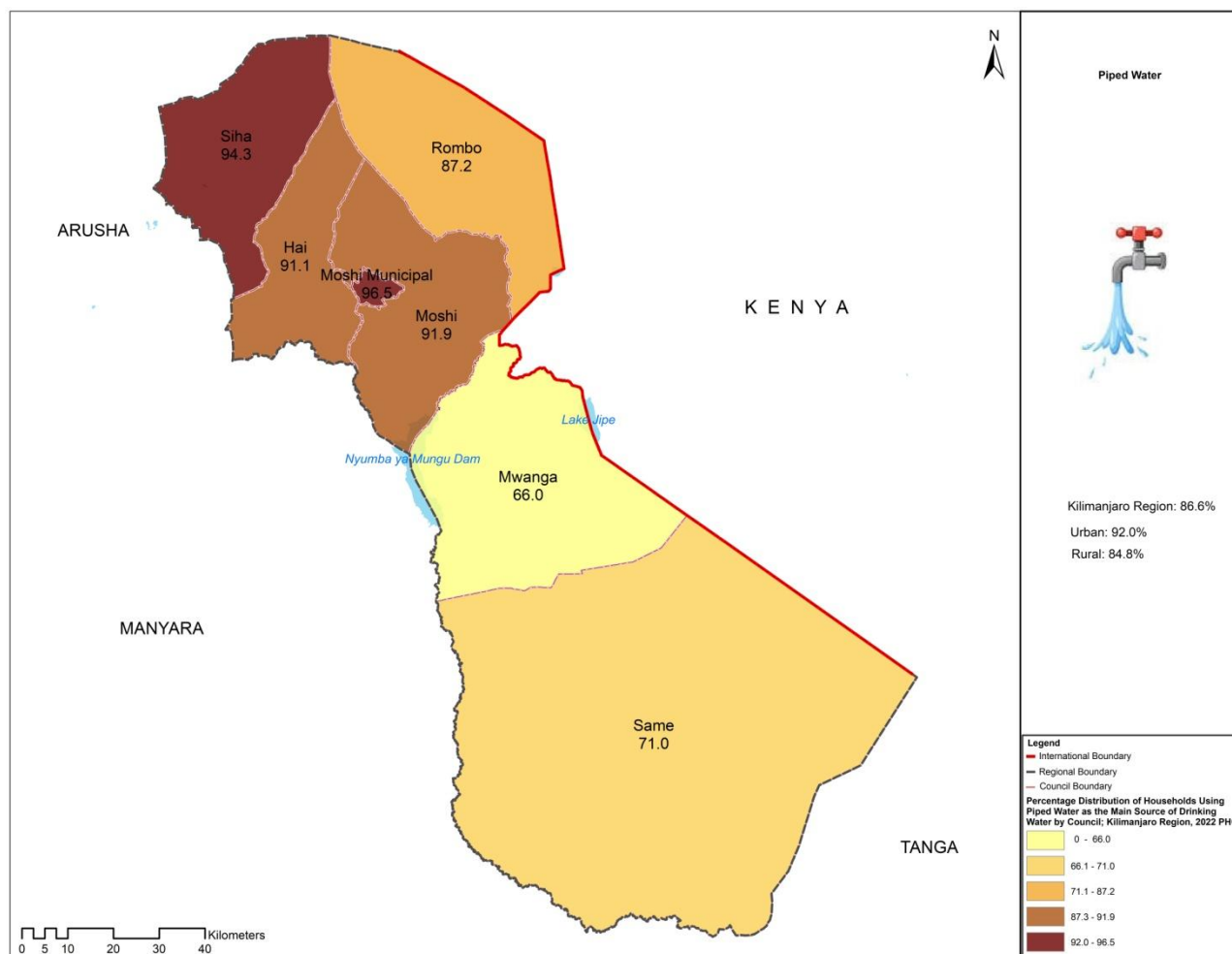
Results show that in Kilimanjaro Region 92.8 percent of households use improved sources of drinking water. Across councils, five councils namely Moshi Municipal (98.3%), Siha District (97.0%), Rombo District (96.4%), Moshi District (95.6%) and Hai District (94.4%) have more than 90 percent of their households using improved sources of drinking water. On the other hand, two councils with less than 90 percent of their households using improved sources of drinking water are Mwanga District (82.8%) and Same District (81.7%) (Figure 12.5).

**Figure 12.5: Percentage Distribution of Households Using Improved and Unimproved Sources of Drinking Water by Council; Kilimanjaro Region, 2022 PHC**



Piped water is one of the improved water sources which include piped water into dwelling, piped water in the yard/plot, public tap/standpipe, neighbours tap or standpipe. Overall, about nine in ten households (86.6%) in Kilimanjaro Region are using piped water as the main source of drinking water (Map 12.1).

**Map 12.1: Percentage Distribution of Households Using Piped Water as the Main Source of Drinking Water by Council; Kilimanjaro Region, 2022 PHC**



Households living in urban areas are more likely to use piped water than those living in rural areas (92.0% urban and 84.8% rural). Households in urban areas having piped water into their dwelling or yard is 71.2 percent, while 10.9 percent are getting water from a neighbours' piped supply and 9.9 percent from a public tap. In rural areas, 49.6 percent of households have piped water into their dwellings or yards, 18.4 percent get drinking water from a neighbours' piped supply and 16.8 percent from a public taps. Percentage of households using piped water ranges from 66.0 percent in Mwanga District Council to 96.5 percent in Moshi Municipal Council (Map 12.1 and Table 12.7).

**Table 12.7: Percentage Distribution of Households by Main Source of Drinking Water, Place of Residence and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence/Headship	Main source														
	Total Number of Households	Piped Water into Dwelling	Piped Water in the Yard/Plot	Public Tap/Standpipe	Neighbours Tap/Stand Pipe	Tube well/Borehole	Protected Dug Well	Unprotected Dug Well	Protected Spring	Unprotected Spring	Rainwater	Bottled Water	Cart With Small Tank/Drum/Bic	Tanker Truck	Surface Water
<b>Total</b>	<b>494,428</b>	<b>32.5</b>	<b>22.5</b>	<b>15.1</b>	<b>16.5</b>	<b>1.2</b>	<b>1.0</b>	<b>0.9</b>	<b>0.7</b>	<b>3.3</b>	<b>1.1</b>	<b>0.2</b>	<b>1.6</b>	<b>0.3</b>	<b>3.0</b>
Rural	369,184	28.3	21.3	16.8	18.4	1.2	1.1	1.1	0.9	4.1	1.4	0.2	1.3	0.3	3.6
Urban	125,244	44.9	26.3	9.9	10.9	1.2	0.5	0.4	0.4	0.7	0.5	0.3	2.3	0.3	1.5
Male Headed Households	309,059	32.1	22.4	15.2	16.6	1.2	1.0	1.0	0.8	3.5	1.2	0.3	1.5	0.3	3.1
Female Headed Household	185,369	33.2	22.8	14.9	16.4	1.3	0.9	0.8	0.7	2.8	1.1	0.2	1.7	0.3	2.9
<b>Council</b>															
Rombo District	71,224	26.8	20.1	8.8	31.5	1.2	1.8	1.0	0.4	1.3	3.9	0.1	1.9	0.0	1.2
Mwanga District	38,751	22.1	17.6	18.3	8.0	4.9	2.9	2.4	1.9	5.1	1.9	0.8	3.1	1.3	9.7
Same District	75,731	19.2	12.5	25.6	13.7	2.6	1.1	1.5	1.1	9.0	1.0	0.5	3.8	0.5	7.8
Moshi Municipal	63,731	55.0	30.2	4.0	7.3	0.3	0.3	0.3	0.5	0.8	0.2	0.1	0.4	0.0	0.6
Moshi District	145,034	33.8	26.4	13.6	18.1	0.5	0.7	0.7	0.8	2.4	0.2	0.1	1.1	0.1	1.5
Hai District	64,549	35.8	24.8	15.8	14.7	0.2	0.5	0.4	0.6	3.2	0.7	0.3	0.8	0.3	2.0
Siha District	35,408	32.3	20.8	26.3	14.9	0.2	0.3	0.4	0.2	0.9	1.0	0.3	0.3	0.3	1.7

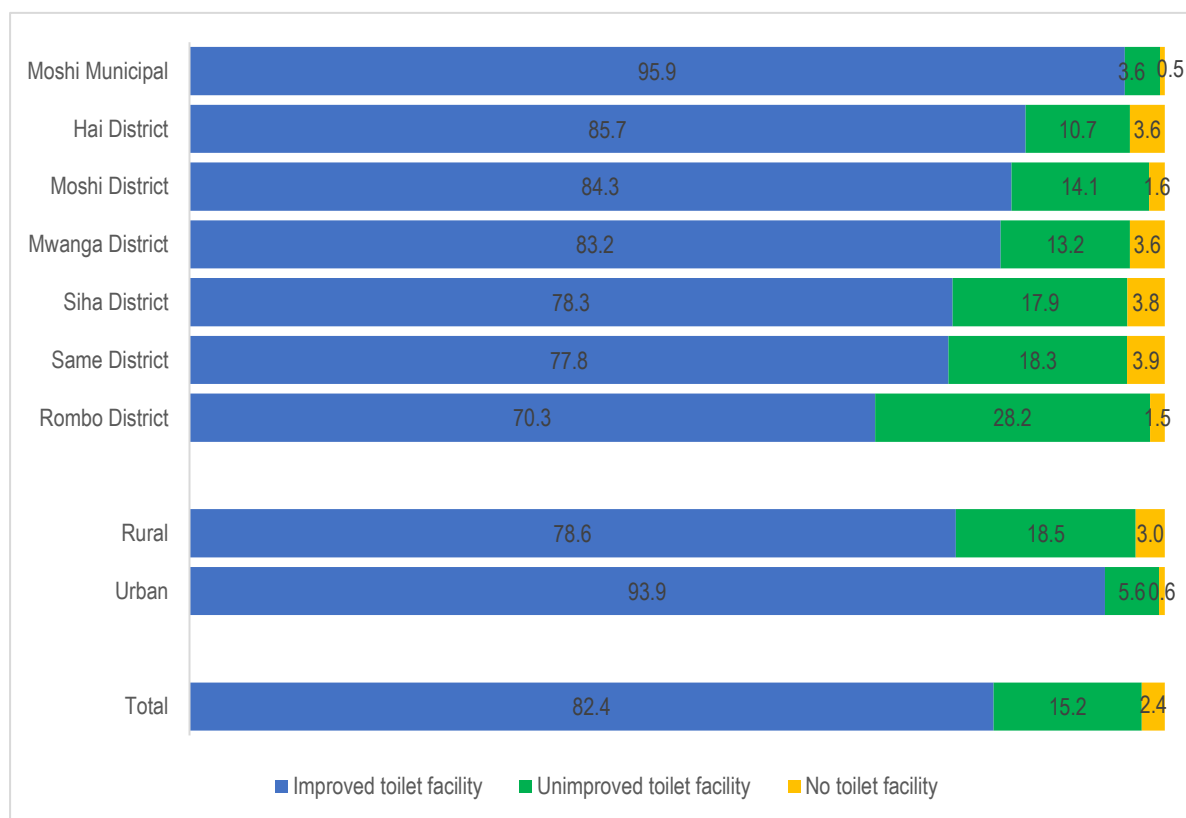
Note: Surface water includes river, dam, lake, pond, stream, charco dam, canal and irrigation channels

### 12.4.2 Sanitation Facilities

The 2022 PHC collected information on toilet facilities used by households. Toilet facilities are categorised into two groups; improved and unimproved. Improved facilities include flush or pour flush toilet that flushes the water and waste to a piped sewer system, septic tank, covered pit or unknown destination; ventilated improved pit (VIP) latrine, pit latrine with washable slab and with lid, pit Latrine with washable slab without lid and pit latrine without washable slab (soil slab). Unimproved facilities include pit latrine without slab (open pit) and bucket.

More than eighty percent (82.4%) of households in Kilimanjaro Region use improved toilet facilities. In rural households' 78.6 percent are using improved toilet facilities; this is above the Third Tanzania Five Years Development Plan target of 75 percent by 2025/26. Moshi Municipal Council has the highest percentage (95.9%) of households using improved toilet facilities, while Rombo District Council has the lowest (70.3%). The most commonly used toilet facilities in private households are flush/pour flush to covered pit (25.2 %). A higher proportion of households using flush/pour flush to covered pit are in urban than in rural areas (30.4% in urban and 23.4% in rural). The percentage of households without toilet facilities (open defecation) ranges from 0.5 percent in Moshi Municipal Council to 3.9 percent in Same District Council (Figure 12.6 and Table 12.8).

**Figure 12.6: Percentage Distribution of Households with Improved, Unimproved and Without Toilet Facility by Council; Kilimanjaro Region, 2022 PHC**



**Table 12.8: Percentage Distribution of Households by Main Type of Toilet Facility, Place of Residence, Headship and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence/Headship	Total Number of Households	Types of Toilet Facilities										
		Flush/ Pour Flush to Piped Sewer System	Flush/ Pour Flush to Septic Tank	Flush/ Pour Flush to Covered Pit	Flush/ Pour Flush to Somewhere Else	Ventilated Improved Pit (VIP) Latrine	Pit Latrine with Washable Slab and with Lid	Pit Latrine with Washable Slab without Lid	Pit Latrine with Not- Washable/ Soil Slab	Pit Latrine Without Slab/ Open Pit	Bucket	No Facility/ Bush/ Field/ Beach
<b>Total</b>	<b>494,428</b>	<b>6.4</b>	<b>10.0</b>	<b>25.2</b>	<b>2.5</b>	<b>11.8</b>	<b>7.4</b>	<b>13.8</b>	<b>5.4</b>	<b>14.5</b>	<b>0.7</b>	<b>2.4</b>
Rural	369,184	4.1	7.2	23.4	2.3	12.6	7.9	14.7	6.5	17.7	0.8	3.0
Urban	125,244	13.3	18.4	30.4	3.1	9.5	6.2	10.9	2.0	5.2	0.4	0.6
Male Headed Households	309,059	6.3	9.9	25.3	2.5	11.7	7.4	13.4	5.6	14.9	0.7	2.3
Female Headed Households	185,369	6.6	10.2	24.9	2.6	11.9	7.4	14.4	5.0	13.8	0.7	2.5
<b>Council</b>												
Rombo District	71,224	3.0	4.3	12.9	1.7	10.2	9.8	18.9	9.6	26.6	1.6	1.5
Mwanga District	38,751	4.4	12.6	33.6	2.3	11.6	4.6	9.7	4.4	12.9	0.3	3.6
Same District	75,731	3.8	5.8	35.6	4.2	9.1	5.2	8.3	5.9	17.2	1.1	3.9
Moshi Municipal	63,731	18.8	23.5	29.6	2.2	7.5	4.8	8.2	1.3	3.4	0.2	0.5
Moshi District	145,034	5.3	8.5	27.8	2.7	12.2	7.8	14.6	5.4	13.5	0.6	1.6
Hai District	64,549	5.7	12.3	17.0	1.8	15.4	10.5	18.5	4.6	10.4	0.3	3.6
Siha District	35,408	4.6	5.6	14.4	2.1	20.2	8.4	17.8	5.3	17.7	0.2	3.8

## 12.5 Sources of Energy

The 2022 PHC collected information on households' main source of energy for cooking and lighting. The information collected enabled assessment of access to clean sources of energy (electricity, solar energy and gas). Use of clean energy as an alternative source has two benefits which are (a) to reduce the heavy reliance on wood as the main source of fuel for cooking hence protecting the environment and (b) to improve the health of the population especially women through reduced exposure to smoke from wood fuels.

### 12.5.1 Sources of Energy for Cooking

Table 12.9 shows that the majority of households in Kilimanjaro Region use firewood (64.5%) as the main source of energy for cooking followed by gas (16.8%). In rural areas 76.5 percent of households use firewood for cooking while in urban it is 29.1 percent. The percentage of households in the Region using charcoal for cooking is 9.8 percent, in urban areas it is 20.2 percent and in rural areas it is 6.2 percent.

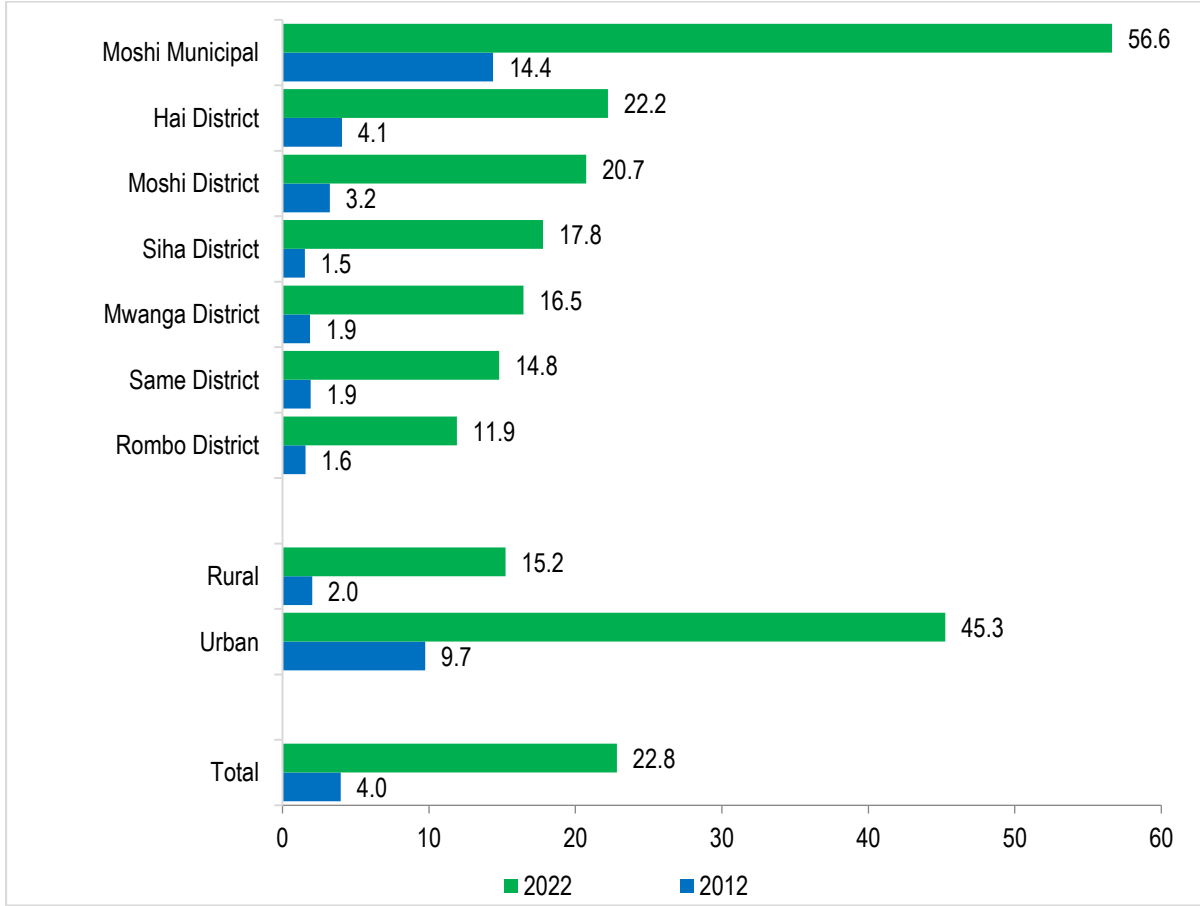
Across councils, the percentage of households using firewood for cooking ranges from 20.7 percent in Moshi Municipal to 81.7 percent in Rombo District. On the other hand, the percentage of households using charcoal for cooking ranges from 4.5 percent in Rombo District Council to 15.9 percent in Same District Council (Table 12.9).

**Table 12.9: Percentage Distribution of Households by Main Source of Energy for Cooking, Place of Residence, Headship and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence/Headship	Total Number of Households	Main Source of Energy for Cooking													
		Electricity (TANESCO)	Solar	Generator/ Private Sources	Gas	Biogas	Wind Generated Electricity	Paraffin	Coal	Charcoal	Firewood	Wood/ Residuals	Animal residuals	Charcoal Briquette	Not Applicable
<b>Total</b>	<b>494,428</b>	<b>4.5</b>	<b>1.4</b>	<b>0.3</b>	<b>16.8</b>	<b>0.1</b>	<b>0.0</b>	<b>1.0</b>	<b>0.1</b>	<b>9.8</b>	<b>64.5</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>1.3</b>
Rural	369,184	3.5	1.5	0.3	10.0	0.1	0.0	0.6	0.0	6.2	76.5	0.1	0.0	0.0	0.9
Urban	125,244	7.5	1.0	0.3	36.6	0.1	0.0	2.3	0.1	20.2	29.1	0.1	0.0	0.0	2.6
Male Headed Households	309,059	4.5	1.4	0.3	17.0	0.2	0.0	1.1	0.1	9.1	64.2	0.1	0.0	0.0	1.9
Female Headed Households	185,369	4.6	1.3	0.3	16.4	0.1	0.0	0.9	0.0	10.9	64.9	0.1	0.0	0.0	0.3
<b>Council</b>															
Rombo District	71,224	3.4	1.5	0.5	6.9	0.1	0.0	0.6	0.0	4.5	81.7	0.0	0.0	0.0	0.7
Mwanga District	38,751	4.2	1.9	0.2	10.2	0.1	0.0	0.6	0.1	12.5	68.9	0.2	0.0	0.1	1.0
Same District	75,731	3.7	2.7	0.6	8.2	0.1	0.0	0.6	0.1	15.9	66.6	0.1	0.0	0.0	1.1
Moshi Municipal	63,731	8.4	0.4	0.1	47.7	0.1	0.0	3.6	0.1	15.4	20.7	0.1	0.0	0.0	3.3
Moshi District	145,034	4.5	1.0	0.4	15.1	0.2	0.0	0.8	0.0	8.3	68.5	0.0	0.0	0.0	1.2
Hai District	64,549	4.0	1.1	0.1	17.0	0.2	0.0	0.7	0.0	7.1	68.7	0.1	0.0	0.1	1.0
Siha District	35,408	2.7	2.0	0.1	12.9	0.1	0.0	0.6	0.0	5.0	75.1	0.2	0.2	0.0	0.9

Clean energy includes electricity, gas, biogas, solar, generator or private sources and wind generated electricity. The use of clean energy for cooking by households in Kilimanjaro Region has increased from 4.0 percent in 2012 to 22.8 percent in 2022. The use of clean energy for cooking by households in urban areas increased significantly from 9.7 percent in 2012 to 45.3 percent in 2022 compared with an increase from 2.0 percent in 2012 to 15.2 percent in 2022 in rural areas. There is a large increase in percentages of households using clean energy across councils between the 2012 and 2022 censuses, ranging from 10.3 percentage points increase in Rombo District to 42.2 percentage points increase in Moshi Municipal (Figure 12.7).

**Figure 12.7: Percentage Distribution of Households Using Clean Energy for Cooking by Place of Residence and Council; Kilimanjaro Region, 2012 and 2022 PHCs**



## 12.5.2 Sources of Energy for Lighting

Results show that, 63.1 percent of households in Kilimanjaro Region use electricity from the national grid (TANESCO) as the main source of energy for lighting, followed by 15.7 percent of households using solar energy. Electricity is predominantly used in the urban households (82.9%) compared with the rural households (56.3%). Use of electricity for lighting ranges from 46.7 percent in Same District Council to 87.3 percent in Moshi Municipal Council.

Councils with lower percentages of households using electricity as the main source of energy for lighting have relatively high percentages of households using solar energy. The Council with the highest percentage of households using solar as the main source of lighting is Same District (26.4%) followed by Siha District (25.1%) (Figure 12.8 and Table 12.10).

**Figure 12.8: Percentage Distribution of Households Using Electricity and Solar as Main Sources of Energy for Lighting by Council; Kilimanjaro Region, 2022 PHC**

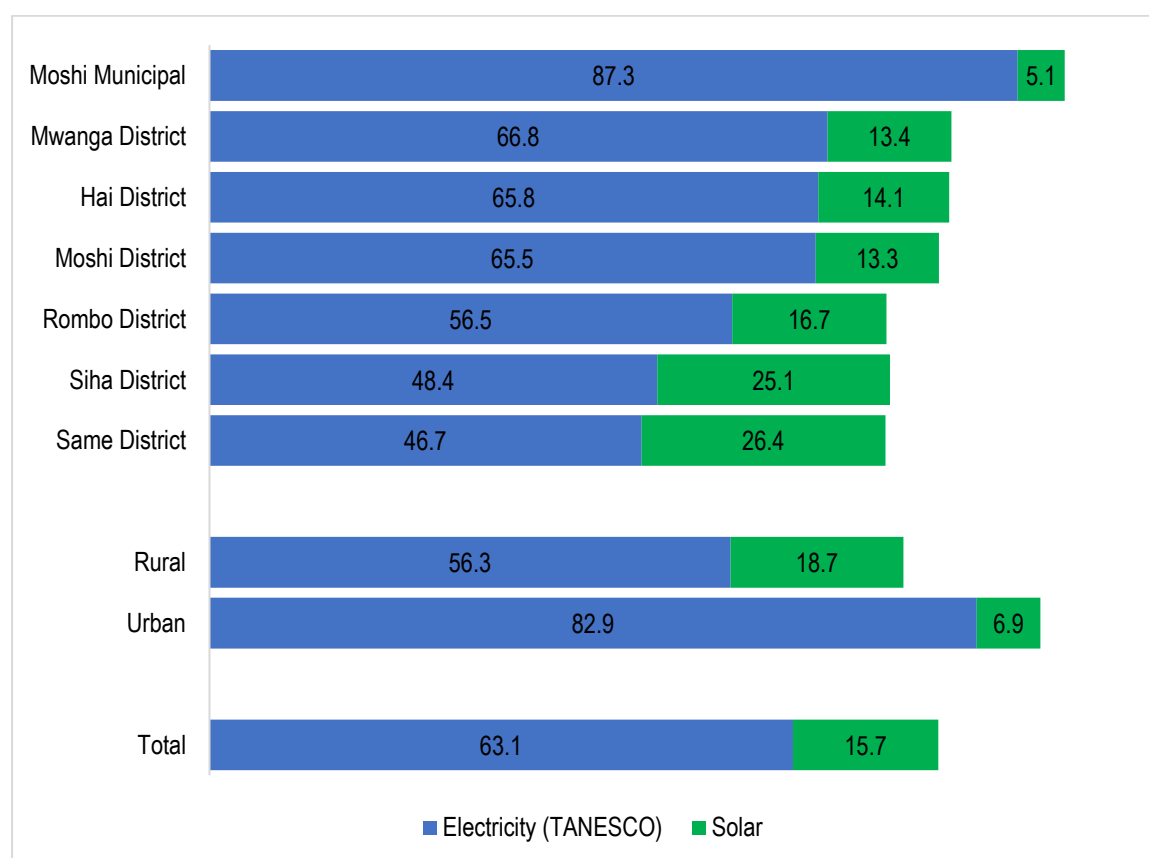
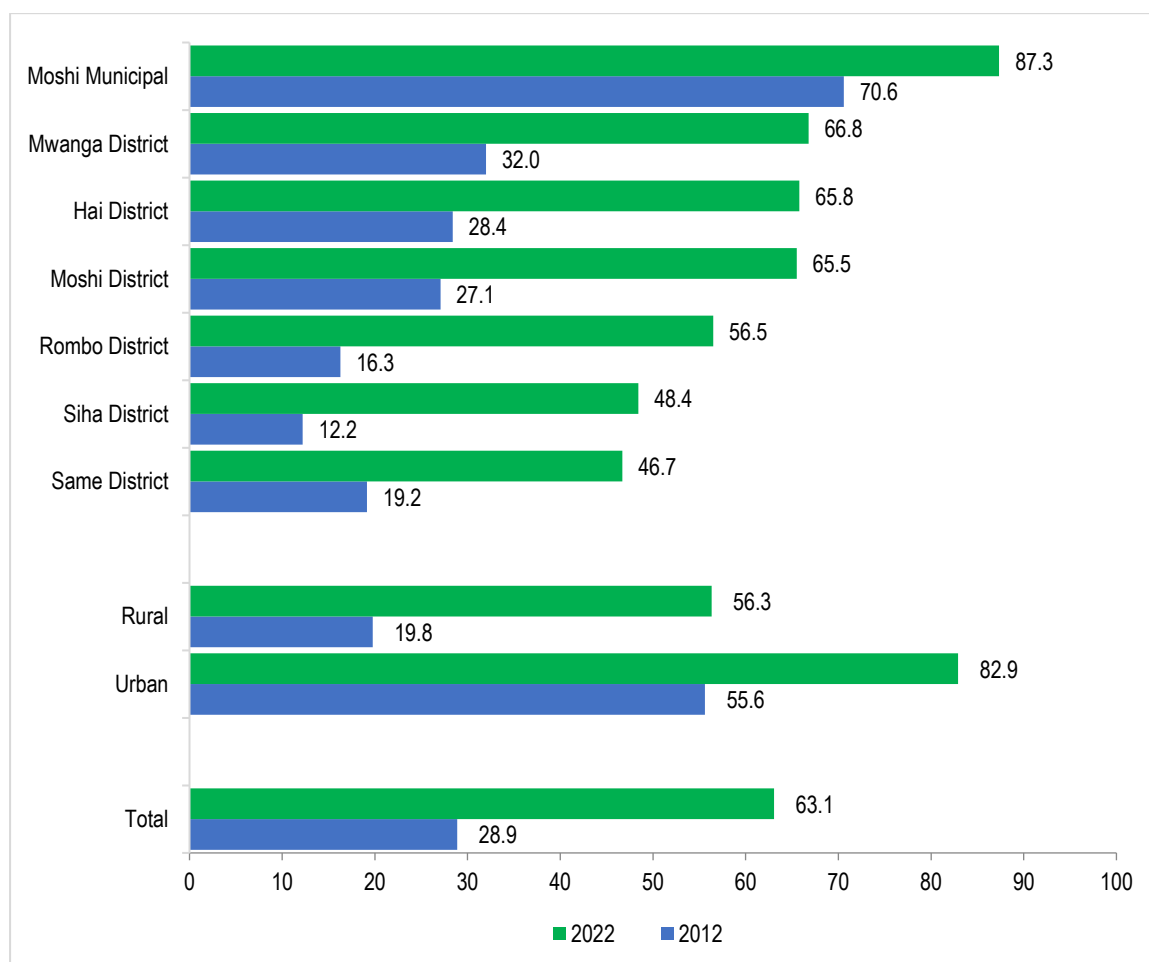


Figure 12.9 shows that, there is an increase in use of national grid electricity for lighting in Kilimanjaro Region. Percentage of households using electricity from the national grid for lighting increased from 28.9 percent in 2012 to 63.1 percent in 2022. A similar increase is observed in all councils.

**Figure 12.9: Percentage Distribution of Households Using Electricity from the National Grid for Lighting by Council; Kilimanjaro Region, 2012 and 2022 PHCs**



**Table 12.10: Percentage Distribution of Households by Main Source of Energy for Lighting, Place of Residence, Headship and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence/Headship	Total Number of Households	Main Source of Energy												
		Electricity (TANESCO)	Solar	Generator/Private Source	Gas (Industrial)	Gas (Biogas)	Wind Generated Electricity	Acetylene Lamp	Kerosene (Lantern/Chimney)	Kerosene (Wick Lamps)	Candles	Firewood	Torch/Chinese Rechargeable Lamp	Electricity (Generated from Plant Residuals)
<b>Total</b>	494,428	<b>63.1</b>	<b>15.7</b>	<b>0.3</b>	<b>0.2</b>	<b>0.0</b>	<b>0.1</b>	<b>1.2</b>	<b>1.7</b>	<b>5.3</b>	<b>1.3</b>	<b>1.1</b>	<b>9.9</b>	<b>0.0</b>
Rural	369,184	56.3	18.7	0.3	0.2	0.0	0.1	1.4	1.8	6.5	1.4	1.2	11.9	0.0
Urban	125,244	82.9	6.9	0.4	0.3	0.0	0.1	0.7	1.3	1.7	1.1	0.6	4.0	0.0
Male Headed Households	309,059	62.3	16.3	0.4	0.3	0.0	0.1	1.2	1.7	5.2	1.4	1.0	10.1	0.0
Female Headed Households	185,369	64.3	14.6	0.3	0.2	0.0	0.1	1.2	1.7	5.5	1.2	1.1	9.7	0.0
<b>Council</b>														
Rombo District	71,224	56.5	16.7	0.5	0.4	0.0	0.1	1.4	1.4	8.2	1.6	1.1	12.1	0.0
Mwanga District	38,751	66.8	13.4	0.1	0.1	0.0	0.3	1.1	1.6	3.7	2.0	0.8	10.2	0.0
Same District	75,731	46.7	26.4	0.9	0.5	0.0	0.2	1.4	1.4	4.7	1.3	1.7	14.9	0.0
Moshi Municipal	63,731	87.3	5.1	0.1	0.1	0.0	0.0	0.5	1.3	1.4	0.8	0.4	3.0	0.0
Moshi District	145,034	65.5	13.3	0.3	0.2	0.0	0.0	1.3	2.0	6.3	1.2	0.9	8.8	0.1
Hai District	64,549	65.8	14.1	0.1	0.2	0.0	0.1	1.2	2.1	5.2	1.3	0.8	9.1	0.0
Siha District	35,408	48.4	25.1	0.2	0.1	0.0	0.1	1.5	1.6	5.9	1.6	2.2	13.3	0.0



## 12.6 Household Environmental Control

### 12.6.1 Waste Disposal

Waste disposal is a collection, processing and recycling or deposition of the waste materials generated by human being. Waste materials are either in form of liquid or solid and the effect of their components may be either hazardous or inert on health and environment. Improper disposal of waste is a burden to public health provision. This section discusses the major means used by households in disposing solid and electronics waste.

