



THE UNITED REPUBLIC OF TANZANIA

Rukwa Region

Basic Demographic and Socio-Economic Profile





The United Republic of Tanzania

The Contemporary State of Persons With Disability in Tanzania

National Bureau of Statistics
Ministry of Finance and Planning
Dodoma

and

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

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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.

RUKWA REGION, ADMINISTRATIVE BOUNDARIES



Foreword

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



reference as the midnight of the 22nd/23rd 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 and 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 Regional Basic Demographic and Socio-Economic reports are the sixth 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, as well as 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.

A black ink signature of Kassim Majaliwa Majaliwa, featuring a large, stylized loop at the top and several horizontal strokes below.

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

A purple ink signature of Hemed Suleiman Abdulla, written in a cursive style with a prominent loop at the end.

Hemed Suleiman Abdulla (MHR)
Second Vice President of Zanzibar

Acknowledgement

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
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Chief Government Statistician
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Executive Summary

The 2022 Rukwa Region Basic Demographic and Socio-Economic Profiles 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 gives a user of this publication an understanding on the size, growth and distribution of Rukwa Region population from the 2022 PHC and previous censuses. Rukwa Region has a population of 1,540,519 persons, out of those, 797,400 are females and 743,119 are males. Population of Rukwa Region grew at an average annual growth rate of 4.3 percent from 2012 to 2022 representing an increase of 53.4 percent over a 10-year period. At this rate, the population of Rukwa Region is expected to double in the next 16 years. The Region's

population remains predominantly rural, with 79.6 percent of its total population living in rural areas and 20.4 percent living in urban areas.

Chapter Three is about age and sex profile of Rukwa 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 14.8 years. About half (49.4%) of the population is aged below 15 years. The percentage of the working age population (15 - 64 years) has increased slightly from 47.0 percent in 1988 Census to 47.9 percent in 2022. Results from 2022 PHC also show that the proportion of the working age population is higher in urban areas (52.9%) compared with rural areas (46.6%), and the age dependency ratio for the region is 108.9. The percentage of the elderly population aged 65 years and above in Rukwa Region decreased from 4.0 percent in 2002 to 3.9 percent in 2012 and thereafter increased to 4.1 percent in 2022.

Chapter Four presents information on household composition whereby results show that Rukwa Region has 328,052 private households, out of which 72,634 (22.1%) are in urban areas. This is an increase of 2.8 percentage points from 75.1 percent recorded in 2012 PHC to 77.9 percent in 2022 PHC, indicating increasing urbanization in the Region. Female-headed households in the Region increased from 27.9 percent in 2012 to 35.3 percent in 2022. Furthermore, the percentage of female headed households is slightly higher in urban areas (37.0%) than in rural areas (31.0%). The average household size for the Region decreased from 5.0 persons in 2012 to 4.7 persons in 2022.

Chapter Five presents the census results on marital status for persons aged 15 years and above. About 46.7 percent of persons aged 15 years and above in Rukwa Region are married; females are more likely (46.9%) to be married than males (46.4%). About five percent (4.5%) of persons aged 15 years and above are widowed; percentage of widowed females is significantly higher (7.4%) than that of males (1.2%). The results further show that females get married at a younger age than males. The Mean Age at First Marriage in 2022 for Rukwa Region is 20.3 years for females and 23.8 years for males. The Mean Age at First Marriage for males increased from 23.3 years in 2012 to 23.8 years in 2022. The SMAM for females also increased from 19.9 years in 2012 to 20.3 years in 2022.

Chapter Six provides information on national identification documents and citizenship. The majority (83.3%) of the population in Rukwa Region have neither birth certificates nor birth notifications. Only 13.6 percent have birth certificates and 2.3 percent have birth notification. Analysis by age indicates that the under-five population has the highest percentage (28.5%) of the individuals with birth certificates, followed by 14.3 percent of the population aged 5-9 years. Results on other national identification documents show that 8.5 percent of persons aged 18 years and above have national identification cards 20.2 percent have national identification numbers. It is also noted that only 4.3 percent of persons in private households in the Region have health insurance from National Health Insurance Fund (NHIF) or Community Health Insurance Fund (CHIF).

Results on citizenship indicate that 99.8 percent of the enumerated population in the Region in 2022 are Tanzanians. The majority of non-Tanzanians came from other East African Countries (1,637 persons) followed by other African Countries (1,010 persons).

Chapter Seven presents information on survival of parents in Rukwa Region. Results indicate that about nine out of ten (90.0%) children under 18 years in the Region have both parents alive. One out of ten (10.0%) children under 18 years are orphans with a higher proportion in urban areas (10.5%) than in rural areas (9.9%). Seven percent (7.2%) of children under 18 years are orphans with one parent dead while almost three percent (2.8%) are orphans with both parent dead. Sumbawanga District Council has the highest percentage (10.6%) of orphans compared with other councils in Rukwa Region.

Chapter Eight presents information on education, literacy and numeracy. Adult literacy rate for persons aged 15 years and above in Rukwa Region is 74.1 percent. Literacy rate is higher among males (80.7%) than females (68.1%). Numeracy rate among persons aged five years and above is 70.2 percent and it is higher among males (71.3%) than females (69.3%). The Net Enrolment Rate (NER) for primary schools is 72.1 percent. It is higher among females (75.1%) than males (69.1%). Majority (80.1%) of population aged four years and above attained primary education, 14.7 percent attained ordinary level secondary education and 2.6 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. There are 579,799 (75.6%) persons in employment. The current unemployment rate in Rukwa Region using International relaxed definition is 5.9 percent. Females have higher unemployment rate (6.9%) than males (4.8%). The overall Labour Force Participation Rate (LFPR) for Rukwa Region is 79.4 percent.

Chapter Ten highlight statistics on disability status in Rukwa 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. About nine percent (9.3%) of the total population aged 7 years and above is living with some form of disability. Difficulty in seeing (2.4 %) and walking (1.7%) are the most common types of disabilities in Rukwa Region.

Chapter Eleven focuses on status of land ownership including information on persons owning land, type of ownership and legal documents possession in Rukwa Region. Thirty-four percent (34.4%) 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 (31.1 percent) than that of males (38.1%). More than fifty percent (52.6%) of persons aged 15 years and above in Rukwa Region own land without legal documents. Among the land owners with legal documents in Rukwa Region, majority (31.3%) of them own land jointly followed by those owning land alone (14.1%).

Chapter Twelve presents information on housing characteristics, assets ownership and environmental control in Rukwa Region. About two-third (65.6%) households in the Region live in their own houses. More than one-third (37.9%) of households have no legal rights over the land where their houses are built. More than forty percent (46.2%) of households are living in houses with improved floor covering materials. Almost 56 percent (55.8%) of households in Rukwa Region use improved sources of drinking water. More than thirty five percent (35.7%) of households in Rukwa Region use improved toilet facilities.

The majority of households in Rukwa Region use firewood (65.2%) and charcoal (27.8%) as main sources of energy for cooking. The main source of energy for lighting is electricity from

the national grid (TANESCO) used by 19.5 percent of households. The percentage of households using electricity from the national grid for lighting increased from 6.7 percent in 2012 to 19.5 percent in 2022. More than thirty-eight percent (38.6%) of households in Rukwa Region use burying of solid waste as the main method of solid waste disposal and 60.2 percent of households mix electronic waste with other refuse.

Chapter Thirteen highlights on households and individuals Access and Use of Information and Communication Technology (ICT), including Ownership of ICT equipment and the Type of Use of ICT equipment in Rukwa Region. It is shown that there is significant mobile phone penetration in the Region with 72.1 percent of person aged 15 years and above owning mobile phones; 63.2 percent of them owning only non-smartphones and 0.4 percent owning only smartphones or tablets. Usage proportions are similarly high, with 74.5 percent of persons aged 15 years and above using ICT equipment for communication. Non-smartphones are mostly used by individuals who attained training after primary education (98.5%). One percent (1.2%) of person aged 15 and above in Rukwa Region use Laptops and less than one percent (0.7%) 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 Rukwa Region and Councils levels as per the 2022 Tanzania Building Census (2022 TBC) results. Findings indicate that 76.2 percent of all buildings/units in Rukwa Region are occupied by the owners themselves and 10.4 percent are occupied by tenants. About seventy percent (69.6%) of all individually owned buildings in Rukwa Region are owned by males, 18.8 percent are owned by females, and 9.2 percent are jointly owned. Forty percent (40.7%) of all buildings have permanent flooring materials (sand-cement or Tiles/with cement or concrete, tiles or marble). Almost seven out of ten (69.8%) of all buildings in Rukwa Region are built on unsurveyed land. About forty percent (39.6%) of all buildings in the Region are constructed on land that does not have legal documents. Thirteen percent (13.1%) of all buildings/units in Rukwa Region are connected to the national grid electricity, while 29.9 percent are powered by other sources. About Sixteen percent (15.7%) of all buildings/units have water services. Three percent (3.0%) of all buildings in the Region have infrastructures for the people with disabilities.

Census Results in Brief

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

Indicator	Total		Rural		Urban	
	Number	Percent	Number	Percent	Number	Percent
Population Size, Growth and Distribution						
Total Population	1,540,519	100.0	1,226,368	100.0	314,151	100.0
Male	743,119	48.2	594,770	48.5	148,349	47.2
Female	797,400	51.8	631,598	51.5	165,802	52.8
Average Annual Intercensal Growth Rate (2012 – 2022)	-	4.3	-	1.9	-	4.3
Age and Sex Profile						
Children (0–4 years)	278,183	18.1	227,419	18.5	50,764	16.2
Male	136,370	18.4	111,298	18.7	25,072	16.9
Female	141,813	17.8	116,121	18.4	25,692	15.5
Young Population (0–14 years)	761,716	49.4	621,648	50.7	140,068	44.6
Male	375,409	50.5	307,336	51.7	68,073	45.9
Female	386,307	48.4	314,312	49.8	71,995	43.4
Young Population (0–17 years)	859,653	55.8	698,292	56.9	161,361	51.4
Male	424,502	57.1	346,589	58.3	77,913	52.5
Female	435,151	54.6	351,703	55.7	83,448	50.3
Youth Population (15–24 years)	292,157	19.0	227,444	18.5	64,713	20.6
Male	136,425	18.4	107,277	18.0	29,148	19.6
Female	155,732	19.5	120,167	19.0	35,565	21.5
Youth Population (15–35 years)	500,802	32.5	386,403	31.5	114,399	36.4
Male	234,163	31.5	182,051	30.6	52,112	35.1
Female	266,639	33.4	204,352	32.4	62,287	37.6
Females of Reproductive Age (15-49 years)	658,616	42.8	508,646	41.5	149,970	47.7
Working Age Population (15-64 years)	737,288	47.9	571,175	46.6	166,113	52.9
Male	348,914	47.0	272,024	45.7	76,890	51.8
Female	388,374	48.7	299,151	47.4	89,223	53.8
Elderly Population (60+ years)	63,740	4.1	51,281	4.2	12,459	4.0
Male	29,619	4.0	24,170	4.1	5,449	3.7
Female	34,121	4.3	27,111	4.3	7,010	4.2
Elderly Population (65+ years)	41,515	2.7	33,545	2.7	7,970	2.5
Male	18,796	2.5	15,410	2.6	3,386	2.3
Female	22,719	2.8	18,135	2.9	4,584	2.8
Household Composition						
Total Number of Private Households	328,052	100.0	255,418	77.9	72,634	22.1
Male Headed Households	212,413	64.7	168,170	65.8	44,243	60.9
Female Headed Households	115,639	54.4	87,248	34.2	28,391	39.1
Average Household Size¹	-	4.7	-	4.8	-	4.2

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

Indicator	Total		Rural		Urban	
	Number	Percent	Number	Percent	Number	Percent
Average Household Size Headed by Male ¹	-	4.9	-	5.3	-	4.4
Average Household Size Headed by Female ¹	-	4.3	-	4.3	-	4.0
Marital Status (15 years and Above)						
Never Married	210,525	27.0	149,682	24.8	60,843	35.0
Married	363,384	46.7	296,452	49.0	66,932	38.4
Living Together	133,206	17.1	104,238	17.2	28,968	16.6
Divorced	18,212	2.3	14,153	2.3	4,059	2.6
Separated	18,788	2.4	14,207	2.3	4,581	2.6
Widowed	34,688	4.5	25,988	4.3	8,700	5.0
National Identification Documents and Citizenship						
Birth Registration						
Population with Birth Certificate	207,741	13.6	133,267	10.9	74,474	24.2
Population with Birth Notification	34,552	2.3	25,991	2.1	8,561	2.8
Country of Citizenship		-				
Tanzanians	1,540,519	99.8	1,226,368	99.8	314,151	99.8
Non-Tanzanians	2,989	0.2	2,490	0.2	499	0.2
National Identification Documents						
National Health Insurance or Community Health (NHIF or CHF)	65,679	4.3	40,237	3.3	26,185	8.5
Other Health Insurance	14,363	0.94	10,974	0.9	3,389	1.1
National Identification Card	669,785	8.5	522,436	7.0	147,349	14.0
National Identification Number	135,297	20.2	89,310	17.1	46,028	31.2
Zanzibar Identification Card	118	0.0	41	0.0	77	0.1
Driving License	12,803	3.4	5,004	1.1	7,799	5.3
Voter's Identification Card	407,905	60.9	310,585	59.4	97,320	66.0
Travel Passport	7,218	0.7	4,680	0.2	2,538	0.6
Orphanhood (one or both parents died)						
Child Orphans (0-17 years)	23,942	2.8	19,572	2.8	4,364	2.7
Literacy, Numeracy and Education						
Adult Literacy Rate (15 years and above)	846,957	67.1	630,391	63.1	216,566	82.2
Youth Literacy Rate (15-35 years)	500,802	77.5	386,403	73.9	114,399	89.7
Adult Numeracy Rate (15 years and above)	767,252	80.0	598,791	78.0	168,461	87.3
Net Enrolment Ratio in Primary Schools (7 – 13 years)	332,632	72.1	271,111	69.1	61,521	85.1
Gross Enrolment Ratio in Primary Schools	647,179	122.0	482,357	109.7	164,822	144..7
Highest Level of Educational Attained (4 Years and Above)						
Total Number	558,187	100.0	425,799	100.0	132,388	100.0
Pre-Primary	4,463	0.8	3,955	0.9	508	0.4
Primary School (1 - 8)	447,216	80.1	361,715	84.9	85,501	64.6
Training After Primary	692	01	451	01	241	0.2
Pre-Form One	174	0.0	122	0.0	52	0.0
Secondary School O - level (1 - 4)	82,250	14.7	49,403	11.6	32,847	24.8
Secondary School A - level (5 - 6)	4,707	0.8	1,973	0.5	2,734	2.1
Training After Secondary Education	889	0.7	2,041	0.5	1,848	1.0
University and Other Related	14,788	2.6	6,132	1.4	8,656	6.5

Indicator	Total		Rural		Urban	
	Number	Percent	Number	Percent	Number	Percent
Education for people with mental disabilities/ mental health disabilities	8	0.0	7	0.0	1	0.0
Economic Activity						
Legislators, administrators and managers	1,394	0.3	1,941	0.1	1,197	0.6
Professionals	4,856	1.1	4,901	0.5	4,644	2.2
Technicians and associate professionals	12,759	2.2	16,357	1.3	14,011	5.3
Clerks	1,326	0.2	2,689	0.1	1,327	0.5
Service workers and shop sales workers	28,158	3.6	25,265	2.3	14,672	8.4
Agricultural and fishery workers	351,060	60.5	475,376	67.2	43,266	37.0
Craft and related workers	93,053	16.0	138,301	14.6	33,216	21.3
Plant and machine operators and assemblers	3,041	0.5	8,045	0.3	9,545	1.4
Elementary occupations	91,152	15.7	190,948	13.6	41,694	23.3
Disability						
Disability Prevalence	106,114	9.3	85,742	9.5	20,372	8.5
Type of Disability						
Albinism	1,489	0.1	1,145	0.1	3,44	0.1
Seeing	39,258	2.4	31,808	2.5	7,450	2.3
Hearing	19,152	0.9	15,742	0.9	3,410	0.8
Walking	31,634	1.7	25,791	1.7	5,843	1.7
Remembering	13,512	0.5	10,883	0.5	2,629	0.5
Self-Care	7,844	0.2	6,255	0.2	1,589	0.2
Communication	10,670	0.5	8,564	0.5	2,106	0.2
Other Disability	23,294	3.0	18,924	3.1	4,370	2.7
Ownership of Land (15 years and above)						
Persons Owning Land	767,252	34.4	598,791	37.4	168,461	23.6
Male	359,692	38.1	283,144	41.1	76,548	27.0
Female	407,560	31.1	315,647	34.2	91,913	20.8
Housing Characteristics, Asset Ownership and Environmental Control						
Type of Tenure (Main dwelling)						
Owned by Household	215,139	65.6	178,392	69.8	36,747	50.6
Living without Paying any Rent	23,905	7.3	19,069	7.5	4,836	6.7
Rented Privately	60,072	18.3	36,839	14.4	23,233	32.0
Rented by Employer	8,475	2.6	6,050	2.4	2,425	3.3
Rented by Government at Subsidized Rent	9,760	3.0	6,748	2.6	3,012	4.1
Owned by Employer (Free)	5,869	1.8	4,550	1.8	1,319	1.8
Owned by Employer (Rent)	4,832	1.5	3,770	1.5	1,062	1.5
Main Materials Used for Roofing						
Iron Sheets	240,383	73.3	172,735	67.6	67,648	93.1
Grass/Leaves	81,177	24.7	76,926	30.1	4,251	5.9
Mud and Leaves	4,608	1.4	4,273	1.7	335	0.5
Others	1,884	0.6	1,484	0.6	400	0.6
Main Materials Used for Flooring						
Cement	146,164	44.6	93,956	36.8	52,208	71.9

Indicator	Total		Rural		Urban	
	Number	Percent	Number	Percent	Number	Percent
Earth/Sand	173,482	52.9	156,793	61.4	16,689	23.0
Ceramic tiles	4,550	1.4	1,268	0.5	3,282	4.5
Other	3,856	1.2	3,401	1.3	455	0.6
Main Materials Used for Walls						
Cement Bricks	6,406	2.0	2,854	1.1	3,552	4.9
Baked Bricks	267,911	81.7	204,474	80.1	63,437	87.3
Sundried Bricks	40,072	12.2	35,523	13.9	4,549	6.3
Poles and Mud	6,444	2.0	5,925	2.3	519	0.7
Stones	1,236	0.4	936	0.4	300	0.4
Others	5,983	1.8	5,706	2.2	277	0.4
Main Source of Energy for Lighting						
Electricity (TANESCO)	63,938	19.5	26,084	10.2	37,854	52.1
Solar	126,249	38.5	110,118	43.1	16,131	22.2
Kerosene	33,263	10.1	26,844	10.5	6,419	8.8
Others	104,602	31.9	92,372	36.2	12,230	16.8
Main Source of Energy for Cooking						
Firewood	213,865	65.2	194,864	76.3	19,001	26.2
Charcoal	91,171	27.8	46,154	18.1	45,017	62.0
Kerosene	1,317	0.4	1,075	0.4	242	0.3
Electricity	3,548	1.1	1,931	0.8	1,617	2.2
Gas	6,482	2.0	1,752	0.7	4,730	6.5
Others	11,669	3.6	9,642	3.8	2,027	2.8
Main Source of Drinking Water						
Piped Water	121,256	37.0	77,742	30.4	43,514	59.9
Other Protected Sources	61,663	18.8	44,569	17.4	17,094	23.5
Unprotected Sources	145,133	44.2	133,107	52.1	12,026	16.6
Type of Toilet Facility						
Flush Toilet	61,893	18.9	22,810	8.9	39,083	53.8
Ventilated Improved Pit Latrine (VIP)	10,393	3.2	6,468	2.5	3,925	5.4
Pit Latrine	241,408	73.6	212,929	83.4	28,479	39.2
Others	1,749	0.5	1,677	0.7	72	0.1
No Facility	12,609	3.8	11,534	4.5	1,075	1.5
Type of Refuse Disposal						
Collected by Company or Authority	42,926	13.1	16,238	6.4	26,688	36.7
Burnt	113,296	34.5	96,309	37.7	16,987	23.4
Roadside Dumping	1,985	0.6	1,685	0.7	300	0.4
Burying/Pit	126,723	38.6	103,349	40.5	23,374	32.2
Other Dumping (bush, open space)	43,122	13.1	37,837	14.8	5,285	7.3
Ownership of Household Assets						
Hand Hoe	217,156	66.2	176,075	68.9	41,081	56.6
Farm Land	206,670	63.0	174,278	68.2	32,392	44.6
House	215,462	65.7	177,537	69.5	37,925	52.2
Bicycle	62,052	18.9	48,087	18.8	13,965	19.2

Indicator	Total		Rural		Urban	
	Number	Percent	Number	Percent	Number	Percent
Motorcycle or Vespa	14,946	4.6	10,572	4.1	4,374	6.0
Power Tiller	745	0.2	534	0.2	211	0.3
Information, Communication and Technology						
Households owning radio	328,052	33.3	255,418	32.2	72,634	37.4
Person aged 15+ owning mobile phone	767,252	72.1	598,791	69.3	168,461	81.7
Private households with at least one member owning mobile phone	328,052	69.4	255,418	64.8	72,634	85.3
Persons aged 15+ using ICT equipment for communication	600,502	39.3	456,230	37.4	144,272	46.8
Persons aged 15 and above own desktop	5,159	0.7	3,278	0.5	1,881	1.1
Persons aged 15 and above owned Laptop	9,277	1.2	4,908	0.8	4,369	2.6
Buildings Census						
Buildings with Physical Address	198,424	65.6	160,977	66.3	37,447	63.0
Basic Services in Buildings						
Electricity (TANESCO)	40,198	13.1	17,712	7.2	22,486	37.0
Water	48,142	15.7	25,574	10.4	22,568	37.1
Toilet	250,810	81.9	201,358	82.1	49,452	81.3
Infrastructure for People with Disabilities	9,057	3.0	6,580	2.7	2,477	4.2
Building Land Survey Status						
Surveyed	63,633	21.0	40,451	16.7	23,182	39.0
Not Surveyed	210,936	69.8	183,143	75.4	27,793	46.7
Regularised	19,594	6.5	13,945	5.7	5,649	9.5

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Abbreviations and Acronyms

CAPI	Computer Assisted Personal Interviews
CBO	Community Based Organisation
CCRO	Certificate of Customary Right of Occupancy
CEB	Children Ever Born
CHIF	Community Health Insurance Fund
CRO	Certificate of Right of Occupancy
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 Latin
WB	World Bank
WHC	Watumishi Housing company
ZAN ID	Zanzibar Identification Card
ZBA	Zanzibar Building Agency
ZHC	Zanzibar Housing Corporation

Concepts and Definitions

Population and Housing Census

Census Night is a reference point for Census enumeration and all questions in the census relate 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 comprise 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 arrangement, 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 arrangement, 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 of 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 basic mathematical demands for a range of situations in adult life.