About six in ten (59.9%) of households in Kilimanjaro Region use burning of solid waste as the main method of solid disposal, followed by regular collection methods (17.3%). In urban areas, 44.8 percent of private households use regular collection as means of disposing solid waste, followed by burning collection methods (41.2%) and burring/pit collection (6.7%). In rural areas 66.2 percent of households use burning followed by burring/pit collection (13.4%) and regular collection (8.0%). Moshi Municipal Council has the highest percentage (64.6%) of households using regular collection of solid waste followed by Hai District Council (14.6%) (Table 12.11).

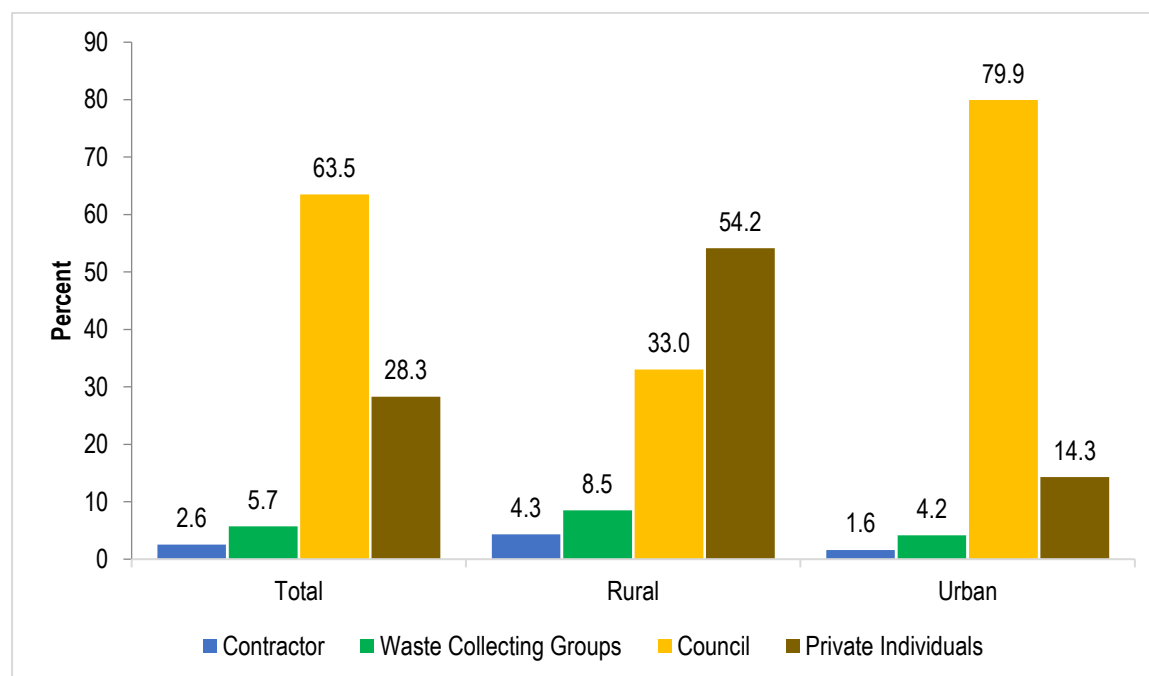
**Table 12.11: Percentage Distribution of Households by Main Means of Solid Waste Disposal, Place of Residence, Headship and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence/Headship	Total Number of Households	Means of Solid Waste Disposal								
		Regularly Collected	Irregularly Collected	Burnt	Roadside Dumping	Burying/Pit	Open Space	Ocean/ Lake/ River/ Shore	In the Farm/ Manure	Bush/ Ravine
<b>Total</b>	<b>494,428</b>	<b>17.3</b>	<b>1.8</b>	<b>59.9</b>	<b>0.3</b>	<b>11.7</b>	<b>2.0</b>	<b>0.1</b>	<b>6.0</b>	<b>1.1</b>
Rural	369,184	8.0	1.0	66.2	0.3	13.4	2.3	0.1	7.6	1.2
Urban	125,244	44.8	4.0	41.2	0.3	6.7	0.9	0.0	1.1	0.8
Male Headed Households	309,059	16.9	1.7	60.0	0.3	12.0	2.0	0.1	5.9	1.1
Female Headed Households	185,369	17.9	1.8	59.7	0.3	11.1	1.9	0.1	6.0	1.1
<b>Council</b>										
Rombo District	71,224	7.6	1.0	71.3	0.2	9.7	1.7	0.1	7.8	0.8
Mwanga District	38,751	8.7	0.9	71.4	0.4	10.4	2.2	0.0	4.3	1.7
Same District	75,731	12.3	1.3	57.8	0.5	15.4	3.2	0.1	6.8	2.6
Moshi Municipal	63,731	64.6	5.3	23.9	0.2	3.6	0.6	0.1	1.2	0.4
Moshi District	145,034	9.2	1.3	65.1	0.3	14.6	2.0	0.1	6.7	0.8
Hai District	64,549	14.6	1.5	62.2	0.2	11.3	1.9	0.1	7.6	0.7
Siha District	35,408	9.9	1.2	67.8	0.3	12.5	2.2	0.0	4.9	1.1

## 12.6.2 Waste Collection Authorities

The results show that Councils (63.5%) and private individual (28.3%) are the main authorities that usually collect solid waste in private households in Kilimanjaro Region. Households in rural areas are more likely to use private individuals (54.2%) as waste collectors while urban households are more likely to use Councils (79.9%) (Figure 12.10 and Table 12.12).

**Figure 12.10: Percentage Distribution of Households by Type of Authorities Collecting Waste and Place of Residence; Kilimanjaro Region, 2022 PHC**



**Table 12.12: Percentage Distribution of Households by Type of Authorities Collecting Waste, Place of Residence, Headship and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence/Headship	Total Number of Households	Type of Authority			
		Contractor	Waste Collecting Groups	Council	Private Individuals
<b>Total</b>	<b>94,269</b>	<b>2.6</b>	<b>5.7</b>	<b>63.5</b>	<b>28.3</b>
Rural	33,063	4.3	8.5	33.0	54.2
Urban	61,206	1.6	4.2	79.9	14.3
Male Headed Households	57,675	2.6	6.0	62.8	28.6
Female Headed Households	36,594	2.4	5.2	64.6	27.8
<b>Council</b>					
Rombo District	6,108	4.0	8.4	43.0	44.6
Mwanga District	3,711	2.6	6.1	49.3	42.0

Same District	10,313	6.3	9.6	31.1	53.0
Moshi Municipal	44,601	0.6	1.6	91.6	6.1
Moshi District	15,243	5.2	9.7	29.8	55.3
Hai District	10,349	2.5	11.0	49.7	36.8
Siha District	3,944	2.1	7.8	40.7	<b>12.5</b>

### 12.6.3 Electronic Waste Disposal

Electronic waste (e-waste) refers to electronic products that are unwanted, not working and nearing or at the end of their useful life. Electronic waste are products that have exhausted their utility value through either redundancy, replacement, or breakage and include goods such as computers, televisions, radios, cell phones, copiers, fax machines, refrigerators, washing machines and microwaves. The method through which households use to dispose their electronic waste can pose a risk to public health.

Results show that 41.4 percent of households in Kilimanjaro Region mix electronic waste with other refuse. Households living in urban areas (58.5%) and 35.6 percent of those in rural areas mix electronic waste with other refuse. The percentage of households mixing electronic waste with other refuse as main method of disposal is highest (68.0%) in Moshi Municipal Council followed by Same District Council (46.2%). All councils have more than 30 percent of their households mixing electronic waste with other refuse except for Rombo District (29.7%) (Table 12.13).

**Table 12.13: Percentage Distribution of Households by Methods of Disposing Electronic Waste by Place of Residence, Headship and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence/Headship	Total Number of Households	Electronic Waste Disposal								
		Mixed with other Refuse	Collected by Government	Collected by Private Company	Dumped in the Compound/Street	Dumped in the Latrine	Burnt in Open/Pit	Buried	Sold/Giving as Gift	Collected by Individual(s)
<b>Total</b>	<b>494,428</b>	<b>41.4</b>	<b>2.4</b>	<b>0.6</b>	<b>3.3</b>	<b>0.5</b>	<b>20.0</b>	<b>25.1</b>	<b>4.8</b>	<b>2.0</b>
Rural	369,184	35.6	0.8	0.6	3.8	0.5	22.3	29.3	5.3	1.9
Urban	125,244	58.5	7.0	0.6	1.8	0.5	13.2	12.7	3.4	2.4
Male Headed Households	309,059	41.2	2.3	0.7	3.3	0.5	19.9	25.2	4.9	2.0
Female Headed Households	185,369	41.7	2.5	0.5	3.3	0.5	20.0	24.8	4.6	2.0
<b>Council</b>										
Rombo District	71,224	29.7	0.9	0.3	3.3	0.3	23.7	33.8	6.1	2.0
Mwanga District	38,751	40.0	0.8	0.3	4.4	0.7	22.3	24.3	5.1	2.1
Same District	75,731	46.2	0.9	0.3	4.1	0.7	21.1	21.2	3.8	1.8
Moshi Municipal	63,731	68.0	10.6	0.5	1.3	0.3	7.9	6.8	2.9	1.8
Moshi District	145,034	36.7	1.2	1.1	3.5	0.6	20.8	27.9	5.9	2.5
Hai District	64,549	34.5	1.9	0.6	2.9	0.5	22.5	31.4	4.0	1.6
Siha District	35,408	40.1	1.3	0.6	3.5	0.5	21.5	26.5	4.3	1.8

## 12.7 Ownership of Assets

Ownership of assets refers to possession of any personal property regardless of the purpose it serves. Any asset owned by any member of the household was treated as a household asset in the 2022 PHC. The information collected about assets in this section are in three groups: transport, housing and agricultural equipment. Questions on ownership of specific assets aim at obtaining non-monetary poverty indicators.

### 12.7.1 Transport Assets

Transport assets are motorised equipment (i.e., motor vehicles, motorcycles or vespa and tri-motorcycles), non-motorised equipment (i.e., bicycles and tricycle) and draft animals (i.e., donkey or camel). In Kilimanjaro Region, bicycle is the main transportation asset owned by 10.8 percent of households followed by motorcycles (10.3%) and motor vehicles (4.3%). The percentage of households owning bicycles is higher in male-headed households (13.0%) compared with female-headed households (7.1%). The percentage of households owning bicycle is slightly higher (10.9%) in rural areas than in urban areas (10.3%). Across councils, the percentage of households owning bicycles ranges from 8.5 percent in Same District to 12.6 percent in Hai District (Table 12.14).

**Table 12.14: Percentage Distribution of Households by Type of Transport Assets Owned, Place of Residence, Headship and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence/Headship	Total Number of Households	Types of Assets					
		Bicycle	Motor vehicle	Motorcycle or Vespa	Tricycle (Guta)	Trimotor cycle	Donkey/Camel
<b>Total</b>	<b>494,428</b>	<b>10.8</b>	<b>4.3</b>	<b>10.3</b>	<b>0.2</b>	<b>0.5</b>	<b>1.5</b>
Rural	369,184	10.9	3.5	10.7	0.2	0.3	1.9
Urban	125,244	10.3	6.8	9.3	0.2	0.8	0.6
Male Headed Households	309,059	13.0	5.0	13.4	0.2	0.6	1.5
Female Headed Households	185,369	7.1	3.1	5.3	0.1	0.3	1.7
<b>Council</b>							
Rombo District	71,224	12.1	2.7	12.5	0.1	0.2	0.7
Mwanga District	38,751	10.0	2.9	10.8	0.3	0.2	1.8
Same District	75,731	8.5	1.9	10.3	0.2	0.2	3.1
Moshi Municipal	63,731	10.0	8.1	7.9	0.2	1.1	0.4
Moshi District	145,034	11.2	4.8	9.4	0.2	0.5	0.7
Hai District	64,549	12.6	5.3	10.3	0.2	0.6	1.9
Siha District	35,408	10.2	3.7	13.7	0.2	0.4	4.6

### 12.7.2 Housing and Cooking Assets

Housing and cooking assets include a house, electric or charcoal iron, electric or gas cooker and refrigerator or freezer. The 2022 PHC results show that, 69.1 percent of households in Kilimanjaro Region own houses. The percentage of households owning houses is higher (77.2%) in rural than in urban areas (45.2%). The percentage of male headed households owning houses is slightly higher (69.5%) than that of female headed households (68.4%). Other housing and cooking assets owned by households are electric or gas cooker (25.0%), electric iron (24.8%), charcoal iron (18.0%), and refrigerator or freezer (11.8%). Except for ownership of houses and Charcoal iron, households living in urban areas are more likely to own housing and cooking assets than households living in rural areas (Table 12.15 ).

**Table 12.15: Percentage Distribution of Households by Type of Housing and Cooking Assets Owned, Place of Residence, Headship and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence/Headship	Total Number of Households	Types of Assets				
		House	Electric Iron	Charcoal Iron	Electric or Gas Cooker	Refrigerator or Freezer
<b>Total</b>	<b>494,428</b>	<b>69.1</b>	<b>24.8</b>	<b>18.0</b>	<b>25.0</b>	<b>11.8</b>
Rural	369,184	77.2	20.6	19.7	19.5	8.6
Urban	125,244	45.2	37.3	13.1	41.3	21.5
Male Headed Households	309,059	69.5	24.9	18.7	25.2	11.8
Female Headed Households	185,369	68.4	24.7	16.9	24.7	11.8
<b>Council</b>						
Rombo District	71,224	80.0	18.0	20.0	14.6	5.3
Mwanga District	38,751	70.1	22.1	16.7	20.7	11.1
Same District	75,731	67.6	13.9	16.7	13.8	7.4
Moshi Municipal	63,731	40.0	43.8	11.8	50.3	25.9
Moshi District	145,034	74.7	27.0	19.3	26.2	12.2
Hai District	64,549	71.6	27.1	20.9	27.0	12.5
Siha District	35,408	73.8	17.7	18.8	20.3	<b>12</b>

### 12.7.3 Agricultural Assets

Agricultural assets include plough, power tiller, hand hoe, oxen, land or farm and tractor. In Kilimanjaro Region, 69.3 percent of households own land or farm and 61.6 percent own a hand hoe. Ownership of land or farm is higher among households living in rural areas (77.1%) than in urban (46.1 %). Households in rural areas are also more likely (69.2%) to own hand hoes than those in urban areas (39.4%).

Across councils, ownership of land or farm ranges from 41.2 percent of households in Moshi Municipal Council to 81.7 percent of households in Rombo District Council. Likewise, the

percentage of households owning hand hoe ranges from 30.9 percent in Moshi Municipal Council to 70.3 percent in Rombo District Council (Table 12.16).

**Table 12.16: Percentage Distribution of Households by Type of Agricultural Assets Owned, Place of Residence, Headship and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence/Headship f	Total Number of Households	Types of Assets						
		Plough	Power Tiller	Hand Hoe	Wheel barrow	Oxen	Farm or Land	Tractor
<b>Total</b>	<b>494,428</b>	<b>0.9</b>	<b>0.3</b>	<b>61.6</b>	<b>6.4</b>	<b>1.0</b>	<b>69.3</b>	<b>0.3</b>
Rural	369,184	1.1	0.3	69.2	7.0	1.2	77.1	0.3
Urban	125,244	0.4	0.3	39.4	4.8	0.4	46.1	0.3
Male Headed Households	309,059	1.0	0.3	62.9	7.3	1.1	70.5	0.3
Female Headed Households	185,369	0.9	0.2	59.5	5.0	1.0	67.2	0.2
<b>Council</b>								
Rombo District	71,224	0.3	0.2	70.3	7.7	0.4	81.7	0.1
Mwanga District	38,751	0.6	0.3	63.1	5.0	0.8	67.4	0.2
Same District	75,731	0.3	0.3	63.1	3.4	0.3	70.6	0.2
Moshi Municipal	63,731	0.3	0.2	30.9	4.0	0.3	41.2	0.2
Moshi District	145,034	0.4	0.3	66.8	7.0	0.4	73.7	0.3
Hai District	64,549	1.0	0.3	65.9	10.5	1.1	70.8	0.4
Siha District	35,408	7.3	0.4	66.0	6.6	7.7	72.9	0.6

## Chapter 13

### Access and Use of Information and Communication Technology by Individuals and Households.

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- About nine out of ten (89.4%) persons aged 15 years and above own mobile phones.
- About twenty four percent (23.9%) of persons aged 15 years and above own both smartphones and non-smartphones.
- Less than one percent (0.8%) of persons aged 15 years and above own only smartphones or tablets
- Almost two thirds (64.7%) of persons aged 15 years and above own only non-smart phones.
- About nine out of ten households (91.7%) have at least one person aged 4 or above who own a mobile phone in Kilimanjaro Region.
- Non-smartphone is mostly owned by individuals who attained university and other related, training after primary and training after secondary education (96.9%, 96.2 and 97.0 respectively).
- Smartphone is mostly owned among individuals who attained university and other related education level (78.0%)
- About two percent (1.6%) of persons aged 15 years and above own desktop and about three percent (3.4%) own laptop computers.
- Six out of ten persons (60.0%) aged 15 years and above use ICT equipment for communication.

#### 13.1 Introduction

Information and Communication Technology (ICT) is increasingly setting the pace of global socio-economic development. Countries are prioritising investment in the digital ecosystem to transform and modernise their economies in recognising ICT's developmental role in facilitating and accelerating overall development. ICT statistics have been an agenda in the International statistical community for many years, and it has been receiving increasing attention due to its impact on the economy and society in general.

The availability of ICT infrastructure and its use continues to grow. The Internet, in particular, is transforming society through the growing amount of information and related tools

available. These advances and recognition that ICTs drive society and economic development have led to the need for reliable, comprehensive and comparable statistics to support Government decisions.

This chapter describes the status of individuals and household's access and the use of Information and Communication Technology (ICT) in Kilimanjaro Region, which includes ownership and use of ICT equipment. Although the information on ICT access and use by households and individuals was collected from all persons aged four years and above, for the purpose of this report, some indicators are analysed based on persons aged 15 years and above to facilitate national and regional comparisons of ICT indicators. In addition, ICT indicators in this report comply with the International Telecommunication Union (ITU) Guidelines for Measuring ICT Access and Usage by Individuals and Households.

Information collected during 2022 PHC, includes access and usage of radios, televisions, computers, mobile phones, fixed-line telephones and internet facilities for all individuals aged four years and above. Access, usage and ownership of ICT equipment are key in linking communities, facilitating businesses and empowering communities socially and economically.

### **13.2 Households with Radio**

The 2022 PHC results reveal that 48.8 percent of households in Kilimanjaro Region have radios<sup>8</sup>. Higher proportions of households with radios are in rural areas (49.3%) than urban areas (47.3%). The Council with the highest percentage of households with radios is Rombo District (72.8%), followed by Moshi District (53.2%) and Moshi Municipal (48.4%). Same District Council has the lowest percentage (29.9%) of households with radio (Table 13.1).

### **13.3 Ownership of Television**

According to the 2022 PHC results, 37.8 percent of the households in Kilimanjaro Region own televisions. Analysis by the place of residence indicates that urban areas have a higher proportion (46.6%) of households with television sets than rural areas (34.9%). Across councils, Rombo District has the highest proportion of households owning television (59.3%), followed by Moshi Municipal (48.5%). On the other hand, Same District Council recorded the lowest percentage (24.0%) followed by Siha District (27.8%) (Table 13.1).

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<sup>8</sup> For the purpose of the 2022 PHC, radio was limited to a standalone unit only.

### **13.4 Households with Landline Telephone**

According to the Tanzania Communications Regulatory Authority (TCRA) communication statistics report, the landline telephone market is characterised by general stagnation, manifested by drastically decreasing subscriptions from 176,367 fixed telephone lines in PHC 2012 to 85,976 lines in PHC 2022.

The 2022 PHC results reveal that about one percent (0.9%) of households in Kilimanjaro Region have landline telephones. The percentage of households with landline telephones in rural areas (0.9%) is almost proportionately similar to that of urban areas (0.8%). Rombo District has the highest percentage of households with landline telephones (2.1%), followed by Moshi Municipal (1.0%). Mwanga District, Same and Siha District councils have the lowest percentage (0.4% each) of households with landline telephones (Table 13.1).

### **13.5 Households with Internet Facility**

The 2022 PHC results reveal that less than one percent (0.5%) of households in Kilimanjaro Region have Internet<sup>9</sup> facilities. Urban areas have a higher proportion (1.0%) of households with Internet facilities than rural areas (0.4%). Moshi Municipal Council has the highest percentage of households with internet facilities (1.4%), followed by Moshi, Hai and Siha Districts (0.5% each) while Rombo District Council has the lowest percentage (0.2%) (Table 13.1).

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<sup>9</sup> 'Household with Internet access' means that the Internet is generally available for use by all members of the household at any time, regardless of whether it is actually used.

**Table 13.1: Percentage Distribution of Households Owning Selected ICT Equipment and Selected Household Attributes by Place of Residence and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence	Total Number of Households	Type of ICT Equipment							
		Owning Radio	Owning Radio with children under 15	Owning Radio without children under 15	Owning Television	Owning Television with children under 15	Owning Television without children under 15	Has land-line telephone	Has internet facility
<b>Total</b>	494,428	48.8	30.3	18.5	37.8	25.1	12.7	0.9	0.5
Rural	369,184	49.3	31.4	17.8	34.9	23.8	11.1	0.9	0.4
Urban	125,244	47.3	26.8	20.5	46.6	29.0	17.6	0.8	1.0
<b>Council</b>									
Rombo District	71,224	72.8	46.7	26.1	59.3	39.5	19.8	2.1	0.2
Mwanga District	38,751	42.2	26.7	15.4	35.7	24.2	11.5	0.4	0.4
Same District	75,731	29.9	20.6	9.3	24.0	16.9	7.1	0.4	0.3
Moshi Municipal	63,731	48.4	25.9	22.5	48.5	29.2	19.4	1.0	1.4
Moshi District	145,034	53.2	32.3	20.9	34.3	23.1	11.2	0.7	0.5
Hai District	64,549	43.4	26.9	16.5	34.6	22.9	11.7	0.6	0.5
Siha District	35,408	40.5	27.1	13.4	27.8	19.8	8.0	0.4	0.5

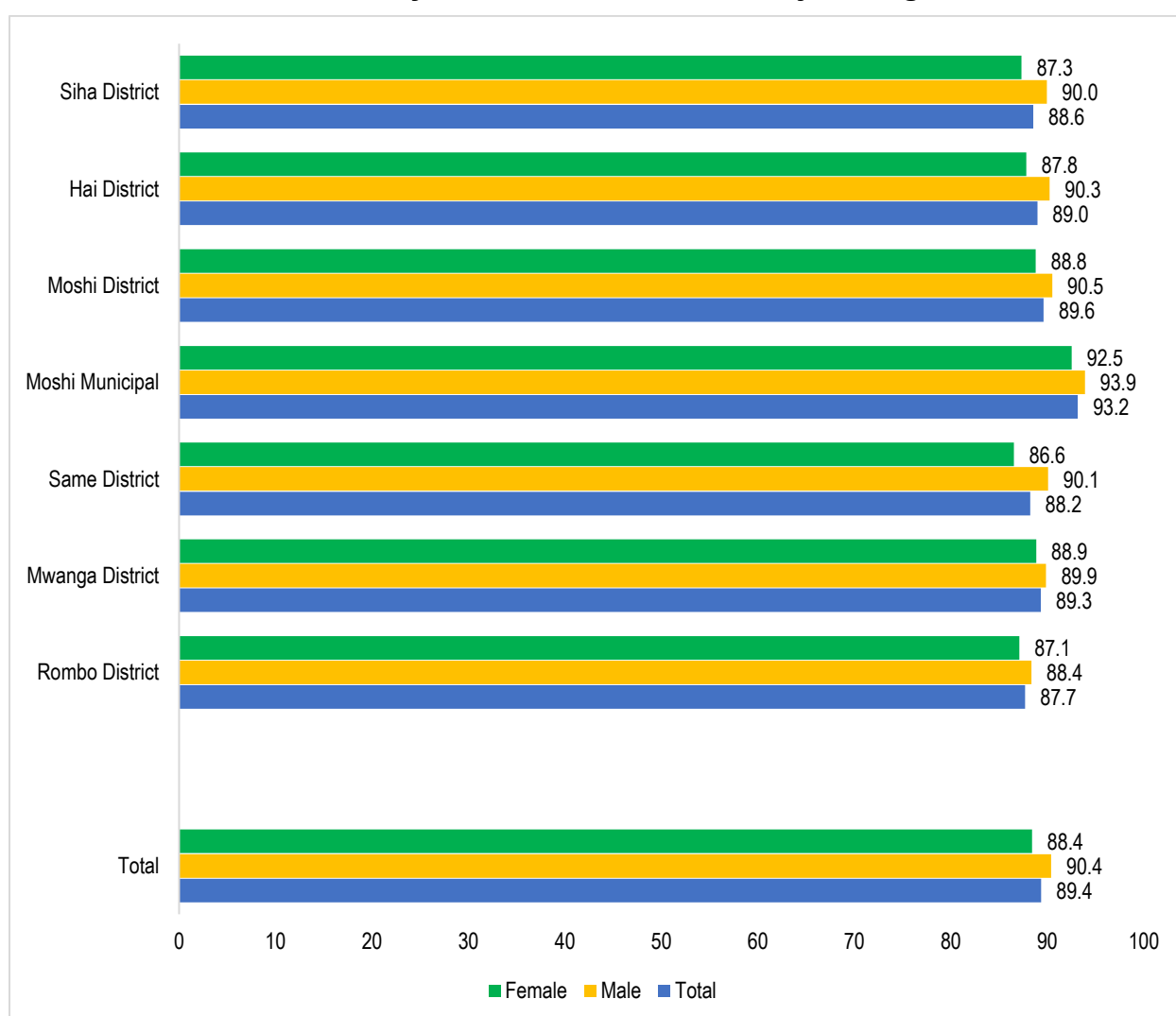
## 13.6 Mobile Phones

### 13.6.1 Ownership of Mobile Phones by Individuals

An individual is considered to own a mobile cellular telephone if he/she has a mobile phone device with at least one active SIM card for personal use. It includes those with a mobile phone for personal use that is not registered under his/her name but it excludes individuals with only active SIM cards (s) and not mobile phones.

Results reveal that 89.4 percent of the population aged 15 years and above in Kilimanjaro Region own mobile phones. Urban areas (92.2%) have higher proportions of individuals who own any mobile phone than rural areas (88.5%). Ownership of mobile phones is slightly higher among males (90.4%) than females (88.4 %) (Figure 13.1).

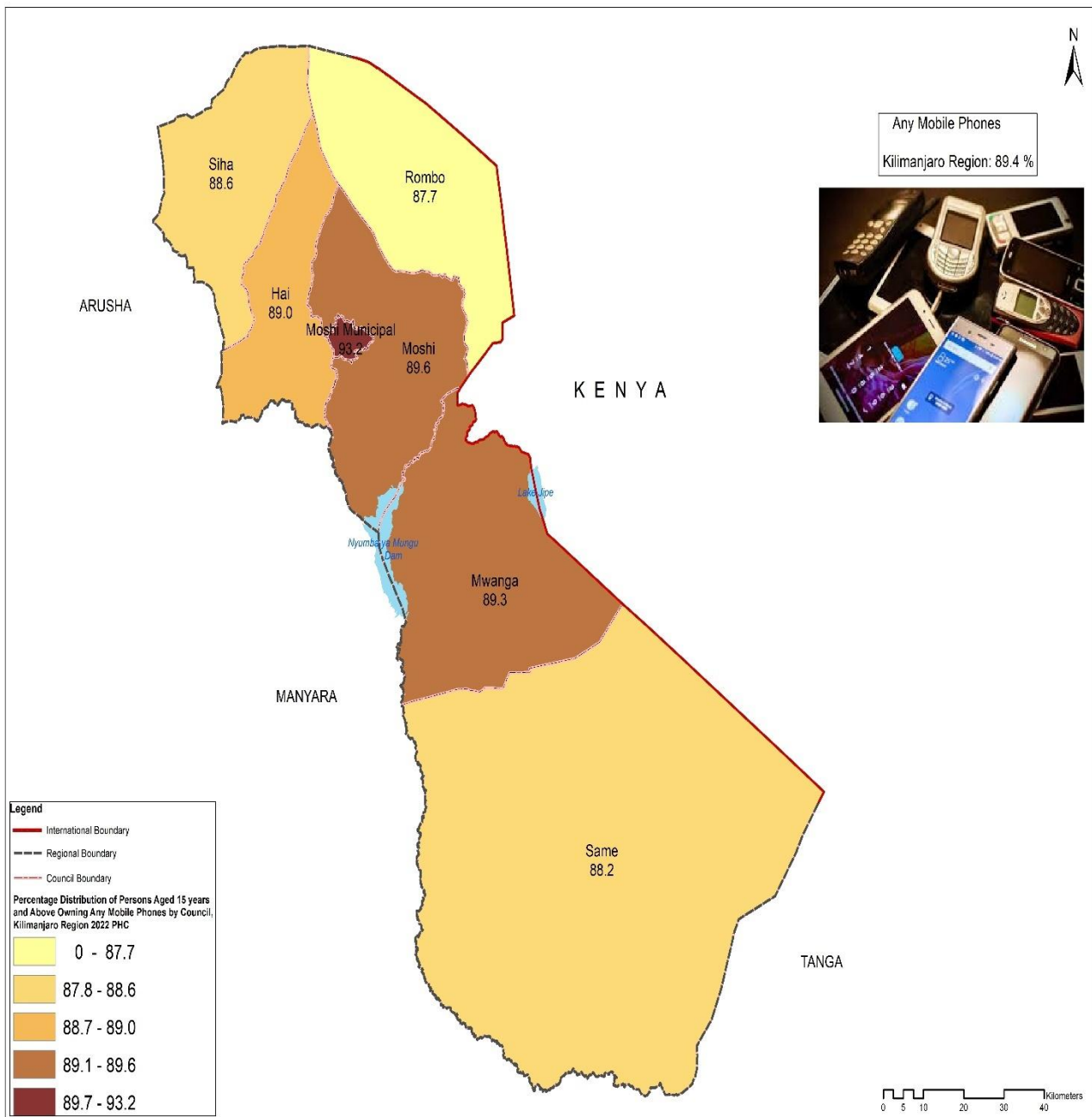
**Figure 13.1: Percentage Distribution of Persons Aged 15 Years and Above Owning Mobile Phones by Sex and Council; Kilimanjaro Region, 2022 PHC**



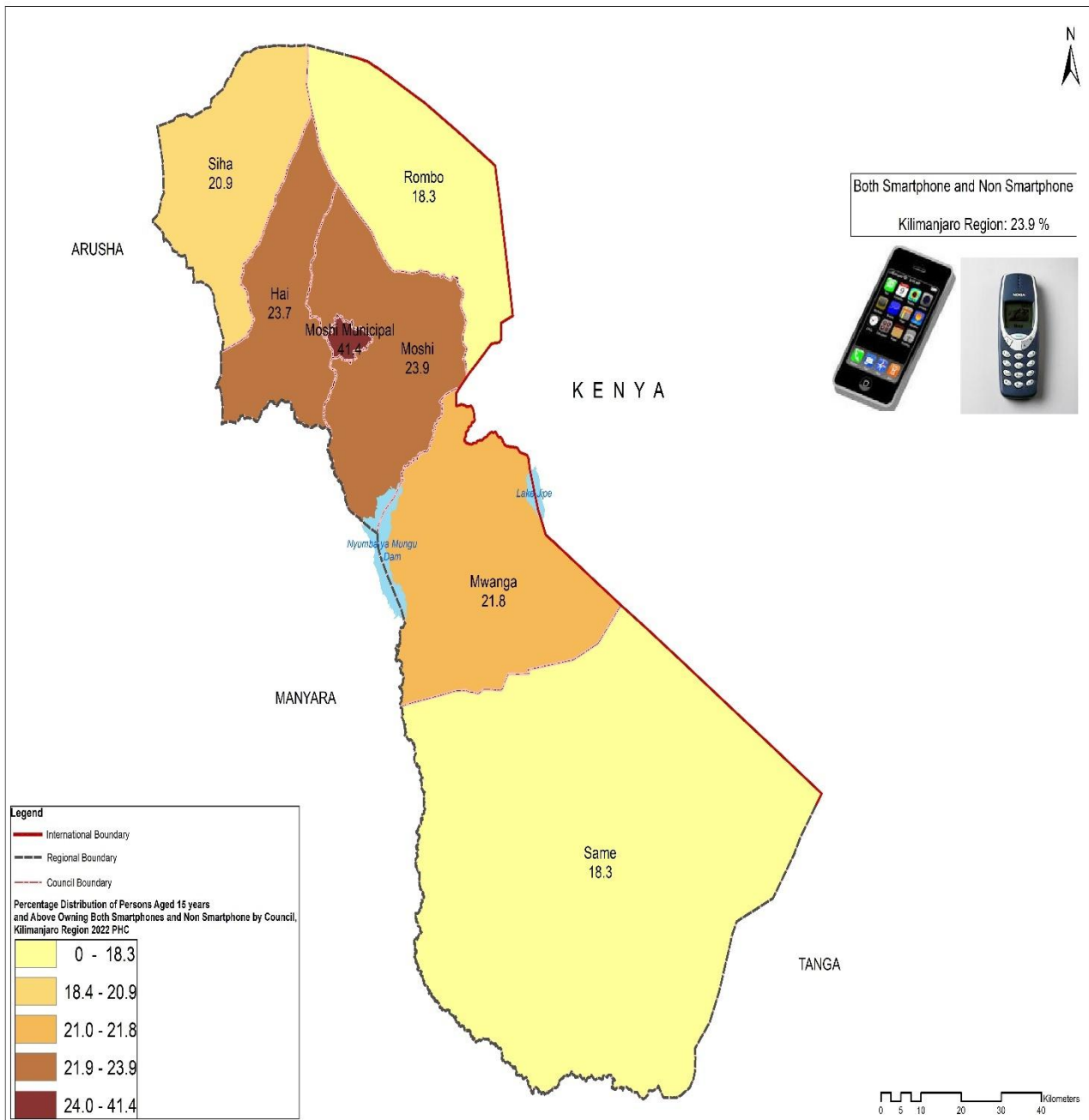
**Table 13.2: Percentage Distribution of Population Aged 15 years and Above Owning Mobile Phones by Type, Sex, Place of Residence and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence	Total Number of Persons			Percent											
				Any Mobile Phone			Both Smart and Non-smart Phone			Smart Phone or Tablet Only			Non-Smart Phone Only		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	1,183,637	560,994	622,643	89.4	90.4	88.4	23.9	25.2	22.7	0.8	0.7	0.9	64.7	64.4	64.8
Rural	901,767	429,831	471,936	88.5	89.6	87.4	19.9	21.2	18.8	0.8	0.7	0.8	67.8	67.8	67.8
Urban	281,870	131,163	150,707	92.2	93.0	91.5	36.6	38.5	35.0	1.0	0.9	1.1	54.6	53.6	55.5
<b>Council</b>															
Rombo District	175,259	82,702	92,557	87.7	88.4	87.1	18.3	19.1	17.6	0.9	0.8	1.0	68.5	68.4	68.6
Mwanga District	93,658	44,393	49,265	89.3	89.9	88.9	21.8	23.4	20.4	0.6	0.5	0.7	66.9	65.9	67.7
Same District	184,181	87,711	96,470	88.2	90.1	86.6	18.3	19.7	17.0	0.6	0.5	0.7	69.4	69.9	68.9
Moshi Municipal	141,910	66,908	75,002	93.2	93.9	92.5	41.4	43.3	39.6	1.1	1.0	1.2	50.7	49.7	51.7
Moshi District	349,778	166,843	182,935	89.6	90.5	88.8	23.9	25.1	22.8	0.9	0.8	1.0	64.8	64.6	65.0
Hai District	155,532	73,398	82,134	89.0	90.3	87.8	23.7	24.9	22.7	0.8	0.7	0.9	64.4	64.6	64.2
Siha District	83,319	39,039	44,280	88.6	90.0	87.3	20.9	23.2	18.9	0.6	0.6	0.6	67.0	66.2	67.8

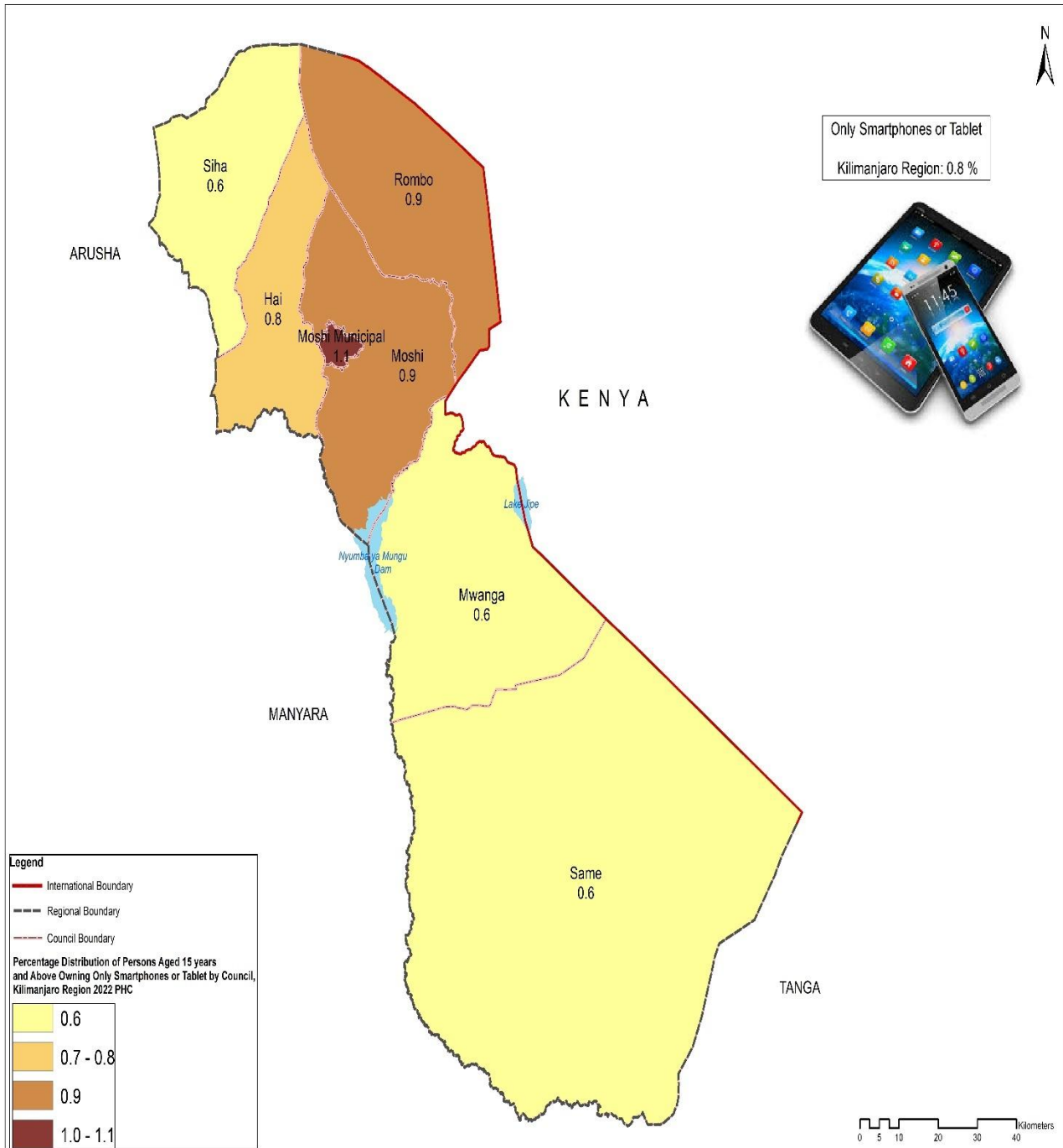
**Map 13.1: Percentage of Persons Aged 15 Years and Above Owning Any Mobile Phones by Council; Kilimanjaro Region, 2022 PHC.**



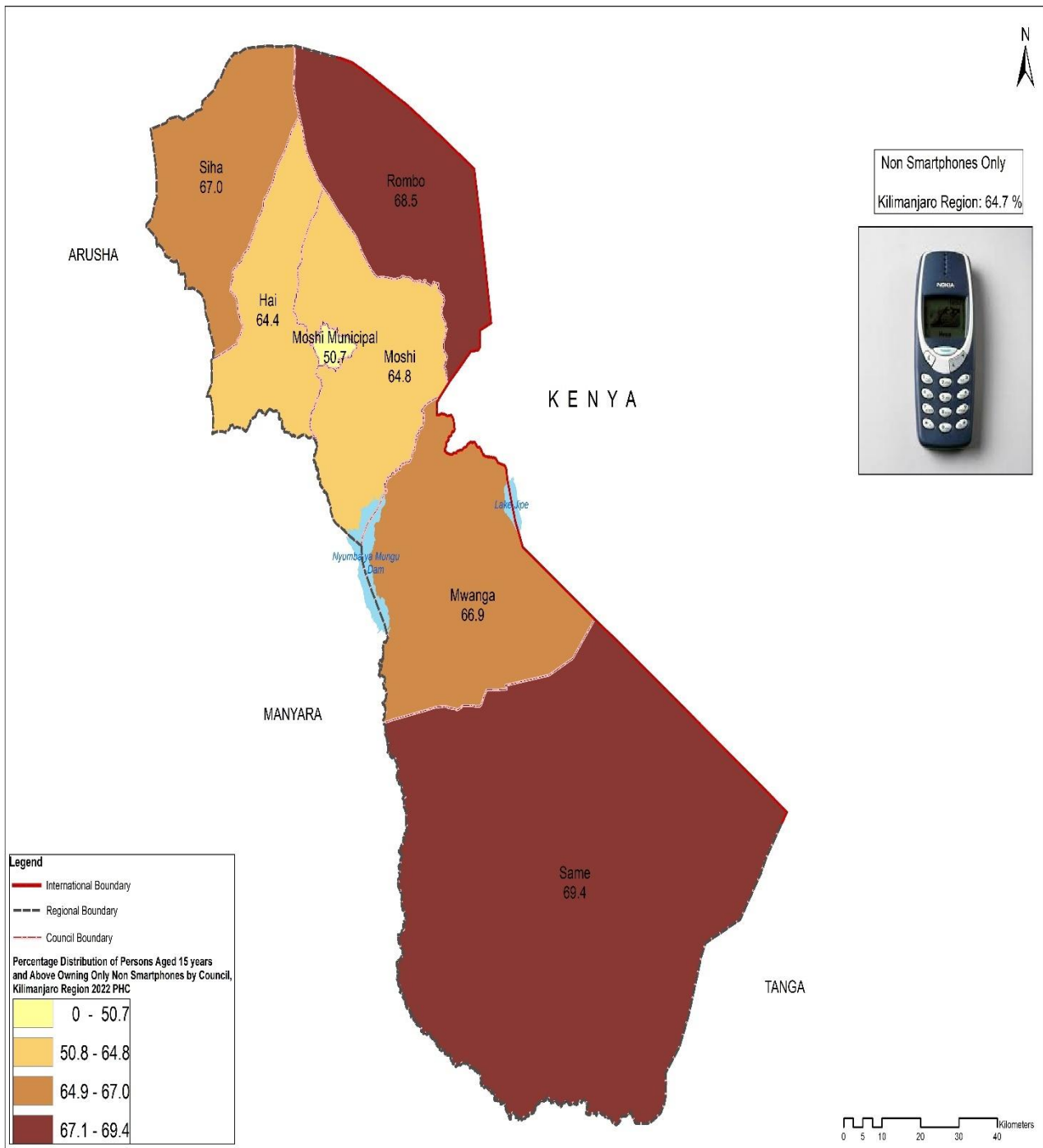
**Map 13.2: Percentage of Persons Aged 15 Years and Above Owning Both Smartphones and Non-Smartphone by Council; Kilimanjaro Region 2022 PHC.**



**Map 13.3: Percentage of Persons Aged 15 Years and Above Owning only Smartphones or Tablet by Council; Kilimanjaro Region, 2022 PHC.**



**Map 13.4: Percentage of Persons Aged 15 Years and Above Owning only Non-Smart Phones by Council; Kilimanjaro Region, 2022 PHC.**



### 13.6.2 Ownership of Mobile Phones by Households

Ownership of mobile phones by phone type indicates that in Kilimanjaro Region 91.7 percent of households have at least one member aged four years and above owning any type of mobile phone. The proportion of households owning any type of mobile phone is higher (95.1%) in urban areas than in rural areas (90.6%). In urban areas, the proportion of households that own smart mobile phones is 50.4 percent and 81.9 percent for non-smartphones. In rural areas 30.4 percent of households own smart phones and 85.7 own non smart phones.

Across all councils in Kilimanjaro Region, the proportion of households with smartphones is less than 50 percent of all households except for Moshi Municipal (55.9%). Results also indicate that Moshi Municipal has the highest percentage (55.9%) of households that owns smart mobile phones while Same District recorded the lowest (27.5%) (Table 13.3).

**Table 13.3: Percentage Distribution of Households with at Least One Member Aged Four Years and Above Owning Mobile Phone by Type, Place of Residence and Council; Kilimanjaro Region, 2022 PHC**

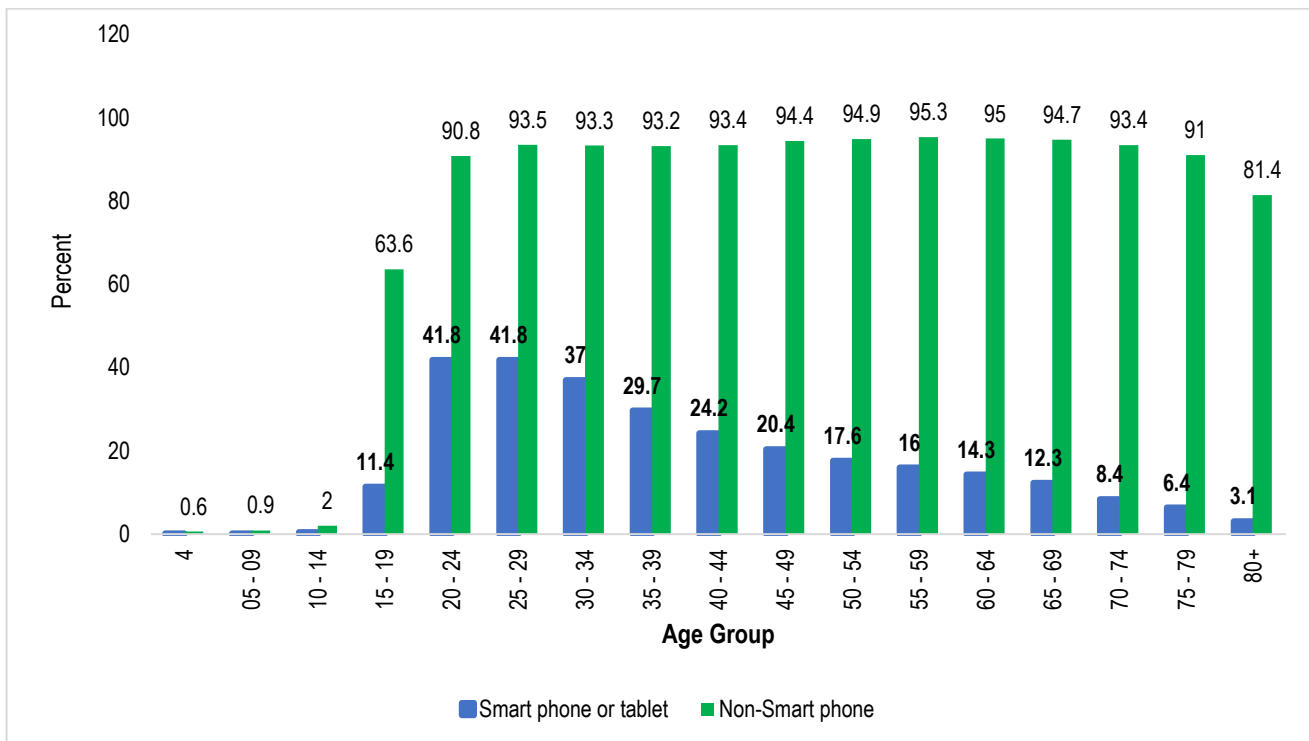
Place of Residence	Number of Private Households	Mobile Phone Ownership		
		At least one Member Owning a Mobile Phone	Households with Smart Phone	Households with Non-Smart Phone
<b>Total</b>	494,428	91.7	35.5	84.8
Rural	369,184	90.6	30.4	85.7
Urban	125,244	95.1	50.4	81.9
<b>Council</b>				
Rombo District	71,224	90.3	28.8	86.0
Mwanga District	38,751	91.9	32.5	86.5
Same District	75,731	90.4	27.5	86.6
Moshi Municipal	63,731	95.8	55.9	79.7
Moshi District	145,034	91.6	35.8	84.6
Hai District	64,549	91.9	35.5	85.3
Siha District	35,408	90.1	31.5	85.1

### 13.6.3 Ownership of Mobile Phones by Age Groups and Sex

Non-smartphone is the most widely owned phone type among persons aged four years and above in Kilimanjaro Region; it is owned by 63.6 percent of all individuals (63.3% of males and 63.9% of females). When the data is disaggregated by locality, 62.4 percent of individuals in rural areas own non-smartphones compared with 67.5 percent of those in urban areas (Table 13.4).

The proportion of ownership of smartphone is highest (95.3%) for individuals aged 55-64 years while for non-smartphone it is highest (41.8%) for individual aged 20-29 years. The results also show that the proportion of ownership of non-smart phones increases steadily from age 4 years to age group 20 -29, remained almost constant up to age 70-74 and thereafter declines slowly to age group 80 years and above. Likewise, the proportion of ownership of smartphone increases from age group 10-14 years and attained its maximum point at age group 20-29 years and thereafter declines steadily to age 80 years and above.

**Figure 13.2: Percentage Distribution of Individuals Owning Mobile Phone by Type and Age Group; Kilimanjaro Region, 2022 PHC**



**Table 13.4: Percentage of Population Aged Four Years and Above Owning Mobile Phones by Type, Place of Residence, Sex and Age Group; Kilimanjaro Region, 2022 PHC**

Age Group	Non-smartphone									Smartphone								
	Total			Rural			Urban			Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	<b>63.6</b>	<b>63.3</b>	<b>63.9</b>	<b>62.4</b>	<b>62.2</b>	<b>62.7</b>	<b>67.5</b>	<b>67.1</b>	<b>67.9</b>	<b>17.7</b>	<b>18.3</b>	<b>17.2</b>	<b>14.7</b>	<b>15.3</b>	<b>14.2</b>	<b>27.8</b>	<b>28.7</b>	<b>27.1</b>
4	0.6	0.6	0.7	0.6	0.5	0.7	0.6	0.7	0.6	0.2	0.2	0.2	0.2	0.1	0.2	0.3	0.4	0.2
5 - 9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.2	0.3	0.2	0.2	0.2	0.2	0.4	0.4	0.3
10- 14	2.0	2.2	1.8	2.0	2.2	1.8	1.9	2.2	1.7	0.5	0.5	0.4	0.4	0.4	0.3	0.8	0.9	0.7
15 - 19	63.6	64.5	62.8	62.3	63.4	61.3	67.7	68.5	67.1	11.4	12.7	10.2	9.9	11.0	8.8	16.2	18.7	14.1
20 - 24	90.8	91.6	90.0	89.8	90.8	88.8	93.2	93.7	92.7	41.8	42.7	41.0	37.9	38.7	37.2	51.2	52.8	49.9
25 - 29	93.5	94.5	92.6	92.3	93.4	91.3	96.3	97.1	95.7	41.8	42.7	41.1	36.8	37.6	36.0	53.6	54.6	52.7
30 - 34	93.3	94.0	92.6	92.1	92.9	91.4	96.2	96.9	95.6	37.0	38.1	35.9	32.3	33.2	31.4	48.9	50.8	47.1
35 - 39	93.2	93.9	92.5	92.2	93.0	91.4	96.0	96.3	95.8	29.7	30.7	28.8	25.2	26.1	24.5	42.2	44.2	40.5
40 - 44	93.4	93.8	93.0	92.5	93.0	92.0	96.1	96.5	95.8	24.2	25.0	23.4	20.1	20.9	19.3	37.0	38.2	36.1
45 - 49	94.4	94.8	94.1	93.7	94.1	93.3	96.9	97.2	96.6	20.4	20.7	20.2	16.7	17.1	16.4	33.4	33.4	33.3
50 - 54	94.9	95.7	94.2	94.4	95.3	93.7	96.8	97.2	96.3	17.6	18.4	17.0	14.5	15.1	13.9	30.1	30.9	29.5
55 - 59	95.3	96.6	94.2	94.9	96.3	93.6	97.2	97.9	96.7	16.0	16.8	15.3	13.0	13.9	12.2	29.4	30.1	28.7
60 - 64	95.0	96.9	93.4	94.7	96.7	93.0	96.5	97.5	95.6	14.3	15.8	13.1	11.7	13.1	10.5	26.9	28.6	25.5
65 - 69	94.7	97.1	92.7	94.4	97.0	92.3	96.1	97.5	95.0	12.3	15.3	9.9	10.2	13.0	8.0	23.4	27.0	20.2
70 - 74	93.4	97.0	90.4	93.2	96.9	90.1	94.7	97.6	92.3	8.4	10.9	6.3	6.8	9.2	4.9	17.9	21.8	14.8
75 - 79	91.0	96.5	86.8	90.8	96.5	86.5	92.1	96.3	89.0	6.4	9.2	4.2	5.3	7.8	3.3	13.6	18.4	10.1
80 +	81.4	91.9	74.8	81.6	92.2	74.9	79.9	89.8	73.8	3.1	4.0	2.5	2.7	3.5	2.1	6.2	8.1	5.1

#### **13.6.4 Ownership of Mobile Phones by Level of Education**

The 2022 PHC results reveal that non-smartphones are mostly owned by individuals who attained training after secondary education (97.0%) and least owned by those who attained pre-primary level (81.6%). Analysis by sex shows that, there are no significant differences in the proportions of non-smartphone ownership between males and females across all education levels. The results also show that persons living in urban areas are more likely to use non-smartphones than those living in rural areas (Table 13.5).

**Table 13.5: Number and Percentage of Population Aged 15 Years and Above Owning Non-smartphones by Place of Residence, Sex and Education Level Attained; Kilimanjaro Region, 2022 PHC**

Education	Percent									Number of Persons								
	Total			Rural			Urban			Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Pre-Primary	81.6	81.3	81.7	80.4	79.8	80.8	87.2	88.2	86.5	916	379	537	745	304	441	171	75	96
Primary School (1 - 8)	91.5	92.5	90.6	91.0	92.0	90.0	93.6	94.5	92.9	593,045	289,158	303,887	472,398	233,281	239,117	120,647	55,877	64,770
Secondary School O - level (1 - 4)	81.8	82.2	81.3	79.9	80.4	79.4	86.3	86.9	85.9	256,436	121,632	134,804	177,343	84,708	92,635	79,093	36,924	42,169
Secondary School A - level (5 - 6)	85.2	87.3	82.9	84.4	86.6	82.1	86.7	88.8	84.6	21,768	11,436	10,332	14,543	7,712	6,831	7,225	3,724	3,501
University and Other Related	96.9	97.2	96.6	96.5	96.8	96.2	97.5	97.8	97.2	93,352	48,124	45,228	58,415	30,341	28,074	34,937	17,783	17,154
Training After Primary	96.2	96.7	95.4	95.9	96.4	95.1	97.2	97.7	96.6	5,857	3,541	2,316	4,675	2,863	1,812	1,182	678	504
Training After Secondary education	97.0	97.9	95.9	95.6	97.0	94.0	100.0	100.0	100.0	259	143	116	175	96	79	84	47	37

The 2022 PHC results reveal that, smartphones in Kilimanjaro Region are mostly owned by individuals who attained university and other related levels of education (78.0%) and least owned by those who attained pre-primary education (8.6%). The percentage of persons owning smartphone is higher for males than female for persons that attained pre-primary level, primary (1-8); secondary O level (1-4) and secondary School A - level (5-6) while it is higher for females than males for persons who attained university and other related levels; training after primary education and those who attained training after secondary school education. Ownership of smartphone in Kilimanjaro Region is higher in urban areas than in rural areas for all education levels (Table 13.6).

**Table 13.6: Number and Percentage of Population Aged 15 Years and Above Owning Smartphones by Place of Residence, Sex and Education Level Attained; Kilimanjaro Region, 2022 PHC**

Education Level	Percent									Number of Persons								
	Total			Rural			Urban			Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Pre-Primary	8.6	12.4	5.9	7.1	10.8	4.6	15.8	20.0	12.6	97	58	39	66	41	25	31	17	14
Primary School (1 - 8)	14.3	15.0	13.6	12.2	12.9	11.5	22.7	23.7	21.8	92,470	46,746	45,724	63,216	32,725	30,491	29,254	14,021	15,233
Secondary School O - level (1 - 4)	30.0	30.4	29.6	26.0	26.4	25.7	39.6	40.5	38.8	94,118	45,017	49,101	57,804	27,780	30,024	36,314	17,237	19,077
Secondary School A - level (5 - 6)	47.7	50.6	44.7	44.7	47.3	41.9	54.0	57.8	50.1	12,196	6,633	5,563	7,698	4,211	3,487	4,498	2,422	2,076
University and Other Related	78.0	77.7	78.4	75.1	74.6	75.7	83.0	83.1	82.9	75,213	38,483	36,730	45,478	23,380	22,098	29,735	15,103	14,632
Training After Primary	33.8	32.3	36.1	30.8	29.5	32.8	46.0	44.4	48.1	2,059	1,183	876	1,500	875	625	559	308	251
Training After Secondary Education	40.4	38.4	43.0	34.4	30.3	39.3	53.6	55.3	51.4	108	56	52	63	30	33	45	26	19

### 13.6.5 Usage of Mobile Phones by Individuals

Results reveal that nine out of ten (91.2%) individuals aged 15 years and above in Kilimanjaro Region are using non-smartphones and 25.4 percent are using smartphones. The proportion of individuals who are using non-smartphones is slightly higher (93.0%) in urban areas than in rural areas (90.6%). A similar situation is observed in the usage of smartphones, where the proportion of individuals using smart phones in urban areas (38.5%) is higher than that of rural areas (21.3%). Generally, proportion of males who are using mobile phones is higher than that of females for both smart and non-smart phone.

Across all councils, the proportion of individuals who are using mobile phones is the highest in Moshi Municipal for both non-smartphones (93.4%) and smartphone (43.4%). On the other hand, Rombo District has the lowest percentage of individuals using both non-smartphones (89.8%) and smartphones (19.8%) (Table 13.7).

**Table 13.7: Percentage of Population Aged 15 Years and Above Using Mobile Phones by Type, Sex, Place of Residence and Council; Kilimanjaro Region, 2022 PHC**

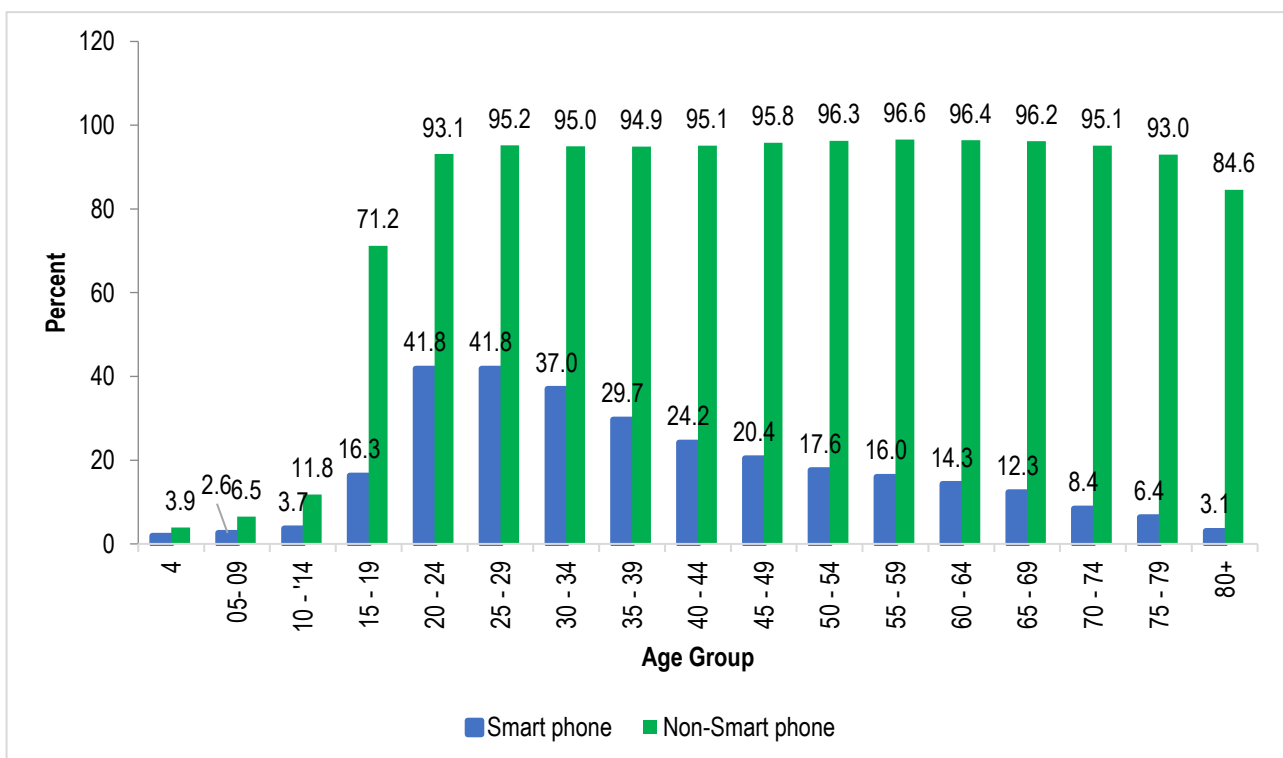
Place of Residence	Number of Persons Using ICT Equipment			Percent of Mobile Phone Usage					
	Both Sexes	Male	Female	Smart mobile phone			Non-smartphone		
				Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	<b>1,183,637</b>	<b>560,994</b>	<b>622,643</b>	<b>25.4</b>	<b>26.7</b>	<b>24.3</b>	<b>91.2</b>	<b>91.8</b>	<b>90.6</b>
Rural	901,767	429,831	471,936	21.3	22.5	20.3	90.6	91.3	90.0
Urban	281,870	131,163	150,707	38.5	40.3	37.0	93.0	93.5	92.5
<b>Council</b>									
Rombo District	175,259	82,702	92,557	19.8	20.6	19.2	89.8	90.1	89.5
Mwanga District	93,658	44,393	49,265	23.3	24.8	21.9	91.5	91.7	91.3
Same District	184,181	87,711	96,470	19.5	20.8	18.3	91.2	92.2	90.3
Moshi Municipal	141,910	66,908	75,002	43.4	45.1	41.8	93.4	94.1	92.9
Moshi District	349,778	166,843	182,935	25.5	26.6	24.5	91.1	91.7	90.6
Hai District	155,532	73,398	82,134	25.4	26.4	24.5	91.1	91.8	90.5
Siha District	83,319	39,039	44,280	22.1	24.3	20.1	90.1	90.9	89.5

### 13.6.6 Usage of Mobile Phones by Type, Age Group and Sex

More than two thirds (67.6%) of persons aged four years and above in Kilimanjaro Region used non-smartphones in the three months prior to the 2022 PHC. There is a slight difference in the proportion of females (68.2%) using non-smartphones and that of males (66.9%). Non-smart phone usage among individuals living in urban areas is higher (70.6%) compared with those in rural areas (66.6%). Nineteen percent of persons aged four years in Kilimanjaro Region use smartphone. Urban areas (29.7%) have higher percentage (29.7%) of persons aged four years and above using smartphone compared with rural areas (15.8) (Table 13.8).

Non-smart phones are mostly used by individuals aged 24-79 years while smart phones are mostly used by individuals aged 20 to 29 years. The use of non-smartphones increases steadily from age 4 years up to age group 20-24 then increases at a slow pace up to age group 55 – 59, thereafter declines slowly down to age group 80 years and above (Figure 13.3).