Numeracy Rate is the percentage of a population with the 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 of 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

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 how people 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.

Buildings Census

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.

Buildings Census is the act of collecting, analysing and disseminating of buildings data for a specified 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 total number of buildings in a particular area.

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

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

Detached house is a building that stand alone from the foundation to roof level. 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 whatsoever used, designed or intended to be used for other than a residential use.

Partly Complete House is a building where 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 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 secure tenure for the concerned population.

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

Residential License is that which 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 is a building consisting of ground floor only.

Stand Alone is 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 is a row of more than two houses similar houses under one roof joined together by their side walls. The house could be single or multi-storey

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

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 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 23rd August, 2022 was made by H.E. Dr. Samia Suluhu Hassan, President of

the United Republic of Tanzania, on 21st March, 2022 and was published in the Tanzania Government Gazette of the 29th 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, the vregional, 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 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, 2,173 EAs were delineated in Rukwa Region with 1,696 in rural areas and 447 in urban areas.

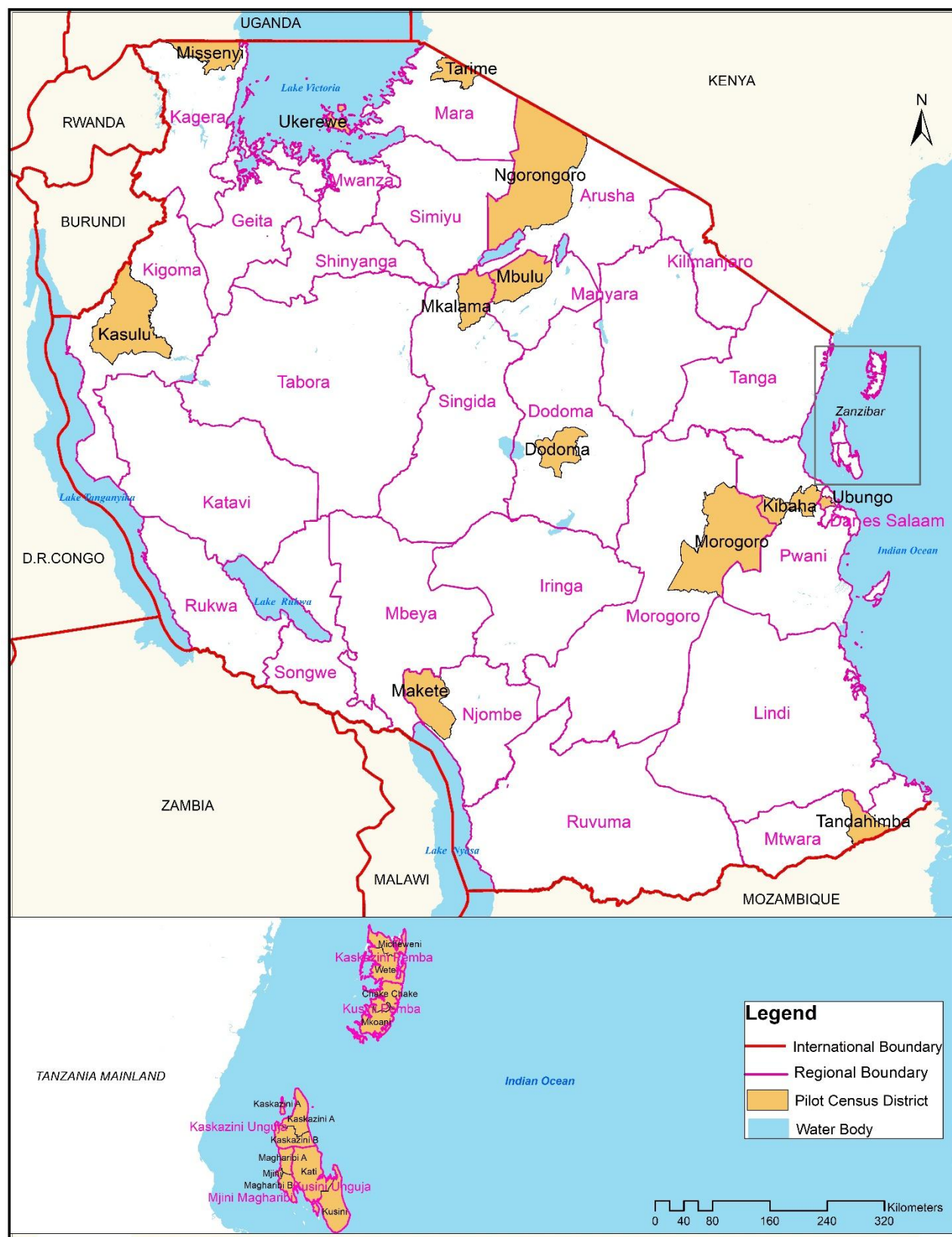
Map 1. 1: A Typical Enumeration Area Map for 2022 PHC



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. The Pilot 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 14th 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.

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 questionnaires; 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 the 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 22nd/23rd August, 2022 within the borders of Tanzania. The actual enumeration was conducted by enumerators and supervisors in their respective assigned areas. There were enumerators stationed at mass transit points (the night of 22nd/23rd) 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 23rd to 29th 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 5th 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 23rd 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 compiling basic counts and basic 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 30th 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

Key Points

- Rukwa Region has a population of 1,540,519 persons; (743,119 males and 797,400 females).
- The regional population grew at an average annual growth rate of 4.3 percent between 2012 and 2022. At this rate, Rukwa Regional population is expected to double in the next 16 years; that is in year 2038.
- The regional population remains predominantly rural with 76.9 percent of its total population living in rural areas and 20.4 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 Rukwa Region. Population size is the first demographic fact that any population census intends to obtain. Determining population size is important for planning, monitoring and establishing required 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 programmes and the public in general. These statistics facilitate making evidence-based decisions, optimal resources allocation, planning, monitoring and evaluation of development frameworks.

2.2 Population Size

Rukwa Region has a population of 1,540,519 persons and is the twenty-one most populous region in Tanzania Mainland. Slightly more than half (51.8%) of this population are females (797,400 persons) and 48.2 percent (743,119 persons) are males (Table 2.1).

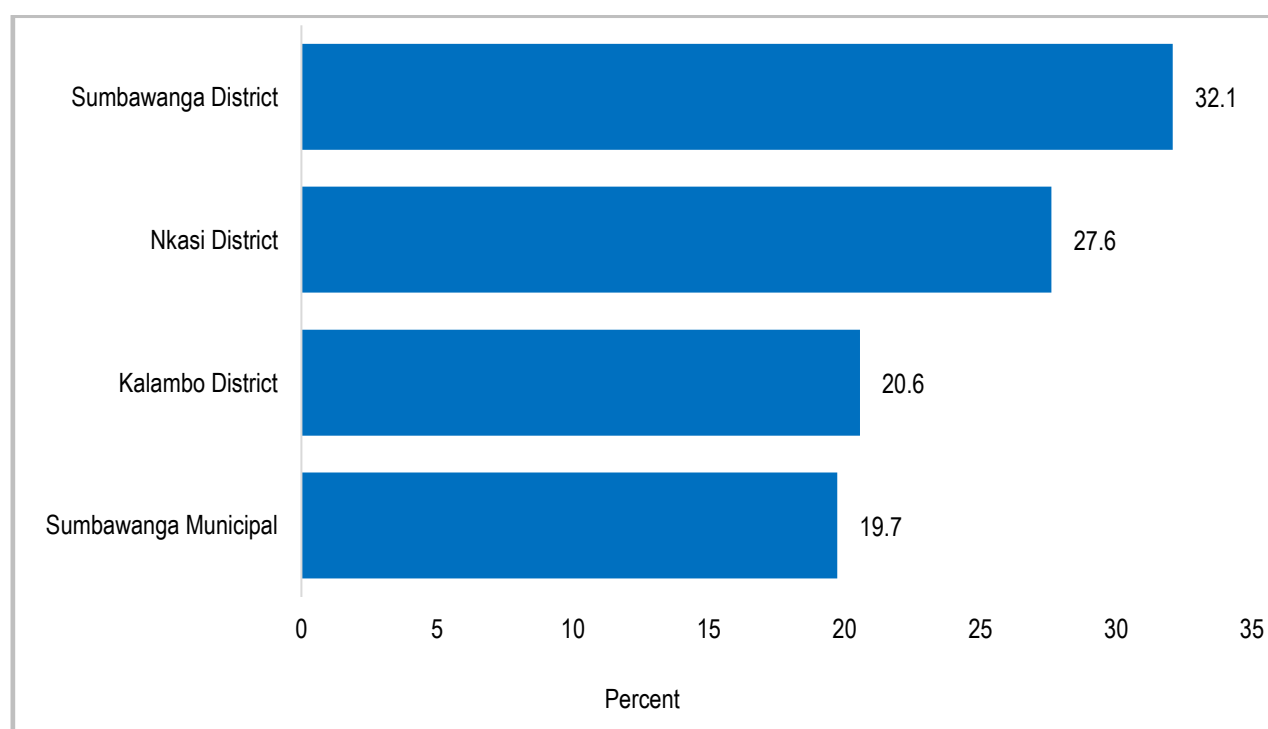
2.2.1 Population Size by Council

Administratively, Rukwa Region has four Councils, out of those, three (3) are District Councils and one (1) is a Municipal Council. Sumbawanga District Council in Rukwa Region has the highest population (494,330 persons) followed by; Nkasi District (425,420 persons), Kalambo District (316,783 persons), and Sumbawanga Municipal (303,986 persons). Thus, about 60 percent (59.7%) of the total population in Rukwa Region live in the two most populous councils (Sumbawanga and Nkasi Districts). Sumbawanga Municipal (with 303,986 persons) and Kalambo District (with 316,783 persons) have relatively smaller populations. Further results show that the proportion of females is higher compared with that 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; Rukwa Region, 2022 PHC

Council	Population Size				
	Both sexes	Male		Female	
		Number	Percent	Number	Percent
Total	1,540,519	743,119	48.2	797,400	51.8
Kalambo District	316,783	153,124	48.3	163,659	51.7
Sumbawanga District	494,330	238,600	48.3	255,730	51.7
Sumbawanga Municipal	303,986	144,657	47.6	159,329	52.4
Nkasi District	425,420	206,738	48.6	218,682	51.4

Figure 2.1: Percentage Distribution of Population by Council; Rukwa Region, 2022 PHC



2.2.2 Rural and Urban Population

Rukwa Region population is predominantly rural, with 79.6 percent of its population living in rural areas and 20.4 percent living in urban areas. The Councils with most of their population living in rural areas are Kalambo, Sumbawanga and Nkasi Districts with 98.2 percent, 89.9 percent and 82.3 percent respectively. Further results show that Sumbawanga Municipal is the most urbanized Council with 60.2 percent of its 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; Rukwa Region, 2022 PHC

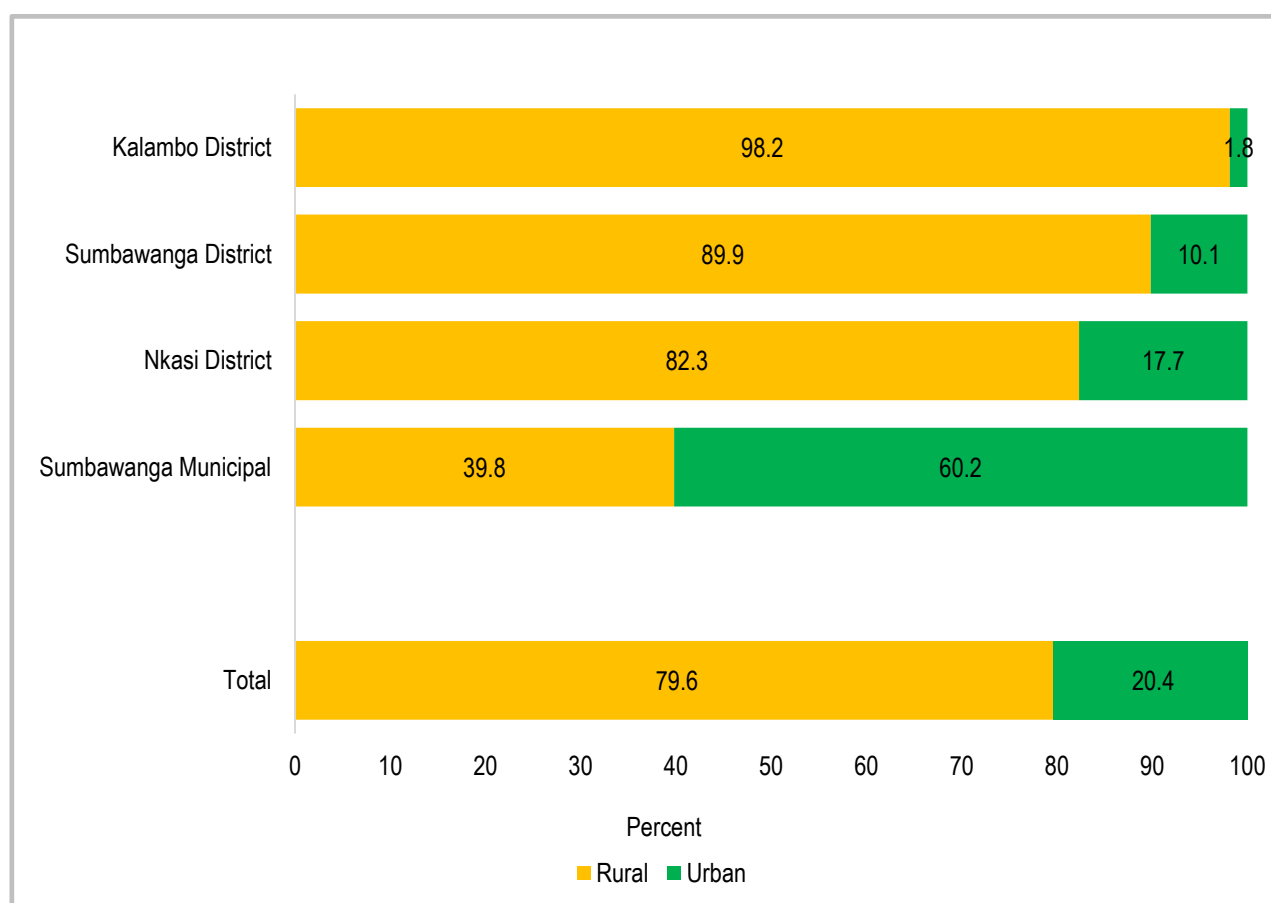


Table 2.2: Number and Percentage Distribution of Population by Place of Residence, Sex and Council; Rukwa Region, 2022 PHC

Council	Population size										
	Total			Rural				Urban			
	Total	Male	Female	Both Sexes		Male	Female	Both sexes		Male	Female
				Number	Percent	Number	Number	Number	Percent	Number	Number
Total	1,540,519	743,119	797,400	1,226,368	79.6	594,770	631,598	314,151	20.4	148,349	165,802
Kalambo District	316,783	153,124	163,659	310,946	98.2	150,351	160,595	5,837	1.8	2,773	3,064
Sumbawanga District	494,330	238,600	255,730	444,164	89.9	214,672	229,492	50,166	10.1	23,928	26,238
Sumbawanga Municipal	303,986	144,657	159,329	121,016	39.8	58,647	62,369	182,970	60.2	86,010	96,960
Nkasi District	425,420	206,738	218,682	350,242	82.3	171,100	179,142	75,178	17.7	35,638	39,540

2.3 Population Change and Growth

2.3.1 Population Change

The population of Rukwa Region has increased by 53.4 percent from 1,004,539 persons in 2012 to 1,540,519 persons in 2022. This is an indication of an increasing population growth rate over the one decade (Table 2.3).

2.3.2 Annual Population Growth Rate and Trends

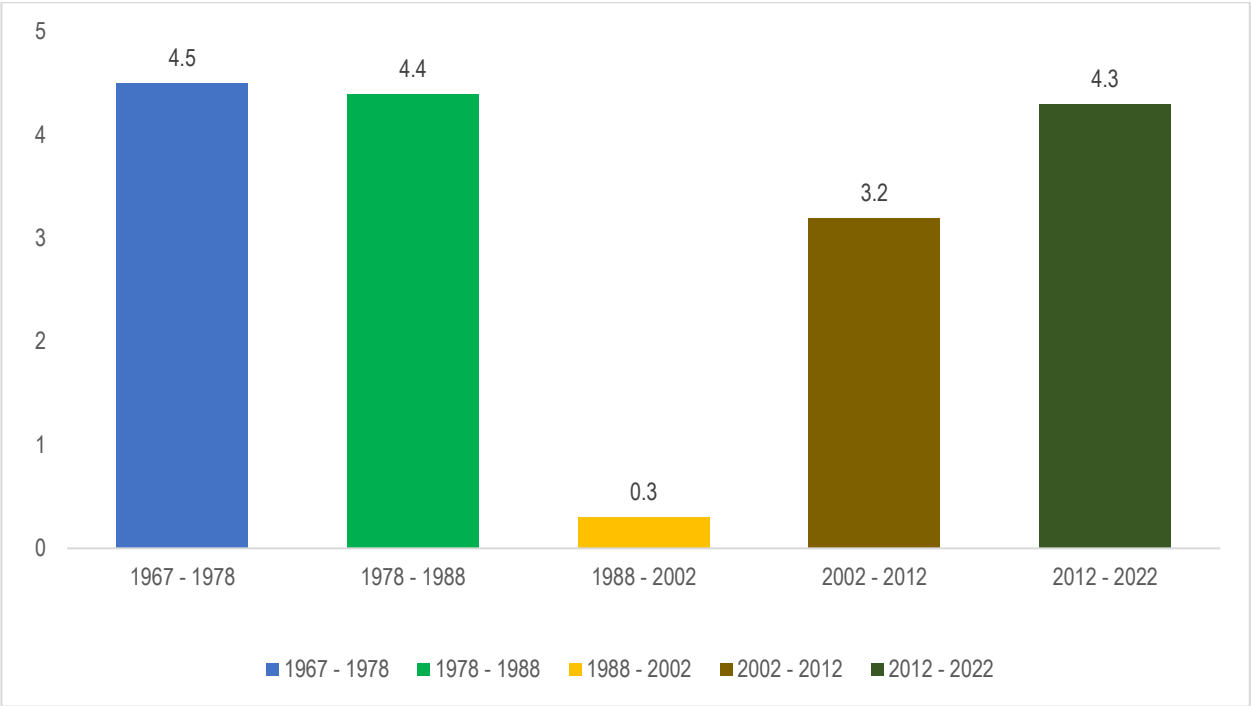
Rukwa Region population grew at an average annual growth rate of 4.3 percent between 2012 and 2022. This growth is above the national average of 3.2 percent. At this rate, the regional population is expected to double in the next 16 years; that is in the year 2038. The growth rate for the male population is 4.2 percent while that of female is 4.3 percent which is the same as that of the total population (Table 2.3).

Table 2.3: Population Size and Growth Indicators by Sex; Rukwa Region, 2002, 2012 and 2022 PHCs

Sex	Population Size		Percentage Changes	Percentage Growth Rate (per annum)	Doubling Time from 2022 (Years)
	2012	2022	2012-2022	2012-2022	
Total	1,004,539	1,540,519	53.4	4.3	16
Male	487,311	743,119	52.5	4.2	16
Female	517,228	797,400	54.2	4.3	16

Figure 2.3 shows that the trend in the average annual intercensal growth rate of the Rukwa Region population remained almost constant over two decades (1967–1978 and 1978–1988) at 4.5 and 4.4 percent, respectively. It then declined to 0.3 percent between 1988 and 2002, before increasing to 4.3 percent from 2012 to 2022.

Figure 2.3: Average Annual Intercensal Population Growth Rates; Rukwa Region, 1967–2022 Censuses



Chapter 3

Age and Sex Profile

Key Points

- About half (49.4%) of the Rukwa Region population is aged below 15 years and 2.7 percent is aged 65 years and above, thus a youthful age structure.
- The median age of the Rukwa Regional population is 14.8 years.
- The percentage of the working age population (15 - 64 years) in Rukwa Region increased from 47.0 percent in 1988 Census to 47.9 percent in 2022.
- The percentage of the population aged 60 years and above in Rukwa Region is 4.1
- The age dependency ratio for Rukwa Region is 108.9

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 Rukwa 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 populations. 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 an important variable for planning and making important decisions in public administration for different population groups. For instance, age is used as an essential input in population projections, planning for social economic development and provision of social services including health, education, food security and energy. Despite its importance, the results from previous censuses and the experience from most developing countries, show that age and sex information are affected by misreporting.