**Figure 13.3: Percentage Distribution of Individuals Using Mobile Phones by Type and Age Groups; Kilimanjaro Region, 2022 PHC.**



**Table 13.8: Percentage of Population Aged 4 Years and Above Using Mobile Phones by Type, Place of Residence, Sex, and Age Groups; Kilimanjaro Region, 2022 PHC.**

Age Group	Percent of Non-Smartphone Users									Percent of Smartphones users								
	Total			Rural			Urban			Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	<b>67.6</b>	<b>66.9</b>	<b>68.2</b>	<b>66.6</b>	<b>66.0</b>	<b>67.2</b>	<b>70.6</b>	<b>70.0</b>	<b>71.2</b>	<b>19.0</b>	<b>19.6</b>	<b>18.5</b>	<b>15.8</b>	<b>16.4</b>	<b>15.3</b>	<b>29.7</b>	<b>30.5</b>	<b>28.9</b>
4	3.9	3.7	4.1	3.9	3.7	4.2	3.8	3.7	3.8	1.9	1.8	1.9	1.6	1.4	1.7	2.9	3.0	2.7
05-09	6.5	6.4	6.5	6.5	6.5	6.5	6.2	6.1	6.2	2.6	2.6	2.6	2.2	2.2	2.2	4.1	4.2	4.1
10-14	11.8	11.7	11.9	12.0	11.9	12.1	11.2	11.3	11.1	3.7	3.6	3.8	3.1	3.0	3.1	6.1	6.1	6.1
15 - 19	71.2	71.7	70.7	70.5	71.1	69.9	73.5	74.1	73.1	16.3	17.3	15.3	14.4	15.2	13.5	22.3	24.5	20.4
20 - 24	93.1	93.4	92.7	92.4	92.8	92.0	94.7	95.0	94.4	41.8	42.7	41.0	37.9	38.7	37.2	51.2	52.8	49.9
25 - 29	95.2	95.7	94.7	94.3	94.9	93.8	97.2	97.7	96.8	41.8	42.7	41.1	36.8	37.6	36.0	53.6	54.6	52.7
30 - 34	95.0	95.3	94.7	94.1	94.4	93.8	97.1	97.4	96.9	37.0	38.1	35.9	32.3	33.2	31.4	48.9	50.8	47.1
35 - 39	94.9	95.1	94.8	94.2	94.4	94.0	97.0	97.0	97.0	29.7	30.7	28.8	25.2	26.1	24.5	42.2	44.2	40.5
40 - 44	95.1	95.0	95.1	94.4	94.4	94.5	97.1	97.2	97.0	24.2	25.0	23.4	20.1	20.9	19.3	37.0	38.2	36.1
45 - 49	95.8	95.8	95.8	95.3	95.3	95.3	97.6	97.8	97.5	20.4	20.7	20.2	16.7	17.1	16.4	33.4	33.4	33.3
50 - 54	96.3	96.6	96.1	96.0	96.2	95.8	97.5	97.8	97.3	17.6	18.4	17.0	14.5	15.1	13.9	30.1	30.9	29.5
55 - 59	96.6	97.2	96.1	96.3	97.0	95.7	97.9	98.3	97.5	16.0	16.8	15.3	13.0	13.9	12.2	29.4	30.1	28.7
60 - 64	96.4	97.5	95.5	96.2	97.4	95.2	97.3	97.9	96.9	14.3	15.8	13.1	11.7	13.1	10.5	26.9	28.6	25.5
65 - 69	96.2	97.6	95.0	96.0	97.6	94.7	97.0	97.9	96.2	12.3	15.3	9.9	10.2	13.0	8.0	23.4	27.0	20.2
70 - 74	95.1	97.6	93.1	95.0	97.5	92.9	95.7	97.9	94.0	8.4	10.9	6.3	6.8	9.2	4.9	17.9	21.8	14.8
75 - 79	93.0	97.0	90.0	93.0	97.0	89.8	93.6	97.0	91.1	6.4	9.2	4.2	5.3	7.8	3.3	13.6	18.4	10.1
80 +	84.6	93.2	79.2	84.9	93.5	79.4	82.6	90.9	77.5	3.1	4.0	2.5	2.7	3.5	2.1	6.2	8.1	5.1

### 13.6.7 Type of Use of ICT Equipment

The Census further sought to establish the use of ICT equipment (mobile phones and computers) for all persons aged 15 years and above. The results show that 89.3 percent of persons aged 15 years and above years in Kilimanjaro Region mostly use ICT equipment for communication, followed by 65.9 percent of persons using ICT for sending and receiving money and 46.7 percent of persons using ICT equipment for searching and receiving information.

Results further show that persons who are living in rural and urban areas mostly use ICT equipment for communication (89.3% for rural and 91.5% for urban), followed by those using the equipment for sending and receiving money (63.0% for rural and 71.3% for urban) and those using them for searching or receiving information (43.6% for rural and 56.6% for urban). However, the likelihood of using ICT equipment for most purposes is higher in urban areas than in rural areas. The use of ICT equipment by individuals aged 15 years and above varies across Councils. The most common use of ICT equipment across all councils is for communication followed by sending and receiving money and then searching/receiving information. Online business is the least use of ICT equipment across councils. The data further reveals that Moshi Municipal has the highest percentage in all ICT uses compared with other councils (Table 13.9).

**Table 13.9: Percentage of Persons Aged 15 Years and Above Using ICT Equipment by Type of Use, Sex, Place of Residence and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence	Communication			Search/receive information			Online business			Learning			Playing games/Entertainment			Sending and Receiving money			Number of People Using ICT Equipment		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	89.3	89.9	88.8	46.7	48.3	45.3	4.8	5.3	4.3	12.7	13.5	12.0	12.4	13.9	11.1	65.0	65.9	64.2	1,183,637	560,994	622,643
Rural	88.7	89.3	88.1	43.6	45.2	42.2	4.0	4.5	3.6	10.8	11.4	10.3	10.8	12.2	9.6	63.0	63.9	62.2	901,767	429,831	471,936
Urban	91.5	92.0	91.0	56.6	58.5	55.0	7.2	8.1	6.4	18.8	20.2	17.6	17.6	19.7	15.8	71.3	72.3	70.3	281,870	131,163	150,707
<b>Council</b>																					
Rombo District	88.1	88.3	87.9	40.2	41.6	38.9	3.3	3.8	2.9	9.0	9.6	8.4	9.5	10.4	8.7	58.6	58.6	58.5	175,259	82,702	92,557
Mwanga District	88.7	88.9	88.5	42.7	44.4	41.1	4.9	5.3	4.5	12.1	12.6	11.7	12.3	13.9	10.9	67.1	67.7	66.5	93,658	44,393	49,265
Same District	88.5	89.4	87.6	38.9	40.6	37.3	4.0	4.5	3.6	9.8	10.4	9.2	9.8	11.3	8.5	61.8	63.0	60.7	184,181	87,711	96,470
Moshi Municipal	92.7	93.3	92.2	60.7	62.1	59.5	8.4	9.5	7.5	21.8	23.4	20.4	20.8	23.1	18.8	73.4	74.6	72.4	141,910	66,908	75,002
Moshi District	89.9	90.4	89.5	50.9	52.4	49.5	4.4	5.0	4.0	12.6	13.4	11.8	12.5	13.9	11.2	67.0	67.8	66.2	349,778	166,843	182,935
Hai District	88.8	89.5	88.2	45.4	47.0	44.0	4.5	4.9	4.1	12.8	13.0	12.6	11.5	12.8	10.3	65.1	66.3	64.1	155,532	73,398	82,134
Siha District	87.4	88.3	86.7	43.3	45.6	41.3	5.1	5.7	4.5	12.5	13.4	11.8	11.8	14.0	9.9	60.2	61.7	58.9	83,319	39,039	44,280

### 13.6.8 Usage of Mobile Phones by Education Level

The 2022 PHC results reveal that, in Kilimanjaro Region, non-smartphone is mostly used by individuals who attained training after secondary education (98.1%) followed by those who attained university and other related (97.5%) while it is least used by those who attained pre-primary education (84.6%). The result also shows that, there are no significant differences in regard to the usage of non-smartphone between males and females across education levels in the Region.

There is no significant difference for the use of non-smartphone in Kilimanjaro Region between urban and rural areas across all education levels (Table 13.10).

**Table 13.10: Number and Percentage of Population Aged 15 Years and Above Using Non-smartphones by Place of Residence, Sex and Education Level; Kilimanjaro Region, 2022 PHC**

Education Level	Percent									Number of Persons Using Non-smartphones								
	Total			Rural			Urban			Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Pre-Primary	84.6	82.4	86.1	83.9	81.1	85.9	87.8	88.2	87.4	950	384	566	778	309	469	172	75	97
Primary School (1 - 8)	93.7	94.1	93.4	93.4	93.7	93.0	95.1	95.7	94.7	607,532	294,212	313,320	484,953	237,667	247,286	122,579	56,545	66,034
Secondary School O - level (1 - 4)	85.7	86.0	85.5	84.4	84.6	84.2	88.9	89.2	88.6	268,876	127,156	141,720	187,449	89,221	98,228	81,427	37,935	43,492
Secondary School A - level (5 - 6)	88.4	89.9	86.8	88.0	89.6	86.4	89.2	90.6	87.7	22,588	11,772	10,816	15,159	7,975	7,184	7,429	3,797	3,632
University and Other Related	97.5	97.7	97.3	97.2	97.4	97.0	98.0	98.2	97.8	93,952	48,383	45,569	58,847	30,528	28,319	35,105	17,855	17,250
Training After Primary	97.4	97.5	97.1	97.1	97.4	96.7	98.3	98.1	98.5	5,929	3,573	2,356	4,734	2,892	1,842	1,195	681	514
Training After Secondary Education	98.1	98.2	98.0	97.9	98.0	97.8	98.6	98.7	98.5	13,890	6,605	7,285	9,345	4,485	4,860	4,545	2,120	2,425

In Kilimanjaro Region, smartphones are mostly used by individuals who have attained university and other related levels of education (78.1 and is less used by those who have attained pre-primary level (9.3%). The percentage of individuals using smartphones is slightly higher for males than for females for persons who have attained secondary school A-level education or lower levels, however the percentage is lower for males than females for those who have attained training after secondary and primary education as well as those who have attained university and other related levels of education. The percentage of individuals who use smartphone is higher in urban areas than in rural areas for all education levels (Table 13.11).

**Table 13.11: Number and Percentage of Population Aged 15 Years and Above Using Smartphone by Place of Residence, Sex and Education Level; Kilimanjaro Region, 2022 PHC**

Education Level	Percent									Number of Persons Using Smartphones								
	Total			Rural			Urban			Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Pre-Primary	9.3	13.9	5.9	7.9	12.6	4.6	15.8	20.0	12.6	104	65	39	73	48	25	31	17	14
Primary School (1 - 8)	14.4	15.1	13.8	12.3	13.1	11.6	23.0	23.9	22.1	93,656	47,303	46,353	64,066	33,149	30,917	29,590	14,154	15,436
Secondary School O - level (1 - 4)	32.1	32.6	31.7	28.1	28.5	27.8	41.8	42.7	41.0	100,696	48,163	52,533	62,394	30,015	32,379	38,302	18,148	20,154
Secondary School A - level (5 - 6)	50.8	52.9	48.5	47.7	49.6	45.7	57.1	59.9	54.3	12,975	6,929	6,046	8,214	4,417	3,797	4,761	2,512	2,249
University and Other Related	78.1	77.7	78.4	75.1	74.6	75.7	83.0	83.1	82.9	75,215	38,483	36,732	45,480	23,380	22,100	29,735	15,103	14,632
Training After Primary	33.8	32.3	36.1	30.8	29.5	32.8	46.0	44.4	48.1	2,059	1,183	876	1,500	875	625	559	308	251
Training After Secondary Education	70.3	66.4	73.7	67.8	63.7	71.6	75.4	72.4	78.0	9,946	4,468	5,478	6,473	2,914	3,559	3,473	1,554	1,919

### 13.6.9 Use of Non-Smartphones by Employment Status and Sex

Results reveal that, in Kilimanjaro Region, usage of non-smartphones is more than 95 percent for all categories of employment. In regarding to the usage of non-smartphones across employment categories by sex, results show that males have slightly higher percentage than females across all employment categories. Furthermore, results show that the percentage of individuals using non-smartphones is slightly higher for persons living in urban than in rural areas across all employment status categories (Table 13.12).

**Table 13.12: Number and Percentage of Population Aged 15 Years and Above Using Non-smartphone by Place of Residence, Sex and Employment Status; Kilimanjaro Region, 2022 PHC**

Employment Status	Percent									Number of Persons Using Non-smartphones								
	Total			Rural			Urban			Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Paid employees	96.7	97.3	93.8	96.2	96.8	93.6	98.2	98.3	95.9	4,941	4,181	760	3,660	2,970	690	1,281	1,211	70
Self-employed without employees	95.8	96.4	95.3	95.6	96.5	94.9	96.3	95.9	96.6	14,678	6,485	8,193	11,592	5,371	6,221	3,086	1,114	1,972
Self-employed with employees	96.6	98.0	95.2	95.9	97.3	94.5	98.6	99.8	97.4	2,998	1,529	1,469	2,197	1,096	1,101	801	433	368
Casual labourers	95.4	95.7	94.6	95.2	95.5	94.2	96.0	96.2	95.4	5,925	4,537	1,388	4,326	3,336	990	1,599	1,201	398
Workers not classified by status	96.0	97.1	94.1	95.0	96.0	93.6	98.8	100.0	96.0	1,246	782	464	921	554	367	325	228	97

Results reveal that, the percentages of employed persons aged 15 years above using smart phones in Kilimanjaro Region ranges from 23.5 percent among self-employed without employees to 31.4 percent among the paid employees. In regard to use of smartphones among employed persons, the census results show that the percentage of males using smart phones is slightly higher than that of females for most of employment categories except for self-employed without employees and for workers not classified by status. Furthermore, results show that the percentage of persons using smart phones is higher for persons living in urban areas than in rural areas for all employment categories (Table 13.13).

**Table 13.13: Number and Percentage of Population Aged 15 Years and Above Using Smartphones by Place of Residence, Sex and Employment Status; Kilimanjaro Region, 2022 PHC**

Employment Status	Percent									Number of Persons Using Smartphones								
	Total			Rural			Urban			Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Paid employees	31.4	31.6	30.2	27.0	26.3	29.7	44.1	44.6	35.6	1,603	1,358	245	1,027	808	219	576	550	26
Self-employed without employees	23.5	22.9	24.1	20.3	20.5	20.2	35.7	34.3	36.6	3,609	1,538	2,071	2,464	1,139	1,325	1,145	399	746
Self-employed with employees	28.6	31.6	25.7	23.2	24.5	22.0	44.0	50.0	37.0	889	493	396	532	276	256	357	217	140
Casual labourers	29.0	28.8	29.6	24.5	25.2	22.3	41.1	38.8	48.0	1,798	1,364	434	1,114	880	234	684	484	200
Workers not classified by status	29.7	33.9	22.7	25.1	28.6	19.9	43.2	47.4	33.7	385	273	112	243	165	78	142	108	34

### 13.6.10 Usage of Mobile Phones by Occupation

The 2022 PHC results reveal that in Kilimanjaro Region, non-smart phones are used by more than 90 percent of persons aged 15 years and above across all occupation categories. Analysis by sex shows that the use of re is no significant difference for the usage of non-smartphones among males is slightly higher than that of female across all occupation categories. There are no significant differences in the use of non-smart phones between urban and rural across all occupation categories (Table 13.14).

**Table 13.14: Number and Percentage of Population Aged 15 Years and Above Using Non-Smart Phones by Place of Residence, Sex and Occupation Status; Kilimanjaro Region, 2022 PHC**

Occupation Status	Percent									Number of Persons								
	Total			Rural			Urban			Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Legislators' administrators and managers.	98.4	98.4	98.4	98.2	98.0	98.5	98.8	99.1	98.4	4,419	2,536	1,883	2,484	1,464	1,020	1,935	1,072	863
Professionals.	98.4	98.8	98.1	98.4	98.5	98.3	98.5	99.1	97.9	22,908	11,610	11,298	13,437	6,903	6,534	9,471	4,707	4,764
Technicians and associate professionals.	97.2	97.2	97.0	97.2	97.2	97.3	97.0	97.2	96.5	37,854	28,577	9,277	23,365	17,921	5,444	14,489	10,656	3,833
Clerks	97.5	98.5	96.9	98.4	99.1	97.9	96.5	97.8	95.6	4,478	1,791	2,687	2,486	1,003	1,483	1,992	788	1,204
Service workers and shop sales workers	96.9	97.6	96.5	97.3	97.7	97.0	96.4	97.5	95.8	47,205	17,721	29,484	27,420	10,437	16,983	19,785	7,284	12,501
Agricultural and fishery workers	91.5	91.9	91.0	91.3	91.9	90.9	92.2	92.3	92.0	380,169	178,922	201,247	326,091	154,000	172,091	54,078	24,922	29,156
Craft and related workers	95.2	95.7	94.7	95.3	95.6	94.9	95.0	95.9	94.1	160,748	86,365	74,383	118,145	64,064	54,081	42,603	22,301	20,302
Plant and machine operators and assemblers	97.4	97.7	95.4	97.8	98.1	95.5	96.8	97.0	95.1	8,520	7,635	885	5,537	4,984	553	2,983	2,651	332
Elementary occupations	92.6	93.4	91.9	92.0	92.9	91.3	94.0	94.7	93.4	198,584	94,072	104,512	138,859	66,761	72,098	59,725	27,311	32,414

The 2022 PHC results reveal that in Kilimanjaro Region, smartphone are mostly used by professionals (80.9%) and least used by agricultural and fishery workers (18.4%). Analysis by sex shows that, the use of smartphones is slightly higher among males than among females for most occupational categories except for the legislators', administrators and managers category and the technicians and associate professional category for which the percentage of females using smartphones is slightly higher for females than for males. Use of smartphones is more pronounced among individuals living in urban areas than among those living in rural areas across most of occupational categories except for clerks category for which the percentage of persons using smartphones (is slightly higher (76.9%) in rural areas than in urban areas (Table13.15).

**Table 13.15: Number and Percentage of Population Aged 15 Years and Above Using Smartphones by Place of Residence, Sex and Occupation Status; Kilimanjaro Region, 2022 PHC**

Occupation Status	Percent									Number of Persons								
	Total			Rural			Urban			Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Legislators' administrators and managers.	78.3	77.5	79.5	75.5	73.3	78.6	82.1	83.3	80.6	3,517	1,996	1,521	1,909	1,095	814	1,608	901	707
Professionals.	80.9	81.6	80.1	79.8	79.6	79.9	82.5	84.6	80.4	18,824	9,598	9,226	10,892	5,578	5,314	7,932	4,020	3,912
Technicians and associate professionals.	51.4	47.2	64.3	48.3	43.7	63.2	56.4	53.0	65.7	20,015	13,870	6,145	11,598	8,061	3,537	8,417	5,809	2,608
Clerks	75.8	75.9	75.7	76.9	76.7	77.0	74.4	74.9	74.1	3,479	1,380	2,099	1,942	776	1,166	1,537	604	933
Service workers and shop sales workers	46.5	49.7	44.7	42.7	45.3	41.1	51.8	55.9	49.4	22,671	9,023	13,648	12,043	4,842	7,201	10,628	4,181	6,447
Agricultural and fishery workers	18.4	19.0	17.8	16.8	17.5	16.2	27.9	28.6	27.3	76,423	37,004	39,419	60,050	29,279	30,771	16,373	7,725	8,648
Craft and related workers	24.4	25.6	23.0	20.2	21.5	18.6	36.2	37.7	34.7	41,246	23,150	18,096	25,007	14,384	10,623	16,239	8,766	7,473
Plant and machine operators and assemblers	43.3	43.6	40.6	39.8	40.4	34.9	49.8	49.7	50.1	3,787	3,410	377	2,253	2,051	202	1,534	1,359	175
Elementary occupations	25.8	27.3	24.4	21.2	22.7	19.9	36.6	38.8	34.7	55,276	27,538	27,738	32,039	16,347	15,692	23,237	11,191	12,046

## 13.7 Computers

### 13.7.1 Ownership of Computers by Individuals

Table 13.16 presents information on persons aged 15 years and above owning computers by type, sex, place of residence and Council for Kilimanjaro Region. Results show that three percent (3.4%) of persons aged 15 years and above own laptops and 1.6 percent own desktop computers. Moshi Municipal Council has the highest percentage of persons owning laptop computers (7.1%) while Mwanga District has the highest (2.4%) proportion of persons aged 15 and above owning desktop computers. The Council with the lowest percentage of persons owning desktop and laptop computers (0.9% and 2.2% respectively) is Rombo District.

**Table 13.16: Percentage of Persons Aged 15 Years and Above Owning Computers by Type, Sex, Place of Residence and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence	Type of Computer					
	Desktop			Laptop		
	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	1.6	2.0	1.3	3.4	4.3	2.6
Rural	1.4	1.7	1.2	2.7	3.3	2.1
Urban	2.3	2.9	1.7	5.7	7.4	4.2
<b>Council</b>						
Rombo District	0.9	1.2	0.7	2.2	2.7	1.7
Mwanga District	2.4	2.7	2.1	3.1	3.9	2.3
Same District	1.7	2.0	1.5	2.4	3.1	1.8
Moshi Municipal	2.3	3.1	1.7	7.1	9.1	5.3
Moshi District	1.3	1.6	1.0	3.4	4.2	2.7
Hai District	1.8	2.1	1.5	3.2	4.0	2.6
Siha District	2.0	2.3	1.8	2.9	3.6	2.2

### 13.7.2 Usage of Computers by Individuals

Results reveal that five percent (5.4%) of persons aged 15 years and above in Kilimanjaro Region use laptops and almost three percent (3.2%) use desktop computers. Generally, the proportion of males that uses laptops and/or desktop computers is slightly higher than females.

Use of computers by individuals varies across councils, with Moshi Municipal having the highest percentage of individuals using computer (5.0% uses desktops and 10.3% uses laptops). Rombo District has the lowest percentage (2.0% use desktops and 3.7% use laptops). The percentage of individuals who use desktop and/or laptop computers is higher for males than for females across all councils (Table 13.17).

**Table 13.17: Percentage of Persons Aged 15 Years and Above Using Computers by Type, Sex, Place of Residence and Council; Kilimanjaro Region, 2022 PHC**

Place of Residence	Number of Persons			Type of Computers					
	Both Sexes	Male	Female	Desktop			Laptop		
				Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	<b>1,183,637</b>	<b>560,994</b>	<b>622,643</b>	<b>3.2</b>	<b>3.7</b>	<b>2.7</b>	<b>5.4</b>	<b>6.5</b>	<b>4.5</b>
Rural	901,767	429,831	471,936	2.7	3.1	2.4	4.5	5.2	3.8
Urban	281,870	131,163	150,707	4.6	5.6	3.8	8.6	10.5	6.9
<b>Council</b>									
Rombo District	175,259	82,702	92,557	2.0	2.3	1.7	3.7	4.4	3.1
Mwanga District	93,658	44,393	49,265	4.1	4.6	3.6	5.1	6.0	4.3
Same District	184,181	87,711	96,470	3.1	3.5	2.7	4.1	4.9	3.3
Moshi Municipal	141,910	66,908	75,002	5.0	6.0	4.0	10.3	12.5	8.3
Moshi District	349,778	166,843	182,935	2.7	3.2	2.2	5.4	6.4	4.5
Hai District	155,532	73,398	82,134	3.3	3.8	3.0	5.2	6.1	4.4
Siha District	83,319	39,039	44,280	3.5	3.9	3.1	4.6	5.5	3.9

### 13.7.3 Usage of Computers by Age Group and Sex

Use of computers includes the use of all types of computers, namely personal computers, laptops or portable electronic boards. Details on distribution of persons that used computers during the three months period prior to the Census presented in Table 13.18. The table shows that during the reference period, Kilimanjaro Region has 4.3 percent and 2.4 percent of individuals aged 4 years and above that used laptop and desktop computers respectively. The proportion of persons that used desktop or laptop computers in the reference period increase from age 5-9 years and attain the maximum point at aged group 25 – 34 years for persons that used desktops and age group 25-29 years for persons that used laptops and thereafter decrease as the age increases.

The proportion of persons aged 4 years and above that reported to have used laptop computers in the three months preceding the Census is higher across all age groups than those who reported to have used desktops.

The proportion of person aged 4 years and above that used laptop and desktop computers is higher among males than females from age groups 20 – 24 years to 80 years and above but is the same for males and females in younger age groups (age 4 years to age group 15 - 19 years) (Table 13.18).

**Table 13.18: Percentage of Persons Aged 4 Years and Above, Using Computers by Type, Sex and Age Groups; Kilimanjaro Region, 2022 PHC**

Age Group	Desktop			Laptop			Number of Persons		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Total	Male	Female
<b>Total</b>	<b>2.4</b>	<b>2.8</b>	<b>2.1</b>	<b>4.3</b>	<b>5.0</b>	<b>3.7</b>	<b>1,657,656</b>	<b>800,223</b>	<b>857,433</b>
4	0.4	0.5	0.4	1.1	1.0	1.2	46,159	23,415	22,744
5 – 9	0.5	0.5	0.5	1.5	1.5	1.5	219,835	110,627	109,208
10 -14	0.8	0.8	0.7	1.8	1.8	1.7	208,025	105,187	102,838
15 – 19	2.0	2.1	1.9	3.3	3.5	3.2	177,390	88,299	89,091
20 – 24	4.2	4.7	3.7	8.4	9.3	7.5	153,273	72,921	80,352
25 – 29	4.7	5.5	3.9	8.7	10.6	7.0	133,410	63,773	69,637
30 – 34	4.7	5.8	3.8	8.3	10.1	6.5	113,041	54,952	58,089
35 – 39	3.9	4.6	3.3	6.9	8.5	5.5	94,802	45,131	49,671
40 – 44	3.2	3.5	2.9	5.1	6.1	4.2	90,725	43,324	47,401
45 – 49	3.0	3.3	2.6	4.2	5.0	3.5	85,403	40,609	44,794
50 – 54	2.6	3.0	2.3	3.6	4.2	3.1	79,970	37,354	42,616
55 – 59	2.6	2.9	2.4	3.5	4.2	2.9	62,211	29,182	33,029
60 – 64	2.0	2.5	1.6	3.0	3.9	2.2	58,233	27,098	31,135
65 – 69	1.9	2.3	1.5	3.0	4.1	2.0	41,024	18,534	22,490
70 – 74	1.6	1.8	1.3	2.2	2.8	1.7	34,767	15,799	18,968
75 – 79	1.5	2.0	1.1	2.1	2.7	1.6	21,764	9,433	12,331
80 +	0.9	1.0	0.9	1.5	1.5	1.4	37,624	14,585	23,039

### 13.7.4 Usage of Computers by Highest Level of Education Attained and Sex

The results reveal that, the highest proportion of persons aged 15 years and above who used desktop computers in the last three months prior the census in Kilimanjaro Region had attained university and other related education levels (31.9%) with males having a higher proportion (37.1%) than females (26.3%).

The results further show that the percentage of persons who used desktop computers is slightly higher among males than females for all levels of education. Likewise, the percentage of persons who used desktop computers is slightly higher for persons living in urban areas than for those living in rural areas across all level of education (Table 13.19).

**Table 13.19: Percentage of Persons Aged 15 Years and Above Who Used Desktop Computers in the Last Three Months Prior to the Census Date, by Place of Residence, Sex and Education Level; Kilimanjaro Region, 2022 PHC**

Education Level	Percentage of Desktop Usage									Number of Persons								
	Total			Rural			Urban			Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Pre-Primary	3.4	5.2	2.1	3.1	4.7	2.0	4.6	7.1	2.7	1,123	466	657	927	381	546	196	85	111
Primary School (1 - 8)	2.0	2.1	1.9	1.9	1.9	1.8	2.5	2.9	2.3	648,191	312,647	335,544	519,328	253,539	265,789	128,863	59,108	69,755
Secondary School O - level (1 - 4)	4.0	4.8	3.4	3.5	4.1	3.0	5.3	6.5	4.3	313,667	147,927	165,740	222,043	105,415	116,628	91,624	42,512	49,112
Secondary School A - level (5 - 6)	11.2	12.6	9.7	10.0	11.4	8.5	13.6	15.2	12.1	25,554	13,097	12,457	17,222	8,905	8,317	8,332	4,192	4,140
University and Other Related	31.9	37.1	26.3	29.0	33.7	23.9	36.7	43.0	30.2	96,367	49,527	46,840	60,542	31,345	29,197	35,825	18,182	17,643
Training After Primary	4.3	4.5	3.8	3.8	4.1	3.3	6.3	6.5	5.9	6,090	3,663	2,427	4,874	2,969	1,905	1,216	694	522
Training After Secondary Education	15.5	17.8	13.4	13.7	15.6	11.9	19.3	22.4	16.5	14,156	6,724	7,432	9,548	4,577	4,971	4,608	2,147	2,461

The results reveal that, the highest proportion of persons aged 15 years and above who used laptop computers in the three months prior to the census in Kilimanjaro Region have attained university and other related education levels (16.4%) with a higher proportion for males

(18.7%) than for females (13.9%). The results also show that the percentage of persons who attained primary to university and other related levels, who use laptop computers increases as the level of education increases.

The results further show that the percentage of persons who used laptop computers is slightly higher among persons living in urban areas than among those living in rural areas for all levels of education (Table 13.20).

**Table 13.20: Percentage of Persons Aged 15 Years and Above Who Used Laptop Computers in the Last Three Months Prior to the Census Date by Place of Residence, Sex and Education Level; Kilimanjaro Region, 2022 PHC**

Education Level	Percent									Number of Persons								
	Total			Rural			Urban			Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Pre-Primary	2.0	2.8	1.5	1.8	2.4	1.5	3.1	4.7	1.8	1,123	466	657	927	381	546	196	85	111
Primary School (1 - 8)	1.4	1.4	1.3	1.3	1.3	1.3	1.7	2.0	1.5	648,191	312,647	335,544	519,328	253,539	265,789	128,863	59,108	69,755
Secondary School O - level (1 - 4)	2.7	3.1	2.3	2.3	2.7	2.0	3.4	4.1	2.9	313,667	147,927	165,740	222,043	105,415	116,628	91,624	42,512	49,112
Secondary School A - level (5 - 6)	6.3	7.0	5.6	5.9	6.5	5.2	7.3	8.2	6.3	25,554	13,097	12,457	17,222	8,905	8,317	8,332	4,192	4,140
University and Other Related	16.4	18.7	13.9	15.8	17.9	13.6	17.3	20.1	14.5	96,367	49,527	46,840	60,542	31,345	29,197	35,825	18,182	17,643
Training After Primary	3.1	3.2	3.0	2.9	2.8	2.9	4.2	4.9	3.3	6,090	3,663	2,427	4,874	2,969	1,905	1,216	694	522
Training After Secondary Education	8.8	9.3	8.4	7.6	8.0	7.3	11.3	11.9	10.8	14,156	6,724	7,432	9,548	4,577	4,971	4,608	2,147	2,461

### 13.7.5 Usage of Computers by Employment Status and Sex

Results reveal that in Kilimanjaro Region, the percentage of persons aged 15 years and above who used desktop computers in the three months prior the Census date ranges from 2.3 percent for workers not classified by employment status to 4.0 percent for paid employees. In

regard to the use of desktop computers, results show that the percentage of persons who used desktop computers is slightly higher for males than for females across all employment status categories.

Furthermore, results show that the proportion of persons who used desktop computers is higher for persons living in urban than those living in rural areas for all types of employment categories (Table 13.21).

**Table 13.21: Percentage of Persons Aged 15 Years and Above Who Used Desktop Computers in the Last Three Months Prior to the Census Date by Place of Residence, Sex and Employment Status; Kilimanjaro Region, 2022 PHC**

Employment Status	Percent									Number of persons								
	Total			Rural			Urban			Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Paid employees	4.0	4.0	3.7	3.2	3.1	3.8	6.3	6.5	2.7	5,109	4,299	810	3,804	3,067	737	1,305	1,232	73
Self-employed without employees	2.7	2.9	2.6	2.3	2.4	2.3	4.4	5.3	3.8	15,327	6,730	8,597	12,124	5,568	6,556	3,203	1,162	2,041
Self-employed with employees	3.8	5.1	2.5	2.5	3.4	1.6	7.6	9.7	5.3	3,103	1,560	1,543	2,291	1,126	1,165	812	434	378
Casual labourers	2.9	3.1	2.2	2.3	2.5	1.4	4.6	4.7	4.1	6,210	4,742	1,468	4,544	3,493	1,051	1,666	1,249	417
Workers not classified by status	2.3	2.9	1.4	1.4	1.7	1.0	4.9	5.7	3.0	1,298	805	493	969	577	392	329	228	101

Results reveal that the percentage of persons aged 15 years and above who used laptop computers in the three months prior the Census' date ranges from 4.6 percent for Self-employed without employees to 7.4 percent for paid employees' category. In regard to the use of laptop computers, results show that the percentage of persons who used laptop computers is higher among males than females across all employment status categories.

Furthermore, results show that the proportion of persons who used laptop computers is higher for persons living in urban than for those living in rural areas for all employment categories (Table 13.22).

**Table 13.22: Percentage of Persons Aged 15 Years and Above Who Used Laptop Computers in the Last Three Months Prior to the Census Date by Place of Residence, Sex and Employment Status; Kilimanjaro Region, 2022 PHC**

Employment Status	Percent									Total Number of Persons								
	Total			Rural			Urban			Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Paid employees	7.4	7.7	5.3	5.8	6.0	5.0	11.8	12.0	8.2	5,109	4,299	810	3,804	3,067	737	1,305	1,232	73
Self-employed without employees	4.6	5.2	4.2	3.7	4.2	3.3	8.0	9.8	7.0	15,327	6,730	8,597	12,124	5,568	6,556	3,203	1,162	2,041
Self-employed with employees	6.9	9.2	4.5	4.8	6.0	3.8	12.6	17.7	6.6	3,103	1,560	1,543	2,291	1,126	1,165	812	434	378
Casual labourers	6.0	6.2	5.2	4.5	4.6	4.2	9.9	10.6	7.7	6,210	4,742	1,468	4,544	3,493	1,051	1,666	1,249	417
Workers not classified by status	5.7	6.3	4.7	4.3	4.9	3.6	9.7	10.1	8.9	1,298	805	493	969	577	392	329	228	101

### 13.7.6 Usage of Computers by Occupation

The 2022 PHC results reveal that in Kilimanjaro Region, legislators’ administrators and managers category have the highest percentage (10.2%) of person aged 15 years and above who used desktop computers in the three months prior to the census date, while agricultural and fishery workers category have the lowest percentage (1.2%).