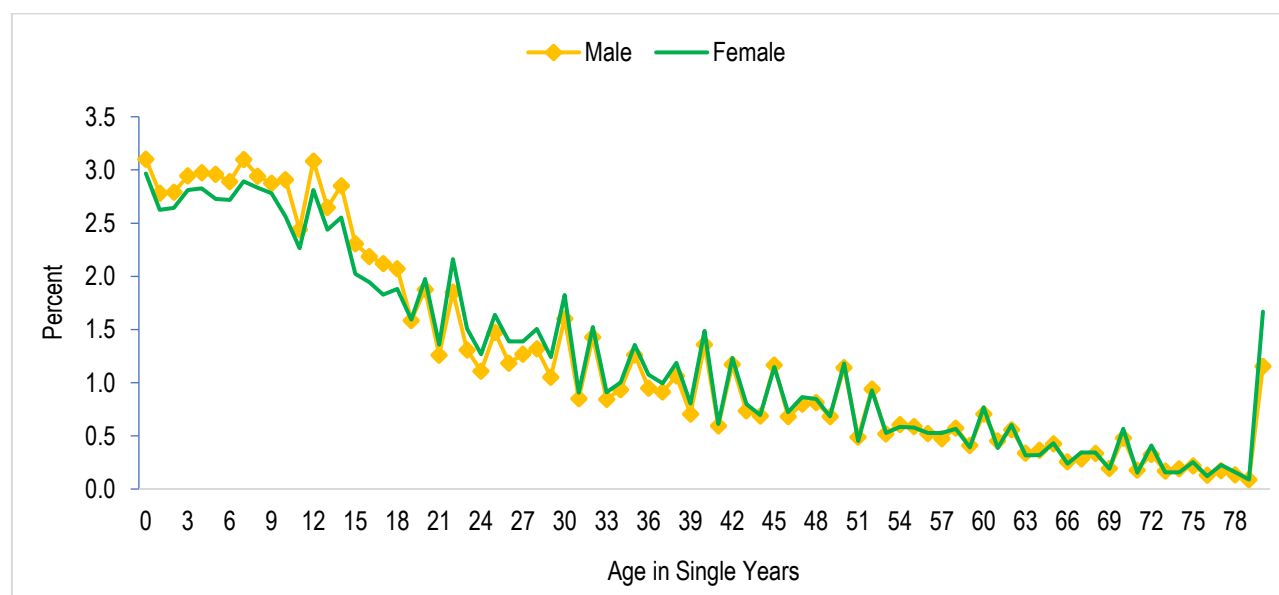
3.2 Quality of Age and Sex Data

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 Rukwa 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 – Rukwa 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 Rukwa Region. The data depict a young population age structure with 49.4 percent of the population aged below 15 years and 2.7 percent aged 65 years and above. The median age of the Rukwa Region population is 14.8 years. The results also portray a larger

number of females than males in all age groups except in age group 10 to 14 for which the number of males is larger than that of females.

Sex ratio by age groups provides an important index of possible age misreporting. Under normal circumstances, the general trend of sex ratio is a gradual decrease with age, eventually falling below 100, whereby the number of females begins to exceed the number of males and the difference grows larger with advancing ages. The overall sex ratio for Rukwa Region is about 93 males for every 100 females (94 for rural areas and 89 for urban) indicating more females than males. The sex ratio of the population aged 10 - 14 years in rural is 103 boys per 100 girls). In the urban areas, the sex ratio of the population of the same age in urban areas is relatively low (91 per 100 girls). This indicates that there may be an 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 Groups; Rukwa Region, 2022 PHC

Age Group	Both Sexes		Male		Female		Sex Ratio
	Number	Percent	Number	Percent	Number	Percent	
Total	1,540,519	100.0	743,119	100.0	797,400	100.0	93
0-4	278,183	18.1	136,370	18.4	141,813	17.8	96
5-9	258,866	16.8	126,491	17.0	132,375	16.6	96
10-14	224,667	14.6	112,548	15.1	112,119	14.1	100
15-19	160,052	10.4	77,147	10.4	82,905	10.4	93
20-24	132,105	8.6	59,278	8.0	72,827	9.1	81
25-29	104,884	6.8	48,615	6.5	56,269	7.1	86
30-34	86,068	5.6	40,734	5.5	45,334	5.7	90
35-39	71,943	4.7	34,119	4.6	37,824	4.7	90
40-44	57,977	3.8	28,213	3.8	29,764	3.7	95
45-49	45,587	3.0	22,417	3.0	23,170	2.9	97
50-54	33,818	2.2	16,596	2.2	17,222	2.2	96
55-59	22,629	1.5	10,972	1.5	11,657	1.5	94
60-64	22,225	1.4	10,823	1.5	11,402	1.4	95
65-69	13,578	0.9	6,375	0.9	7,203	0.9	89
70-74	11,472	0.7	5,381	0.7	6,091	0.8	88
75-79	6,313	0.4	2,902	0.4	3,411	0.4	85
80-84	4,776	0.3	1,991	0.3	2,785	0.3	71
85+	5,376	0.3	2,147	0.3	3,229	0.4	66
Median Age		14.8		14.3		14.7	

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

Age Group	Both Sexes		Male		Female		Sex Ratio
	Number	Percent	Male	Percent	Female	Percent	
Total	1,226,368	100.0	594,770	100.0	631,598	100.0	94
0 – 4	227,419	16.2	111,298	16.9	116,121	15.6	96
5 – 9	211,940	14.7	103,685	15.0	108,255	14.4	96
10 – 14	182,289	11.4	92,353	11.7	89,936	11.2	103
15 – 19	125,423	9.4	61,341	9.0	64,082	9.8	96
20 – 24	102,021	9.5	45,936	8.6	56,085	10.4	82
25 – 29	79,738	8.8	37,101	8.2	42,637	9.4	87
30 – 34	65,473	8.2	31,179	8.1	34,294	8.3	91
35 – 39	55,394	6.7	26,224	6.8	29,170	6.5	90
40 – 44	44,911	4.9	21,928	5.3	22,983	4.6	95
45 – 49	35,686	3.5	17,572	3.8	18,114	3.1	97
50 – 54	26,827	2.4	13,226	2.6	13,601	2.3	97
55 – 59	17,966	1.5	8,757	1.5	9,209	1.4	95
60 – 64	17,736	1.1	8,760	1.1	8,976	1.0	98
65 – 69	10,877	0.6	5,153	0.6	5,724	0.6	90
70 – 74	9,296	0.5	4,426	0.5	4,870	0.5	91
75 – 79	5,099	0.2	2,381	0.2	2,718	0.3	88
80-84	3,899	0.2	1,630	0.1	2,269	0.2	72
85+	4,374	0.1	1,820	0.1	2,554	0.2	71
Median Age	14.2		13.7		13.9		

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

Age Group	Both Sexes		Male		Female		Sex Ratio
	Number	Percent	Male	Percent	Female	Percent	
Total	314,151	100.0	148,349	100.0	165,802	100.0	89
0 – 4	50,764	16.2	25,072	16.9	25,692	15.5	98
5 – 9	46,926	14.9	22,806	15.4	24,120	14.5	95
10 – 14	42,378	13.5	20,195	13.6	22,183	13.4	91
15 – 19	34,629	11.0	15,806	10.7	18,823	11.4	84
20 – 24	30,084	9.6	13,342	9.0	16,742	10.1	80
25 – 29	25,146	8.0	11,514	7.8	13,632	8.2	84
30 – 34	20,595	6.6	9,555	6.4	11,040	6.7	87
35 – 39	16,549	5.3	7,895	5.3	8,654	5.2	91
40 – 44	13,066	4.2	6,285	4.2	6,781	4.1	93
45 – 49	9,901	3.2	4,845	3.3	5,056	3.0	96
50 – 54	6,991	2.2	3,370	2.3	3,621	2.2	93
55 – 59	4,663	1.5	2,215	1.5	2,448	1.5	90
60 – 64	4,489	1.4	2,063	1.4	2,426	1.5	85
65 – 69	2,701	0.9	1,222	0.8	1,479	0.9	83
70 – 74	2,176	0.7	955	0.6	1,221	0.7	78
75 – 79	1,214	0.4	521	0.4	693	0.4	75
80-84	877	0.3	361	0.2	516	0.3	70
85+	1,002	0.3	327	0.2	675	0.4	48
Median Age	16.6		15.9		17.1		

3.2.2 Population Pyramid

A population pyramid is a graphical representation of the age and sex composition of a specific population. It provides a snapshot of the population's age and sex structure. It also provides useful insights into the patterns of vital events (birth and death rates). The pyramid of Rukwa 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). Rukwa Region population structure resembles other regional structures in the country.

However, pyramids for major urban centres may have a different structure. For example, the pyramid for Sumbawanga Municipal Council (Figure 3.5), the headquarters of Rukwa Region shows an increase of population in ages 15–29, an indication of possible youth in-migration from other parts of the country.

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

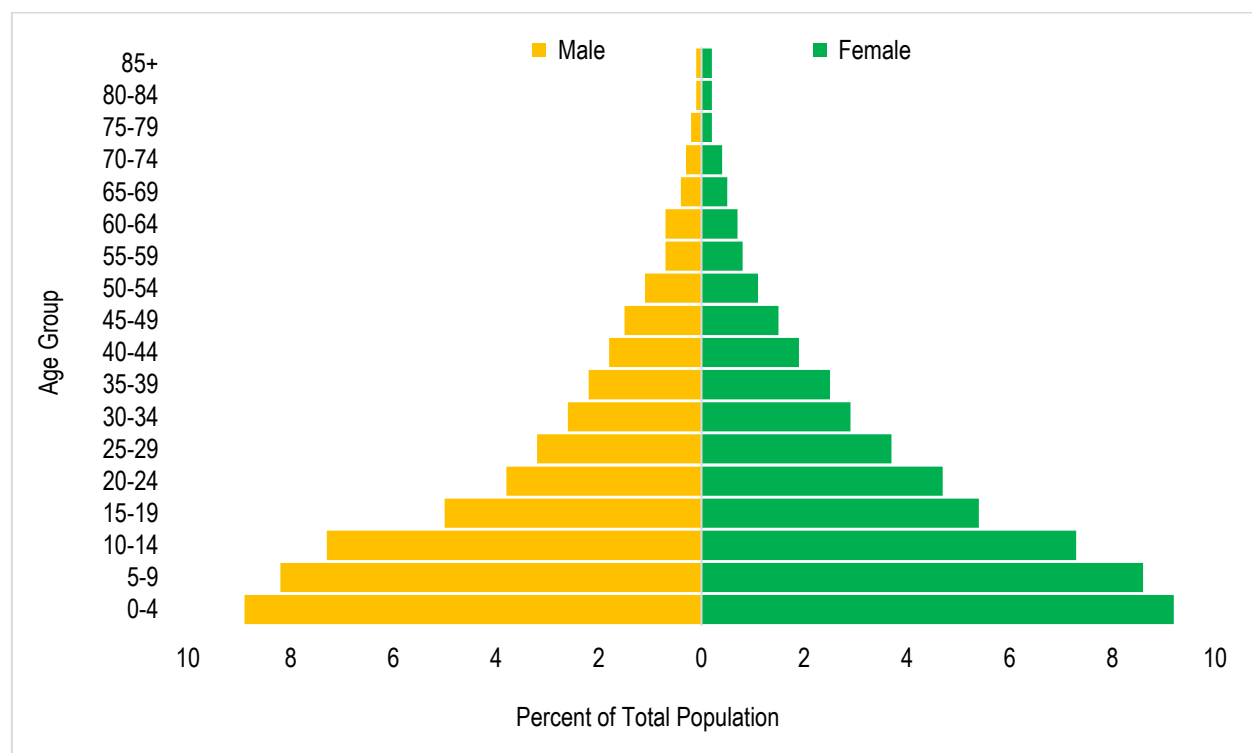


Figure 3.3: Population Pyramid for Five Year Age Groups; Rukwa Rural, 2022 PHC

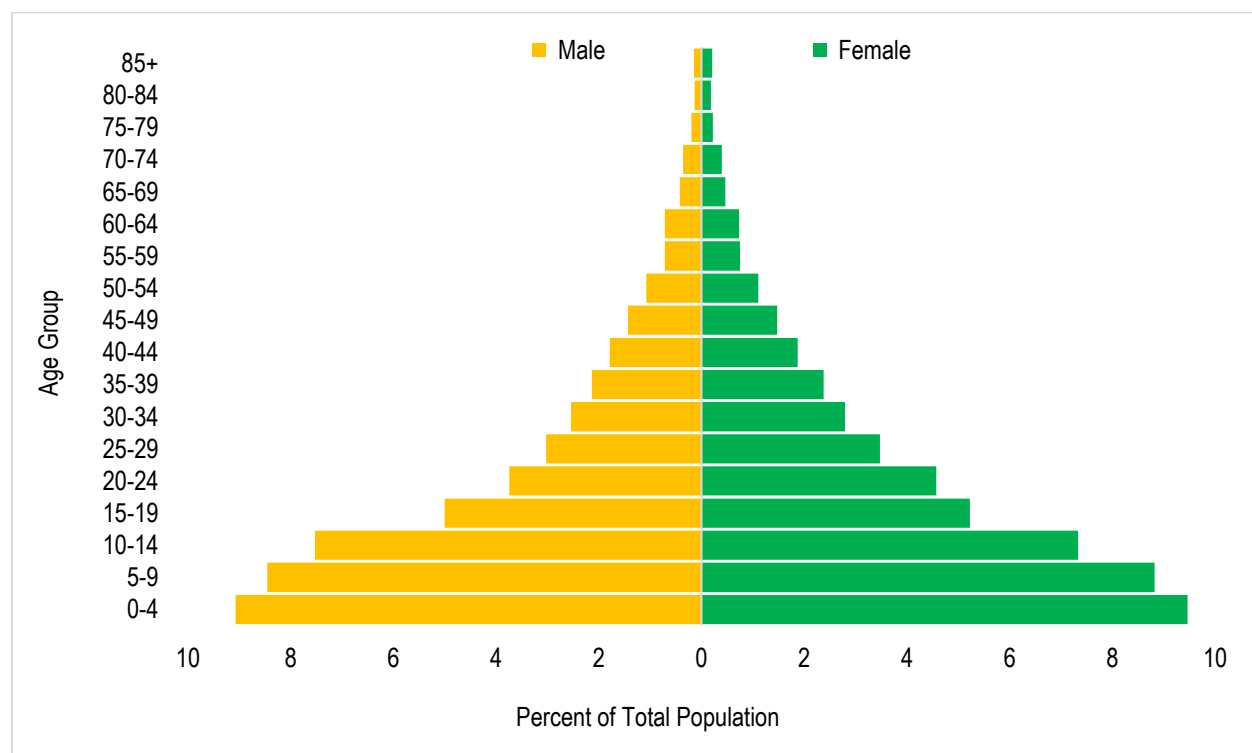


Figure 3.4: Population Pyramid for Five Year Age Groups; Rukwa Urban, 2022 PHC

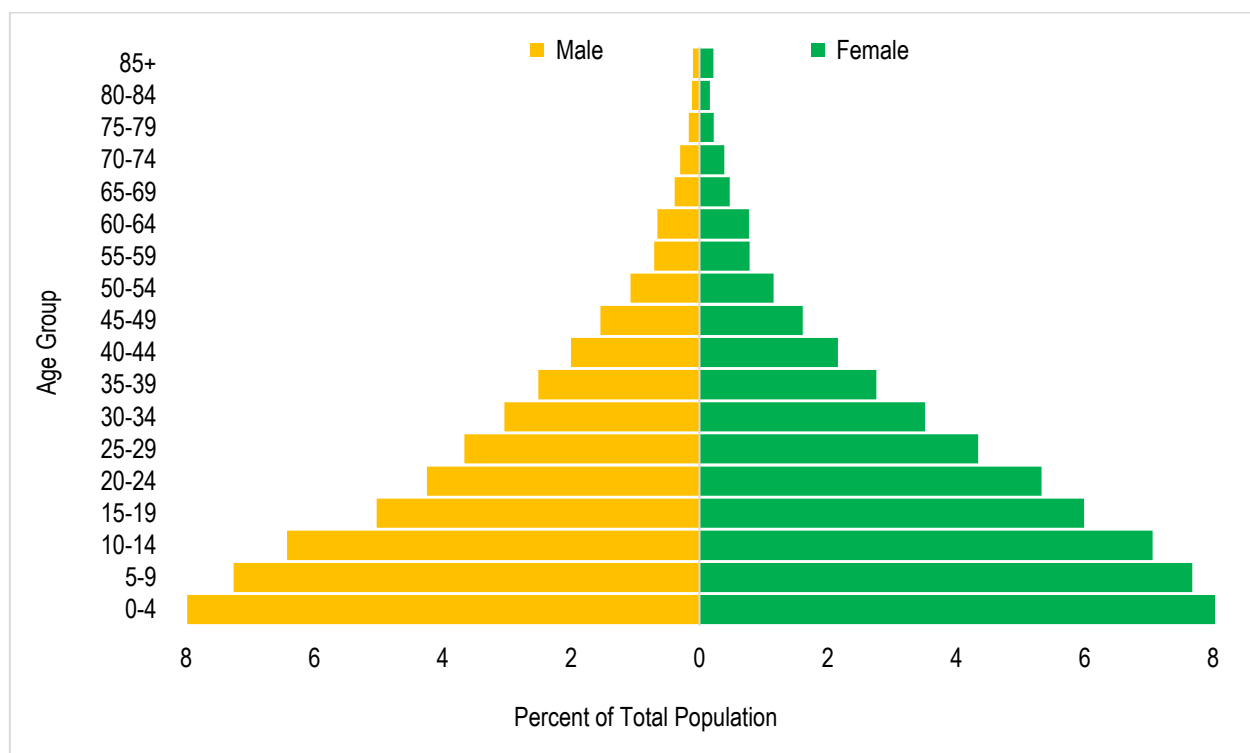
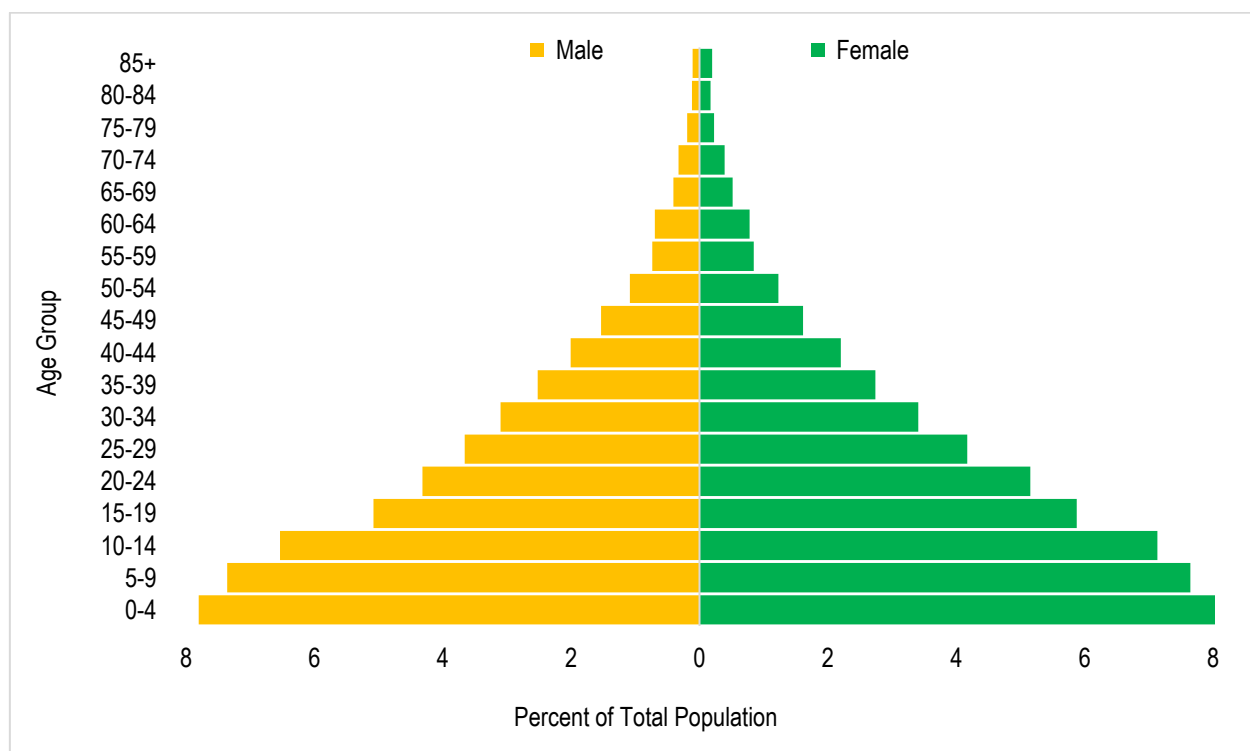


Figure 3.5: Population Pyramid for Five Year Age Groups; Sumbawanga Municipal Council, 2022 PHC



3.3 Population Distribution by Selected Age Groups

The 2022 PHC reveals that, Rukwa Region has a young population with 49.4 percent of the total population below 15 years of age and 2.7 percent of the population aged 65 years and above (Table 3.4). The broad-based structure is an indication of a development stage where a population succeeds in reducing infant mortality while fertility remains high.

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

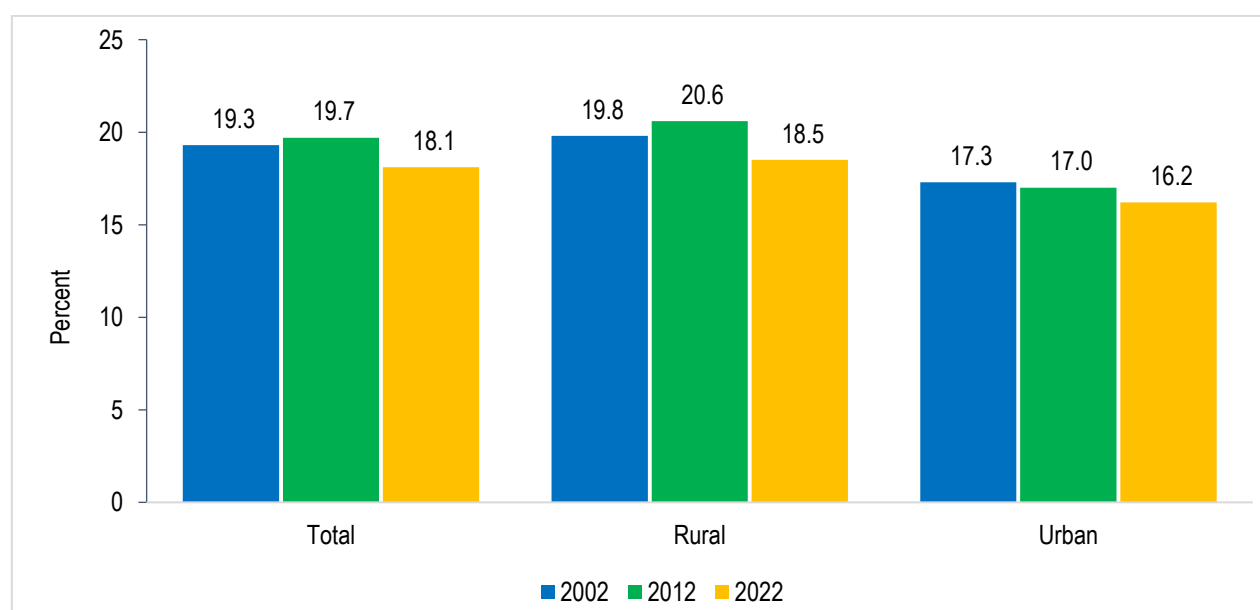
Age Group	Total		Rural		Urban	
	Number	Percent	Number	Percent	Number	Percent
Total Population	1,540,519	100.0	1,226,368	100.0	314,151	100.0
Male	743,119	48.2	594,770	48.5	148,349	47.2
Female	797,400	51.8	631,598	51.5	165,802	52.8
Children (Under 1 year)	57,089	3.7	46,677	3.8	10,412	3.3
Male	27,914	3.8	22,810	3.8	5,104	3.4
Female	29,175	3.7	23,867	3.8	5,308	3.2
Children (0–4 years)	278,183	18.1	227,419	18.5	50,764	16.2
Male	136,370	18.4	111,298	18.7	25,072	16.9
Female	141,813	17.8	116,121	18.4	25,692	15.5
Children (0–8 years)	489,475	31.8	400,697	32.7	88,778	28.3
Male	240,351	32.3	196,707	33.1	43,644	29.4
Female	249,124	31.2	203,990	32.3	45,134	27.2
Young Population (0–14 years)	761,716	49.4	621,648	50.7	140,068	44.6
Male	375,409	50.5	307,336	51.7	68,073	45.9
Female	386,307	48.4	314,312	49.8	71,995	43.4
Young Population (0–17 years)	859,653	55.8	698,292	56.9	161,361	51.4
Male	424,502	57.1	346,589	58.3	77,913	52.5
Female	435,151	54.6	351,703	55.7	83,448	50.3
Teenagers (13–19 years)	243,949	15.8	192,854	15.7	51,095	16.3
Male	119,048	16.0	95,578	16.1	23,470	15.8
Female	124,901	15.7	97,276	15.4	27,625	16.7
Youth Population (15–24 years)	292,157	19.0	227,444	18.5	64,713	20.6
Male	136,425	18.4	107,277	18.0	29,148	19.6
Female	155,732	19.5	120,167	19.0	35,565	21.5
Youth Population (15–35 years)	500,802	32.5	386,403	31.5	114,399	36.4
Male	234,163	31.5	182,051	30.6	52,112	35.1
Female	266,639	33.4	204,352	32.4	62,287	37.6
Primary School (7–13 years)	332,632	21.6	271,111	22.1	61,521	19.6
Male	164,321	22.1	134,702	22.6	29,619	20.0
Female	168,311	21.1	136,409	21.6	31,902	19.2
Secondary School (14–17 years)	141,282	9.2	111,462	9.1	29,820	9.5
Male	70,772	9.5	57,026	9.6	13,746	9.3
Female	70,510	8.8	54,436	8.6	16,074	9.7

Age Group	Total		Rural		Urban	
	Number	Percent	Number	Percent	Number	Percent
Females of Reproductive Age (15-49 years)	658,616	42.8	508,646	41.5	149,970	47.7
Working Age Population (15-64 years)	737,288	47.9	571,175	46.6	166,113	52.9
Male	348,914	47.0	272,024	45.7	76,890	51.8
Female	388,374	48.7	299,151	47.4	89,223	53.8
Elderly Population (60+ years)	63,740	4.1	51,281	4.2	12,459	4.0
Male	29,619	4.0	24,170	4.1	5,449	3.7
Female	34,121	4.3	27,111	4.3	7,010	4.2
Elderly Population (65+ years)	41,515	2.7	33,545	2.7	7,970	2.5
Male	18,796	2.5	15,410	2.6	3,386	2.3
Female	22,719	2.8	18,135	2.9	4,584	2.8
Elderly Population (70+ years)	27,937	1.8	22,668	1.8	5,269	1.7
Male	12,421	1.7	10,257	1.7	2,164	1.5
Female	15,516	1.9	12,411	2.0	3,105	1.9
Age-Dependency Ratio		108.9		114.7		89.1

3.3.1 Children Under Five Years

The 2022 PHC results show that, the population under five years in Rukwa Region is 18.1 percent. Figure 3.6 indicates that the percentage of the population under five years in the Region has decreased slightly from 19.3 percent in 2002 to 18.1 percent in 2022. This moderate decrease is an indication of a slow decline in fertility in the Region during the specified period.

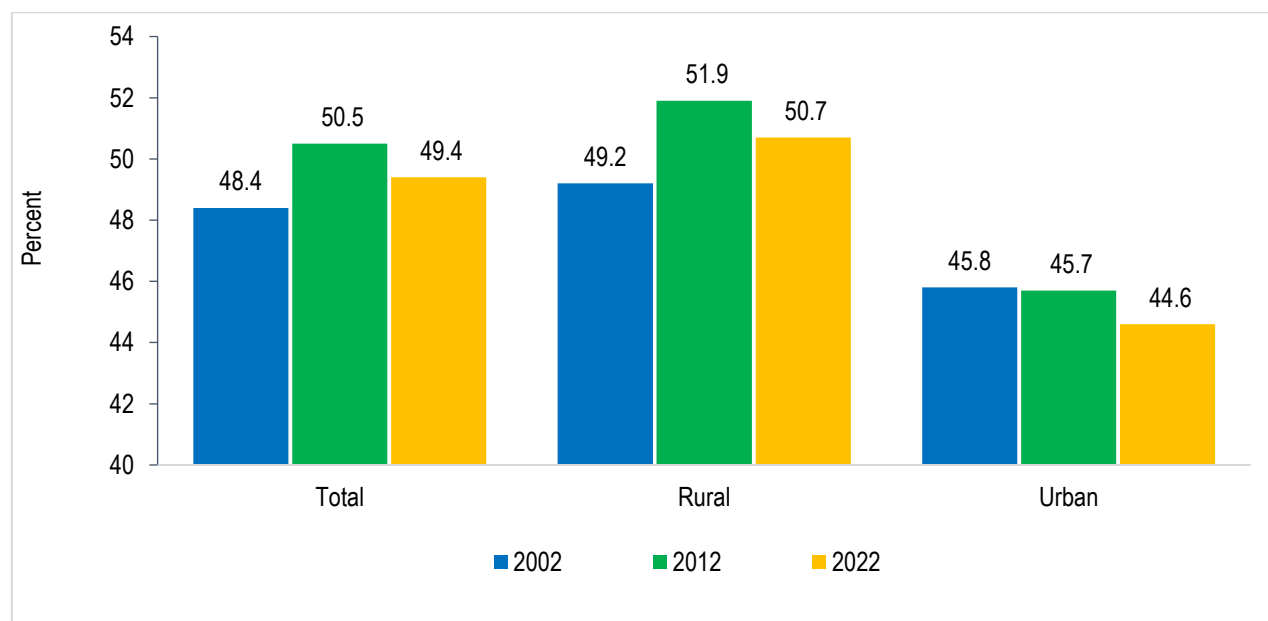
Figure 3.6: Percentage of Children Under Five Years by Place of Residence; Rukwa Region, 2002, 2012 and 2022 PHCs



3.3.2 Young Population (0-14 Years)

Rukwa Regional population is characterised by a young age structure, with 49.4 percent of the total regional population below 15 years of age. Figure 3.7 shows that the percentage of the population below 15 years of age has increased slightly from 48.4 percent in 2002 to 49.4 percent in 2022.

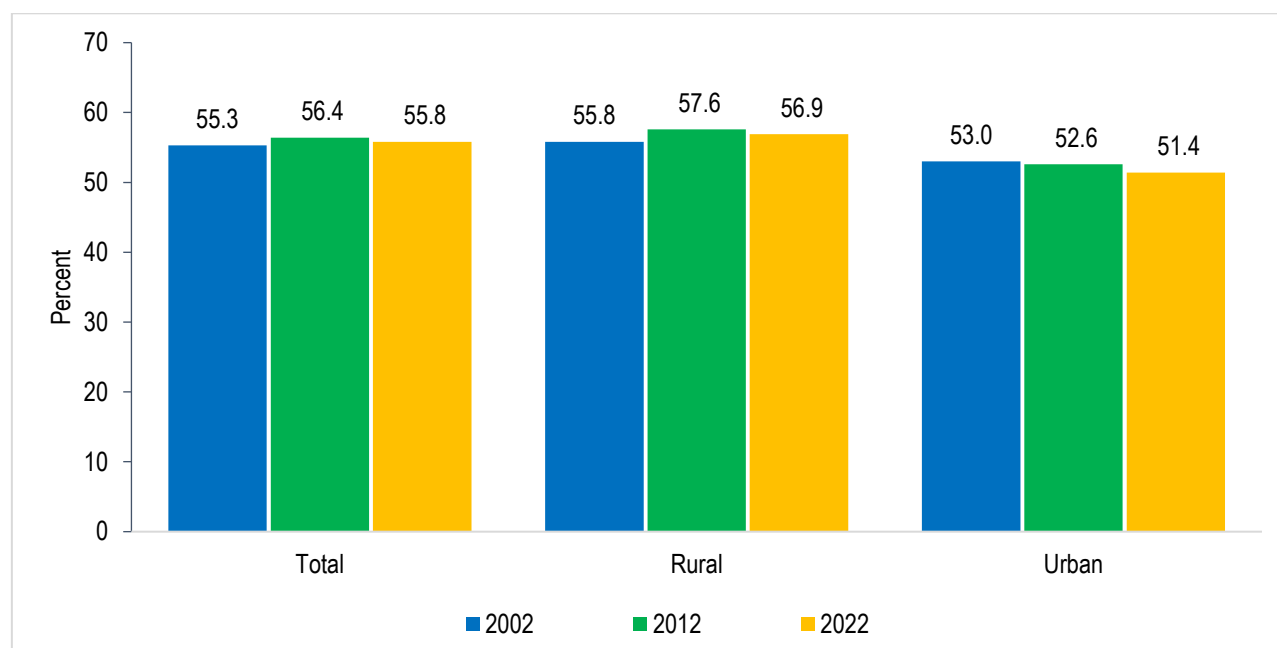
Figure 3.7: Percentage of Young Population (0-14 Years) by Place of Residence; Rukwa Region, 2002, 2012 and 2022 PHCs



3.3.3 Young Population (0-17 Years)

Figure 3.8 shows that in Rukwa Region 55.8 percent of the population is below 18 years. The percentage of the population aged 0-17 years in Rukwa Region has remained almost the same in the 2012-2022 period (55.3% in 2002 and 55.8% in 2022).

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

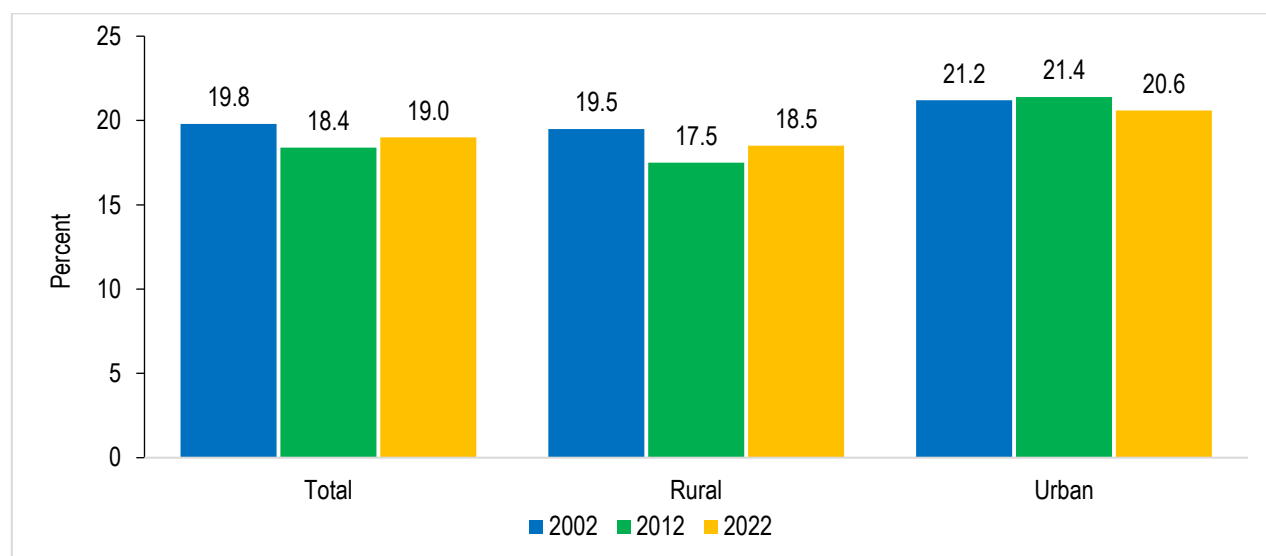


3.3.4 Youth Population (15-24 Years)

The 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 indicates that the youth population as per the United Nations definition (15 – 24 years) in Rukwa Region accounts for 19.0 percent of the total regional population. The percentage of youth population (15-24 years) in Rukwa Region has slightly decreased from 19.8 percent in 2002 to 19.0 percent in 2022.

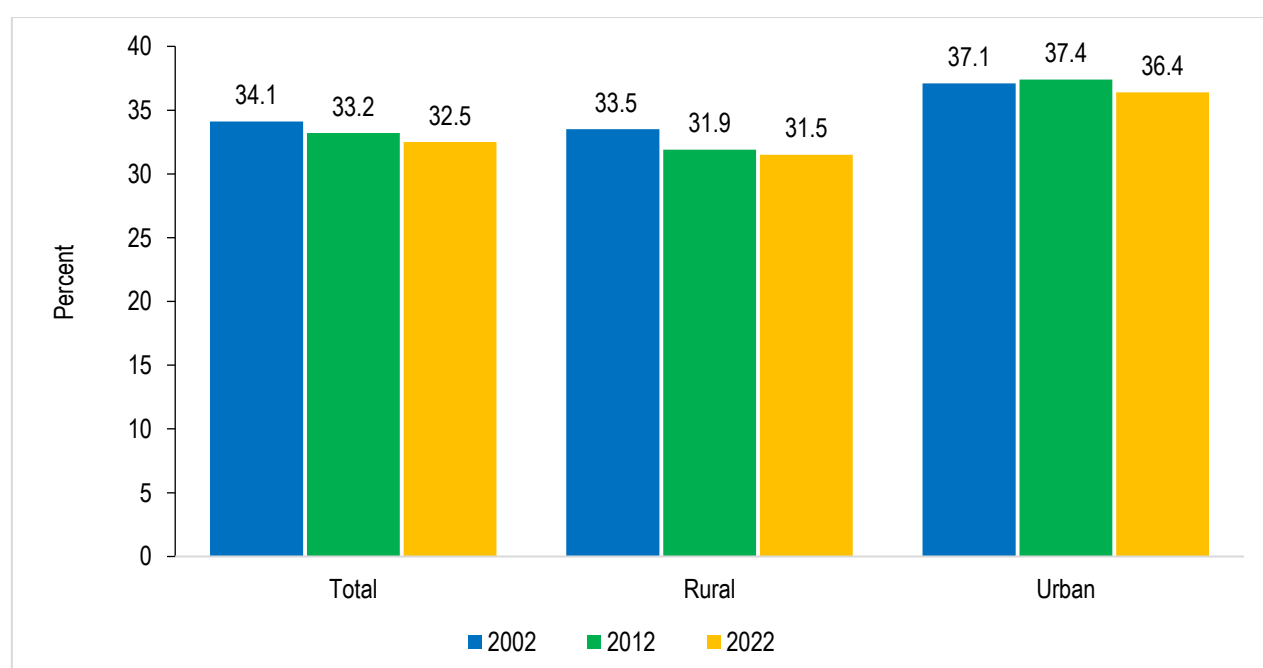
Figure 3.9: Percentage of Youth Population (15-24 Years) by Place of Residence; Rukwa Region, 1988, 2002, 2012 and 2022 PHCs



3.3.5 Youth Population (15 - 35 Years)

The 2022 PHC results show that the youth population as per the National Youth Development Policy, 2007 (15 - 35 years) accounts for 32.5 percent of the Rukwa regional population. The percentage of persons aged 15-35 years in the Region has decreased slightly from 34.1 in 2002 to 32.5 percent in 2022 (Figure 3.10).

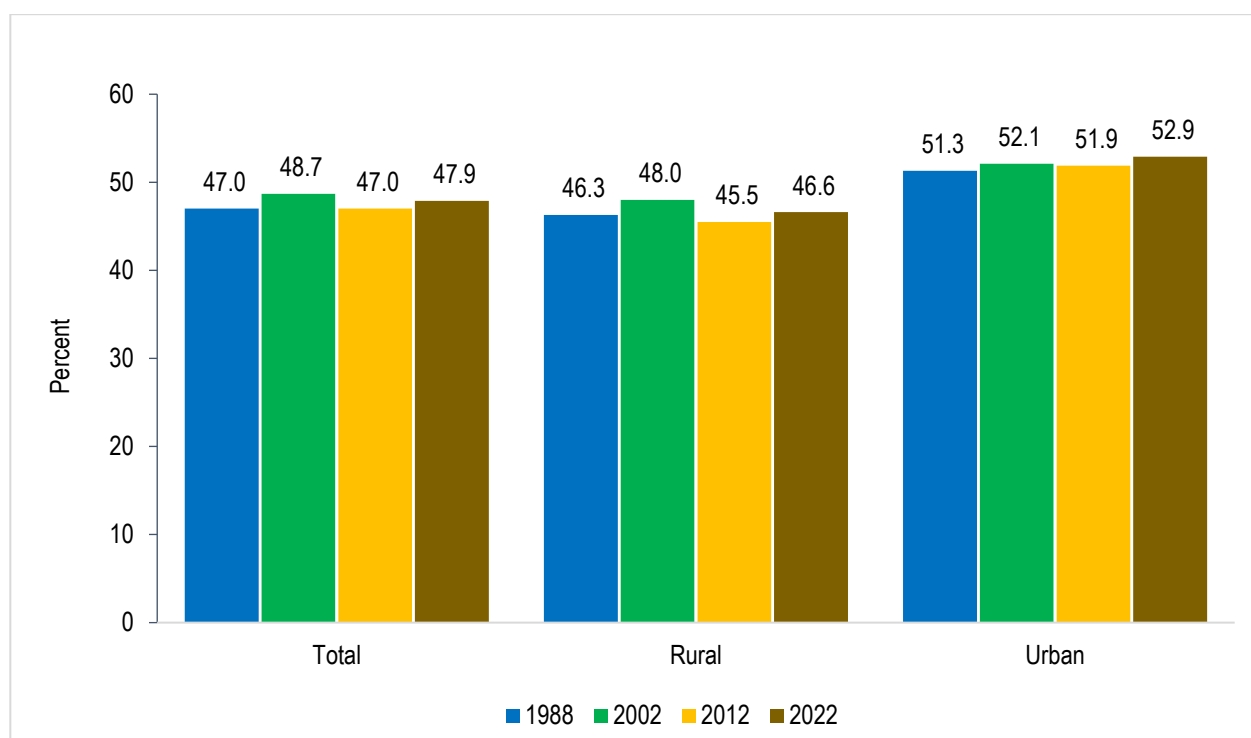
Figure 3.10: Percentage of the Youth Population (15-35 Years) by Place of Residence; Rukwa Region, 2002, 2012 and 2022 PHCs



3.3.6 Working Age Population (15-64 Years)

The working age population (15 – 64 years) in Rukwa Region is 47.9 percent of the total regional population. The percentage of working age population in the Region has decreased slightly from 48.7 percent in the 2002 Census to 47.9 percent in the 2022 Census (Figure 3.11)

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



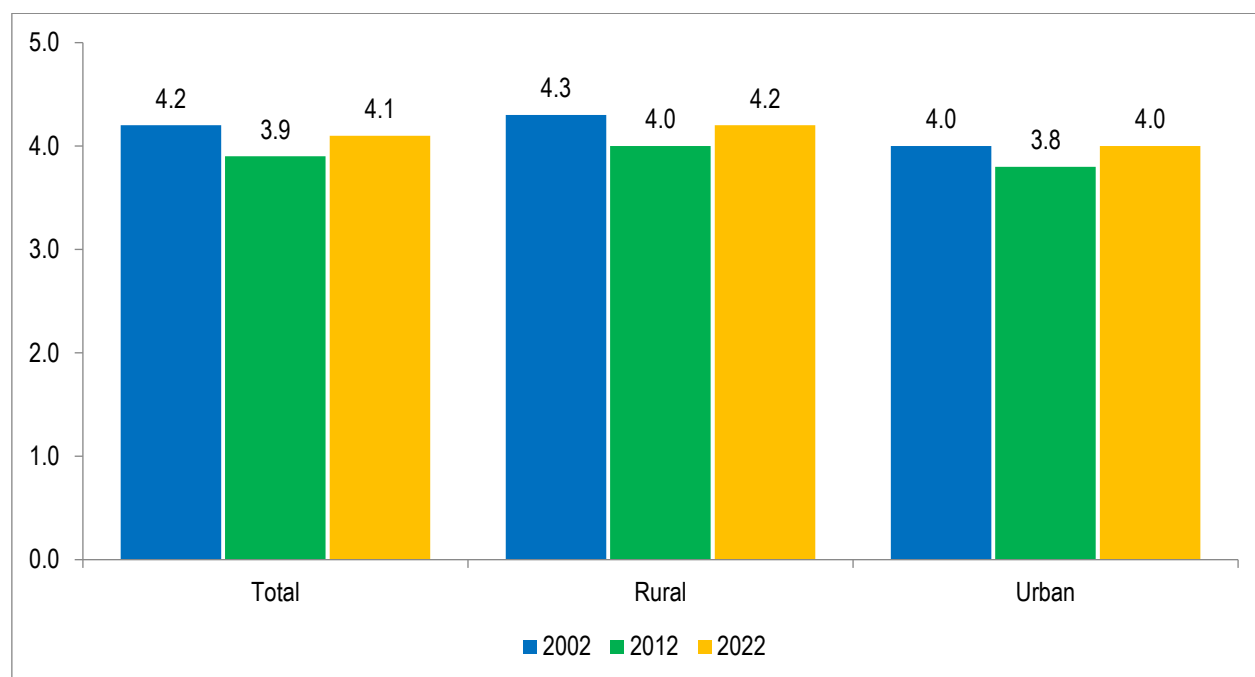
3.3.7 Elderly Population

According to the international definition, elderly is a person aged 65 years and above. However, according to the Tanzania National Ageing Policy of 2003, elderly 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 Rukwa Regional population. The percentage of the population aged 60 years and above in Rukwa Region is 4.1 percent. The percentage of the elderly population in Rukwa Region has remained almost the same in two decades (4.2 percent in 2002, 3.9 percent in 2012 and 4.1 percent in 2022) (Figure 3.12).