The results further show that the percentage of persons aged 15 years and above who used desktop computers is higher among males than females for the occupation categories except for the technicians and associate professionals category for which the

percentages are almost same. There are small differences in the percentage of persons who used desktop computers for persons living in urban and rural areas across all occupation categories (Table 13.23).

**Table 13.23: Percentage of Persons Aged 15 Years and Above Who Used Desktop Computers in the Last Three Months Prior to the Census Date by Place of Residence, Sex and Occupation Status; Kilimanjaro Region, 2022 PHC**

Occupation Status	Percent									Number of Persons								
	Total			Rural			Urban			Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Legislators' administrators and managers.	10.2	11.5	8.4	10.2	11.0	9.1	10.2	12.2	7.6	4,489	2,576	1,913	2,530	1,494	1,036	1,959	1,082	877
Professionals.	9.8	12.2	7.3	9.3	11.7	6.9	10.3	13.0	7.8	23,269	11,756	11,513	13,652	7,005	6,647	9,617	4,751	4,866
Technicians and associate professionals.	3.6	3.6	3.7	3.4	3.3	3.8	4.0	4.1	3.7	38,964	29,401	9,563	24,032	18,439	5,593	14,932	10,962	3,970
Clerks.	7.8	9.3	6.8	9.0	10.8	7.8	6.3	7.4	5.6	4,592	1,818	2,774	2,527	1,012	1,515	2,065	806	1,259
Service workers and shop sales workers.	2.7	4.1	1.9	2.6	3.7	2.0	2.9	4.7	1.9	48,711	18,162	30,549	28,189	10,688	17,501	20,522	7,474	13,048
Agricultural and fishery workers.	1.2	1.3	1.1	1.1	1.2	1.0	1.7	2.1	1.4	415,655	194,596	221,059	356,976	167,605	189,371	58,679	26,991	31,688
Craft and related workers.	1.5	1.7	1.4	1.4	1.5	1.3	2.0	2.3	1.6	168,844	90,273	78,571	124,020	67,015	57,005	44,824	23,258	21,566
Plant and machine operators and assemblers.	2.4	2.4	2.5	2.5	2.4	2.9	2.4	2.5	1.7	8,743	7,815	928	5,662	5,083	579	3,081	2,732	349
Elementary occupations.	1.5	1.9	1.3	1.4	1.6	1.2	1.8	2.4	1.4	214,435	100,740	113,695	150,877	71,891	78,986	63,558	28,849	34,709

The 2022 PHC results shows that professionals have the highest percentage (38.1%) of person aged 15 years and above who used laptop computers in the three months prior to the census date compared with other occupations in Kilimanjaro Region, while

agricultural and fishery workers category and the craft and related workers recorded the smallest percentages (3.6% and 3.7% respectively).

The percentage of persons who used laptop computers is higher among males than females across all occupation categories except for the technicians and associate professionals category and Plant and machine operators and assemblers for which the percentages of females are higher than that of males. The percentage of persons who used laptop computers is more pronounced among persons living in urban than in rural areas across all occupation categories except for the clerks' category for which the percentage of males (28.8%) and females (28.9%) are almost same (Table 13.24).

**Table 13.24: Percentage of Persons Aged 15 Years and Above Who Used Laptop Computers in the Last Three Months Prior to the Census Date by Place of Residence, Sex and Occupation Status; Kilimanjaro Region, 2022 PHC**

Occupation Status	Percent									Number of Persons								
	Total			Rural			Urban			Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Both Sexes	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Legislators' administrators and managers.	33.9	37.0	29.7	31.5	33.6	28.4	37.1	41.8	31.4	4,489	2,576	1,913	2,530	1,494	1,036	1,959	1,082	877
Professionals.	38.1	45.5	30.6	35.8	42.6	28.7	41.4	49.8	33.3	23,269	11,756	11,513	13,652	7,005	6,647	9,617	4,751	4,866
Technicians and associate professionals.	12.7	11.9	15.2	11.3	10.4	14.1	14.9	14.3	16.7	38,964	29,401	9,563	24,032	18,439	5,593	14,932	10,962	3,970
Clerks.	28.9	33.3	26.0	28.8	33.4	25.8	28.9	33.1	26.2	4,592	1,818	2,774	2,527	1,012	1,515	2,065	806	1,259
Service workers and shop sales workers.	7.2	10.1	5.5	6.1	8.4	4.6	8.7	12.4	6.6	48,711	18,162	30,549	28,189	10,688	17,501	20,522	7,474	13,048
Agricultural and fishery workers.	3.6	4.2	3.1	3.3	3.8	2.9	5.8	6.9	4.8	415,655	194,596	221,059	356,976	167,605	189,371	58,679	26,991	31,688
Craft and related workers.	3.7	4.3	3.1	3.0	3.4	2.6	5.7	6.9	4.4	168,844	90,273	78,571	124,020	67,015	57,005	44,824	23,258	21,566
Plant and machine operators and assemblers.	6.7	6.5	8.1	5.6	5.4	7.1	8.7	8.5	9.7	8,743	7,815	928	5,662	5,083	579	3,081	2,732	349
Elementary occupations.	4.6	5.4	3.8	3.8	4.3	3.2	6.4	8.2	5.0	214,435	100,740	113,695	150,877	71,891	78,986	63,558	28,849	34,709

## Chapter 14

### Information on Buildings

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#### Key Points

- About sixty-four percent (63.8%) of all buildings have permanent flooring materials (sand-cement or tiles (ceramic/marble/PVC) and Terrazzo).
- Forty-five percent (44.1%) of all buildings/units in Kilimanjaro Region are connected to the national grid electricity, while 11.8 percent are powered by other sources.
- About forty five percent (45.4%) of all buildings/units have water services.
- Three percent (3.3%) of all buildings in Kilimanjaro Region have infrastructure for Persons With Disabilities
- About seventy one percent (71.1%), of all individually owned buildings/units in Kilimanjaro Region are owned by men, 22.3 percent by women, and 3.8 percent are owned by males and females jointly.
- About seventy percent (69.9%) of all buildings/units in Kilimanjaro Region are used by the owners themselves and 12.9 percent are used by tenants.
- Seventy our percent (74.0%) of all buildings in Kilimanjaro Region are built on un-surveyed land.
- About twenty nine percent (28.8%) of all buildings/units in Kilimanjaro Region are constructed on land that do not have legal documents.

#### 14.1 Introduction

This Chapter provides information on the number of buildings, types of buildings, main uses of buildings and the number of units in residential and commercial-residential buildings in Kilimanjaro Region and Council levels as per the 2022 Tanzania Building Census (2022 TBC) results. It also presents building's information which constitutes building categories, occupancy status, building ownership, construction status, building materials used for construction, number of bedrooms, building tenure status and buildings condition. In addition, the chapter presents information on basic services which are categorized as services within the building (electricity, water and toilets) and accessibility of buildings (roads) and

availability of infrastructure for People with Disabilities (PWD). Furthermore, it provides an overview of building ownership status, land surveying, and the presence of legal documents for land ownership where the buildings are built.

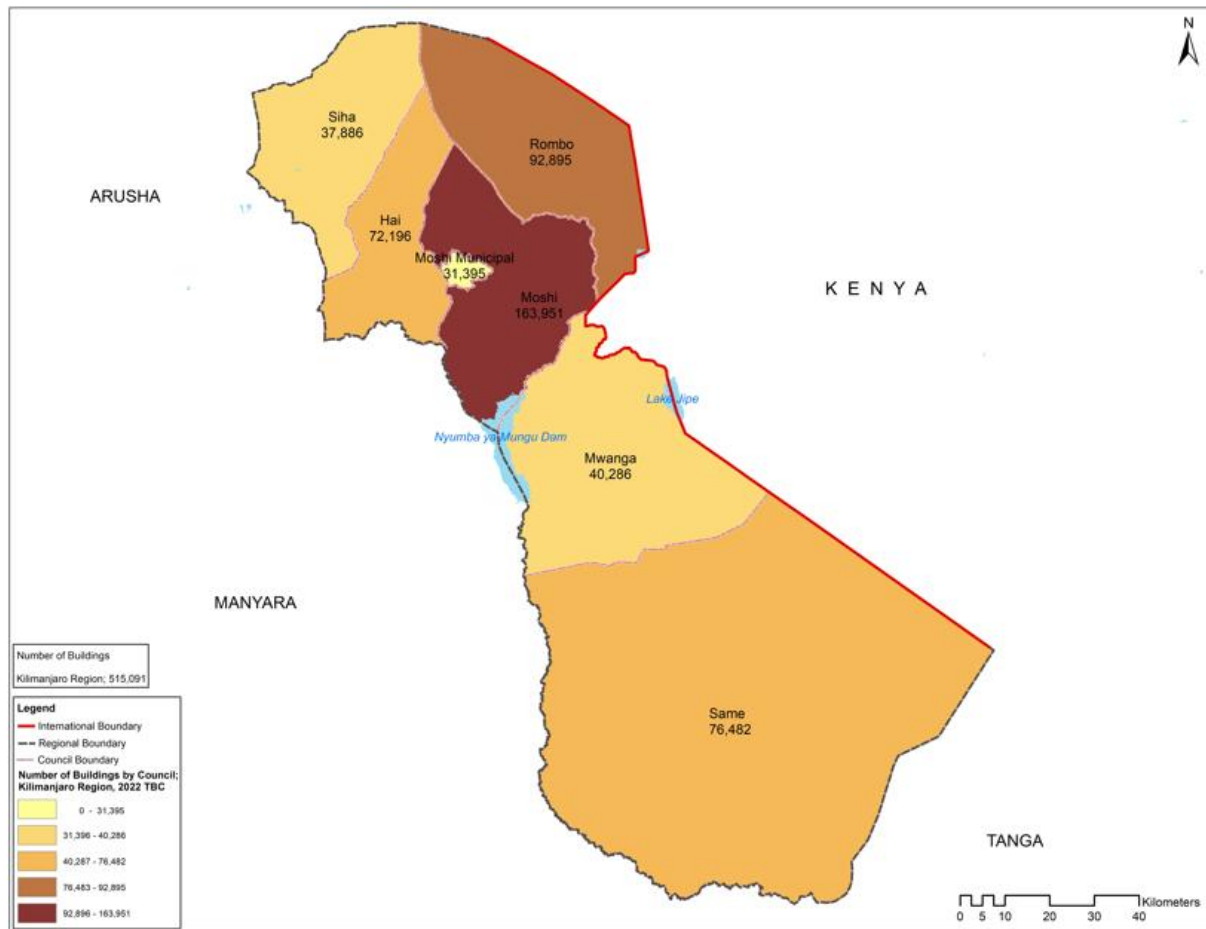
#### **14.2 Number of Buildings**

The 2022 PHC results show that Kilimanjaro Region has a total of 515,091 buildings whereby 434,980 buildings are in rural and 80,111 are in urban areas. Moshi District Council has the largest number of buildings (163,951 buildings) followed by Rombo District Council (92,895 buildings) and Same District Council (76,482 buildings). On the other hand, Moshi Municipal Council and Siha District Council have fewer numbers of buildings (31,395 and 37,886 respectively). Further results show that Moshi District Council has the largest number (1,206) of multi-storey buildings, followed by Moshi Municipal Council (976 multi-storey buildings) while Siha District Council (93) and Mwanga District Council (230) have relatively small numbers of multi-storey buildings (Map 14.1 and Table 14.1).

**Table 14.1: Number of Buildings by Place of Residence, Type and Council; Kilimanjaro Region, 2022 TBC**

Council	Total				Rural				Urban			
	Number of Buildings	Multi Storey	Single Storey	Under Construction	Number of Buildings	Multi Storey	Single Storey	Under Construction	Number of Buildings	Multi Storey	Single Storey	Under Construction
<b>Total</b>	<b>515,091</b>	<b>3,540</b>	<b>486,916</b>	<b>24,635</b>	<b>434,980</b>	<b>2,303</b>	<b>412,463</b>	<b>20,214</b>	<b>80,111</b>	<b>1,237</b>	<b>74,453</b>	<b>4,421</b>
Rombo District	92,895	292	89,135	3,468	89,259	266	85,678	3,315	3,636	26	3,457	153
Mwanga District	40,286	230	38,076	1,980	34,818	199	33,102	1,517	5,468	31	4,974	463
Same District	76,482	327	72,013	4,142	60,055	284	57,107	2,664	16,427	43	14,906	1,478
Moshi Municipal	31,395	976	29,543	876	NA	NA	NA	NA	31,395	976	29,543	876
Moshi District	163,951	1,206	155,174	7,571	156,598	1,146	148,359	7,093	7,353	60	6,815	478
Hai District	72,196	416	67,526	4,254	61,186	342	57,379	3,465	11,010	74	10,147	789
Siha District	37,886	93	35,449	2,344	33,064	66	30,838	2,160	4,822	27	4,611	184

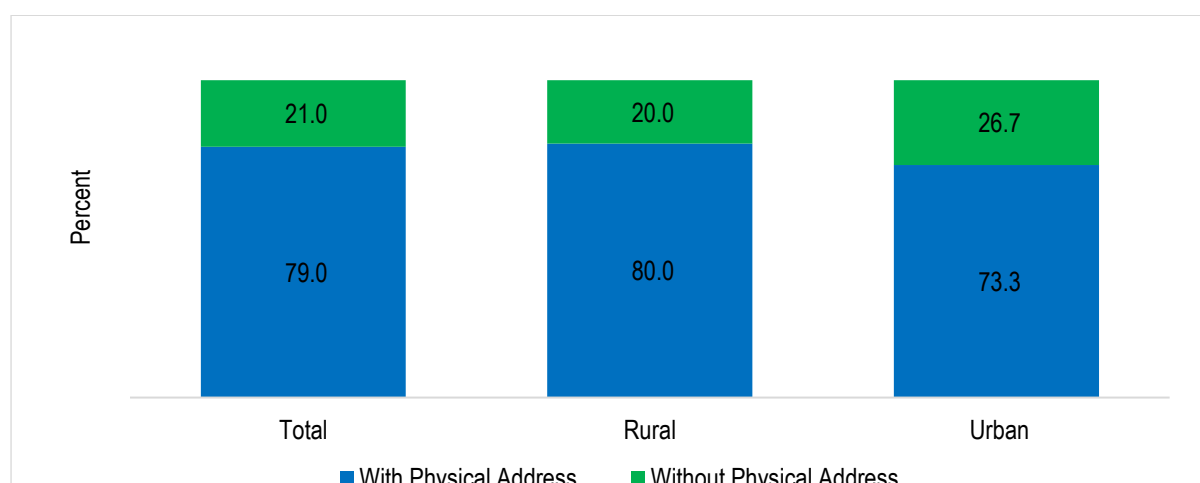
**Map 14.1: Number of Buildings by Council; Kilimanjaro Region, 2022 TBC**



### 14.2.1 Buildings with Physical Address

The results show that 79.0 percent of all buildings in Kilimanjaro Region have physical address. The percentage of buildings with physical address is relatively higher in rural (80.0%) than in urban areas (73.3%) (Figure 14.1 and Table 14.2).

**Figure 14.1: Percentage Distribution of Buildings With and Without Physical Address by Place of Residence; Kilimanjaro Region, 2022 TBC**

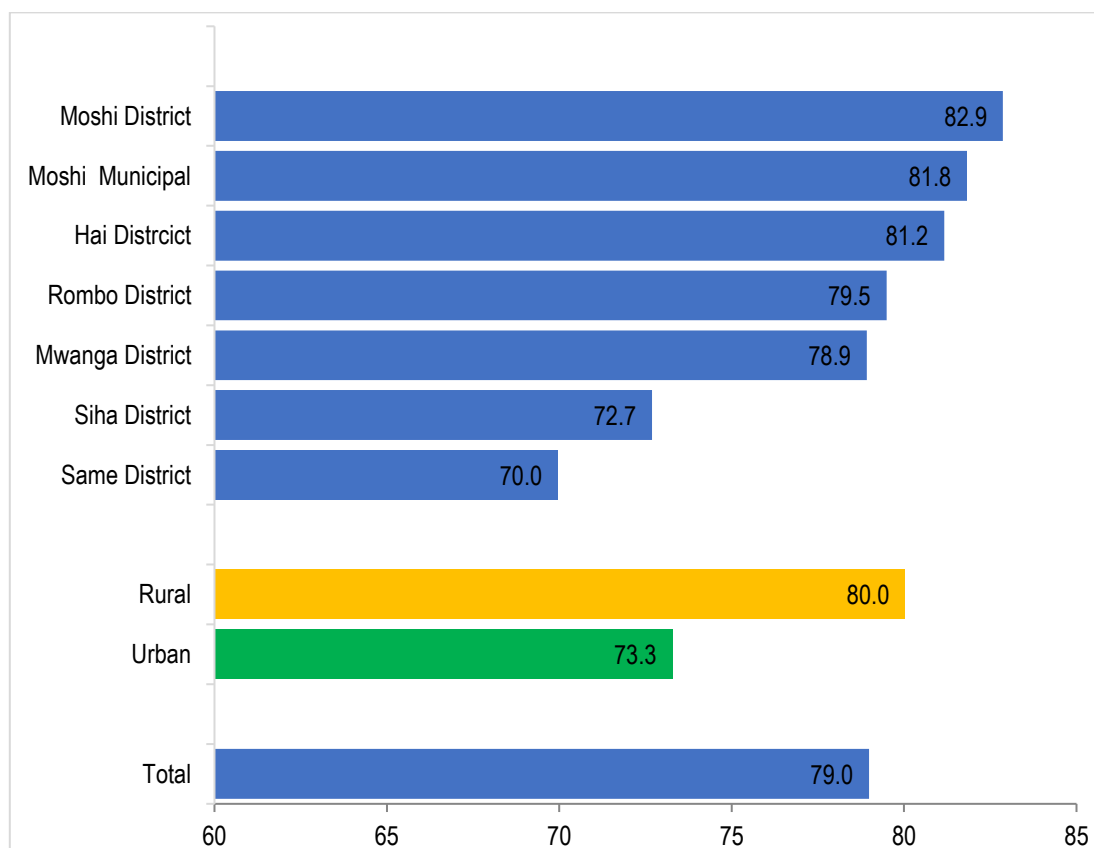


Across councils, results show that, the percentage of buildings with physical address ranges from 70.0 percent in Same District to 82.9 percent in Moshi District (Table 14.2 and Figure 14.2).

**Table 14.2: Number of Buildings by Place of Residence, Physical Address and Council; Kilimanjaro Region, 2022 TBC**

Council	Total			Rural			Urban		
	Number of Buildings	With Physical Address	Without Physical Address	Number of Buildings	With Physical Address	Without Physical Address	Number of Buildings	With Physical Address	Without Physical Address
<b>Total</b>	<b>515,091</b>	<b>406,838</b>	<b>108,253</b>	<b>434,980</b>	<b>348,130</b>	<b>86,850</b>	<b>80,111</b>	<b>58,708</b>	<b>21,403</b>
Rombo District	92,895	73,843	19,052	89,259	71,263	17,996	3,636	2,580	1,056
Mwanga District	40,286	31,793	8,493	34,818	28,228	6,590	5,468	3,565	1,903
Same District	76,482	53,514	22,968	60,055	43,691	16,364	16,427	9,823	6,604
Moshi Municipal	31,395	25,690	5,705	NA	NA	NA	31,395	25,690	5,705
Moshi District	163,951	135,862	28,089	156,598	130,711	25,887	7,353	5,151	2,202
Hai District	72,196	58,596	13,600	61,186	50,170	11,016	11,010	8,426	2,584
Siha District	37,886	27,540	10,346	33,064	24,067	8,997	4,822	3,473	1,349

**Figure 14.2: Percentage Distribution of Buildings with Physical Address by Council; Kilimanjaro Region, 2022 TBC**

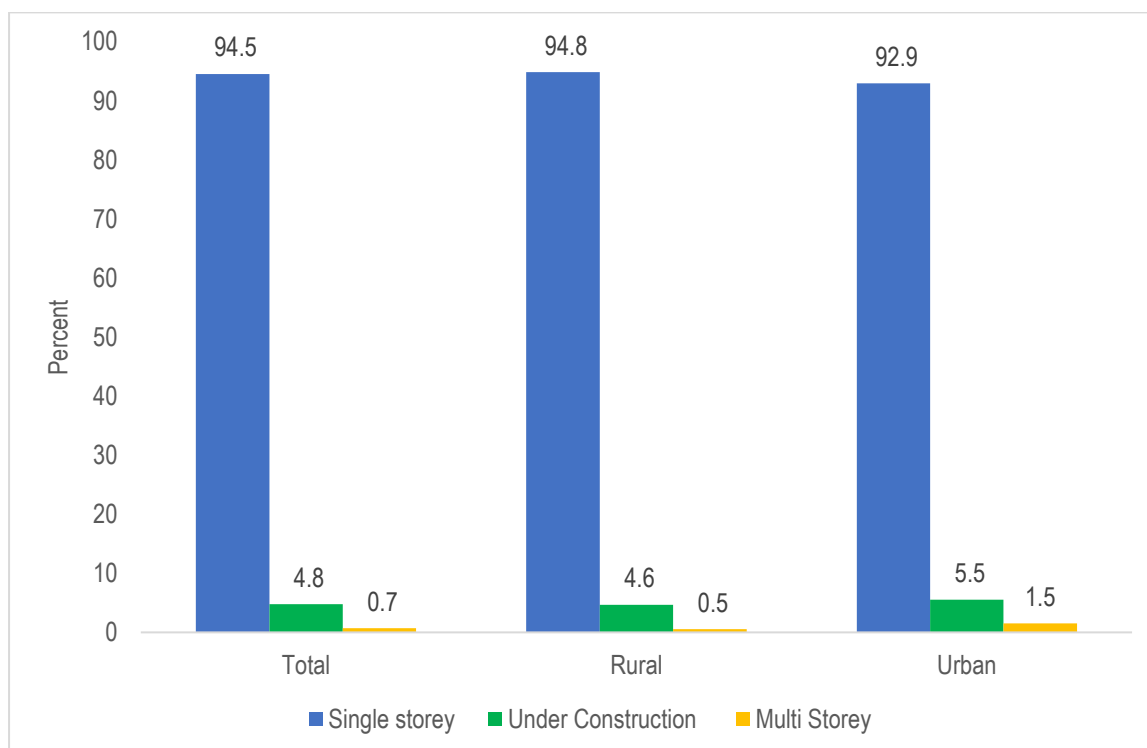


### 14.2.2 Type of Buildings

Building types are categorized into single storey buildings (one floor buildings) and multi-storey buildings (more than one floor buildings). Information on buildings under construction including those at foundation stage was also collected.

The results reveal that, 94.5 percent of all buildings in Kilimanjaro Region are single storey and only less than one percent (0.7%) are multi-storey. The percentage of multi-storey buildings is higher (1.5%) in urban than in rural areas (0.5%). Results further reveal that about five percent (4.8%) of all buildings in the Region are under construction. Percentage of buildings under construction in urban areas is relatively higher (5.5%) than in rural areas (4.6%) (Figure 14.3).

**Figure 14.3: Percentage Distribution of Buildings by Type and Place of Residence; Kilimanjaro Region, 2022 TBC**



### 14.2.3 Main Uses of Buildings

The main uses of buildings are divided into three groups, which are residential, commercial-residential and non-residential uses. The results show that 89.4 percent of buildings in Kilimanjaro Region are used for residential purpose, 4.3 percent for commercial-residential and 6.3 percent for non-residential. The pattern of use of building is almost similar in rural and urban areas.

At the Council level, Rombo District has the highest proportion of residential buildings (90.6 %) while Moshi Municipal has the lowest percentage (79.9 %). With regard to non-residential buildings, Moshi Municipal Council has the highest proportion (10.2 %) while Rombo District Council has lowest 4.3%) (Table 14.3).

**Table 14.3: Percentage Distribution of Buildings by Main Use, Council and Place of Residence; Kilimanjaro Region, 2022 TBC**

Council	Place of Residence	Main Use			
		Total Buildings	Residential	Residential and Commercial	Non-residential use
Total	Total	515,091	89.4	4.3	6.3
	Rural	434,980	90.7	3.5	5.8

Council	Place of Residence	Main Use			
		Total Buildings	Residential	Residential and Commercial	Non-residential use
	Urban	80,111	82.5	8.5	8.9
Rombo District	<b>Total</b>	<b>92,895</b>	<b>90.6</b>	<b>5.1</b>	<b>4.3</b>
	Rural	89,259	91.4	4.7	3.9
	Urban	3,636	71.2	15.1	13.7
Mwanga District	<b>Total</b>	<b>40,286</b>	<b>89.2</b>	<b>3.5</b>	<b>7.3</b>
	Rural	34,818	90.1	3.0	6.9
	Urban	5,468	83.7	6.3	10.0
Same District	<b>Total</b>	<b>76,482</b>	<b>89.9</b>	<b>3.6</b>	<b>6.5</b>
	Rural	60,055	90.8	2.7	6.5
	Urban	16,427	86.7	6.7	6.6
Moshi Municipal	<b>Total</b>	<b>31,395</b>	<b>79.9</b>	<b>9.9</b>	<b>10.2</b>
	Rural	NA	NA	NA!	NA
	Urban	31,395	79.9	9.9	10.2
Moshi District	<b>Total</b>	<b>163,951</b>	<b>90.3</b>	<b>3.5</b>	<b>6.1</b>
	Rural	156,598	90.6	3.3	6.0
	Urban	7,353	84.2	7.8	8.0
Hai District	<b>Total</b>	<b>72,196</b>	<b>89.7</b>	<b>3.9</b>	<b>6.4</b>
	Rural	61,186	90.5	3.2	6.3
	Urban	11,010	85.3	8.0	6.7
Siha District	<b>Total</b>	<b>37,886</b>	<b>89.2</b>	<b>3.8</b>	<b>7.0</b>
	Rural	33,064	89.9	3.6	6.5
	Urban	4,822	84.3	5.6	10.1

The main use of non-residential buildings in Kilimanjaro Region is for commercial purposes (51.4%), followed by institutional services (18.8%) and places of worship (11.0%). Rombo District Council has the highest percentage of buildings (61.3%; 2454 buildings) used for commercial purposes followed by Moshi District Council (59.6%; 5,981 buildings), while Mwanga District Council has the lowest (41.5%; 1,220 buildings). Moshi Municipal Council, the headquarters of Kilimanjaro Region has the highest percentage of buildings (5.3%; 169 buildings) used for industrial purposes while Moshi District Council has the lowest (0.9%; 95 buildings) (Table 14.4).

**Table 14.4: Percentage Distribution of Non-Residential Buildings by Type of Use and Council; Kilimanjaro Region, 2022 TBC**

Council	Total	Type of Use										
		Offices	Commercial	Industrial	Tourists Cottages	Guest Houses/Lodges (%)	Hotels	Godown /Ware House	Institutions	Diplomatic and International Agencies	Religious Institutions	Small Scale Industries
<b>Total</b>	<b>32,439</b>	<b>8.3</b>	<b>51.4</b>	<b>1.6</b>	<b>0.3</b>	<b>2.0</b>	<b>1.7</b>	<b>4.5</b>	<b>18.8</b>	<b>0.1</b>	<b>11.0</b>	<b>4.2</b>
Rombo District	4,002	6.1	61.3	1.4	0.1	1.6	1.0	4.6	16.1	0.1	6.3	4.4
Mwanga District	2,942	8.2	41.5	1.1	0.0	1.5	1.8	2.0	25.9	0.2	16.1	4.1
Same District	5,005	7.4	44.9	1.3	0.1	1.9	2.1	2.5	19.7	0.1	18.5	4.6
Moshi Municipal	3,211	15.4	42.8	5.3	0.3	6.5	3.5	4.1	20.8	0.2	5.6	4.2
Moshi District	10,038	6.3	59.6	0.9	0.3	1.4	1.3	5.4	16.2	0.1	8.1	3.9
Hai District	4,603	9.0	46.7	1.4	0.7	1.4	1.5	6.4	20.2	0.1	12.8	4.8
Siha District	2,638	11.8	46.9	2.0	0.3	1.6	0.9	4.9	18.8	0.0	12.9	3.3

#### **14.2.4 Number of Units in a Building**

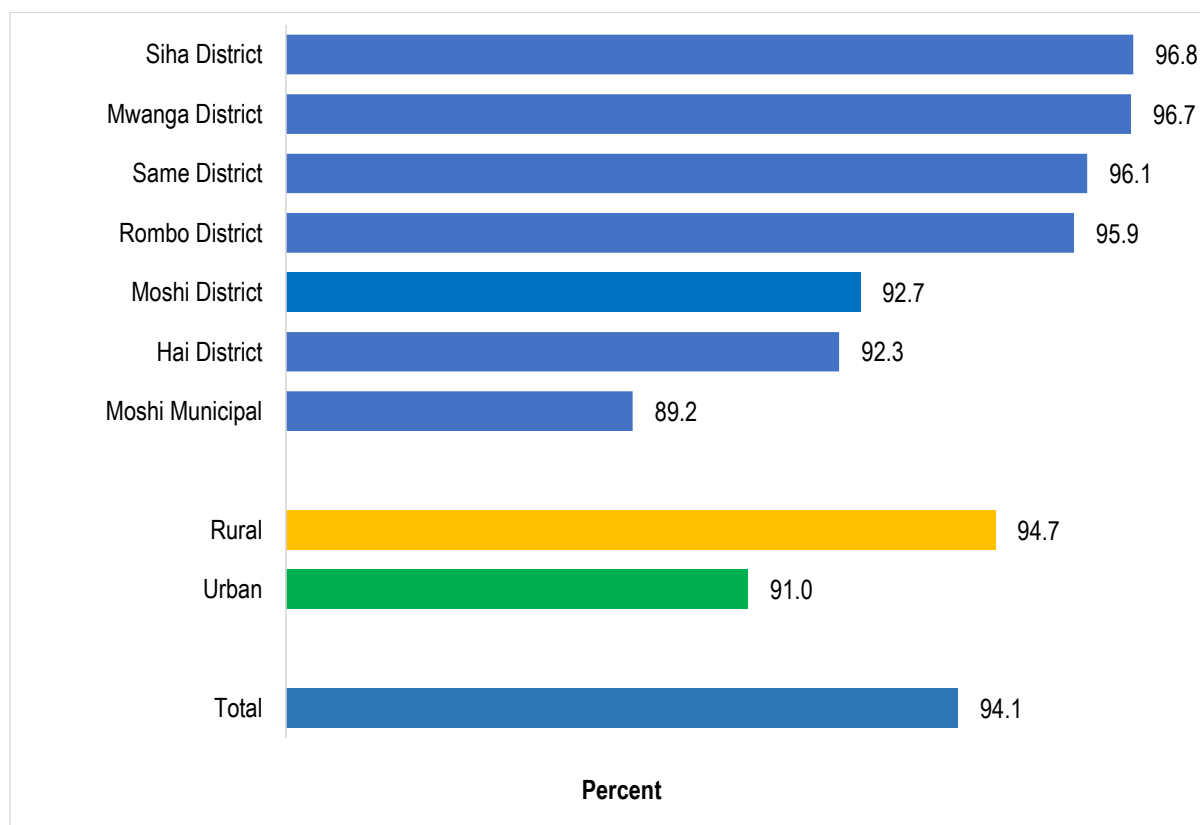
Information on the number of units in the building was collected only in residential and commercial-residential buildings. Results show that, most buildings (94.1%) in Kilimanjaro Region have one unit. The pattern of distribution of buildings by number of units is similar for both rural and urban areas

At the council level, Siha District has the highest proportion (96.8%) of buildings with single unit followed by Mwanga District (96.7), while the Moshi Municipal has the lowest (89.2%). Results further show that, the percentage of buildings with two units ranges from 1.6 percent in Siha District Council to 7.0 percent in Moshi Municipal Council (Table 14.5 and Figure 14.4).