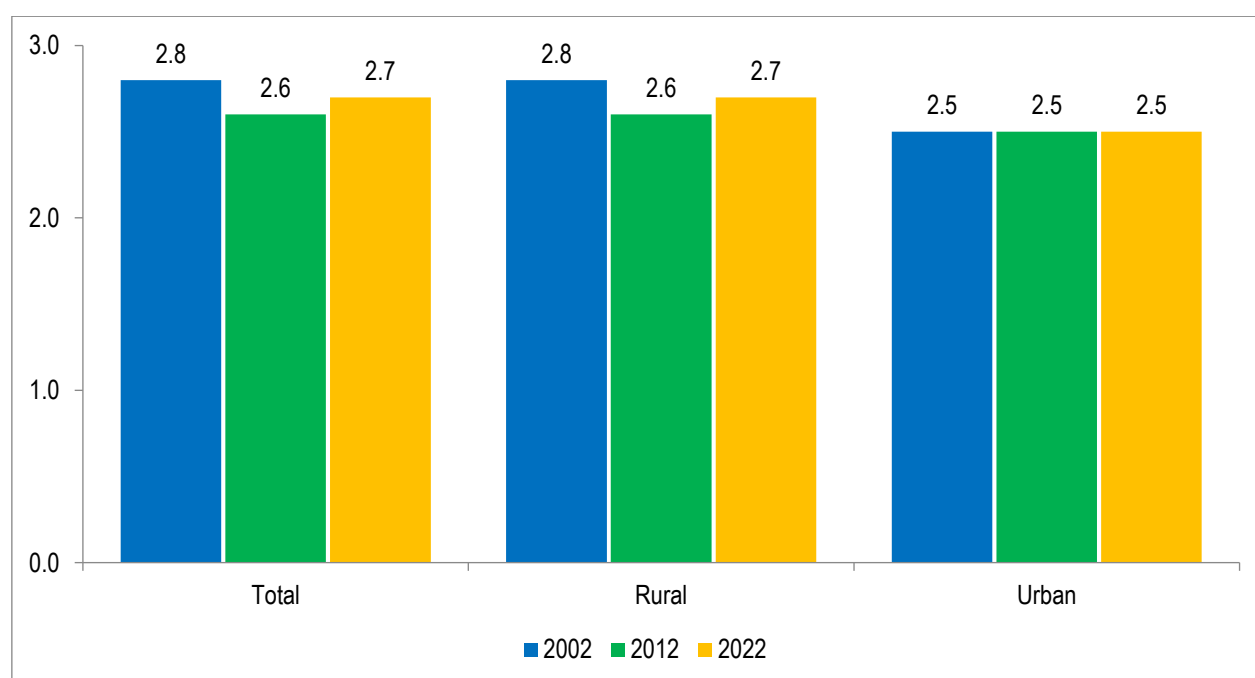
Figure 3.12: Percentage of the Population Aged 60 Years and Above by Place of Residence; Rukwa Region, 1988, 2002, 2012 and 2022 PHCs



Population Aged 65 Years and Above

Findings indicate that, the elderly population constitute a small segment (2.7%) of Rukwa regional population. The percentage of the elderly population aged 65 years and above in the Region remained almost the same in two decades (2.8% in 2002, 2.6% in 2012 and 2.7% in 2022) (Figure 3.13).

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

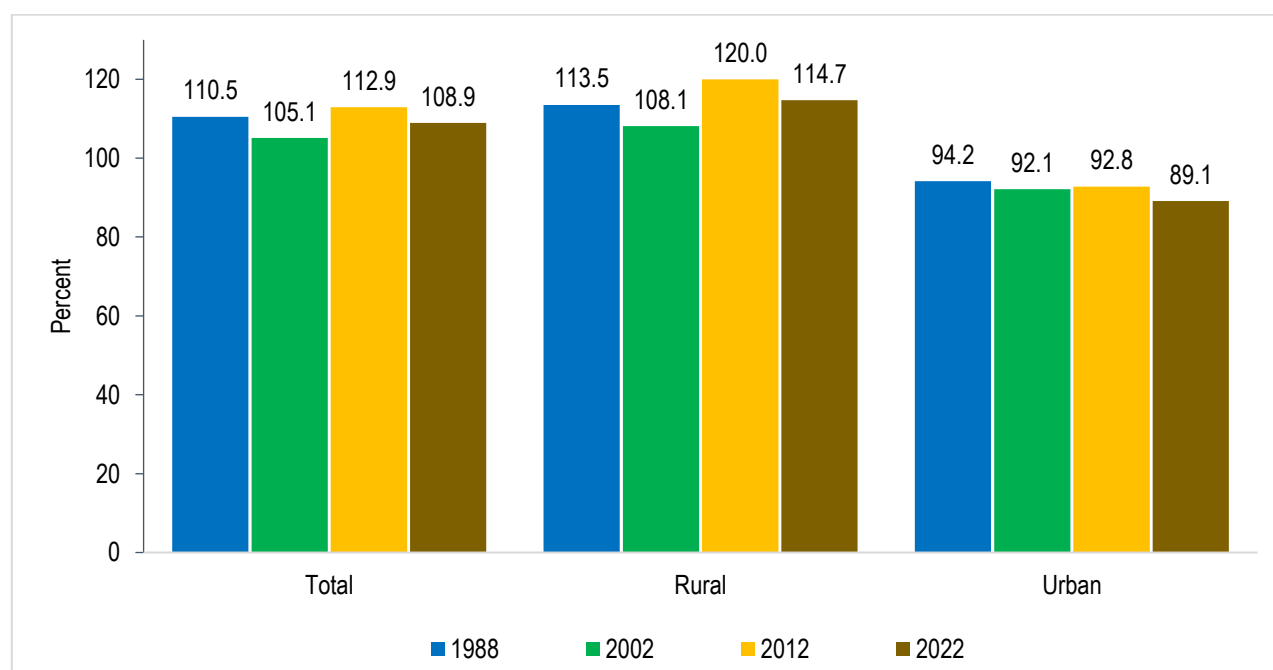


3.3.8 Age Dependency Ratio

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 a number of dependents per 100 persons of the working age population. Ratios higher than a 100 are undesirable. The age-dependency ratio is a proxy indicator of the economic burden and responsibility borne by the working age population.

According to the 2022 PHC results, the dependency ratio for Rukwa Region is 108.9 implying that there are 109 dependents per 100 non-dependents. Results further show that the age dependency ratio in the region has declined in three decades from 110.5 in the 1988 census to 89.0 in the 2022 census (Figure 3.14).

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



Chapter 4

Household Composition

Key points

- Most of private households (77.9%) in Rukwa Region are in rural areas.
- The average household size in Rukwa Region is 4.7 persons; in rural areas it is 4.8 persons while in urban areas it is 4.2 persons.
- There is a decrease in average household size from 5.0 persons in 2012 to 4.7 in 2022.
- The average number of persons per household in male-headed households is 4.9 and 4.3 in female-headed households.
- Female-headed households in Rukwa Region increased from 27.9 percent in 2012 to 35.3 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 for Rukwa Region. 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, having the same cooking arrangements and answerable to one household head, but not necessarily living in the same dwelling unit. Since the 2022 PHC enumeration was *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. Further, usual members of the household who spent the census night elsewhere due to being on duty were included as 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 Rukwa Region has a total of 328,052 private households out of which 72,634 (22.1%) are in urban areas and 255,418 (77.9%) are in rural areas. Female headed households account for 35.3 percent of all private households. The percentage of female headed households is slightly higher in urban areas (39.1%) than in rural areas (34.2%) (Tables 4.1 and 4.2).

Table 4.1: Number and Percentage of Private Households by Place of Residence, Sex of Head of Household and Age Group; Rukwa 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
Total	328,052	212,413	64.7	115,639	35.3	255,418	168,170	65.8	87,248	34.2	72,634	44,243	60.9	28,391	39.1
< 10 ²	123	70	56.9	53	43.1	86	50	58.1	36	41.9	37	20	54.1	17	45.9
10 - 14	916	456	49.8	460	50.2	686	349	50.9	337	49.1	230	107	46.5	123	53.5
15 - 19	8,446	3,705	43.9	4,741	56.1	6,568	2,840	43.2	3,728	56.8	1,878	865	46.1	1,013	53.9
20 - 24	38,550	24,390	63.3	14,160	36.7	30,905	20,043	64.9	10,862	35.1	7,645	4,347	56.9	3,298	43.1
25 - 29	49,704	34,031	68.5	15,673	31.5	37,980	26,554	69.9	11,426	30.1	11,724	7,477	63.8	4,247	36.2
30 - 34	46,775	31,456	67.2	15,319	32.8	35,567	24,384	68.6	11,183	31.4	11,208	7,072	63.1	4,136	36.9
35 - 39	41,182	27,426	66.6	13,756	33.4	31,542	21,258	67.4	10,284	32.6	9,640	6,168	64.0	3,472	36.0
40 - 44	34,784	23,123	66.5	11,661	33.5	26,781	18,117	67.6	8,664	32.4	8,003	5,006	62.6	2,997	37.4
45 - 49	27,995	18,692	66.8	9,303	33.2	21,722	14,749	67.9	6,973	32.1	6,273	3,943	62.9	2,330	37.1
50 - 54	21,424	14,028	65.5	7,396	34.5	16,875	11,221	66.5	5,654	33.5	4,549	2,807	61.7	1,742	38.3
55 - 59	14,840	9,491	64.0	5,349	36.0	11,731	7,615	64.9	4,116	35.1	3,109	1,876	60.3	1,233	39.7
60 - 64	15,402	9,515	61.8	5,887	38.2	12,328	7,761	63.0	4,567	37.0	3,074	1,754	57.1	1,320	42.9
65 - 69	9,311	5,610	60.3	3,701	39.7	7,399	4,541	61.4	2,858	38.6	1,912	1,069	55.9	843	44.1
70 - 74	8,081	4,689	58.0	3,392	42.0	6,553	3,875	59.1	2,678	40.9	1,528	814	53.3	714	46.7
75 - 79	4,305	2,477	57.5	1,828	42.5	3,498	2,045	58.5	1,453	41.5	807	432	53.5	375	46.5
80+	6,214	3,254	52.4	2,960	47.6	5,197	2,768	53.3	2,429	46.7	1,017	486	47.8	531	52.2

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

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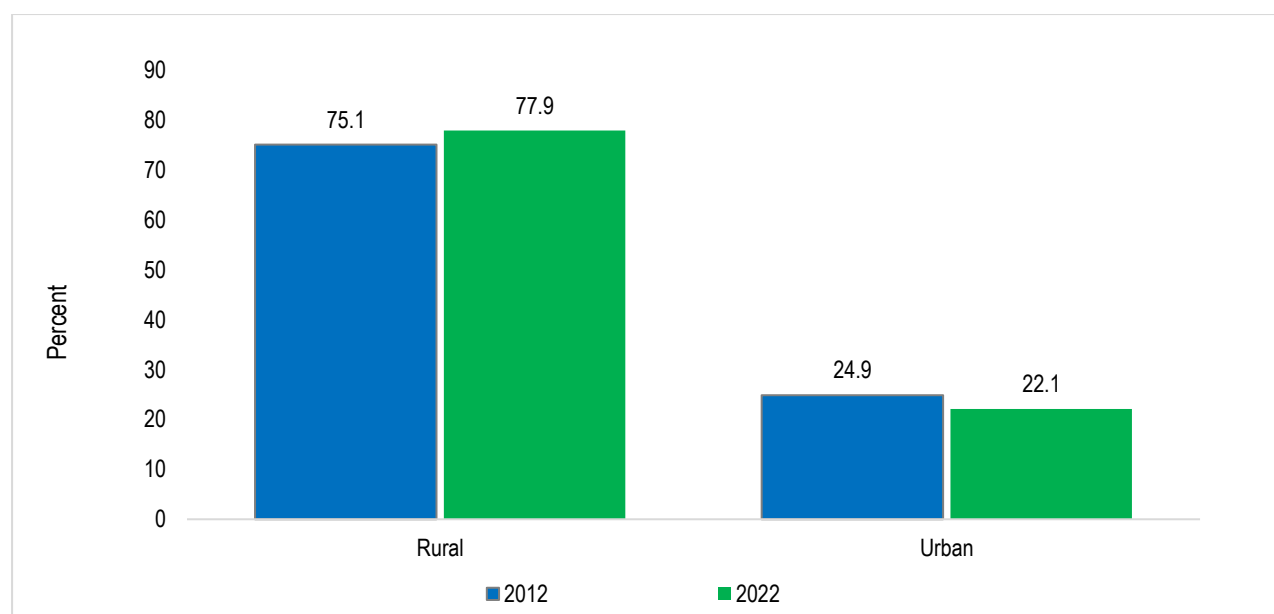
Results further reveal that, Sumbawanga District Council has the largest number of households accounting for 31.8 percent of total private households in the Region. The other Council with a relatively high contribution to the total households is Nkasi District (25.8%). On the other hand, Kalambo District has the smallest contribution of households (21.1%) (Table 4.2).

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

Council	Total		Rural		Urban	
	Number	Percent	Number	Percent	Number	Percent
Total	328,052	100.0	255,418	77.9	72,634	22.1
Kalambo District	69,147	21.1	67,737	26.5	1,410	1.9
Sumbawanga District	104,452	31.8	92,811	36.3	11,641	16.0
Sumbawanga Municipal	69,860	21.3	25,968	10.2	43,892	60.4
Nkasi District	84,593	25.8	68,902	27.0	15,691	21.6

Figure 4.1 shows an increase in rural households from 75.1 percent in 2012 to 77.9 percent in 2022 PHC. Rukwa Region shows decrease of 2.8 percentage points in urban households.

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



4.3 Average Household Size

Average household size is the mean number of persons in a private household. The average household size decreased from 5.0 in 2012 to 4.7 persons in 2022. Households in rural area

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have an average of 4.8 persons per household which is relatively higher than in urban areas (4.2 persons). Average household size declined from 5.1 persons in 2012 to 4.8 in 2022 in rural areas while in urban areas the decline is from 4.7 persons in 2012 to 4.2 in 2022. Moreover, the average household size varies across Councils, ranging from 4.3 persons in Sumbawanga Municipal to 5.0 persons in Nkasi District (Figure 4.2 and Table 4.3).

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

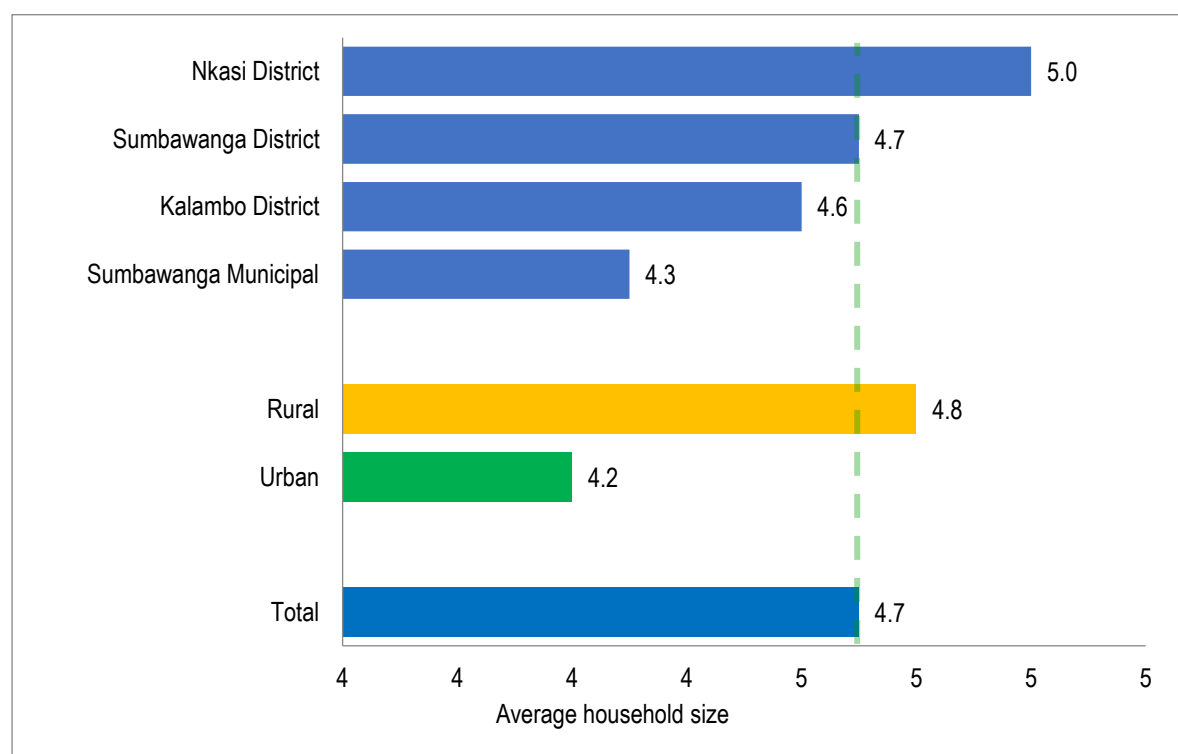
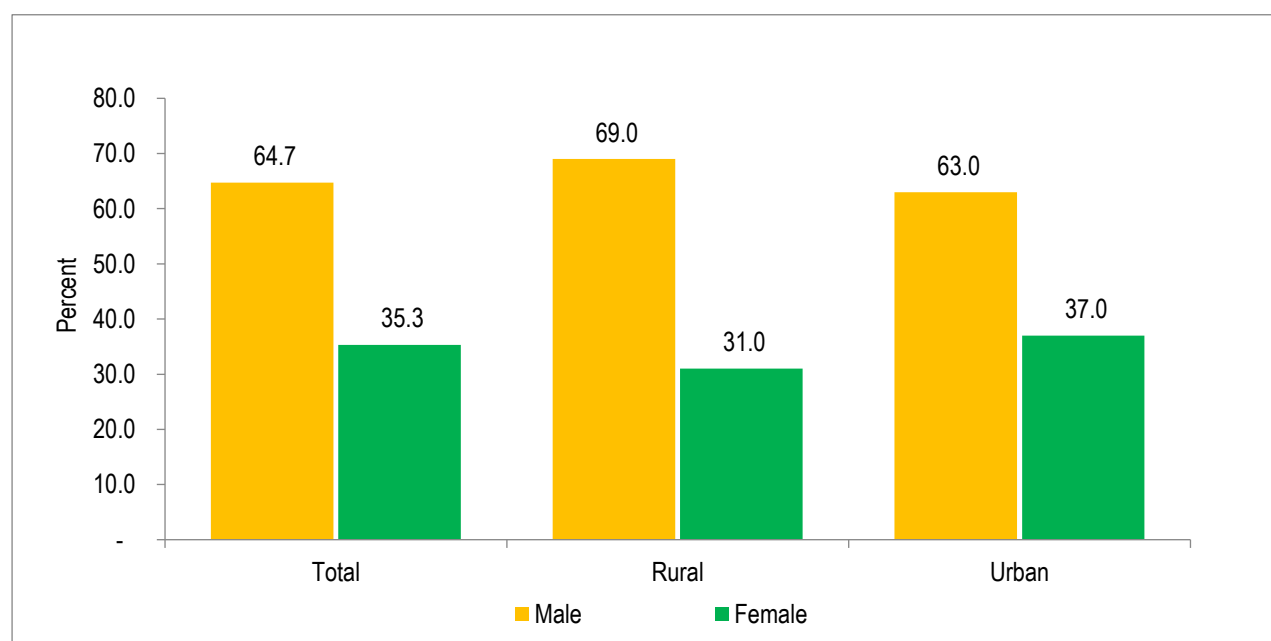


Table 4.3: Population in Private Households, Number of Households and Average Household Size by Place of Residence and Council; Rukwa Region, 2012 and 2022 PHCs

Place of Residence	Population		Number of Households		Average Household Size	
	2012	2022	2012	2022	2012 ³	2022
Total	1,004,539	1,527,355	198,011	328,052	5.0	4.7
Rural	768,002	1,219,302	148,698	255,418	5.1	4.8
Urban	236,537	308,053	49,313	72,634	4.7	4.2
Council						
Kalambo District	207,700	316,204	41,697	69,147	4.9	4.6
Sumbawanga District	305,846	489,766	60,431	104,452	5.0	4.7
Sumbawanga Municipal	209,793	299,074	43,217	69,860	4.8	4.3
Nkasi District	281,200	422,311	52,666	84,593	5.3	5.0

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 private households in Rukwa Region, 64.7 percent are headed by males and 35.3 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; Rukwa Region, 2022 PHC

³ Data from Rukwa Region Basic Demographic and Social-Economic Profile, 2012 PHC

Results further reveal that percentage of male-headed households decreased from 72.1 in 2012 to 64.7 percent in 2022 while female-headed households increased from 27.9 percent in 2012 to 35.3 percent in 2022. A similar pattern is observed across Councils (Table 4.4).

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

Place of Residence	2012		2022	
	Male Headed	Female-Headed	Male Headed	Female-Headed
Total	72.1	27.9	64.7	35.3
Rural	73.8	26.2	69.0	31.0
Urban	67.1	32.9	63.0	37.0
Council				
Kalambo District	73.3	26.7	67.7	32.3
Sumbawanga District	72.6	27.4	66.8	33.2
Sumbawanga Municipal	69.4	30.6	69.1	30.9
Nkasi District	72.9	27.1	67.9	32.1

In Rukwa Region, the average number of persons in male headed households is higher (4.9 persons) than in female headed households (4.3 persons). A similar pattern is observed in both rural and urban areas. Irrespective of sex of head, average household size in Nkasi District is the highest of all Councils (5.3%), followed by Sumbawanga District and Sumbawanga Municipal (5.0 persons each), Kalambo District has the lowest (4.6 persons) average household size (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; Rukwa 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
Total	1,527,355	1,034,979	492,376	328,052	212,413	115,639	4.7	4.9	4.3
Rural	1,219,302	840,860	378,442	255,418	168,170	87,248	4.8	5.0	4.3
Urban	308,053	194,119	113,934	72,634	44,243	28,391	4.2	4.4	4.0
Council									
Kalambo District	316,204	214,073	102,131	69,147	44,393	24,754	4.6	4.9	4.2
Sumbawanga District	489,766	327,401	162,365	104,452	66,618	37,834	5.0	5.3	4.5
Sumbawanga Municipal	299,074	206,691	92,383	69,860	46,196	23,664	5.0	5.3	4.3
Nkasi District	422,311	286,814	135,497	84,593	55,206	29,387	5.3	5.7	4.8

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 to build 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 73.7 percent of households in Rukwa Region live in improved houses, a percentage which is about the same for male headed and female headed households (73.2% and 74.6% respectively). Results further show that the percentage of households which live in improved houses is higher (93.5%) in urban areas compared with rural areas (68.1%). A similar pattern is observed for male headed and female headed households in rural and urban areas

Councils with more than 70.0 percent of households living in improved houses are Sumbawanga Municipal (96.4%) and Sumbawanga District (70.1%). Nkasi District Council has the lowest percentage (63.2%) of households living in improved houses. A similar pattern is observed for both male headed and female headed households (Table 4.6).

Table 4.6: Percentage Distribution of Households living in Improved/Un improved Houses by Sex of Household Head, Place of Residence and Council; Rukwa 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
Total	328,052	73.7	26.3	212,413	73.2	26.8	115,639	74.6	25.4
Rural	255,418	68.1	31.9	168,170	68.0	32.0	87,248	68.3	31.7
Urban	72,634	93.5	6.5	44,243	93.1	6.9	28,391	94.2	5.8
Council									
Kalambo District	69,147	69.2	30.8	44,393	69.2	30.8	24,754	69.1	30.9
Sumbawanga District	104,452	70.1	29.9	66,618	69.5	30.5	37,834	71.1	28.9
Sumbawanga Municipal	69,860	96.4	3.6	46,196	96.1	3.9	23,664	97.0	3.0
Nkasi District	84,593	63.2	36.8	55,206	61.7	38.3	29,387	65.8	34.2

The findings in Table 4.7 show that as age of household head increases the chances of living in improved house generally increases up to age 30-34 years and thereafter remains almost constant.

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

Age Group	Total			Male Headed			Female Headed		
	Total	Improved	Unimproved	Total	Improved	Unimproved	Total	Improved	Unimproved
Total	328,052	73.7	26.3	212,413	73.2	26.8	115,639	74.6	25.4
Below 18	3,594	69.9	30.1	1,627	66.8	33.2	1,967	72.5	27.5
18 - 24	44,441	68.1	31.9	26,994	66.0	34.0	17,447	71.3	28.7
25 - 29	49,704	72.6	27.4	34,031	71.5	28.5	15,673	74.9	25.1
30 - 34	46,775	75.2	24.8	31,456	74.6	25.4	15,319	76.2	23.8
35 - 39	41,182	75.0	25.0	27,426	75.1	24.9	13,756	74.8	25.2
40 - 44	34,784	75.1	24.9	23,123	75.2	24.8	11,661	75.1	24.9
45 - 49	27,995	75.2	24.8	18,692	75.0	25.0	9,303	75.5	24.5
50 - 54	21,424	75.0	25.0	14,028	74.6	25.4	7,396	75.6	24.4
55 - 59	14,840	75.6	24.4	9,491	75.4	24.6	5,349	76.1	23.9
60 - 64	15,402	74.9	25.1	9,515	74.5	25.5	5,887	75.5	24.5
65 - 69	9,311	75.6	24.4	5,610	75.7	24.3	3,701	75.5	24.5
70 - 74	8,081	74.9	25.1	4,689	74.8	25.2	3,392	75.1	24.9
75 - 79	4,305	75.5	24.5	2,477	75.7	24.3	1,828	75.4	24.6
80+	6,214	73.6	26.4	3,254	74.7	25.3	2,960	72.4	27.6

4.4.2 Heads of Households by Marital Status and Occupation

Results reveal that in Rukwa Region most of male heads of household regardless of their marital status (67,153 or 50.2%) are employed as agricultural and fishery workers, followed by those engaged as crafts and related workers (31,175 or 23.3%) and those in elementary occupations (18,589 or 13.9%). Among the 1,426 widowed males (746 or 52.3%) are engaged in agricultural and fishery; 25.0 percent are craft and related workers and 15.1 percent are elementary workers. (Table 4.8 and Table 4.9).

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

Occupation	Total	Never Married	Married	Living Together	Divorced	Separated	Widowed
Total	133,869	7,150	88,868	32,915	1,518	1,992	1,426
Legislators' administrators and managers.	742	59	573	94	5	7	4
Professionals.	2,361	295	1,765	266	14	11	10
Technicians and associate professionals.	6,469	644	4,135	1,480	67	96	47
Clerks.	490	54	280	141	1	8	6
Service workers and shop sales workers.	5,182	654	2,996	1,371	48	76	37
Agricultural and fishery workers.	67,153	2,086	45,911	16,793	715	902	746
Craft and related workers.	31,175	1,816	20,205	7,868	393	536	357
Plant and machine operators and assemblers.	1,708	216	905	536	24	23	4
Elementary occupations.	18,589	1,326	12,098	4,366	251	333	215

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

Occupation	Total	Never Married	Married	Living Together	Divorced	Separated	Widowed
Total	133,869	7,150	88,868	32,915	1,518	1,992	1,426
Legislators administrators and managers.	0.6	0.8	0.6	0.3	0.3	0.4	0.3
Professionals.	1.8	4.1	2.0	0.8	0.9	0.6	0.7
Technicians and associate professionals.	4.8	9.0	4.7	4.5	4.4	4.8	3.3
Clerks.	0.4	0.8	0.3	0.4	0.1	0.4	0.4
Service workers and shop sales workers.	3.9	9.1	3.4	4.2	3.2	3.8	2.6
Agricultural and fishery workers.	50.2	29.2	51.7	51.0	47.1	45.3	52.3
Craft and related workers.	23.3	25.4	22.7	23.9	25.9	26.9	25.0
Plant and machine operators and assemblers.	1.3	3.0	1.0	1.6	1.6	1.2	0.3
Elementary occupations.	13.9	18.5	13.6	13.3	16.5	16.7	15.1

On the other hand, results reveal that 54,430 (46.7%) female heads of household regardless of their marital status are employed as agricultural and fishery workers, followed by craft and related workers (12,572 or 23.1%). Among the 9,866 widowed females, 5,105 (51.7%) are engaged in agricultural and fishery; 2,246 or 22.8 percent are craft and related workers; and 1,801 or 18.3 percent are elementary workers (Table 4.10 and 4.11).

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

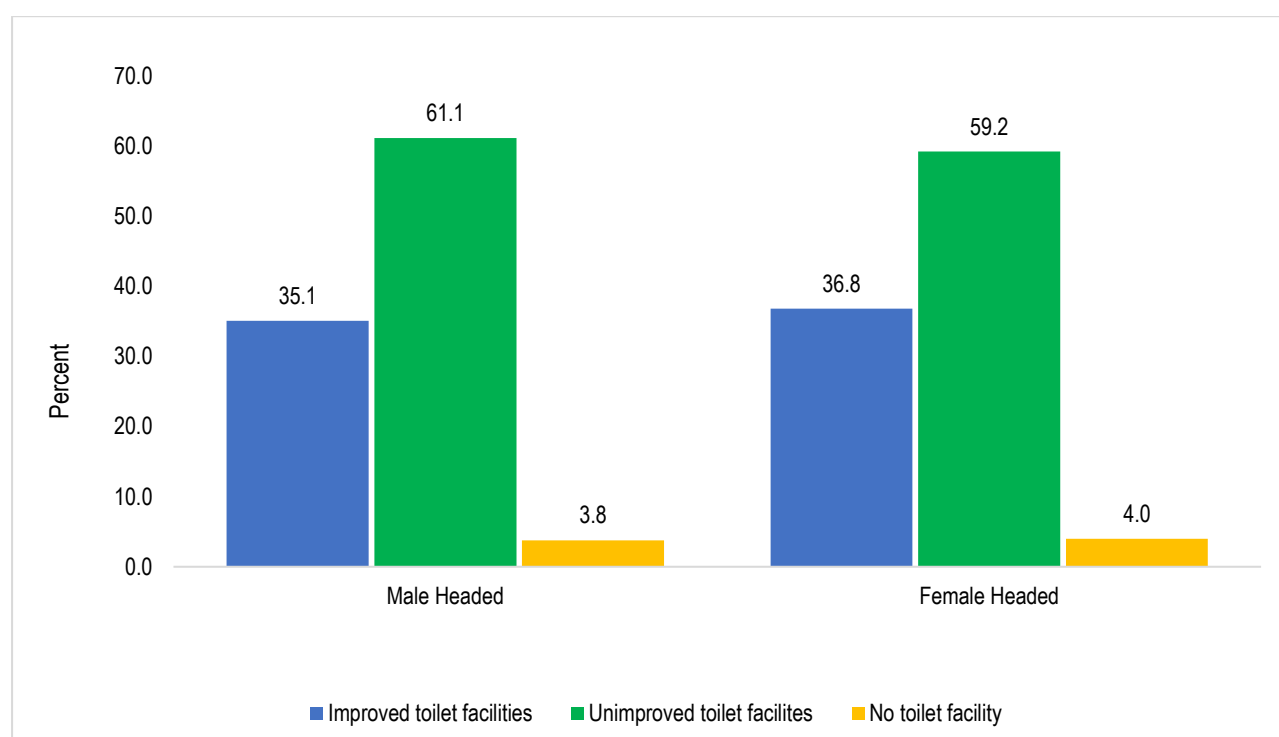
Occupation	Total	Never Married	Married	Living Together	Divorced	Separated	Widowed
Total	54,430	4,400	20,918	9,550	4,684	5,012	9,866
Legislators administrators and managers.	165	43	86	12	5	7	12
Professionals.	696	203	311	61	28	35	58
Technicians and associate professionals.	995	252	409	122	63	74	75
Clerks.	188	66	41	24	8	14	35
Service workers and shop sales workers.	4,334	771	1,367	764	451	452	529
Agricultural and fishery workers.	25,439	959	10,409	4,826	2,006	2,134	5,105
Craft and related workers.	12,572	1,165	4,707	2,067	1,162	1,225	2,246
Plant and machine operators and assemblers.	91	16	41	13	8	8	5
Elementary occupations.	9,950	925	3,547	1,661	953	1,063	1,801

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

Occupation	Total	Never Married	Married	Living Together	Divorced	Separated	Widowed
Total	54,430	4,400	20,918	9,550	4,684	5,012	9,866
Legislators administrators and managers.	0.3	1.0	0.4	0.1	0.1	0.1	0.1
Professionals.	1.3	4.6	1.5	0.6	0.6	0.7	0.6
Technicians and associate professionals.	1.8	5.7	2.0	1.3	1.3	1.5	0.8
Clerks.	0.3	1.5	0.2	0.3	0.2	0.3	0.4
Service workers and shop sales workers.	8.0	17.5	6.5	8.0	9.6	9.0	5.4
Agricultural and fishery workers.	46.7	21.8	49.8	50.5	42.8	42.6	51.7
Craft and related workers.	23.1	26.5	22.5	21.6	24.8	24.4	22.8
Plant and machine operators and assemblers.	0.2	0.4	0.2	0.1	0.2	0.2	0.1
Elementary occupations.	18.3	21.0	17.0	17.4	20.3	21.2	18.3

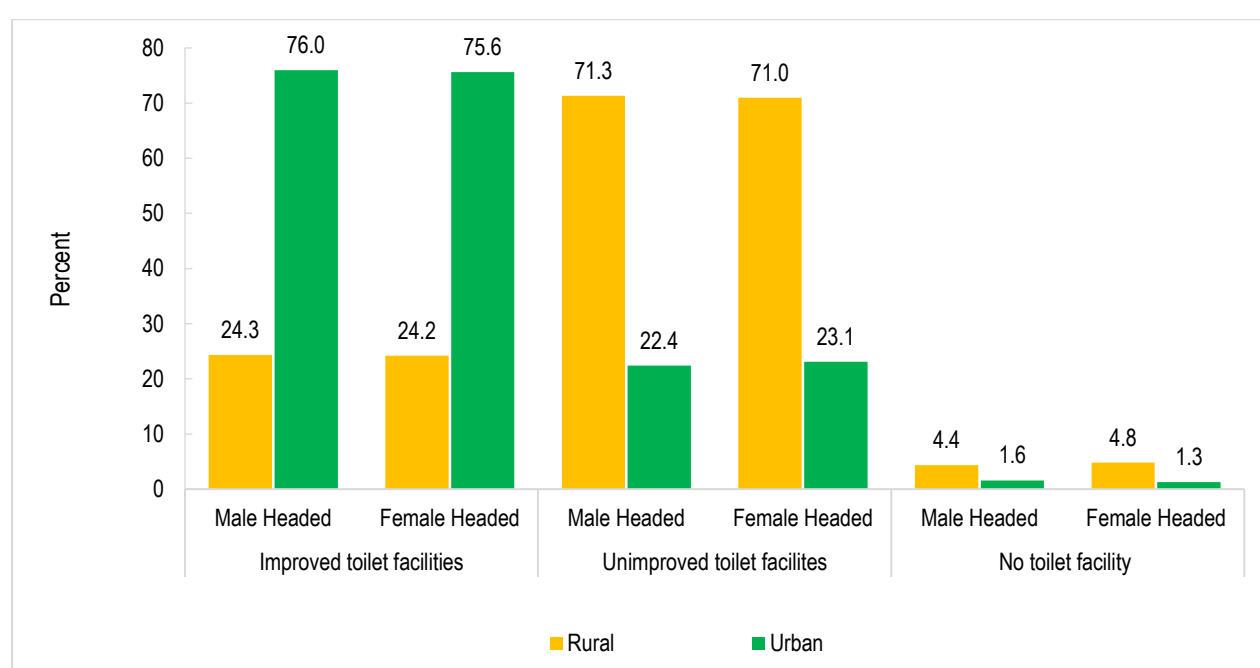
4.4.3 Heads of Household by Type of Toilet Facility

In Rukwa Region the percentage of households using improved toilet facilities is 35.1 percent for the male headed households and 36.8 percent for the female headed households. On the other hand, concerning households with no toilet facilities, there is hardly any difference between female headed and male headed households (Figure 4.4).

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

Results further show that in Rukwa Region the percentage of households using improved toilet facilities is higher in urban than in rural areas, with a percentage point difference of 51.4 for female headed households and 51.7 for the male headed. Furthermore, the percentage of male headed households using improved toilet facilities is higher than that of female headed households for both rural and urban areas. In contrast, 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 and Table 4.12).

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



Across Councils, results reveal that Sumbawanga Municipal has the highest percentage of both male and female-headed households with improved toilet facilities (66.9% and 73.9% respectively). Another Council with high percentage of male and female-headed households using improved toilet facilities is Nkasi District (31.9% and 35.7% respectively). Kalambo District Council has the lowest percentage of male and Female-headed households using improved Toilet facilities.

Councils with relatively high percentages of male-headed households with no toilet facilities are Nkasi District (6.2%), and Kalambo District (5.6%). These two Councils also have a relatively high percentage of female-headed households with no toilet facilities (5.5% and 6.7% respectively) (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, Rukwa Region, 2022 PHC

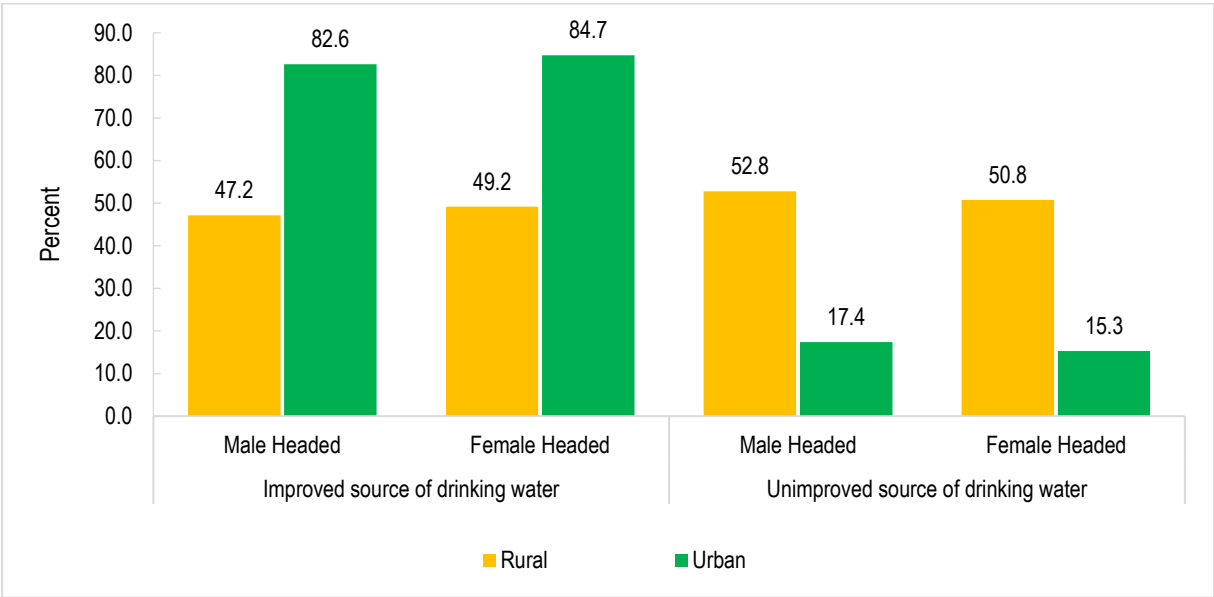
Place of Residence	Total				Male Headed				Female Headed			
	Total	Improved toilet facilities	Unimproved toilet facilities	No toilet facility	Total	Improved toilet facilities	Unimproved toilet facilities	No toilet facility	Total	Improved toilet facilities	Unimproved toilet facilities	No toilet facility
Total	328,052	35.7	60.5	3.8	212,413	35.1	61.1	3.8	115,639	36.8	59.2	4.0
Rural	255,418	24.3	71.2	4.5	168,170	24.3	71.3	4.4	87,248	24.2	71.0	4.8
Urban	72,634	75.8	22.7	1.5	44,243	76.0	22.4	1.6	28,391	75.6	23.1	1.3
Council												
Kalambo District	69,147	21.2	72.8	6.0	44,393	21.2	73.3	5.6	24,754	21.4	71.9	6.7
Sumbawanga District	104,452	24.8	72.3	2.9	66,618	25.0	72.3	2.7	37,834	24.5	72.3	3.1
Sumbawanga Municipal	69,860	69.3	30.2	0.6	46,196	66.9	32.5	0.6	23,664	73.9	25.5	0.6
Nkasi District	84,593	33.2	60.8	6.0	55,206	31.9	61.9	6.2	29,387	35.7	58.9	5.5

4.4.4 Heads of Households by Source of Drinking Water

The results show that, in urban areas there is significant difference between male headed households that use improved sources of drinking water (82.6%) compared with female headed households (84.7%). In the rural areas the percentage of male headed households that use improved source of drinking water is 47.2 percent and 49.2 percent for female headed households.

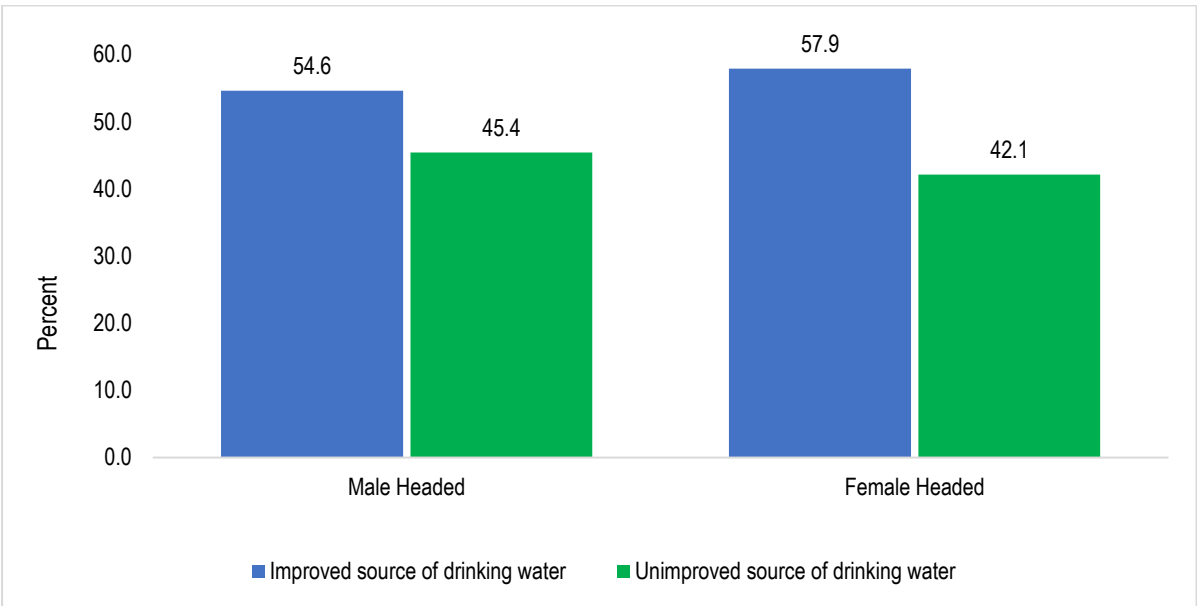
Both male and female headed households using improved sources of drinking water are more dominant in urban areas than in rural areas. The proportions of households that use unimproved sources of drinking water is higher for male headed than female headed households in both rural and urban areas (Figure 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; Rukwa Region, 2022 PHC



The results further reveal that the percentage of male headed households that use unimproved source of drinking water is higher (45.4%) compared with that of female headed households (42.1%) (Figure 4.7).