**Table 14.5: Percentage Distribution of Residential and Commercial- Residential Buildings by Number of Units, Place of Residence and Council; Kilimanjaro Region, 2022 TBC**

Council	Number of Units																				
	Total							Rural							Urban						
	Number of Building	1	2	3	4	5	6+	Number of Buildings	1	2	3	4	5	6+	Number of Buildings	1	2	3	4	5	6+
<b>Total</b>	<b>482,652</b>	<b>94.1</b>	<b>2.6</b>	<b>1.0</b>	<b>0.8</b>	<b>0.7</b>	<b>0.8</b>	<b>409,699</b>	<b>94.7</b>	<b>2.2</b>	<b>0.9</b>	<b>0.7</b>	<b>0.7</b>	<b>0.7</b>	<b>72,953</b>	<b>91.0</b>	<b>5.1</b>	<b>1.4</b>	<b>1.0</b>	<b>0.7</b>	<b>0.9</b>
Rombo District	88,893	95.9	1.7	0.7	0.6	0.5	0.5	85,756	96.0	1.7	0.7	0.6	0.5	0.5	3,137	93.3	3.4	1.2	0.7	0.5	0.8
Mwanga District	37,344	96.7	1.9	0.5	0.3	0.3	0.3	32,423	96.9	1.8	0.5	0.3	0.3	0.3	4,921	95.9	2.6	0.6	0.5	0.2	0.3
Same District	71,477	96.1	2.0	0.6	0.4	0.4	0.5	56,134	97.0	1.6	0.4	0.3	0.4	0.3	15,343	92.8	3.4	1.2	0.9	0.7	1.0
Moshi Municipal	28,184	89.2	7.0	1.5	1.0	0.5	0.7	NA	NA	NA	NA	NA	NA	NA	28,184	89.2	7.0	1.5	1.0	0.5	0.7
Moshi District	153,913	92.7	2.8	1.3	1.1	1.1	1.1	147,150	92.7	2.8	1.3	1.1	1.1	1.1	6,763	92.2	3.3	1.2	1.2	1.1	1.0
Hai District	67,593	92.3	3.0	1.3	1.1	1.1	1.1	57,321	93.2	2.5	1.2	1.0	1.1	1.1	10,272	87.8	6.0	2.0	1.5	1.3	1.4
Siha District	35,248	96.8	1.6	0.5	0.4	0.4	0.4	30,915	97.1	1.4	0.5	0.3	0.3	0.3	4,333	94.2	2.9	1.0	0.7	0.6	0.6

**Figure 14.4: Percentage Distribution of Residential and Commercial-Residential Buildings with One Unit by Council; Kilimanjaro Region, 2022 TBC**



### 14.3. Buildings' Attributes

This section presents findings on attributes of buildings which constitute categories of occupancy status, ownership, construction status, materials used for construction number of bedrooms, tenure status and condition of the building. Buildings in this section refer to all buildings irrespective of their use and ownership.

#### 14.3.1 Building Categories

For the purpose of the 2022 TBC, the categories of buildings are semi-detached, terrace or row of houses, and detached or stand-alone buildings. The results show that most (94.7%) of the buildings in Kilimanjaro Region are detached or stand-alone. The same pattern is observed in rural and urban areas and across all councils in Kilimanjaro Region (Table 14.6).

**Table 14.6: Number and Percentage Distribution of Buildings by Building Category, Place of Residence and Council; Kilimanjaro Region, 2022 TBC**

Place residence	Building Category						
	Total Number of Buildings	Semi-detached	Percent	Terrace/Row of Houses	Percent	Detached/Stand Alone	Percent
<b>Total</b>	515,091	7,678	1.5	19,380	3.8	488,033	94.7
Rural	434,980	4,808	1.1	12,032	2.8	418,140	96.1
Urban	80,111	2,870	3.6	7,348	9.2	69,893	87.2
<b>Council</b>							
Rombo District	92,895	798	0.9	2,232	2.4	89,865	96.7
Mwanga District	40,286	463	1.1	1,294	3.2	38,529	95.6
Same District	76,482	823	1.1	1,848	2.4	73,811	96.5
Moshi Municipal	31,395	1,701	5.4	3,791	12.1	25,903	82.5
Moshi District	163,951	2,343	1.4	6,112	3.7	155,496	94.8
Hai District	72,196	1,085	1.5	2,805	3.9	68,306	94.6
Siha District	37,886	465	1.2	1,298	3.4	36,123	95.3

### 14.3.2 Construction Status of Buildings

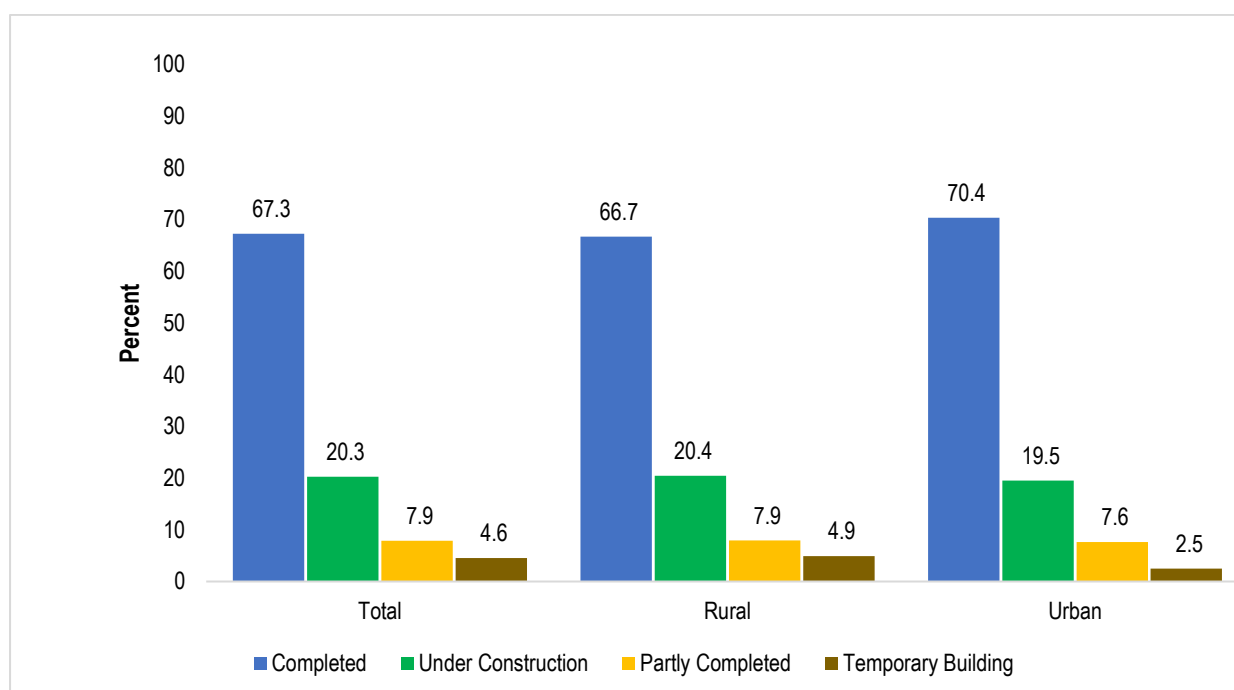
The construction status of buildings is divided into four categories, namely completed, partly completed, under construction and temporary buildings. The 2022 TBC results show that, 67.3 percent of all buildings in Kilimanjaro Region have been completed and 7.9 percent are partly completed. Buildings under construction account for 20.3 percent while temporary buildings account for 4.6 percent. The results also indicate that, 70.4 percent of all buildings in the urban areas are completed compared with 66.7 percent in rural areas.

Moshi Municipal Council has the highest percentage of completed buildings (78.7 %) while Siha District Council has the lowest (61.3 %). Percentage of temporary buildings across Councils ranges from 1.7 percent in Moshi Municipal Council to 12.2 in Siha District Council (Figure 14.5 and Table 14.7).

**Table 14.7: Percentage Distribution of Buildings by Construction Status, Place of Residence and Council; Kilimanjaro Region, 2022 TBC**

Place of residence	Total Number of Buildings	Completed	Partly Completed	Under Construction	Temporary Building
<b>Total</b>	<b>515,091</b>	<b>67.3</b>	<b>7.9</b>	<b>20.3</b>	<b>4.6</b>
Rural	434,980	66.7	7.9	20.4	4.9
Urban	80,111	70.4	7.6	19.5	2.5
<b>Council</b>					
Rombo District	92,895	74.3	5.8	15.9	3.9
Mwanga District	40,286	66.3	7.8	21.9	4.0
Same District	76,482	61.7	9.8	24.1	4.4
Moshi Municipal	31,395	78.7	6.6	13.0	1.7
Moshi District	163,951	66.5	8.1	21.3	4.1
Hai District	72,196	64.6	9.2	22.2	4.1
Siha District	37,886	61.3	6.8	19.7	12.2

**Figure 14.5: Percentage Distribution of Buildings by Construction Status and Place of Residence; Kilimanjaro Region, 2022 TBC**



### 14.3.3 Building Occupancy Status

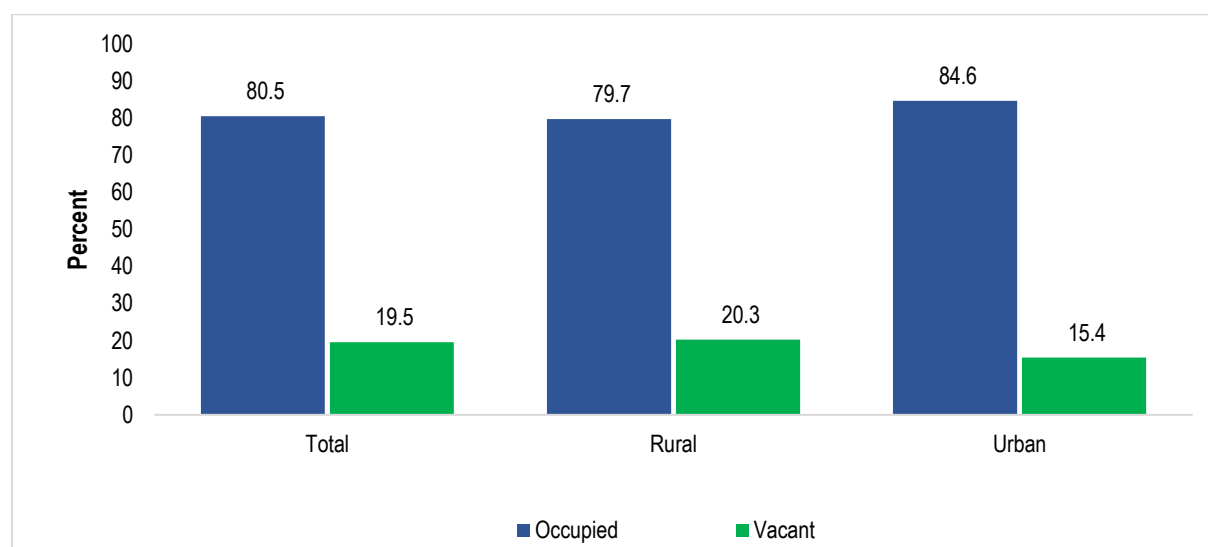
The occupancy status of buildings is determined by checking whether the building is in use or vacant. The results show that 80.5 percent of all buildings in Kilimanjaro Region are in use, while 19.5 percent are vacant. Furthermore, the results indicate that urban areas have a higher proportion of buildings in use (84.6%) compared with

rural areas (79.7%). Moshi Municipal Council has the highest percentage (90.3%) of buildings in use while Rombo District Council has the lowest (77.7%) (Figure 14.6 and Table 14.8).

**Table 14.8: Percentage Distribution of Buildings by Occupancy Status, Place of Residence and Council; Kilimanjaro Region, 2022 TBC**

Place of Residence	Total Number of Buildings	Percent	
		Occupied	Vacant
<b>Total</b>	<b>515,091</b>	<b>80.5</b>	<b>19.5</b>
Rural	434,980	79.7	20.3
Urban	80,111	84.6	15.4
<b>Council</b>			
Rombo District	92,895	77.7	22.3
Mwanga District	40,286	80.0	20.0
Same District	76,482	82.4	17.6
Moshi Municipal	31,395	90.3	9.7
Moshi District	163,951	79.2	20.8
Hai District	72,196	80.1	19.9
Siha District	37,886	81.9	18.1

**Figure 14.6: Percentage Distribution of Buildings by Place of Residence and Occupancy Status; Kilimanjaro Region, 2022 TBC**



#### 14.3.4 Building Construction Materials

This section describes the types of building materials used in flooring, walls and roofing. Analysis in this section is based on buildings and not on households as presented in chapter twelve of this publication.

### 14.3.4.1 Floor Materials

Materials used for floors include cement, PVC tiles, ceramic tiles (marble), terrazzo, clay, earth/sand, hard plastic or bitumen, polished wood, cow dung, wood planks, or bamboo or plant residues. Fifty-five percent (55.3%) of buildings in Kilimanjaro Region have sand-cement floors, followed by earth/sand/soil floors (19.5%) and ceramic tiles floors (8.0%).

Furthermore, buildings with cement floor constitute 53.2 percent of all buildings in rural areas while in urban areas it is 66.7 percent. Moshi Municipal Council has the highest percentage (69.8%) of buildings with cement floor while Siha and Same District Councils have relatively lower percentages (46.8% and 47.0% respectively) (Table 14.9).

**Table 14.9: Percentage of Buildings by Type of Flooring Materials, Place of Residence and Council; Tanzania, 2022 TBC**

Place of residence	Total	Flooring Materials							No Floor	
		Sand-cement	Ceramic tiles	Parquet or polished wood	Terrazzo	PVC tiles	Wood planks	Earth/sand/soil		Cow dung
<b>Total</b>	<b>515,091</b>	<b>55.3</b>	<b>8.0</b>	<b>0.2</b>	<b>0.5</b>	<b>0.0</b>	<b>0.5</b>	<b>19.5</b>	<b>0.2</b>	<b>15.7</b>
Rural	434,980	53.2	6.7	0.2	0.5	0.0	0.6	22.0	0.3	16.4
Urban	80,111	66.7	15.1	0.1	0.7	0.0	0.1	5.6	0.1	11.8
<b>Council</b>										
Rombo District	92,895	48.8	5.3	0.5	0.2	0.0	0.8	28.2	0.0	16.3
Mwanga District	40,286	54.1	7.3	0.0	0.5	0.0	0.4	20.6	0.2	16.9
Same District	76,482	47.0	5.2	0.0	0.4	0.0	0.3	28.3	0.3	18.5
Moshi Municipal	31,395	69.8	20.4	0.1	0.7	0.0	0.0	2.4	0.0	6.5
Moshi District	163,951	59.5	9.4	0.2	0.5	0.0	0.5	14.2	0.1	15.5
Hai District	72,196	61.4	7.8	0.1	1.1	0.0	0.5	14.0	0.4	14.6
Siha District	37,886	46.8	5.1	0.3	0.5	0.2	1.0	26.7	1.4	17.9

**Note:** Other flooring materials are PVC tiles, parquet or polished wood, wood planks, terrazzo or cow dung

#### 14.3.4.2 Wall Materials

Materials used in wall construction include stones, cement or stone blocks, sun-dried clay bricks, burnt clay bricks, glass, wood, iron sheets, bamboo/poles/mud and poles/grass or tents. Most of the buildings in Kilimanjaro Region have walls built with Cement blocks/Stone blocks (40.6 %), followed by burnt bricks (30.8%). About fifty-one (50.7%) percent of buildings in urban areas have walls constructed with cement blocks or stone blocks followed by burnt bricks (39.1%). In rural areas, most of the buildings (38.7%) are constructed using cement blocks or stone blocks followed by burnt bricks (29.3 %). Across councils, Hai District has the highest percentage (66.6 %) of buildings with cement blocks or stone blocks walls while Same District has the lowest percentage (5.1 %) (Table 14.10).

**Table 14.10: Percentage Distribution of Buildings by Type of Wall Materials, Place of Residence and Council; Kilimanjaro Region, 2022 TBC**

Place of Residence	Total	Wall Materials									No Walls
		Stones	Cement blocks/Stone blocks	Sundried bricks	Burnt bricks	Glass	Wood and Iron Sheets	Bamboo poles/wood planks	Grass	Tent/ container	
<b>Total</b>	<b>515,091</b>	<b>1.6</b>	<b>40.6</b>	<b>5.4</b>	<b>30.8</b>	<b>0.0</b>	<b>6.0</b>	<b>14.2</b>	<b>0.1</b>	<b>0.0</b>	<b>1.2</b>
Rural	434,980	1.6	38.7	5.8	29.3	0.0	6.8	16.5	0.1	0.0	1.1
Urban	80,111	1.9	50.7	3.2	39.1	0.0	1.4	1.5	0.1	0.1	2.1
<b>Council</b>											
Rombo District	92,895	2.2	45.8	3.4	0.3	0.0	22.0	25.7	0.1	0.0	0.5
Mwanga District	40,286	0.5	10.2	11.6	59.4	0.0	0.2	15.9	0.2	0.0	2.1
Same District	76,482	1.2	5.1	2.3	76.6	0.0	0.1	11.4	0.3	0.0	2.9
Moshi Municipal	31,395	1.6	59.5	3.0	34.0	0.0	0.3	0.9	0.0	0.0	0.7
Moshi District	163,951	2.3	45.4	4.3	31.1	0.0	3.3	12.6	0.1	0.0	0.8
Hai District	72,196	1.1	66.6	9.5	12.2	0.0	0.9	8.4	0.1	0.0	1.1

Place of Residence	Total	Wall Materials									No Walls
		Stones	Cement blocks/Stone blocks	Sundried bricks	Burnt bricks	Glass	Wood and Iron Sheets	Bamboo poles/wood planks	Grass	Tent/container	
Siha District	37,886	0.8	45.9	9.1	14.1	0.0	10.6	18.1	0.2	0.0	1.2

**Note:**

"No walls" refers to buildings that were under construction (at foundation stage) during Census enumeration

#### **14.3.4.3 Roofing Materials**

Construction materials used for roofing can be permanent or temporary. Permanent construction materials include corrugated iron sheets, tiles, concrete and asbestos, while temporary roofing materials are grass (leaves or palm leaves), mud/grass and poles, plastics, tarpaulin and straw.

The results show that, the highest percentage (91.2 %) of all buildings in Kilimanjaro Region are roofed with corrugated iron sheets, followed by grass/ leaves (1.8%). In rural areas, 91.2 percent of all buildings are roofed with corrugated iron sheets compared with 91.0 percent in urban areas. The percentage of buildings roofed with corrugated iron sheets range from 86.0 percent in Same District Council to 95.2 percent in Rombo District Council (Table 14.11).

**Table 14.11: Percentage Distribution of Buildings by Type of Roofing Materials, Place of Residence and Council; Kilimanjaro Region, 2022 TBC**

Place of Residence	Total	Roofing Material								No roof
		Corrugated Iron sheets	Tiles	Concrete	Asbestos	Grass/ leaves	Mud and leaves	Plastics/ Tins	Tent/ Container	
<b>Total</b>	<b>515,091</b>	<b>91.2</b>	<b>0.4</b>	<b>0.1</b>	<b>0.1</b>	<b>1.8</b>	<b>0.2</b>	<b>0.1</b>	<b>0.0</b>	<b>6.1</b>
Rural	483,696	91.2	0.3	0.1	0.1	2.1	0.3	0.1	0.0	5.9
Urban	31,395	91.1	0.9	0.3	0.1	0.3	0.1	0.0	0.0	7.1
<b>Council</b>										
Rombo District	92,895	95.2	0.3	0.0	0.1	0.1	0.2	0.1	0.0	3.9
Mwanga District	40,286	86.8	0.3	0.1	0.1	4.5	0.3	0.3	0.0	7.6
Same District	76,482	86.0	0.2	0.0	0.1	6.1	0.4	0.1	0.0	7.0
Moshi Municipal	31,395	93.8	1.9	0.6	0.2	0.0	0.0	0.0	0.0	3.4
Moshi District	163,951	92.4	0.3	0.1	0.1	0.7	0.2	0.1	0.0	6.2
Hai District	72,196	91.3	0.3	0.0	0.0	1.1	0.2	0.1	0.0	6.9
Siha District	37,886	88.9	0.2	0.0	0.0	2.5	0.3	0.1	0.1	7.8

### 14.3.5 Number of Bedrooms

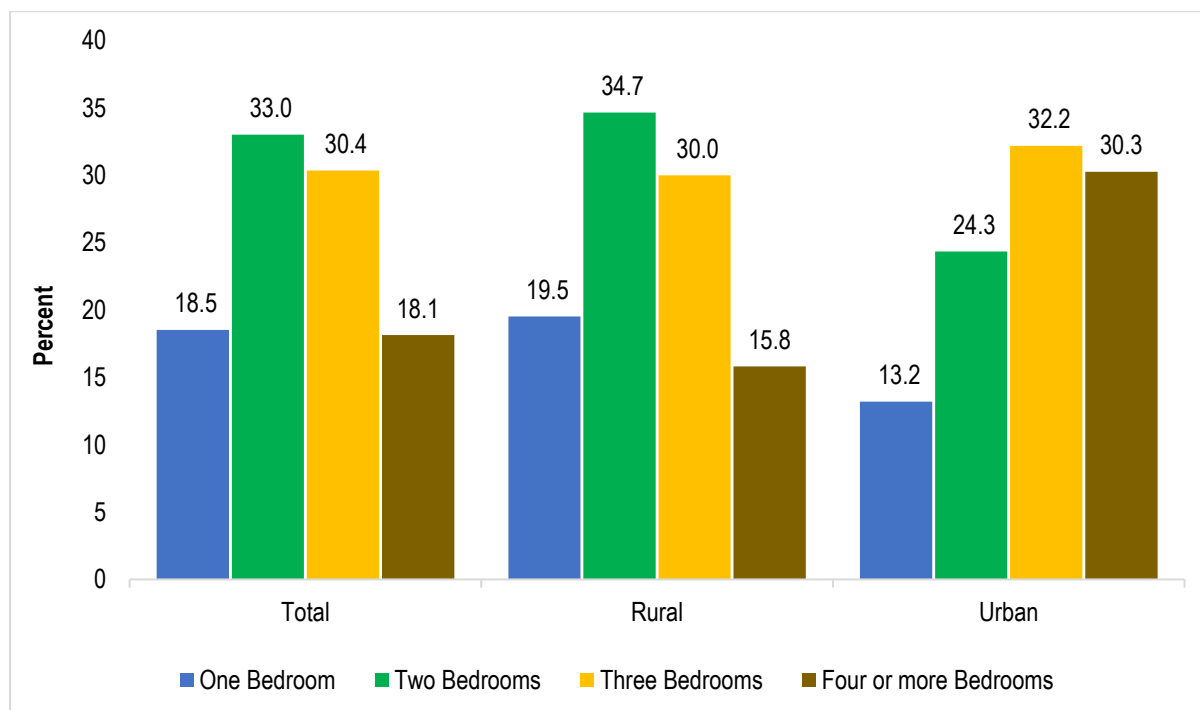
This section provides information on the number of bedrooms in residential and commercial-residential buildings only. The results show that 33.0 percent of such buildings/Units in Kilimanjaro Region have two bedrooms, 30.4 percent have three bedrooms, 18.5 percent have one bedroom, and 18.1 percent have four or more bedrooms.

Furthermore, in rural areas, the proportion of buildings/units with two bedroom is high (34.7%) compared with 19.5 percent of those with one bedroom. In urban areas, most buildings/units (32.2%) have three bedrooms, followed by those with four or more bedrooms (30.3%) and those with two bedrooms (24.3%) (Figure 14.7 and Table 14.12).

**Table 14.12: Percentage of Residential and Commercial-Residential Buildings/Units by Number of Bedrooms, Place of Residence and Council; Kilimanjaro Region, 2022 TBC**

Place of Residence	Number of Buildings/Units	Bedrooms						
		1	2	3	4	5	6	7+
<b>Total</b>	<b>487,120</b>	<b>18.5</b>	<b>33.0</b>	<b>30.4</b>	<b>11.5</b>	<b>3.2</b>	<b>1.5</b>	<b>1.9</b>
Rural	409,041	19.5	34.7	30.0	11.0	2.7	1.1	1.0
Urban	78,079	13.2	24.3	32.2	14.1	5.6	3.8	6.8
<b>Council</b>								
Rombo District	87,998	22.1	42.5	24.3	7.8	1.8	0.8	0.7
Mwanga District	37,792	12.5	24.6	35.6	18.3	5.5	1.9	1.6
Same District	72,447	17.6	30.2	35.5	11.6	2.8	1.2	1.2
Moshi Municipal	32,050	12.4	20.6	29.7	15.2	6.9	4.9	10.2
Moshi District	153,574	16.9	32.2	32.1	12.4	3.2	1.6	1.6
Hai District	67,857	21.1	33.7	29.3	10.3	2.9	1.4	1.4
Siha District	35,402	25.7	37.5	24.6	8.4	1.9	1.0	0.9

**Figure 14.7: Percentage Distribution of Residential and Commercial-Residential Buildings/Units by Number of Bedrooms and Place of Residence; Kilimanjaro Region, TBC 2022**



#### 14.4 Basic Services in Buildings

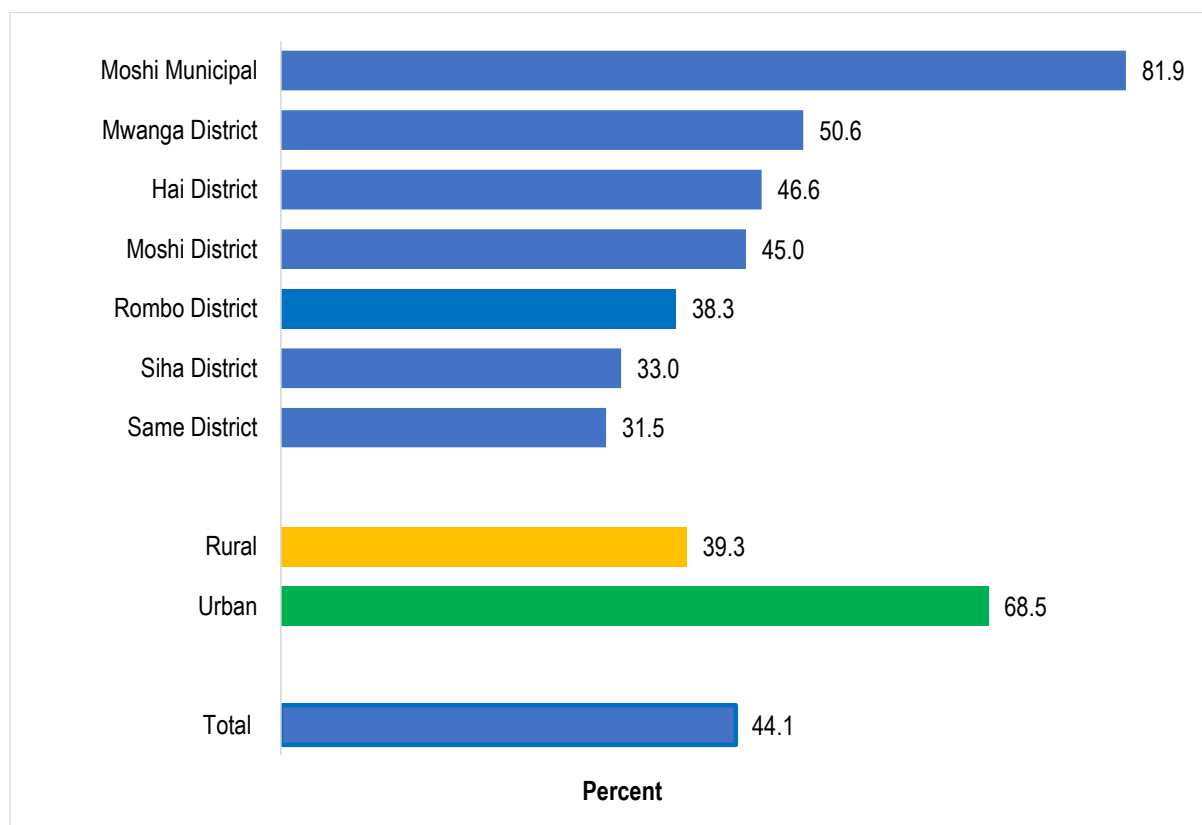
This section presents information on basic services in buildings/units. The services are electricity, water and toilets.

##### 14.4.1 Electricity

Electricity service in buildings/units is divided into two main groups: - electricity from the national grid (TANESCO) and electricity from alternative sources such as solar energy and generators.

The results indicate that 44.1 percent of all buildings/units in Kilimanjaro Region are connected to the national grid. About sixty-nine percent (68.5%) of all buildings/units in urban areas are connected to the national grid compared with 39.3 percent in rural areas. Across councils of Kilimanjaro Region, Moshi Municipal has the highest proportion (82.5%) of buildings/units connected to the national grid followed by Mwanga District (50.6%) while Same District has the lowest percentage (31.5%) (Figure 14.8 and Table 14.13).

**Figure 14.8: Percentage Distribution of Buildings/Units with Electricity from the National Grid (TANESCO) by Council; Kilimanjaro Region, 2022 TBC**



Alternative sources of electricity include all other sources such as solar electricity and generators. The results reveal that 11.8 percent of all buildings/units in Kilimanjaro Region have alternative sources of electricity. The percentage of buildings/units with alternative sources of electricity is higher in rural areas (12.9%) than in urban area (6.4%).

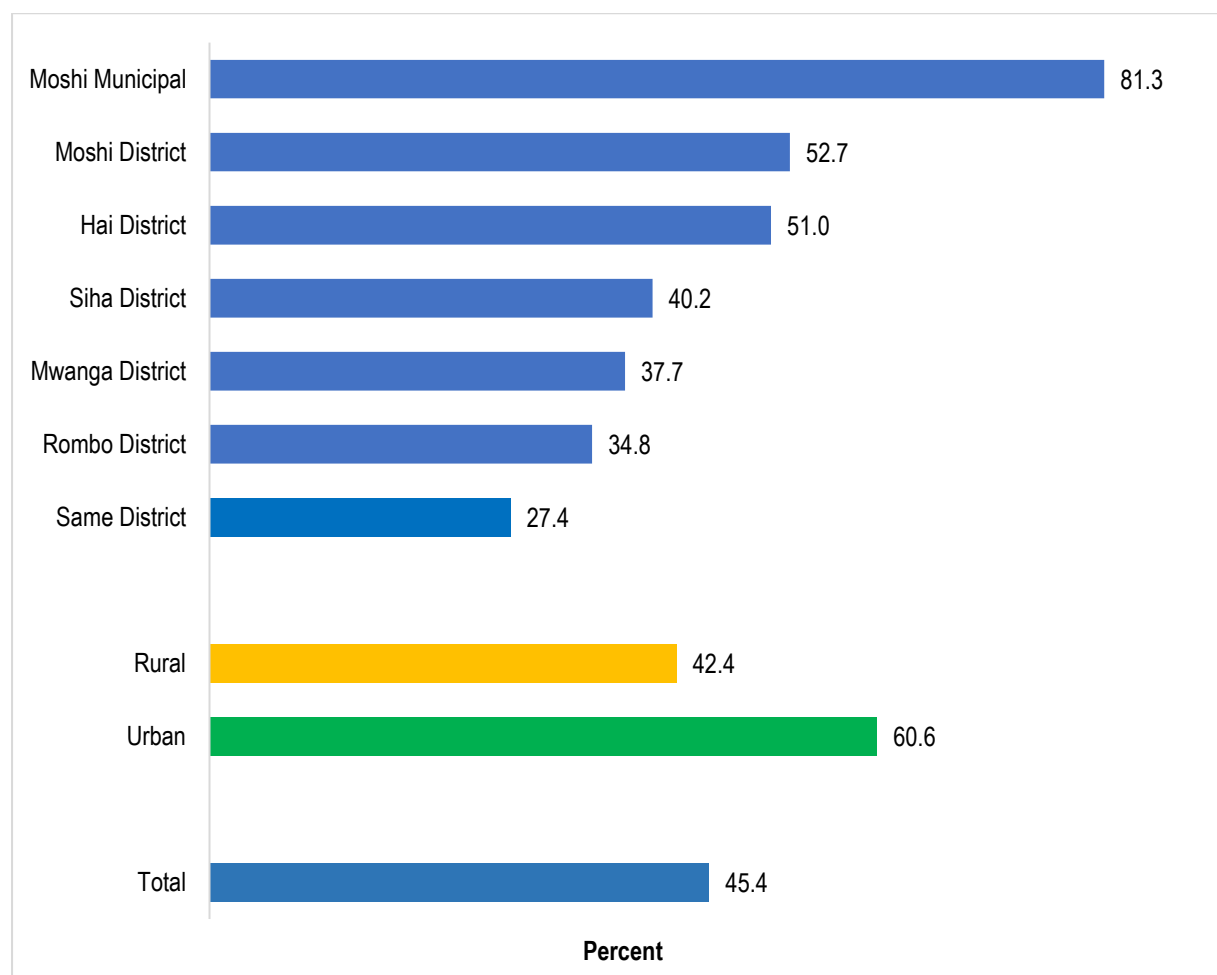
Percentage of buildings/units with alternative source of energy is generally high in Councils with low percentage of buildings connected to the national grid, ranging from five percent (5.0%) in Moshi Municipal Council to 21.9 percent in Same District Council (Table 14.13).

#### 14.4.2 Water

According to the 2022 TBC, water service in a building/unit means the presence of water inside the building/unit and/or on the premises of the relevant building/unit. The results reveal that 45.4 percent of all buildings/units in Kilimanjaro Region have water service. Proportion of buildings/units with water services is higher in urban (60.6%)

than in rural areas (42.4%). Across councils, Moshi Municipal has the highest percentage (81.3%) of buildings/units with water service while, Same District has the lowest percentage (27.4%) (Figure 14.9 and Table 14.1).