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



Across Councils, Sumbawanga Municipal has the highest percentages of both male and female headed households that use improved sources of drinking water (82.9% and 86.4%

respectively). Other councils with relatively large percentages of male and female headed households using improved sources of water for drinking are Sumbawanga District (49.9% and 51.8% respectively) and Nkasi District (46.5% and 53.4% respectively).

On the other hand, Councils with high percentages of male headed households using unimproved sources of drinking water are Kalambo District (57.7%) and Nkasi District (53.5%). Female headed households with high proportion of households using unimproved sources of water for drinking are Kalambo District (54.6%), Sumbawanga District (48.2%), Nkasi District (46.6%) and Sumbawanga Municipal (13.6%) (Table 4.13).

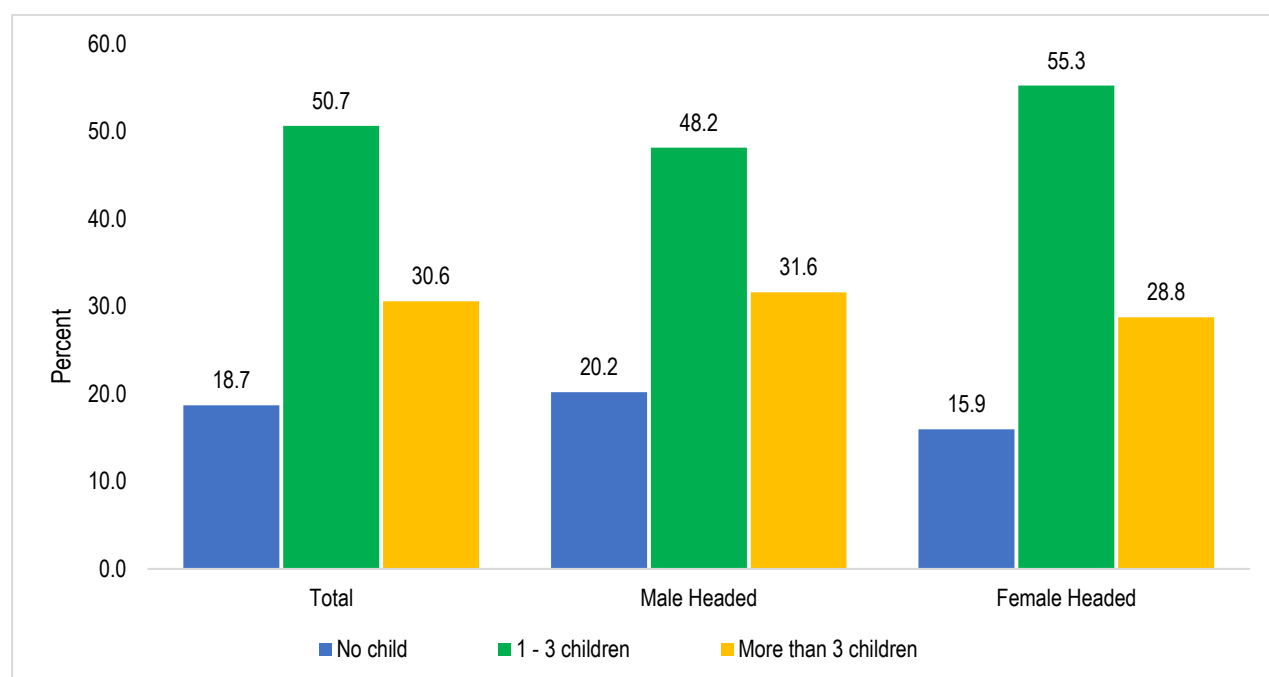
Table 4.13: Percentage Distribution of Households Using Improved and Unimproved Sources of Drinking Water by Sex of Household Head, Place of Residence and Council; Rukwa Region, 2022 PHC

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
Total	328,052	55.8	44.2	212,413	54.6	45.4	115,639	57.9	42.1
Rural	255,418	47.9	52.1	168,170	47.2	52.8	87,248	49.2	50.8
Urban	72,634	83.4	16.6	44,243	82.6	17.4	28,391	84.7	15.3
Council									
Kalambo District	69,147	43.4	56.6	44,393	42.3	57.7	24,754	45.4	54.6
Sumbawanga District	104,452	50.6	49.4	66,618	49.9	50.1	37,834	51.8	48.2
Sumbawanga Municipal	69,860	84.1	15.9	46,196	82.9	17.1	23,664	86.4	13.6
Nkasi District	84,593	48.9	51.1	55,206	46.5	53.5	29,387	53.4	46.6

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 166,238 households 50.7 percent have one to three children under 18 years, 18.7 percent have no child and 30.6 percent have more than three children. Results further show that, the percentage of female headed households with one to three children under 18 years is higher (55.3%) than that of male headed households (48.2%). The percentage of male headed households with more than three children under 18 years is slightly higher (31.6%) than that of female headed households (28.8%). Likewise, the percentage of male headed households with no children under 18 years is higher (20.2%) compared with that of female headed households (15.9%) (Figure 4.8).

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



Results further indicate that 54.1 percent of female headed households living in rural areas have one to three children under 18 years compared with 48.2 percent for male headed households. The same pattern is observed in urban areas. More than one third (33.6%) of male headed households with more than three children reside in rural areas compared with 30.8 percent of female headed households. On the other hand, the proportion of male headed households with no children under 18 years is higher (27.7%) in urban areas compared with female headed households (18.6%) (Figure 4.9 and Table 4.14).

Across councils, Sumbawanga Municipal has the highest percentage (53.3%) of households with one to three children followed by Kalambo District with 51.5 percent, while Nkasi District has the lowest percentage of households with one to three children (47.6%) (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; Rukwa Region, 2022 PHC

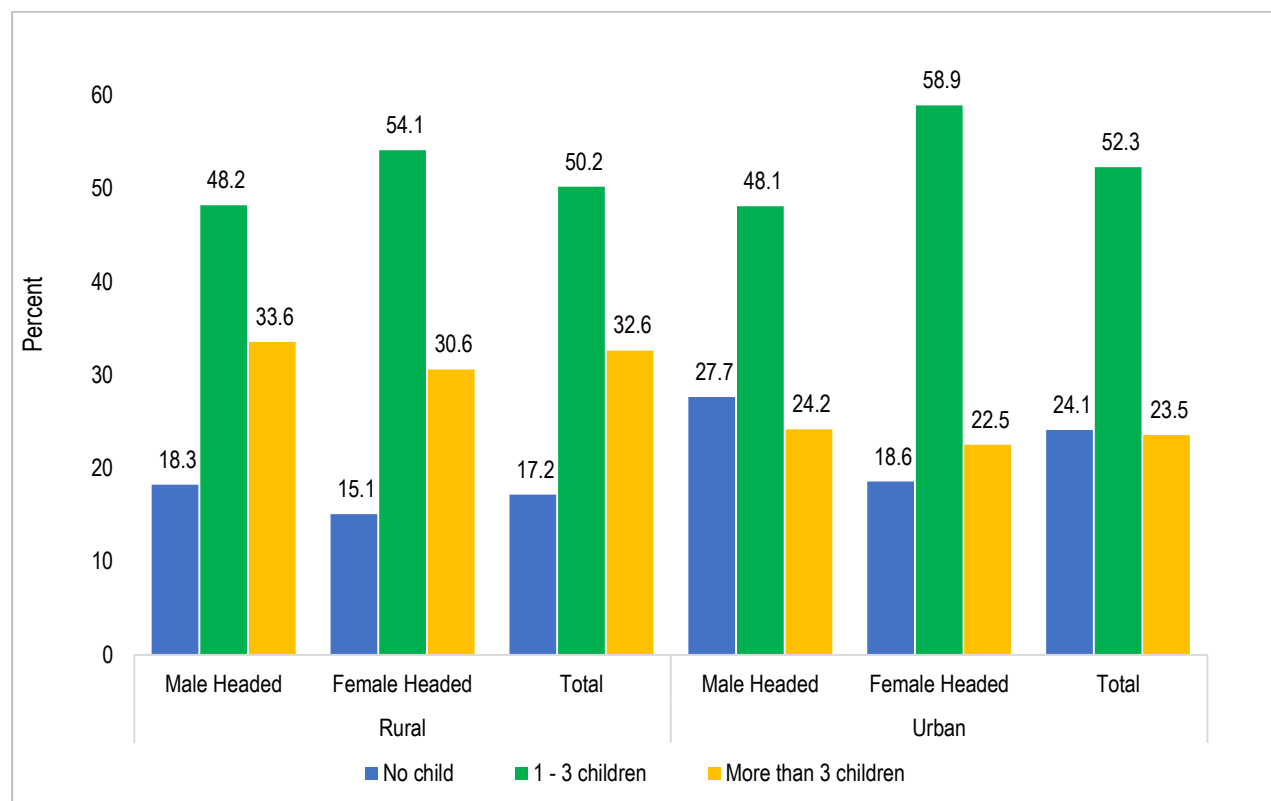


Table 4.14: Percentage Distribution of Households by Sex of Household Head, Number of Children under 18 Years, Place of Residence and Council; Rukwa Region, 2022 PHC

Council	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
Total	328,052	18.7	50.7	30.6	212,413	20.2	48.2	31.6	115,639	15.9	55.3	28.8
Rural	255,418	17.2	50.2	32.6	168,170	18.3	48.2	33.6	87,248	15.1	54.1	30.8
Urban	72,634	24.1	52.3	23.5	44,243	27.7	48.1	24.2	28,391	18.6	58.9	22.5
Council												
Kalambo District	69,147	17.3	51.5	31.2	44,393	18.1	49.4	32.4	24,754	15.8	55.2	29.0
Sumbawanga District	104,452	17.6	50.9	31.5	66,618	19.2	48.7	32.2	37,834	14.9	54.8	30.3
Sumbawanga Municipal	69,860	22.8	53.3	24.0	46,196	24.6	50.0	25.3	23,664	19.1	59.6	21.3
Nkasi District	84,593	17.9	47.6	34.5	55,206	19.5	45.0	35.5	29,387	14.8	52.5	32.7

Chapter 5

Marital Status

Key points

- Nearly fifty percent (46.7%) of the population aged 15 years and above in Rukwa Region are married.
- About five percent (4.5%) of persons aged 15 years and above are widowed. The percentage of females widowed is higher (7.4%) than that of Males (1.2%).
- Two percent (2.3%) of persons aged 15 years and above are divorced. Females are more likely to be divorced (3.3%) than males (1.2%).
- Mean Age at First Marriage in Rukwa Region is 22.0 years. Females are getting married at a younger age (20.3 years) than males (23.8 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 programmes that have 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, in order to allow comparison of the 2022 Census results with the 2012 results, analysis is mainly 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. Data on marital status for the 2022 PHC is disaggregated by age, sex, rural and urban areas and councils.

5.2 Marital Status

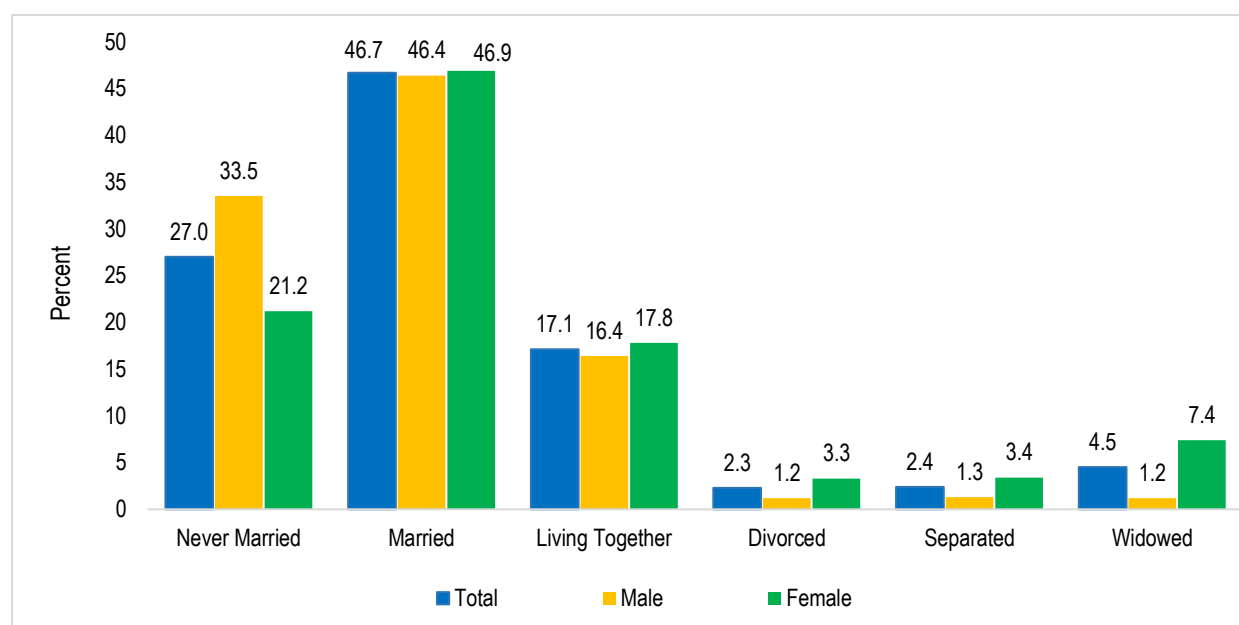
Results show that in Rukwa Region 46.7 percent of persons aged 15 years and above are married; the percentage is higher among females (46.9%) than males (46.4%). Proportionately, the percentage of married persons in rural areas is higher (49.0%) compared with that of urban areas (38.4%). More than a quarter (27.0%) of persons aged 15 years and above have never married; among males it is 33.5 percent while among females it is 21.2 percent. The results also show notable differences between rural and urban areas for the never married persons (24.8% and 35.0% respectively).

Results further show that, the percentage of persons aged 15 years and above who are widowed is 4.5 percent which is higher among females (7.4%) than males (1.2%). The percentage of widowed in rural areas is 4.3 while for urban areas it is 5.0 percent. The large number of females who are widowed compared with males might be contributed by the tendency of most males to remarry after 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; Rukwa Region, 2022 PHC

Marital Status	Total				Rural				Urban			
	Population	Both Sexes	Male	Female	Population	Both Sexes	Male	Female	Population	Both Sexes	Male	Female
Total	778,803	100.0	100.0	100.0	604,720	100.0	100.0	100.0	174,083	100.0	100.0	100.0
Never Married	210,525	27.0	33.5	21.2	149,682	24.8	31.7	18.5	60,843	35.0	40.2	30.5
Married	363,384	46.7	46.4	46.9	296,452	49.0	48.3	49.7	66,932	38.4	39.4	37.6
Living Together	133,206	17.1	16.4	17.8	104,238	17.2	16.4	18.0	28,968	16.6	16.4	16.9
Divorced	18,212	2.3	1.2	3.3	14,153	2.3	1.2	3.4	4,059	2.3	1.3	3.2
Separated	18,788	2.4	1.3	3.4	14,207	2.3	1.3	3.3	4,581	2.6	1.4	3.7
Widowed	34,688	4.5	1.2	7.4	25,988	4.3	1.2	7.1	8,700	5.0	1.3	8.1

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



The percentage of married persons increased sharply with age from 54.7 percent for persons aged 25-29 years to 66.0 percent for those aged 45-49 and thereafter declines gradually as age increases. Percentage of the divorced persons increases with age from 0.3 for those aged 15–19 years to 3.8 for those aged 50-54 years and started to decline gradually down to 1.8 for those aged 80+ years. The widowed persons increase steadily as age increases from 0.2 percent for age 20-24 up to 55.6 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; Rukwa Region, 2022 PHC

Age Group	Total Population	Marital Status					
		Never Married	Married	Living Together	Divorced	Separated	Widowed
Total	778,803	27.0	46.7	17.1	2.3	2.4	4.5
15 - 19	160,052	83.7	10.5	5.1	0.3	0.4	0.0
20 - 24	132,105	36.3	39.8	20.3	1.7	1.7	0.2
25 - 29	104,884	14.2	54.7	25.5	2.6	2.5	0.4
30 - 34	86,068	7.2	61.3	24.2	3.1	3.0	1.1
35 - 39	71,943	4.1	64.5	22.4	3.4	3.5	2.0
40 - 44	57,977	3.0	65.7	20.0	3.7	3.7	3.8
45 - 49	45,587	2.2	66.0	18.3	3.5	3.6	6.3
50 - 54	33,818	1.9	65.1	15.4	3.8	3.7	10.1
55 - 59	22,629	1.8	63.4	12.9	3.6	3.9	14.4
60 - 64	22,225	1.3	59.2	12.0	3.4	3.7	20.3
65 - 69	13,578	1.3	56.9	10.4	2.9	3.6	25.0
70 - 74	11,472	1.1	50.3	9.2	2.8	3.2	33.3
75 - 79	6,313	1.0	45.4	8.3	2.7	3.2	39.3
80+	10,152	1.2	32.8	6.4	1.8	2.3	55.6

Results further show that in Rukwa Region 49.1 percent of the male population aged 10 years and above are never married, 35.5 percent are married and 12.5 percent are living together. Almost all male children in the Region (99.9%) aged 10 - 14 years and 96.5 percent of those aged 15 -19 are never married. The percentage of never married person 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; Rukwa Region, 2022 PHC

Age Group	Total Population	Marital Status					
		Never Married	Married	Living Together	Divorced	Separated	Widowed
Total	480,258	49.1	35.5	12.5	0.9	1.0	0.9
10 – 14	112,548	99.9	0.1	0.0	0.0	0.0	0.0
15 – 19	77,147	96.5	2.4	1.0	0.0	0.0	0.0
20 – 24	59,278	54.1	29.4	15.3	0.5	0.6	0.0
25 – 29	48,615	19.2	52.8	25.6	1.2	1.2	0.1
30 – 34	40,734	8.5	62.5	25.5	1.6	1.7	0.2
35 – 39	34,119	4.6	67.3	23.9	1.9	1.9	0.4
40 – 44	28,213	3.0	70.4	21.5	2.1	2.3	0.7
45 – 49	22,417	2.4	72.0	20.2	2.1	2.2	1.2
50 – 54	16,596	2.0	73.2	17.9	2.4	2.3	2.1
55 – 59	10,972	1.9	74.4	15.4	2.2	2.8	3.3
60 – 64	10,823	1.5	73.7	15.1	2.4	2.4	4.9
65 – 69	6,375	1.2	73.6	13.6	1.9	2.6	7.1
70 – 74	5,381	1.1	70.2	13.8	2.1	2.4	10.5
75 – 79	2,902	1.0	66.3	13.0	2.3	2.9	14.5
80+	4,138	1.1	58.3	11.7	1.6	2.4	24.7

Among the female population aged 10 years and above, 36.9 percent are married, 38.1 percent are never married and 14.0 percent are living together. Almost all female children (99.7%) aged 10 - 14 years and 71.7 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; Rukwa Region, 2022 PHC

Age Group	Total Population	Marital Status					
		Never Married	Married	Living Together	Divorced	Separated	Widowed
Total	523,212	38.1	36.9	14.0	2.6	2.7	5.8
10 – 14	112,119	99.7	0.2	0.1	0.0	0.0	0.0
15 – 19	82,905	71.7	18.0	9.0	0.6	0.7	0.0
20 – 24	72,827	21.8	48.3	24.4	2.6	2.6	0.3
25 – 29	56,269	9.9	56.4	25.4	3.8	3.7	0.7
30 – 34	45,334	6.0	60.3	23.0	4.5	4.3	1.9
35 – 39	37,824	3.6	61.9	21.1	4.8	4.9	3.5
40 – 44	29,764	3.1	61.2	18.5	5.2	5.1	6.8
45 – 49	23,170	2.1	60.2	16.6	4.9	5.1	11.2
50 – 54	17,222	1.8	57.3	13.0	5.1	5.1	17.7
55 – 59	11,657	1.7	53.1	10.7	4.8	5.0	24.8
60 – 64	11,402	1.2	45.5	9.1	4.3	4.9	34.9
65 – 69	7,203	1.3	42.2	7.5	3.7	4.5	40.7
70 – 74	6,091	1.1	32.8	5.2	3.4	3.9	53.5
75 – 79	3,411	1.1	27.6	4.3	3.1	3.5	60.4
80+	6,014	1.2	15.1	2.7	1.8	2.2	76.8

5.2.1 Marital Status for Selected Age Groups

Table 5.5 shows the percentage of population by marital status for selected age groups for Rukwa Region. Results reveal that the percentage of married persons aged 15-64 years in Rukwa Region is 46.6 while for age group 65 years and above is 47.4 percent. The percentage for widowed persons aged 65 years and above is 36.9 percent. Results further show that by age 65 and above, only 1.2 percent of the population aged 10 years and above are single implying that marriage in Rukwa Region is almost universal. There is a relatively high proportion (17.3% and 17.6 %) 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; Rukwa Region, 2022 PHC

Selected Age Group	Total Population	Marital Status					
		Never Married	Married	Living Together	Divorced	Separated	Widowed
Total	1,003,470	43.3	36.2	13.3	1.8	1.9	3.5
10 - 14	224,667	99.8	0.1	0.0	0.0	0.0	0.0
10 - 17	322,604	97.8	1.5	0.6	0.0	0.0	0.0
15 - 24	292,157	62.2	23.7	12.0	0.9	1.0	0.1
15 - 35	500,802	40.7	38.1	17.3	1.7	1.7	0.4
15 - 64	737,288	28.5	46.6	17.6	2.3	2.4	2.6
65+	41,515	1.2	47.4	8.8	2.6	3.1	36.9
70+	27,937	1.1	42.8	8.0	2.4	2.9	42.8

Tables 5.6 and 5.7 reveal that 33.5 percent of male and 21.2 percent of female population aged 15 years and above are never married. For the divorced category, the proportion is higher for females (3.3%) than males (1.2%). Likewise, the percentage of the widowed is higher among females (7.4%) than males (1.2%).