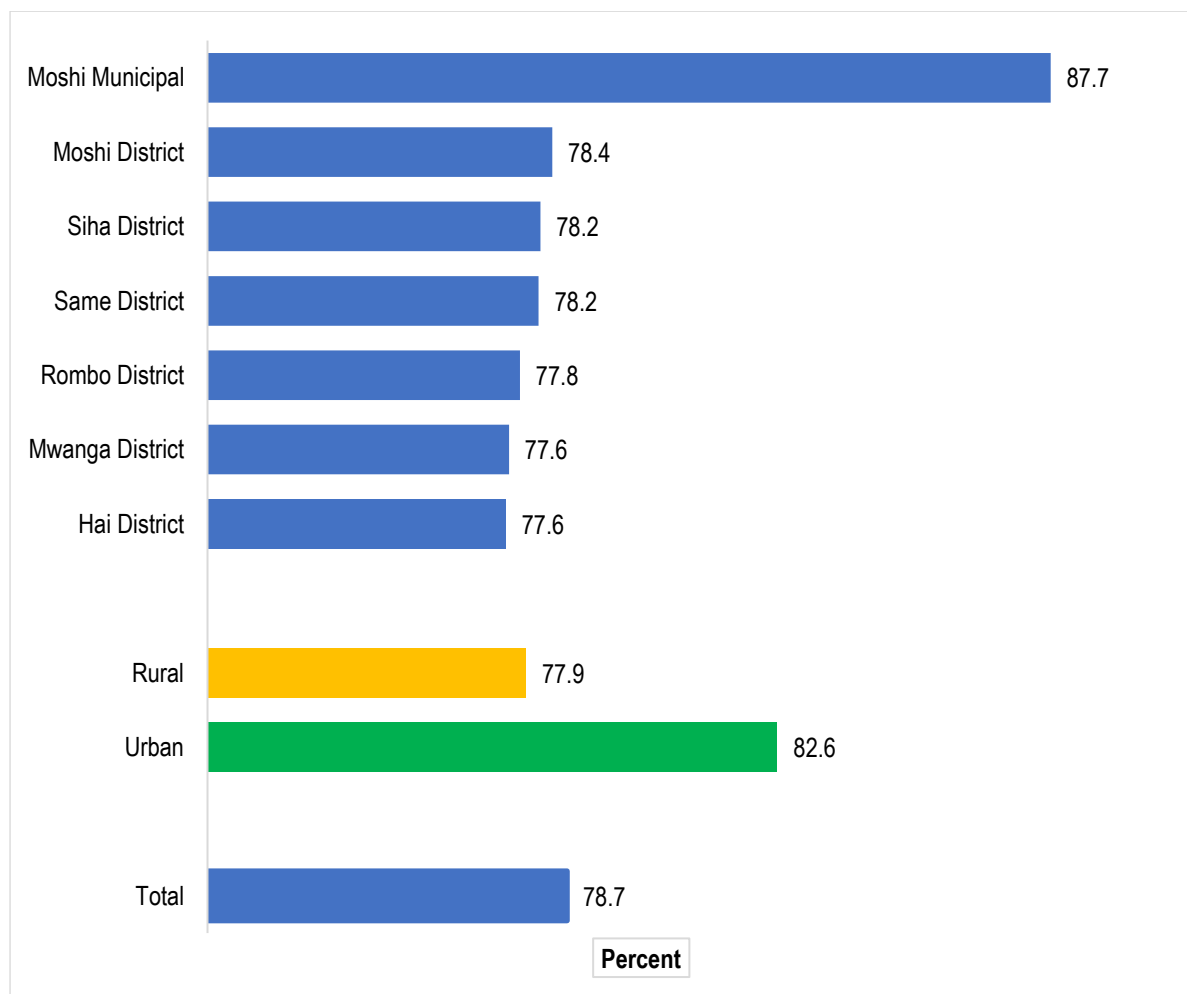
**Figure 14.9: Percentage Distribution of Buildings/Units with Water Services by Council; Kilimanjaro, 2022 TBC**



### 14.4.3 Toilets

Toilet service in a building/unit includes the presence of a toilet inside the building and/or on the premises of the concerned building. The results reveal that 78.7 percent of all buildings in Kilimanjaro Region have toilet facilities. The percentage of buildings with toilet facilities in urban areas is higher (82.6%) than in rural areas (77.9%). There are marked disparities in percentage of buildings with toilet facilities across councils, ranging from 77.6 percent in Hai District to 87.7 percent in Moshi Municipal (Figure 14.10 and Table 14.10).

**Figure 14.10: Percentage Distribution of Buildings/Units with Toilet Facility by Council; Kilimanjaro Region, 2022 TBC**



**Table 14.13: Percentage Distribution of Buildings/Units by Type of Basic Services, Place of Residence and Council; Kilimanjaro Region, 2022 TBC**

Place of Residence	Number of Buildings/Units	Electricity		Water	Toilet
		National Grid	Alternative Sources		
<b>Total</b>	531,455	44.1	11.8	45.4	78.7
Rural	444,558	39.3	12.9	42.4	77.9
Urban	86,897	68.5	6.4	60.6	82.6
<b>Council</b>					
Rombo District	94,402	38.3	9.2	34.8	77.8
Mwanga District	41,143	50.6	7.5	37.7	77.6
Same District	78,267	31.5	21.9	27.4	78.2
Moshi Municipal	35,558	81.9	5.0	81.3	87.7

Moshi District	168,877	45.0	10.0	52.7	78.4
Hai District	74,538	46.6	10.1	51.0	77.6
Siha District	38,670	33.0	20.0	40.2	78.2

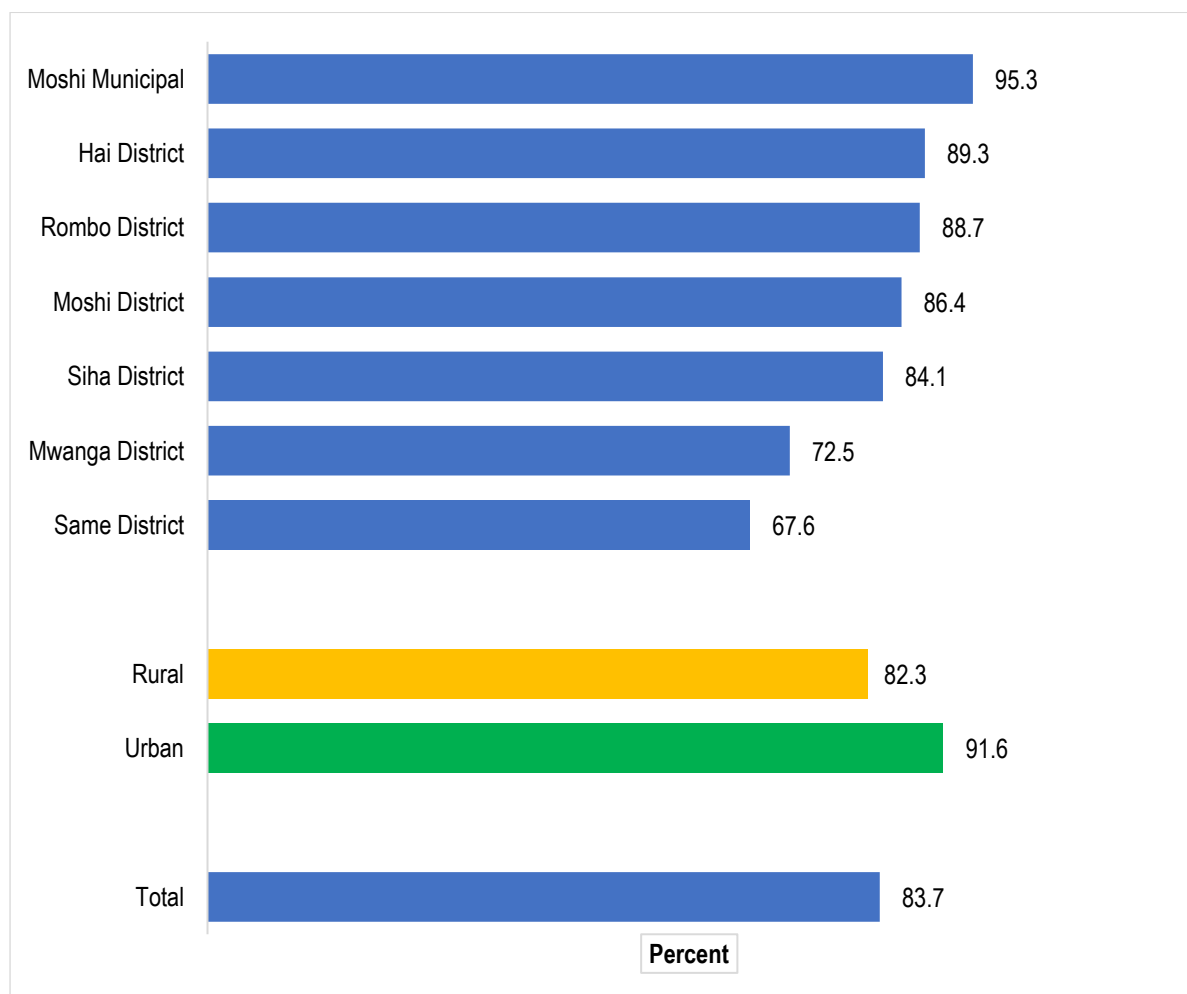
## 14.5 Accessibility of the Building

This section provides information on the accessibility of buildings by road and the presence of infrastructure for Person With Disabilities.

### 14.5.1 Access Roads

The results indicate that 82.3 percent of all buildings in Kilimanjaro Region are accessible by road. Notably, 91.6 percent of the buildings in urban areas are accessible by road, compared with 82.4 percent of buildings in rural areas. Moshi Municipal Council has the highest percentage (95.3%) of buildings accessible by road while Same District Council has the lowest (67.6%) (Figure 14.11).

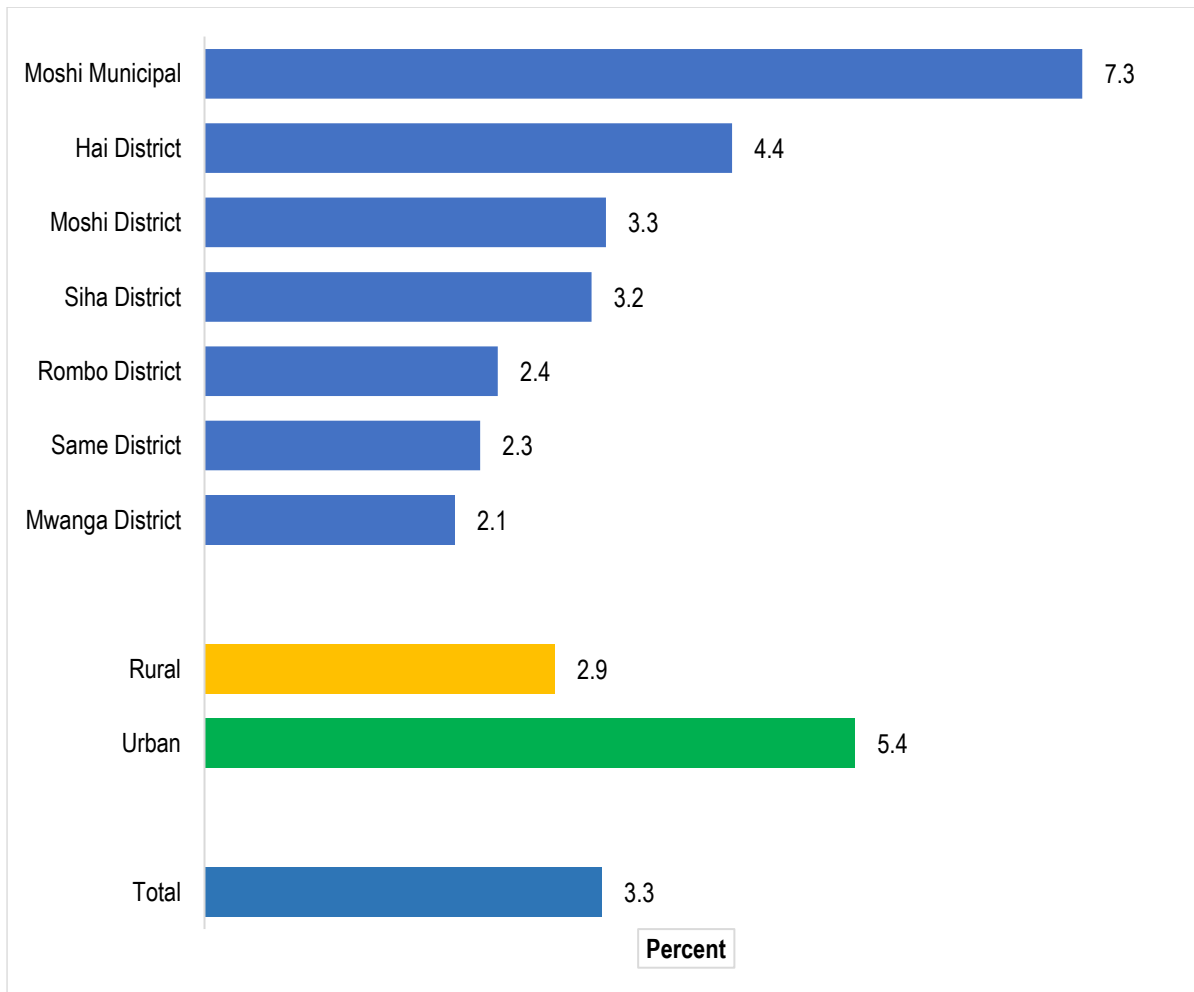
**Figure 14.11: Percentage Distribution of Buildings with Access Road by Council; Kilimanjaro Region, 2022 TBC**



### 14.5.2 Infrastructure for Persons With Disabilities

Results reveal that 3.3 percent of all buildings in Kilimanjaro Region have infrastructure for Persons with Disabilities (PWDs). Buildings with infrastructures for PWDs account for 5.4 percent and 2.9 percent of buildings in urban and rural areas respectively. Moshi Municipal Council has the highest percentage (7.3%) of buildings with infrastructure for PWDs while Mwanga District Council has the lowest percentage (2.1%) (Figure 14.12).

**Figure 14.12: Percentage Distribution of Buildings With Infrastructure for Persons with Disabilities by Council; Kilimanjaro Region, 2022 TBC**



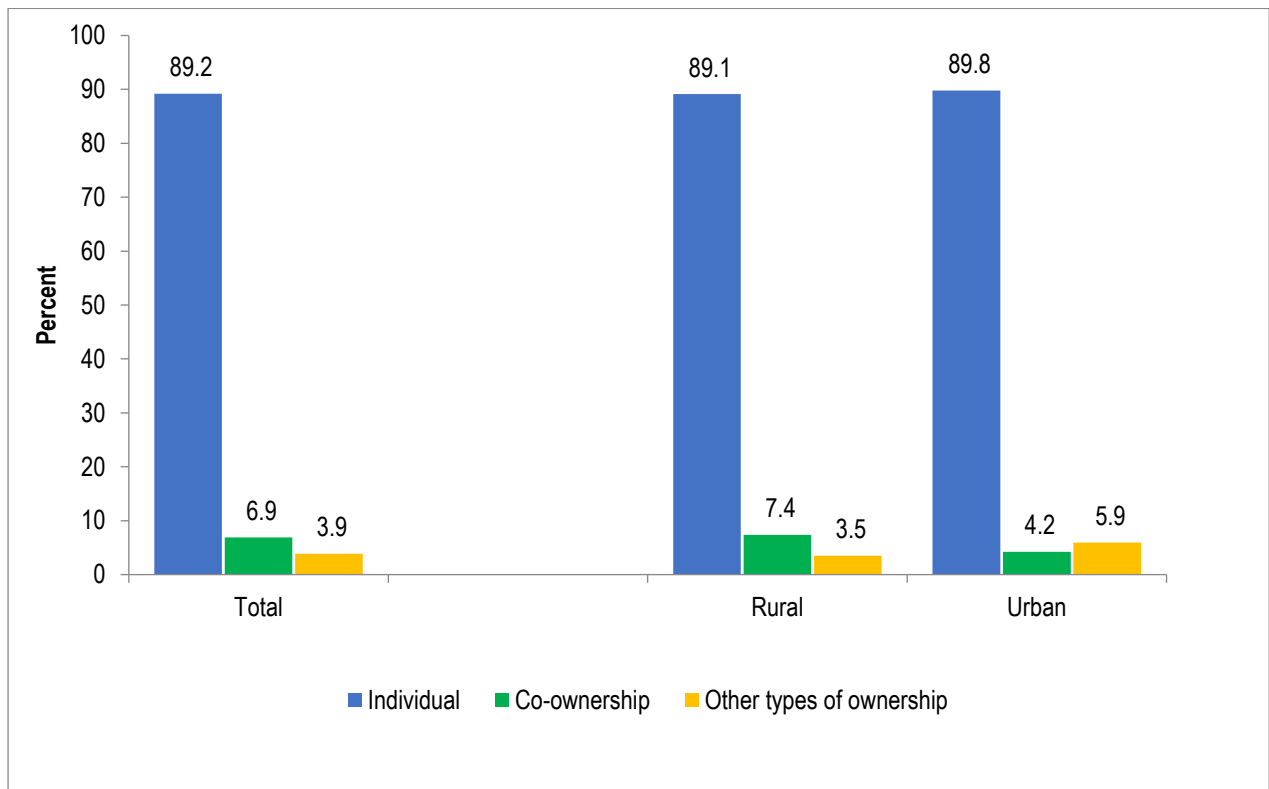
## 14.6 Tenure Status of Buildings

This section provides an overview of building ownership status, land surveying and the presence of legal documents for the land where the building is built.

### 14.6.1 Buildings Ownership Status

The results reveal that the majority (89.2%) of buildings in Kilimanjaro Region are individually owned, followed by 6.9 percent of co-owned buildings. The same pattern is observed in rural and urban areas. (Figure 14.13 and Table 14.14).

**Figure 14.13: Percentage Distribution of Buildings by Ownership Status and Place of Residence; Kilimanjaro Region, 2022 TBC**



### 14.6.2 Buildings Ownership by Sex

Ownership by sex considers only individually owned buildings/units. Ownership status may be categorised as male only, female only or jointly. The results show that most of the buildings/units in Kilimanjaro Region are owned by males only (71.1%), followed by female only (22.3%) and 3.8 percent by male(s) and female(s) jointly. The same pattern is observed in rural and urban areas.

Moshi Municipal Council has the highest proportion (28.4%) of buildings/units owned by females alone while Rombo District Council has the lowest proportion (19.0%) (Table 14.14).

**Table 14.14: Percentage Distribution of Individually Owned Buildings/Units by Place of Residence, Sex and Council; Kilimanjaro Region, 2022 TBC**

Council	Number of Buildings/Units	Total					Number of Buildings/Units	Rural					Number of Buildings/Units	Urban				
		Male	Female	Male(s) and Female(s)	Males Only Jointly	Females Only Jointly		Male	Female	Male(s) and Female(s)	Males Only Jointly	Females Only Jointly		Male	Female	Male(s) and Female(s)	Males Only Jointly	Females Only Jointly
<b>Total</b>	<b>531,455</b>	<b>71.1</b>	<b>22.3</b>	<b>3.8</b>	<b>1.4</b>	<b>1.3</b>		<b>72.2</b>	<b>21.3</b>	<b>3.9</b>	<b>1.3</b>	<b>1.3</b>	<b>86,897</b>	<b>65.5</b>	<b>27.5</b>	<b>3.6</b>	<b>1.8</b>	<b>1.7</b>
Rombo District	94,402	75.2	19.0	3.7	1.1	1.0	90,601	75.6	18.7	3.8	1.0	0.9	3,801	66.7	25.4	3.3	2.2	2.3
Mwanga District	41,143	68.3	25.4	3.5	1.4	1.4	35,506	68.9	25.2	3.3	1.4	1.3	5,637	65.0	26.7	5.3	1.5	1.6
Same District	78,267	70.0	23.2	4.5	1.1	1.2	61,072	70.7	22.1	4.9	1.2	1.2	17,195	67.5	27.2	3.2	1.0	1.1
Moshi Municipal	35,558	63.9	28.4	3.6	2.2	1.9	NA	NA	NA	NA	NA	NA	35,558	63.9	28.4	3.6	2.2	1.9
Moshi District	168,877	72.1	21.5	3.5	1.5	1.4	161,259	72.4	21.2	3.5	1.5	1.4	7,618	66.0	27.4	2.9	1.9	1.9
Hai District	74,538	70.5	22.7	3.9	1.5	1.4	62,527	71.4	21.8	4.0	1.4	1.4	12,011	65.9	27.1	3.4	1.9	1.7

Council	Number of Buildings/Units	Total					Number of Buildings/Units	Rural					Number of Buildings/Units	Urban				
		Male	Female	Male(s) and Female(s)	Males Only Jointly	Females Only Jointly		Male	Female	Male(s) and Female(s)	Males Only Jointly	Females Only Jointly		Male	Female	Male(s) and Female(s)	Males Only Jointly	Females Only Jointly
Siha District	38,670	70.3	22.6	4.5	1.3	1.3	33,593	70.6	22.3	4.5	1.3	1.3	5,077	68.3	25.0	4.1	1.3	1.3

### **14.6.3 Building Occupancy Tenure Status**

The 2022 TBC results indicate that 69.9 percent of all buildings in Kilimanjaro Region are occupied by the owners alone, followed by buildings/units occupied by tenants alone (12.9%).

In rural areas, the results reveal that 72.9 percent of all buildings are occupied by owners themselves followed by 11.0 percent of buildings occupied by persons that were living in the buildings without paying rent. The same pattern is observed in urban areas, however the proportion (28.0%) of buildings/units occupied by tenants is substantially higher than that in rural areas.

Rombo and Siha District Councils have the highest percentage (73.5% each) of buildings occupied by owners themselves, while Moshi Municipal Council has the lowest percentage (47.7%). In addition, Moshi Municipal Council has the highest percentage (34.5%) of tenant-occupied buildings, while the Rombo District Council has the lowest (9.5%) (Table 14.15).

**Table 14.15: Percentage Distribution of Occupied Buildings/Units by Place of Residence, Occupancy Tenure Status and Council; Kilimanjaro Region, 2022 TBC**

Council	Total					Rural					Urban				
	Number of Buildings /Units	Occupied by Owner	Live in Without paying rent	Occupied by Both Owner and Tenant(s)	Occupied by Tenant(s)	Number of Buildings /Units	Occupied by Owner	Live in Without paying rent	Occupied by Both Owner and Tenant(s)	Occupied by Tenant(s)	Number of Buildings /Units	Occupied by Owner	Live in Without paying rent	Occupied by Both Owner and Tenant(s)	Occupied by Tenant(s)
<b>Total</b>	<b>531,455</b>	<b>69.9</b>	<b>10.6</b>	<b>6.6</b>	<b>12.9</b>	<b>444,558</b>	<b>72.9</b>	<b>11.0</b>	<b>6.2</b>	<b>9.9</b>	<b>86,897</b>	<b>54.7</b>	<b>8.7</b>	<b>8.7</b>	<b>28.0</b>
Rombo District	94,402	73.5	10.5	6.5	9.5	90,601	74.2	10.6	6.5	8.7	3,801	55.0	9.1	6.3	29.6
Mwanga District	41,143	70.2	11.8	6.3	11.7	35,506	71.5	12.2	6.1	10.2	5,637	61.8	9.7	7.3	21.3
Same District	78,267	72.9	9.9	5.9	11.3	61,072	76.0	10.0	5.4	8.6	17,195	61.7	9.7	7.7	20.9
Moshi Municipal	35,558	47.7	7.6	10.2	34.5	NA	NA	NA	NA	NA	35,558	47.7	7.6	10.2	34.5
Moshi District	168,877	70.0	11.7	6.7	11.6	161,259	70.7	11.7	6.6	11.0	7,618	55.8	10.5	8.7	24.9
Hai District	74,538	70.3	10.3	6.4	12.9	62,527	73.0	10.6	6.1	10.2	12,011	56.3	8.7	8.0	26.9
Siha District	38,670	73.5	9.4	5.9	11.2	33,593	74.7	9.6	5.9	9.8	5,077	65.5	8.1	6.2	20.3

#### **14.6.4 Buildings Land Survey Status**

Results reveal that the majority of buildings in Kilimanjaro Region (74.0%) are built on un-surveyed land, while 17.0 percent are built on surveyed land and 6.4 percent are built on regularized land. Moreover, 55.9 percent of urban buildings are built on surveyed land compared with 9.8 percent of rural buildings. Rombo District Council has the highest percentage (87.1%) of buildings built on un-surveyed land while the Moshi Municipal Council has the lowest (13.6%) (Table 14.16).

**Table 14.16: Percentage Distribution of Building Plots by Place of Residence, Land Survey Status and Council; Kilimanjaro Region, 2022 TBC**

Council	Total					Rural					Urban				
	Number of Buildings/Units	Surveyed	Not surveyed	Regularized	Don't Know	Number of Buildings	Surveyed	Not surveyed	Regularized	Don't know	Number of Buildings	Surveyed	Not surveyed	Regularized	Don't know
<b>Total</b>	<b>515,091</b>	<b>17.0</b>	<b>74.0</b>	<b>6.4</b>	<b>2.6</b>	<b>434,980</b>	<b>9.8</b>	<b>82.5</b>	<b>5.5</b>	<b>2.1</b>	<b>80,111</b>	<b>55.9</b>	<b>27.9</b>	<b>11.2</b>	<b>5.1</b>
Rombo District	92,895	8.0	87.1	3.2	1.6	89,259	6.3	89.0	3.3	1.5	3,636	52.2	42.3	1.3	4.2
Mwanga District	40,286	10.7	76.6	8.0	4.7	34,818	7.6	83.2	5.8	3.5	5,468	30.4	34.9	22.3	12.4
Same District	76,482	19.3	71.8	5.7	3.2	60,055	11.0	83.3	3.4	2.4	16,427	49.7	30.0	13.9	6.3
Moshi Municipal	31,395	72.7	13.6	10.6	3.1	NA	NA	NA	NA	NA	31,395	72.7	13.6	10.6	3.1
Moshi District	163,951	13.5	76.9	7.4	2.2	156,598	11.7	78.7	7.6	2.0	7,353	51.8	39.5	3.0	5.8
Hai District	72,196	14.9	76.4	6.3	2.4	61,186	8.6	84.1	5.2	2.0	11,010	49.8	33.4	12.2	4.6
Siha District	37,886	13.9	76.6	6.4	3.1	33,064	13.1	78.4	5.8	2.7	4,822	19.8	64.1	10.3	5.8

### 14.6.5 Buildings Land Ownership Documents

Information on land ownership status includes title deeds, residential licenses, letters of offer or acknowledgments of payment, certificates of customary right of occupancy (CCRO in Mainland), agreements or contracts, registration card (Zanzibar), and local Government documents. Results show that 28.8 percent of all buildings are built on land without legal documents, 45.8 percent are built on land with certificate of customary right of occupancy documents and 10.9 percent have title deeds (Table 14.17).

**Table 14.17: Percentage of Buildings/Units and Land Ownership Status by Council; Kilimanjaro Region, 2022 TBC**

Council	Total Buildings	Land Ownership Status								
		Title Deed	Residential License	Letter of Offer/Acknowledgment of Payment	Certificate of Customary Right of Occupancy	Agreement/Contract	Land Registration Card	Local Government Documents (Mtaa/Village)	No Document	Unknown
<b>Total</b>	<b>531,455</b>	<b>10.9</b>	<b>0.5</b>	<b>2.1</b>	<b>45.8</b>	<b>2.2</b>	<b>NA</b>	<b>6.3</b>	<b>28.8</b>	<b>3.5</b>
Rombo District	94,402	2.6	0.1	1.0	61.8	0.7	NA-	1.3	30.2	2.4
Mwanga District	41,143	4.9	0.3	3.2	15.6	0.4	NA-	3.8	66.4	5.3
Same District	78,267	8.1	0.7	3.7	42.9	1.9	NA-	8.3	30.4	4.0
Moshi Municipal	35,558	57.0	2.1	4.3	7.8	6.8	NA-	7.1	10.7	4.2
Moshi District	168,877	9.3	0.3	1.1	55.5	2.0	NA-	6.5	22.0	3.3
Hai District	74,538	11.0	0.3	2.8	45.4	2.2	NA-	7.4	27.0	3.9
Siha District	38,670	7.1	0.6	1.7	38.4	5.1	NA-	12.7	31.6	2.7

## Chapter 15

# Summary of Key Findings, Implication and Recommendations

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### 15.1 Introduction

This chapter presents key findings of the 2022 PHC results with the aim of informing Regional, Local Government Authorities as well as stakeholders on the key findings, implications and recommendations for policies and programmes to realise socio-economic development of Kilimanjaro Region.

### 15.2 Key Findings

Key findings summarized here are on the selected areas of Kilimanjaro Region Basic Demographic and Socio-Economic Profile Report, considered to be of high priority for policies and programmes implementation by councils in this region. Further details and specific results, relevant statistics and full references are found in respective chapters of this report.

#### 15.2.1 Population Size and Growth

- i. Population of Kilimanjaro Region has increased from 1,640,087 persons in 2012 to 1,861,934 persons in 2022; and
- ii. Population of Kilimanjaro Region has been growing at an average annual growth rate of 1.3 percent during the 2012 – 2022 intercensal period;

#### Implications for Policies and Programmes

- i. With the current annual growth rate of 1.3 percent (which is below the national average of 3.2%), the region's population is expected to double in the next 55 years;
- ii. Annual growth rate of 1.3 rate is relatively low when compared with the national average and other regions in the country hence a slow increase of population over a ten-year period which may lead to less human capital; and
- iii. Although the growth of 1.3 percent is low, but may lead to increased pressure on social services, contribute to depletion of natural and environmental

resources, as well as pressure on land use, urban housing and other urban infrastructure.

### **Implications for Policies and Programmes**

- i. Regional, Local Government Authorities and stakeholders need to effectively supervise and implement respective national and sector policies while advocating for planned and balanced approach to population growth and economic development;
- ii. Regional and Local Government Authorities need to consistently undertake land use and urban planning as well as putting in place effective supervision and implementation mechanisms to ensure compliance; and
- iii. Regional and Local Government Authorities as well as stakeholders should strengthen enforcement mechanisms, including by-laws to protect and safeguard the environment in line with the National Environmental Policy (2022) to ensure that the negative impact caused by human activities on environment is minimized.

### **15.2.2 Age Profile**

- i. About twelve percent (12.1%) of Kilimanjaro Region population is aged below five years;
- ii. About forty one percent (41.2%) of total population is below 18 years of age;
- iii. About one third (33.1%) of Kilimanjaro Region population are youths aged 15 – 35 years; and
- iv. About ten percent (10.4%) of Kilimanjaro Region population is aged 60 years and above.

### **Implications for Policies and Programmes**

- i. High proportion of children under five years implies increased demand for Mother and Child Health Services as well as potential demand in social services including education and healthcare;
- ii. High proportion of persons under 18 years of age implies increased demand for education, healthcare and other social services leading to strain in resources and infrastructure. This may lead to higher unemployment rates, which is likely to contribute to social unrest and political instability;

- iii. High proportion of youths (15 – 35 years) exerts pressure on the economy to create more jobs and skills to absorb a growing youth population. However, high proportion of youth population, means a potential labour force that can actively contribute to economic growth, especially when they are educated and skilled and corresponding investments are made in human capital development;
- iv. Increased proportion of elderly persons indicate an increased demand for social protection which includes universal pension, health insurance and housing.

### **Recommendations**

- i. Regional and Local Government Authorities to strengthen implementation of policies and enforcement of laws related to child and youth development and protection;
- ii. Regional and Local Government Authorities to facilitate provision of skills for youth employability and to put in place enabling environment for new programmes and businesses;
- iii. Regional and Local Government Authorities to ensure allocation of enough resources to cater for education, health, social security and protection of young people; and
- iv. Regional and Local Government Authorities to effectively implement policies and programmes that are intended to provide services to the elderly as indicated in related national and sectoral policies on the plight of older people in Kilimanjaro Region.

### **15.2.3 Marital Status and Early Marriage**

#### **Key Findings**

- i. Six percent (6.1%) of the female population aged 15 - 19 in Kilimanjaro Region is married; and
- ii. About eleven percent (11.1%) of females aged 15 years and above is widowed.

#### **Implications for Policies and Programmes**

- i. Early marriages have potentially lifelong harmful consequences such as early pregnancies, child and maternal mortality, and domestic violence. Young

women who marry early are also denied education, economic opportunity opportunities and can experience psychological consequences; and

- ii. Widowhood may lead to social and economic difficulties, such as declining economic growth and increasing poverty levels as well as change of family formation and unbalanced child upbringing.

## **Recommendations**

- i. Regional, Local Government Authorities and stakeholders should strengthen supervision and implementation of national and sector policies related to girl child education and welfare;
- ii. Regional and Local Government Authorities need to scale up measures to enforce laws and regulations that prohibit incidences of early marriage; and
- iii. The Regional and Local Government Authorities to design supportive programmes for widows such cash transfer, public works programmes such as those implemented under TASAF.

### **15.2.4 Possession of National Identification Documents**

#### **Key Findings**

- i. About one quarter (23.9%) of children under five years of age in Kilimanjaro Region have neither birth certificate nor birth notification;
- ii. About twenty six (25.9%) and 16.3 percent of persons aged 18 years and above have national identification cards (NIDA) and identification numbers respectively; and
- iii. About twelve percent (12.2%) of persons in Kilimanjaro Region have health insurance from the National Health Insurance Fund (NHIF) or Community Health Insurance Fund (CHIF).

#### **Implications for Policies and Programmes**

- i. National identification documents are important for citizens to access services and fulfil their rights and obligations. They also help in association of information in the national databases, national security issues and law enforcement. Moreover, birth and national certification is mandatory for every citizen and therefore high proportion of persons without birth certificate and national

identification is contrary to Births and Deaths Registration Act, (CAP 108, R.E 2002) and Registration and Identification of Persons Act of 1986 (R.E 2012);

- i. Birth certificate is a crucial document for children to access services before the age of 18 years, which is the minimum age for acquiring the National Identification Card; and
- ii. Health Insurance Identification card is important for ensuring accessibility to quality health care services.

### **Recommendations**

- i. Regional Authorities and Local Government Authorities as well as other stakeholders need to regularly sensitize the public, especially the youth on the importance of national identification documents; and
- ii. Regional authorities, local government authorities and stakeholders need to educate and sensitize the public on the importance and benefits of Universal Health Insurance Act of 2023.

### **15.2.5 Orphanhood**

#### **Key Findings**

- i. About nine percent (8.7%) of children in Kilimanjaro Region are orphans (6.6% with one parent dead and 2.1 % both parents dead); and
- ii. Proportion of orphaned children range from 8.1 percent in Mwanga District Council to 9.7 percent in Moshi Municipal Council.

#### **Implications for Policies and Programmes**

- i. Orphans are likely to become victims of violence, human trafficking and exploitation, as well as likelihood to experience mental health challenges; and
- ii. The orphanhood may lead to increased burden to family, household and governments in terms of costs of care.

### **Recommendations**

- i. Region, Councils and stakeholders need to sensitize communities on the plight of orphan children and to take actions to minimize their sufferings; and
- ii. Regional and Local Government Authorities should consider sustaining mobilization and allocation of adequate resources to support plans and

programmes regarding orphanage services including education subsidies and running cost of caring centres.

### **15.2.6 Education**

#### **Key Findings**

- i. About ninety four percent (94.2%) of population aged 15 years and above in Kilimanjaro Region is literate;
- ii. Net Enrolment Rate (NER) in primary school in Kilimanjaro Region has increased from 94.1 percent in 2012 to 96.4 percent in 2022;
- iii. About forty one percent (41.3%) of Persons With Disabilities (PWD) dropped out of education for people with mental health challenges; and
- iv. Primary education Gross Enrolment Ratio is 150.7 percent.

#### **Implications for Policy and Programmes**

- i. The high adult literacy rate in the Region signifies the presence of knowledgeable population that may lead to healthier population, high and sustainable economic growth and labour market participation;
- ii. The NER for Kilimanjaro Region indicates that a large proportion of official primary school age children are enrolled in primary education, which signifies that there is higher access to primary education in the region. It also translates into positive education outcomes for region's children and in a long term, resulting in reduction of poverty and inequality;
- iii. Increased rate of net enrolment in primary schools implies an increase of resources required to finance education sector as a result of increased capitation grant, facilities and human resources; and
- iv. High Gross Enrolment Ratio implies that the region is able to accommodate most of its school age population in its education system. However, the increase also shows that the challenges of achieving GER of 100 percent by year 2025/26 as stipulated in the Third Five Year Development Plan III still exists. These challenges include under and over age school registration.

#### **Recommendations**

- i. Regional and Local Government Authorities need to sustain efforts on education achievement in the region;

- ii. Regional and Local Government Authorities need to put in place effective mechanisms to ensure supervision and implementation of provision of skills training as emphasized in the National Education Policy (2023); and
- iii. Regional and Local Government Authorities as well as other stakeholders to support measures to strengthen education system for PWDs and raise awareness of parents and guardians of PWDs to address the issue of high drop-out rates; and
- iv. Regional and Local Government Authorities to raise awareness of parents and guardians of PWDs on the importance of supporting their educational development initiatives.

### **15.2.7 Employment and Economic Activities**

#### **Key Findings**

- i. The overall unemployment rate in Kilimanjaro Region is 4.8 percent; the rate is high in urban (8.7%) than in rural (3.6%) areas;
- ii. Agriculture, forestry and fishing industry has the highest proportion (62.2%) of the total employment in Kilimanjaro region; and
- iii. About fifty percent (50.3%) of youth population aged 15 - 35 are engaged in informal non-agricultural economic activities in Kilimanjaro Region.

#### **Implications for Policies and Programmes**

- i. Unemployment can lead to a reduction in economic growth, as unemployed individuals have less disposable income to spend on goods and services, which can lead to a decrease in demand for goods and services. The 4.8 percent unemployment for Kilimanjaro Region is below the national level of 7.8 percent and is considered to be moderate, implying that its impact on economic growth is also moderate. However, unemployment implies possibility of social vices such as increased crime incidences and social unrest;
- ii. Unemployment can also have a negative impact on individuals and families such as financial hardship, social isolation and a loss of self-esteem. Unemployed persons may also experience negative health outcomes including depression, anxiety and stress;

- iii. Agriculture, forestry and fishing industry is the key sector for employment in the Kilimanjaro Region. Therefore, interventions to develop the sector will lead to more job creation and sustenance of employment; and
- iv. Informal sector is a significant youth employing sector in Kilimanjaro Region. This sector generates income for youths, leading to poverty reduction and it can also lead to local community development. However, informal sector is insecure and lack social protection.

### **Recommendations**

- i. Regional and Local Government Authorities should continue to put in place measures aimed at improving the agriculture, forestry and fishing industry in line with national policies so as to increase sector productivity; and
- ii. Region and Local Government Authorities in collaboration with other stakeholders to develop programmes and projects that promote entrepreneurship and self-employment, access to education and vocational training for the youth.

### **15.2.8 People with Disabilities**

#### **Key Findings**

- i. About fifteen percent (15.3%) of the total Kilimanjaro Region population aged 7 years and above has some form of disability;
- ii. Most Persons With Disabilities (PWDs) (57.5%) reported diseases as a major cause of their disabilities;
- iii. Almost eight percent (7.9%) of PWDs, reported their disability to have been caused by accidents; and
- iv. Use of assistive devices among PWDs is very low.

#### **Implications for Policies and Programmes**

- i. Although prevalence of disability is moderate, its presence implies additional cost of care for the household and the society at large;
- ii. People with Disabilities are more likely to experience adverse social economic outcome such as health care and poverty due to barriers to education, employment, earnings and weak social protection mechanism. However, the use of assistive devices reduces the negative effect of disability; and

- iii. Poor PWDs are caught in vicious cycle of poverty and disability, each being cause and consequence of the other.

## **Recommendations**

- i. Regional and Local Government Authorities need to ensure that all programs and project in the councils integrate issues of PWDs so that they can fully participate in their own development using the resources available in the region;
- ii. Regional, Local Government Authorities and stakeholders to strengthen health and nutrition education programmes for prevention and cure so as to reduce the incidence of diseases leading to reduction of PWDs in the region;
- iii. Regional and Local Government Authorities should put in place effective supervision mechanism for organs responsible with safety issues including road and occupational places to strive to enforce laws and regulations; and
- iv. Regional and local Government authorities should undertake sensitization, advocacy and awareness raising programs on the use of assistive devices and facilitate access to these devices.

### **15.2.9 Land Ownership**

#### **Key Findings**

- i. About fifty three percent (52.6%) of persons aged 15 years and above in Kilimanjaro Region own land without any legal documents, the percentage ranges from 62.8 percent in Mwanga District Council to 33.9 percent in Moshi Municipal; and
- ii. The proportion of males who own land alone is significantly higher (22.5%) than that of females (13.1%).

#### **Implications for Policies and Programmes**

- i. The overall aim of the National Land Policy is to promote and ensure a secure land tenure system, to encourage the optimal use of land resources, and to facilitate broad-based social and economic development without upsetting or endangering the ecological balance of the environment;
- ii. Gender inequality in land ownership is a critical issue in Kilimanjaro Region with significant implications;

- iii. Existence of gender inequality in land ownership leads to unequal economic opportunities;
- iv. Women who own land can engage in income generating activities leading to empowerment, poverty reduction and better livelihood; and
- v. Lack of legal documents for land ownership leads to insecurity of land properties and inaccessibility to economic opportunities.

### **Recommendations**

- i. Regional and Local Government Authorities to strengthen monitoring implementation of the 1997 Land Policy to accelerate land ownership process by enhancing capacities of responsible institutions;
- ii. Regional and Local Government Authorities need to address gender disparity in land ownership to guarantee economic empowerment and achieve human rights outcomes; and
- iii. Regional, Local Authorities and other stakeholders to strengthen education and awareness campaigns about benefits of joint land ownership to promote gender equality for sustainable development and poverty reduction.

### **15.2.10 Drinking Water**

#### **Key Finding**

About ninety three percent (92.8%) of private households use drinking water from improved sources;

#### **Implications for Policies and Programmes**

Use of water from unimproved sources has implication on human health as these sources are easily contaminated leading to poor health outcomes. Given the high proportion of households using improved sources generally and in both urban and rural households in Kilimanjaro Region, there is low likelihood of poor health outcomes emanating from water usage.

#### **Recommendations**

Regional and Local Government Authorities to sustain efforts of supplying water from improved sources in the region.

### 15.2.11 Sanitation

#### Key Findings

- i. About eight out of ten (82.4%) households in Kilimanjaro Region use improved toilet facilities with insignificant disparities between councils ranging from 70.3 percent in Rombo to 95.9 in Moshi Municipal; and
- ii. About two percent (2.4%) of households in Kilimanjaro Region have no toilet facility with notable disparity between councils ranging from 3.9 percent in Same District to less than one percent in Moshi Municipal.

#### Implications for Policies and Programmes

- i. Use of unimproved or non-use of toilet facilities contributes to the spread of infectious diseases such as cholera, diarrhoea, dysentery, hepatitis A, typhoid, and polio. These diseases can lead to serious illness (morbidity) and even death (mortality); and
- ii. Unsafe sanitation practices can contaminate water sources, soil, and ecosystems. This pollution affects not only human health but also the environment. Proper sanitation facilities help prevent contamination and protect natural resources.

#### Recommendations

- i. Regional and Local Government Authorities need to sustain efforts of implementing sanitation projects at local/community level to avoid adverse effects of poor sanitation; and
- ii. Regional and Local Government Authorities in collaboration with stakeholders to continue undertaking sanitation and hygiene education and awareness campaigns in the community.

### 15.2.12 Energy

#### Key Findings

- i. About sixty five percent (64.5) and 9.8 percent of private households in Kilimanjaro Region use firewood and charcoal respectively as the main source of energy;
- ii. About twenty three percent (22.8%) of households in Kilimanjaro Region use clean energy for cooking;

- iii. Almost sixty three percent (63.1%) of households use electricity from the National Grid for as a main source of energy for lighting; with significant disparity between councils ranging from 46.7 percent in Same District to 87.3 percent in Moshi Municipal; and
- iv. Almost sixteen percent (15.7%) of households in Kilimanjaro Region use solar energy for lighting.

### **Implications for Policies and Programmes**

- i. High proportion of households using firewood and charcoal as main source of energy for cooking lead to detrimental impact on environment by perpetuating deforestation, land degradation, soil erosion, air pollution, and loss of forest resources and therefore contributing to climate change;
- ii. Use of clean energy signals the potential of addressing environmental destruction and natural resources;
- iii. Access to national grid in Kilimanjaro Region is moderate, which implies constrained economic opportunities/potentials for the Region and Councils; and
- iv. Disparities in energy access between councils lead to unequal development due to unlocked income generating opportunities due to unavailability of reliable energy from the national grid.

### **Recommendations**

- i. Regional and Local Government Authorities to support national campaign on the use of gas as an alternative source to charcoal and firewood;
- ii. Regional and Local Government Authorities to sensitize communities on the importance of using clean energy, negative effects of dirty energy and deforestation which are the main causes of climate change;
- iii. Regional, Local Government Authorities in collaboration with Non-Governmental Organizations and other stakeholders to continue providing awareness to population on the efficient use of energy and installation of clean energy at lower prices; and

- iv. Regional and Local Government Authorities in collaboration with TANESCO and REA to identify and put in place plan to hasten distribution and installation of electricity to households and communities.

### **15.2.13 Information and Communication Technology (ICT) Access and Use by Individual and Households**

#### **Key Findings**

- i. Almost nine out of ten households (91.7%) in Kilimanjaro Region have at least one member aged 4 years and above who owns a mobile phone;
- ii. Less than one percent of both males (0.7%) and females (0.9%) aged 15 years and above own a smartphones or tablets;
- iii. About two (1.6%) and three (3.4%) percent of persons aged 15 years and above own a desktop and laptop computers respectively; and
- iv. About forty nine percent (48.8%) of households in Kilimanjaro Region own a radio while 37.8 percent own television with notable disparities between councils ranging from 29.9 percent in Same District to 72.8 in Rombo District (Radio) and from 24.0 percent in Same District to 59.3 percent in Rombo District (Television set).

#### **Implications for Policies and Programmes**

- i. The level of adoption of ICT services among households and individuals shows that the sector is growing in the right direction. Despite this growth, evidence from other sources (administrative data) shows that the digital divide gap is still high. For instance, though the broadband population coverage in Tanzania, was 72 percent in 2022, only around 45 percent of the population used broadband services;
- ii. Ownership and usage of ICT smart devices (smartphones, tablets and computer) are low which contribute to low speed of broadband services uptake; and
- iii. Access and use of ICT services are generally low among females compared to males as well as between urban and rural areas.

## Recommendations

- i. Regional and Local Government Authorities need to promote and supervise digital literacy programmes in education curriculum at pre-primary, primary and secondary education levels; and
- ii. Regional and Local Government Authorities need to raise awareness in communities to establish digital networks where they can share communication facilities and promote access to communication service and digital skills.

### 15.2.14 Information on Buildings

#### Key Findings

- i. Seventy nine percent (79.0%) of all buildings in Kilimanjaro Region have physical addresses;
- ii. About fifty seven percent (57.2%) of all buildings in Kilimanjaro Region have electricity services, of which 44.1 percent are connected to the national grid and 11.8 percent are powered by other sources;
- iii. About forty six percent (45.4%) of all buildings have water services;
- iv. About three percent (3.3%) of all buildings in Kilimanjaro Region have infrastructure for Persons with Disabilities;
- v. Seventy four percent (74.0%) of all buildings in Kilimanjaro Region are built on un-surveyed land with disparity between Councils ranging from 13.6 percent in Moshi Municipal to 87.1 percent in Rombo District; and
- vi. About twenty nine percent (28.8%) of all buildings in Kilimanjaro Region are constructed on land that do not have legal documents.

#### Implications for Policies and Programmes

- i. Physical address is crucial for accessing emergency services, facilitate commerce and government taxes such as property tax. It is also, useful for enforcing regulation and management of land planning and use as well as provision and billing of utilities (water, electricity and gas);
- ii. The presence of a small percentage of buildings with electricity and water services, affects the implementation of economic activities for individual citizens in accessing opportunity to increase income and enhancing their development;

- iii. Large percentage of buildings that do not have friendly infrastructure for Persons with Disabilities causes difficulty for this group to reach and use the buildings, thus depriving them the basic rights to access services provided in those buildings;
- iv. Buildings without legal ownership documents indicate that: - The National Programme of Land Planning, Surveying and Titling has not yet been able to reach many beneficiaries, a loss of Government revenue, tenure insecurity among land holders, increase in land related conflicts and inability of land owners to use their land as a mortgage for obtaining loans; and
- v. Presence of many buildings in unplanned and un-surveyed areas signifies escalation of informal settlements, lack of social services and infrastructure.

### **Recommendations**

- i. Regional and Local Government Authorities to effectively supervise identification and posting of physical addresses and regularly conduct the exercise to take account of the growing settlements;
- ii. Regional and Local Government Authorities to facilitate efforts by utility companies to provide electricity and water services in a manner that will enable low-income clients to be connected to these services;
- iii. Regional and Local Government Authorities to strengthen supervision and enforce laws that require buildings to have friendly infrastructure for PWDs;
- iv. Regional and Local Government Authorities to strengthen supervision of implementation of the National Programme of Land Use Planning, Surveying and Titling together with Land Tenure Improvement Programme (LTIP); and

Regional and Local Government Authorities to strengthen and strategically manage land use plans and surveying projects.

## Annex Tables

**Table A2.1: Total Population by Place of Residence, Sex and Council; Kilimanjaro Region, 2022 PHC**

Council	Total	Residence		Sex	
		Rural	Urban	Male	Female
<b>Total</b>	<b>1,861,934</b>	<b>1,419,512</b>	<b>442,422</b>	<b>907,636</b>	<b>954,298</b>
<b>Council</b>					
Rombo District	275,314	256,853	18,461	133,258	142,056
Mwanga District	148,763	125,912	22,851	72,157	76,606
Same District	300,303	229,414	70,889	147,293	153,010
Moshi Municipal	221,733	0	221,733	108,462	113,271
Moshi District	535,803	499,137	36,666	261,950	273,853
Hai District	240,999	191,193	49,806	117,223	123,776
Siha District	139,019	117,003	22,016	67,293	71,726

*N.A Not Applicable*  
*Moshi Municipal has no rural Component*

**Table A2.2: Total Population in Private Household by Place of Residence, Sex and Council; Kilimanjaro Region, 2022 PHC**

Council	Total	Residence		Sex	
		Rural	Urban	Male	Female
<b>Total</b>	<b>1,835,321</b>	<b>1,410,699</b>	<b>424,622</b>	<b>890,004</b>	<b>945,317</b>
Rombo District	273,755	256,275	17,480	132,503	141,252
Mwanga District	148,071	125,491	22,580	71,851	76,220
Same District	297,672	228,229	69,443	145,397	152,275
Moshi Municipal	208,344	N.A	208,344	99,824	108,520
Moshi District	530,637	494,762	35,875	258,116	272,521
Hai District	238,822	189,679	49,143	115,683	123,139
Siha District	138,020	116,263	21,757	66,630	71,390

*N.A Not Applicable*  
*Moshi Municipal has no rural Component*

**Table A2.3: Total Population in Collective Households by Place of Residence, Sex and Council; Kilimanjaro Region, 2022 PHC**

Council	Total	Residence		Sex	
		Rural	Urban	Male	Female
<b>Total</b>	<b>26,613</b>	<b>8,813.0</b>	<b>17,800</b>	<b>17,632</b>	<b>8,981</b>
Rombo District	1,559	578.0	981	755	804
Mwanga District	692	421.0	271	306	386
Same District	2,631	1,185.0	1,446	1,896	735
Moshi Municipal	13,389	N.A	13,389	8,638	4,751
Moshi District	5,166	4,375.0	791	3,834	1,332
Hai District	2,177	1,514.0	663	1,540	637
Siha District	999	740.0	259	663	336

**NA Not Applicable**

**Moshi Municipal has no rural Component**

**Table A8.1 : Literate Population by Place of Residence, Sex and Selected Age Groups; Kilimanjaro Region, 2022  
PHC**

Selected Age Group	Literate Population								
	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Teenagers (13–19 years)	253,389	126,095	127,294	193,501	98,037	95,464	59,888	28,058	31,830
Youth Population (15–24 years)	330,299	161,944	168,355	237,588	118,120	119,468	92,711	43,824	48,887
Youth Population (15–35 years)	597,198	292,996	304,202	422,680	209,160	213,520	174,518	83,836	90,682
Primary School (6–12 years)	278,696	139,142	139,554	217,371	108,916	108,455	61,325	30,226	31,099
Primary School (7–13 years)	284,227	142,176	142,051	222,946	111,931	111,015	61,281	30,245	31,036
Secondary School (14-17 years)	150,353	74,464	75,889	116,123	58,561	57,562	34,230	15,903	18,327
Working Age Population (15-64 years)	1,027,862	499,270	528,592	755,061	368,622	386,439	272,801	130,648	142,153
Elderly population (60+ years)	163,787	78,801	84,986	137,304	66,285	71,019	26,483	12,516	13,967
Population Aged 4 years and above	1,540,607	752,822	787,785	1,160,814	570,117	590,697	379,793	182,705	197,088
Population Aged 14+ years and above	1,178,805	572,383	606,422	880,571	429,886	450,685	298,234	142,497	155,737
Adult Population Aged 18+ years and above	1,028,452	497,919	530,533	764,448	371,325	393,123	264,004	126,594	137,410

**Table A8.2: Population and Literate Population for Persons Aged 15 Years and Above by Sex, Place of Residence and Council; Kilimanjaro Region 2022 PHC**

Place of Residence	Population			Literate Population		
	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	<b>1,207,636</b>	<b>577,224</b>	<b>630,412</b>	<b>1,138,107</b>	<b>552,145</b>	<b>585,962</b>
Rural	909,887	435,648	474,239	848,508	413,678	434,830
Urban	297,749	141,576	156,173	289,599	138,467	151,132
<b>Council</b>						
Rombo District	176,723	83,402	93,321	162,746	78,890	83,856
Mwanga District	94,291	44,674	49,617	88,282	42,437	45,845
Same District	186,621	89,497	97,124	175,415	85,247	90,168
Moshi Municipal	153,633	74,701	78,932	149,945	73,230	76,715
Moshi District	354,613	170,491	184,122	337,356	164,315	173,041
Hai District	157,503	74,802	82,701	148,523	71,364	77,159
Siha District	84,252	39,657	44,595	75,840	36,662	39,178

**Table A8.3: Numerate Population Aged Five Years and Above by Place of Residence, Sex and Five Year Age Groups; Kilimanjaro Region, 2022 PHC**

Age Group	Numerate Population								
	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	<b>1,446,057</b>	<b>699,307</b>	<b>746,750</b>	<b>1,103,649</b>	<b>537,671</b>	<b>565,978</b>	<b>342,408</b>	<b>161,636</b>	<b>180,772</b>
5-9	152,972	75,123	77,849	118,247	58,256	59,991	34,725	16,867	17,858
10-14	195,328	98,086	97,242	154,608	78,185	76,423	40,720	19,901	20,819
15 - 19	167,914	83,293	84,621	127,244	64,460	62,784	40,670	18,833	21,837
20 - 24	144,728	68,597	76,131	102,142	49,083	53,059	42,586	19,514	23,072
25 - 29	126,342	60,335	66,007	87,817	42,107	45,710	38,525	18,228	20,297
30 - 34	106,623	51,879	54,744	75,978	37,238	38,740	30,645	14,641	16,004
35 - 39	88,886	42,369	46,517	65,091	31,313	33,778	23,795	11,056	12,739
40 - 44	85,106	40,753	44,353	64,315	31,119	33,196	20,791	9,634	11,157
45 - 49	80,282	38,275	42,007	62,077	29,728	32,349	18,205	8,547	9,658
50 - 54	75,002	35,207	39,795	59,683	27,928	31,755	15,319	7,279	8,040
55 - 59	58,382	27,682	30,700	47,476	22,534	24,942	10,906	5,148	5,758
60 - 64	53,452	25,578	27,874	44,091	21,070	23,021	9,361	4,508	4,853
65 - 69	37,081	17,328	19,753	31,063	14,480	16,583	6,018	2,848	3,170
70 - 74	30,291	14,628	15,663	25,857	12,562	13,295	4,434	2,066	2,368
75 - 79	18,126	8,529	9,597	15,625	7,373	8,252	2,501	1,156	1,345
80+	25,542	11,645	13,897	22,335	10,235	12,100	3,207	1,410	1,797

**Table A8.4: Numerate Population by Place of Residence, Sex and Selected Age Groups; Kilimanjaro Region, 2022 PHC**

Selected Age Group	Numerate Population								
	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Teenagers (13–19 years)	244,286	121,292	122,994	187,729	94,890	92,839	56,557	26,402	30,155
Youth Population (15–24 years)	312,642	151,890	160,752	229,386	113,543	115,843	83,256	38,347	44,909
Youth Population (15–35 years)	566,120	274,225	291,895	408,144	200,296	207,848	157,976	73,929	84,047
Primary School (6–12 years)	253,871	126,282	127,589	198,918	99,327	99,591	54,953	26,955	27,998
Primary School (7–13 years)	264,948	132,115	132,833	208,535	104,399	104,136	56,413	27,716	28,697
Secondary School (14–17 years)	145,527	71,937	73,590	112,946	56,886	56,060	32,581	15,051	17,530
Working Age Population (15–64 years)	986,717	473,968	512,749	735,914	356,580	379,334	250,803	117,388	133,415
Elderly population (60+ years)	164,492	77,708	86,784	138,971	65,720	73,251	25,521	11,988	13,533
Population Aged 4 years and above	1,457,281	704,792	752,489	1,111,733	541,620	570,113	345,548	163,172	182,376
Population Aged 14+ years and above	1,137,224	545,713	591,511	861,983	416,990	444,993	275,241	128,723	146,518
Adult Population Aged 18+ years and above	991,697	473,776	517,921	749,037	360,104	388,933	242,660	113,672	128,988

**Table A8.5: Population and Children Age (7-13 Years) Attending Primary Schools by Place of Residence, Sex and Council; Kilimanjaro Region, 2022 PHC**

Council	Population (7-13 Years)									Children Attending School (7-13 Years)								
	Total			Rural			Urban			Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	<b>299,832</b>	<b>151,225</b>	<b>148,607</b>	<b>236,567</b>	<b>119,829</b>	<b>116,738</b>	<b>63,265</b>	<b>31,396</b>	<b>31,869</b>	<b>289,006</b>	<b>145,180</b>	<b>143,826</b>	<b>227,471</b>	<b>114,680</b>	<b>112,791</b>	<b>61,535</b>	<b>30,500</b>	<b>31,035</b>
Rombo District	46,679	23,501	23,178	44,102	22,207	21,895	2,577	1,294	1,283	45,672	22,959	22,713	43,181	21,713	21,468	2,491	1,246	1,245
Mwanga District	25,312	12,881	12,431	21,634	11,038	10,596	3,678	1,843	1,835	23,945	12,149	11,796	20,356	10,348	10,008	3,589	1,801	1,788
Same District	51,669	26,321	25,348	40,476	20,684	19,792	11,193	5,637	5,556	48,729	24,664	24,065	37,844	19,197	18,647	10,885	5,467	5,418
Moshi Municipal	29,580	14,560	15,020	NA	NA	NA	29,580	14,560	15,020	28,761	14,154	14,607	NA	NA	NA	28,761	14,154	14,607
Moshi District	83,470	42,087	41,383	78,137	39,446	38,691	5,333	2,641	2,692	81,256	40,824	40,432	76,089	38,261	37,828	5,167	2,563	2,604
Hai District	38,320	19,404	18,916	30,940	15,736	15,204	7,380	3,668	3,712	37,094	18,666	18,428	29,885	15,095	14,790	7,209	3,571	3,638
Siha District	24,802	12,471	12,331	21,278	10,718	10,560	3,524	1,753	1,771	23,549	11,764	11,785	20,116	10,066	10,050	3,433	1,698	1,735

**Table A8.6: Population and All Children Attending Primary Schools by Place of Residence, Sex and Council; Kilimanjaro Region, 2022 PHC**

Council	Population (7-13 Years)									All Children Attending School								
	Total			Rural			Urban			Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
<b>Total</b>	<b>299,832</b>	<b>151,225</b>	<b>148,607</b>	<b>236,567</b>	<b>119,829</b>	<b>116,738</b>	<b>63,265</b>	<b>31,396</b>	<b>31,869</b>	<b>451,840</b>	<b>224,758</b>	<b>227,082</b>	<b>353,773</b>	<b>176,788</b>	<b>176,985</b>	<b>98,067</b>	<b>47,970</b>	<b>50,097</b>
Rombo District	46,679	23,501	23,178	44,102	22,207	21,895	2,577	1,294	1,283	71,273	35,409	35,864	67,292	33,450	33,842	3,981	1,959	2,022
Mwanga District	25,312	12,881	12,431	21,634	11,038	10,596	3,678	1,843	1,835	37,403	18,877	18,526	31,670	16,012	15,658	5,733	2,865	2,868
Same District	51,669	26,321	25,348	40,476	20,684	19,792	11,193	5,637	5,556	75,201	37,763	37,438	58,012	29,256	28,756	17,189	8,507	8,682
Moshi Municipal	29,580	14,560	15,020	NA	NA	NA	29,580	14,560	15,020	46,073	22,403	23,670	-	-	-	46,073	22,403	23,670
Moshi District	83,470	42,087	41,383	78,137	39,446	38,691	5,333	2,641	2,692	127,825	63,731	64,094	119,672	59,748	59,924	8,153	3,983	4,170
Hai District	38,320	19,404	18,916	30,940	15,736	15,204	7,380	3,668	3,712	57,727	28,618	29,109	46,252	23,020	23,232	11,475	5,598	5,877
Siha District	24,802	12,471	12,331	21,278	10,718	10,560	3,524	1,753	1,771	89,328	43,140	46,188	70,827	34,199	36,628	18,501	8,941	9,560

**Table A14.1: Number of Buildings by Ownership Status, Place of Residence and Council; Kilimanjaro Region, 2022 TBC**

Place of Residence	Ownership Status													
	Total Number of Buildings/Units	Individual	Co-ownership	Housing Cooperatives	Parastatal Institutional (TBA /ZBA, NHC/ZHC, WHC)	International organization/Diplomatic Institution	Local Government	Central Government	Non-Government Organizations (NGO's, CBO's) / Private	Religious Institutions (Mosque, church, temple, etc.	Private Companies (AVIC MUTUAL PPERTIES)	Joint Venture	Political Parties/Sports clubs	Mixed Ownership
<b>Total</b>	<b>515,091</b>	<b>459,557</b>	<b>35,478</b>	<b>192</b>	<b>2,973</b>	<b>247</b>	<b>3,893</b>	<b>2,877</b>	<b>3,348</b>	<b>5,506</b>	<b>131</b>	<b>38</b>	<b>432</b>	<b>419</b>
<b>Rural</b>	434,980	387,602	32,084	144	2,010	200	3,042	2,105	2,732	4,393	96	29	207	336
<b>Urban</b>	80,111	71,955	3,394	48	963	47	851	772	616	1,113	35	9	225	83
<b>Council</b>														
<b>Rombo District</b>	92,895	82,288	8,632	43	315	55	538	359	146	412	15	5	48	39
<b>Mwanga District</b>	40,286	35,722	2,530	8	258	14	557	221	172	659	0	1	72	72
<b>Same District</b>	76,482	67,093	6,206	34	444	32	790	265	375	1,163	7	3	16	54
<b>Moshi Municipal</b>	31,395	27,474	1,335	18	639	19	378	509	385	509	27	5	63	34
<b>Moshi District</b>	163,951	148,334	9,981	46	545	47	1,015	611	1,713	1,393	68	12	43	143
<b>Hai District</b>	72,196	64,696	4,580	28	535	30	365	551	341	835	4	11	164	56
<b>Siha District</b>	37,886	33,950	2,214	15	237	50	250	361	216	535	10	1	26	21

## Bibliography

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Hani K. Atrash, M.D., M.P.H.1, Parents' Death, and its Implications for Child Survival 2011; 21(3): 759–770.

National Bureau of Statistics (NBS), 2014, *the 2012 Population and Housing Census, National Basic Demographic and Socio-Economic Profile*, Dar es Salaam, Tanzania.

United Republic of Tanzania constitution, the Tanzania Citizenship ACT chapter 357 revised, 2002 and the Tanzania Citizenship ACT (subsidiary legislation) chapter 357revised Edition, 2002 index to subsidiary legislation.

The United Republic of Tanzania (URT), Ministry of Finance, Tanzania National Bureau of Statistics and Ministry of State, President's Office, State House and Good Governance, Office of the Chief Government Statistician, Zanzibar. *The 2012 Population and Housing Census: Basic Demographic and Socio-Economic Profile*; Tanzania, April 2014.

The United Republic of Tanzania (URT), Ministry of Finance and Planning, Tanzania National Bureau of Statistics and President's Office - Finance and Planning, Office of the Chief Government Statistician, Zanzibar. *The 2022 Population and Housing Census: Administrative Units Population Distribution Report*; Tanzania, December 2022.

Ministry of Finance and Planning, Tanzania National Bureau of Statistics and President's Office - Finance and Planning, Office of the Chief Government Statistician, Zanzibar. *The 2022 Population and Housing Census: Age and Sex Distribution Report*. Tanzania, December 2022.

Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC), [Tanzania Mainland], Ministry of Health (MoH) [Zanzibar], National Bureau of Statistics (NBS), Office of the Chief Government Statistician (OCGS), and ICF. *Tanzania Demographic and Health Survey and Malaria Indicator Survey (TDHS-MIS) 2015-16*. Dar es Salaam, Tanzania, and Rockville, Maryland, USA, 2016.

The United Republic of Tanzania (URT), Ministry of Finance, Tanzania National Bureau of Statistics and Ministry of State, President's Office, State House and Good Governance, Office of the Chief Government Statistician, Zanzibar. *The 2012*

Population and Housing Census: Kilimanjaro Region Basic Demographic and Socio-Economic Profile Report; Tanzania, January, 2016.

The United Republic of Tanzania (URT), Ministry of Finance, Tanzania National Bureau of Statistics and President's Office - Finance and Planning, Office of the Chief Government Statistician, Zanzibar. The 2022 Population and Housing Census: Tanzania Basic Demographic and Socio-Economic Profile Report; Tanzania, April 2024.

National Bureau of Statistics (NBS), *The 2002 Population and Housing Census, Analytical Report*, Dar es Salaam, Tanzania, 2006.

Population Reference Bureau. *2022 WORLD POPULATION Data Sheet*, Washington DC, USA 2022.

United Nations. *Principles and Recommendations for Population and Housing Censuses*, New York, USA, 2017.