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

Age Group	Total Population	Marital Status					
		Never Married	Married	Living Together	Divorced	Separated	Widowed
Total	367,710	33.5	46.4	16.4	1.2	1.3	1.2
15 – 19	77,147	96.5	2.4	1.0	0.0	0.0	0.0
20 – 24	59,278	54.1	29.4	15.3	0.5	0.6	0.0
25 – 29	48,615	19.2	52.8	25.6	1.2	1.2	0.1
30 – 34	40,734	8.5	62.5	25.5	1.6	1.7	0.2
35 – 39	34,119	4.6	67.3	23.9	1.9	1.9	0.4
40 – 44	28,213	3.0	70.4	21.5	2.1	2.3	0.7
45 – 49	22,417	2.4	72.0	20.2	2.1	2.2	1.2
50 – 54	16,596	2.0	73.2	17.9	2.4	2.3	2.1
55 – 59	10,972	1.9	74.4	15.4	2.2	2.8	3.3
60 – 64	10,823	1.5	73.7	15.1	2.4	2.4	4.9
65 – 69	6,375	1.2	73.6	13.6	1.9	2.6	7.1
70 – 74	5,381	1.1	70.2	13.8	2.1	2.4	10.5
75 – 79	2,902	1.0	66.3	13.0	2.3	2.9	14.5
80+	4,138	1.1	58.3	11.7	1.6	2.4	24.7

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

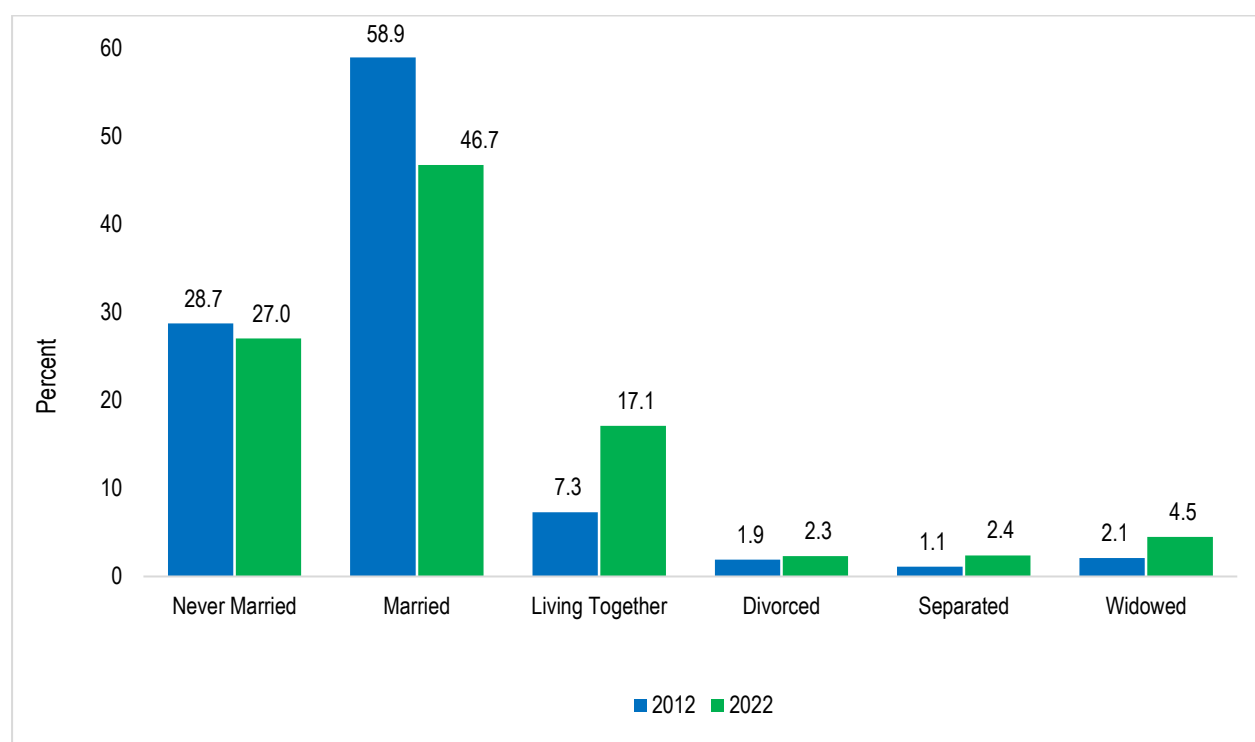
Age Group	Total Population	Marital Status					
		Never Married	Married	Living Together	Divorced	Separated	Widowed
Total	411,093	21.2	46.9	17.8	3.3	3.4	7.4
15 – 19	82,905	71.7	18.0	9.0	0.6	0.7	0.0
20 – 24	72,827	21.8	48.3	24.4	2.6	2.6	0.3
25 – 29	56,269	9.9	56.4	25.4	3.8	3.7	0.7
30 – 34	45,334	6.0	60.3	23.0	4.5	4.3	1.9
35 – 39	37,824	3.6	61.9	21.1	4.8	4.9	3.5
40 – 44	29,764	3.1	61.2	18.5	5.2	5.1	6.8
45 – 49	23,170	2.1	60.2	16.6	4.9	5.1	11.2
50 – 54	17,222	1.8	57.3	13.0	5.1	5.1	17.7
55 – 59	11,657	1.7	53.1	10.7	4.8	5.0	24.8
60 – 64	11,402	1.2	45.5	9.1	4.3	4.9	34.9
65 – 69	7,203	1.3	42.2	7.5	3.7	4.5	40.7
70 – 74	6,091	1.1	32.8	5.2	3.4	3.9	53.5
75 – 79	3,411	1.1	27.6	4.3	3.1	3.5	60.4
80+	6,014	1.2	15.1	2.7	1.8	2.2	76.8

Table 5.8 highlights the Council variations of marital status for the persons aged 15 years and above for Rukwa Region. Results show that the percentage of the never married category ranges from 23.3 percent in Sumbawanga Municipal to 34.1 percent in Nkasi District. For the married category the range is from 40.0 percent in Kalambo and Sumbawanga District Councils to 52.3 percent in Nkasi District Council. The percentage of persons in the widowed category is almost the same in all Councils except in Sumbawanga Municipal which has higher percentage (5.1%) compared to other Councils.

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

Place of Residence	Total Population	Marital Status					
		Never Married	Married	Living Together	Divorced	Separated	Widowed
Total	778,803	27.0	46.7	17.1	2.3	2.4	4.5
Rural	604,720	24.8	49.0	17.2	2.3	2.3	4.3
Urban	174,083	35.0	38.4	16.6	2.3	2.6	5.0
Council							
Kalambo District	156,467	23.5	44.2	23.3	2.3	2.4	4.3
Sumbawanga District	243,838	23.3	48.0	19.6	2.1	2.6	4.4
Sumbawanga Municipal	168,440	34.1	40.0	16.1	2.1	2.6	5.1
Nkasi District	210,058	28.3	52.3	10.4	2.8	2.1	4.2

Figure 5.2 presents comparison of marital status of persons aged 15 years and above in Rukwa Region for the 2012 and 2022 Censuses. The results show a decrease in the proportions of persons in the categories of never married and married. On the other hand, an increasing proportion is revealed for the living together, divorced, separated and widowed categories.

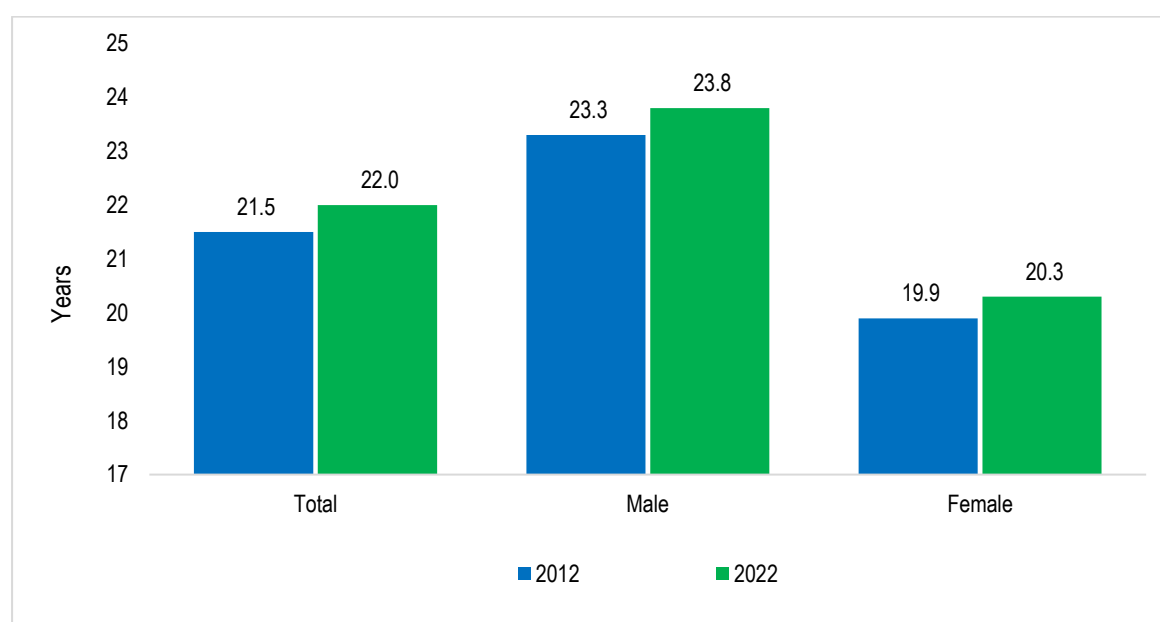
Figure 5.2: Percentage Distribution of Population Aged 15 Years and Above by Marital Status; Rukwa Region, 2012 and 2022 PHCs.

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 have early childbearing and high fertility.

The results show that, MAFM in 2022 is 22.0 years; females are getting married at a younger age (20.3 years) than males (23.8 years). Results further show that there is a slight increase in the MAFM for females from 19.9 years in 2012 to 20.3 years in 2022. During the same period, the MAFM for males increased from 23.3 years in 2012 to 23.8 years in 2022 (Figure 5.3).

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



The MAFM is higher in urban areas compared with rural areas for both males and females and for both censuses (Figure 5.4).

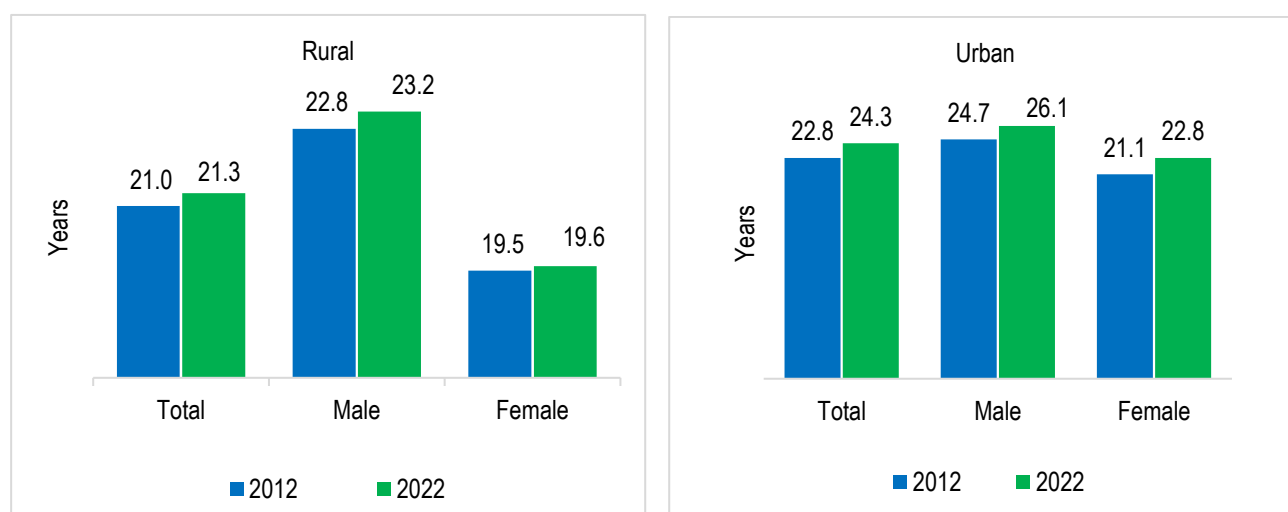
Figure 5.4: Mean Age at First Marriage by Residence and Sex; Rukwa Region, 2012 and 2022 PHC

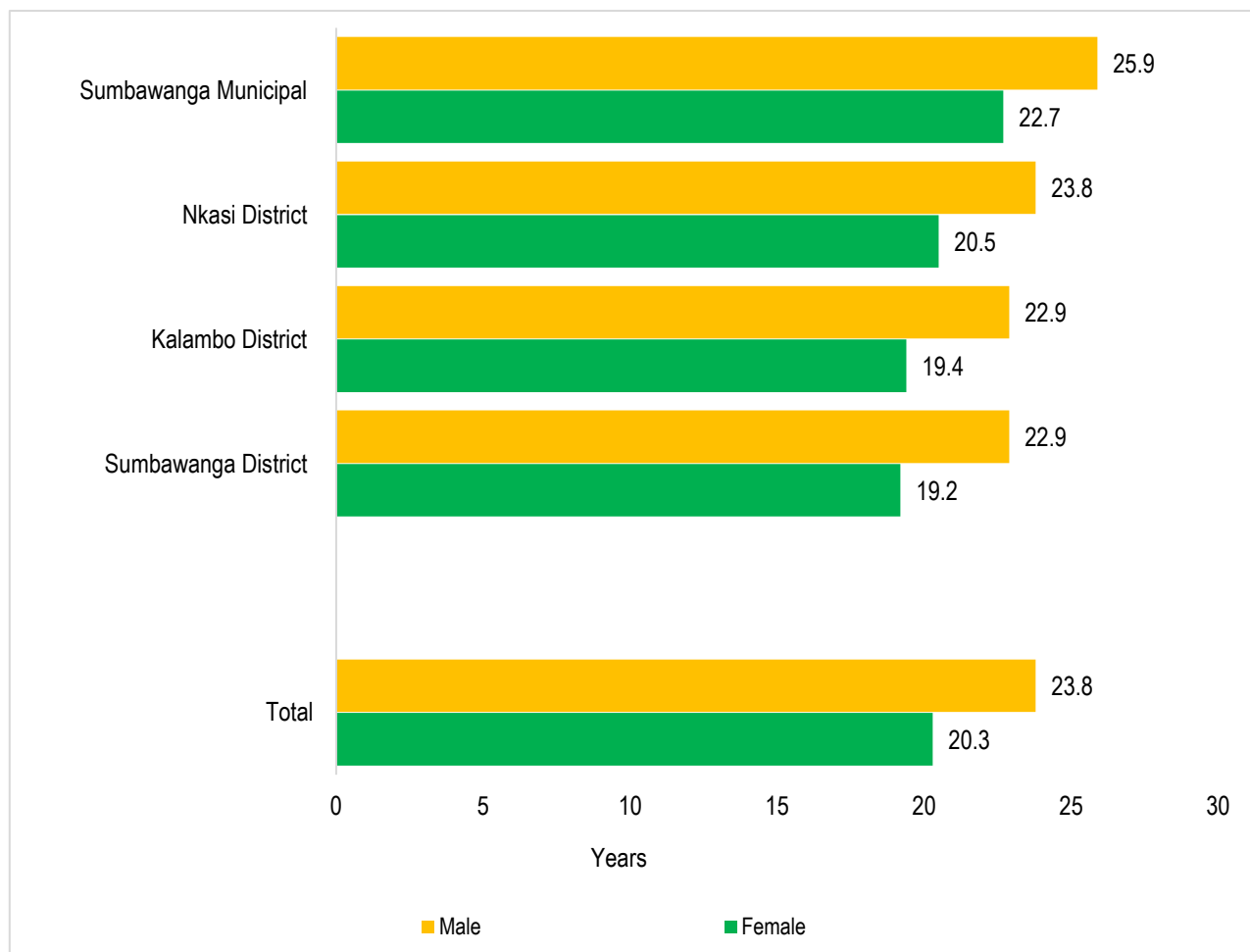
Table 5.9 shows that in Rukwa Region, the MAFM for females slightly increased from 19.9 years in 2012 to 20.3 years in 2022 while for males it increased from 23.3 years in 2012 to 23.8 years in 2022. In general, there is noticeable difference for MAFM in urban areas compared with rural areas for males and females in both censuses.

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

Place of Residence	2012			2022		
	Both Sexes	Male	Female	Both Sexes	Male	Female
Total	21.5	23.3	19.9	22.0	23.8	20.3
Rural	21.0	22.8	19.5	21.3	23.2	19.6
Urban	22.8	24.7	21.1	24.3	26.1	22.8
Council						
Kalambo District	20.6	22.1	19.2	21.0	22.9	19.4
Sumbawanga District	20.8	22.8	19.1	20.9	22.9	19.2
Sumbawanga Municipal	22.9	24.6	21.3	24.2	25.9	22.7
Nkasi District	21.7	23.5	20.1	22.0	23.8	20.5

Figure 5.5 shows Council variations with Sumbawanga Municipal having the highest MAFM for both males (25.9 years) and females (22.7 years), followed by Nkasi District (23.8 years for males and 20.8 years for females) and Kalambo District (22.9 and 19.4 years for males and females respectively). The council with the lowest MAFM is Sumbawanga District (22.9 years for females and 19.2 years for males).

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



Chapter 6

National Identification Documents and Citizenship

Key Points

- More than 80 percent (83.3%) of the population in Rukwa Region have neither birth certificate nor birth notification.
- Nearly 29 percent of children (28.5%) under-five years have birth certificate.
- Twenty percent (20.2%) of persons aged 18 years and above have national identification number and 8.5 percent have national identification cards.
- More than four percent (4.3%) of persons in Rukwa 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 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 the like. If issued in a small, standard smart card size, it is usually called an identity card or citizen card. Alternatively, it is issued in other formats such as Tanzania travel permit or passport. For a national identification document to be valid it should be issued by an authorized government/state institution.

6.2.1 Birth Certificate

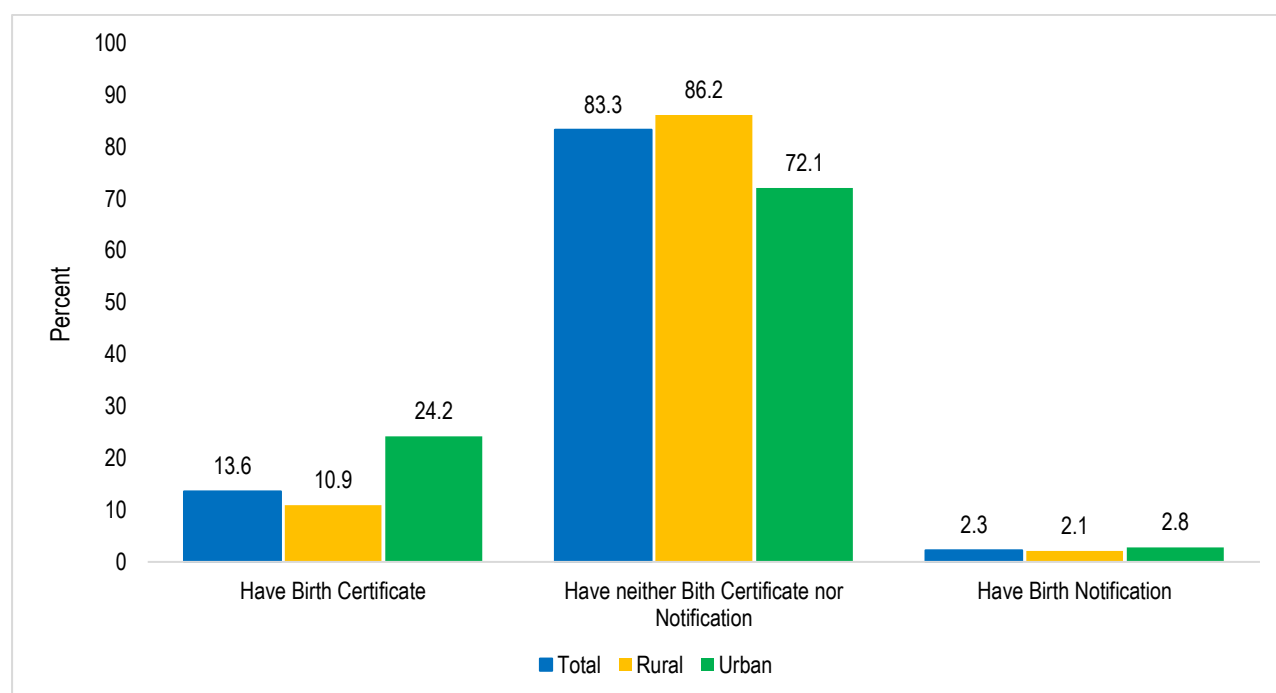
A birth certificate is a vital record that is used to document the birth of a child. The term "birth certificate" can refer to either the original document certifying the circumstances of the birth or to a certified copy or a representation of the ensuing registration of that birth.

In the 2022 PHC, data on birth certificates were collected from all respondents regardless of their age. Results show that, in Rukwa Region 13.6 percent of persons have birth certificates while majority (83.3%) of the population have neither birth certificates nor birth notifications. There is a declining percentage of population with birth certificates from younger to older age groups. It is highest for age group 0 - 4 years (28.5%) followed by age group 5 - 9 years (14.3%) (Tables 6.1).

The percentage of persons with birth certificates is larger in urban (24.2%) than in rural areas (10.9%). The result also shows that the percentage of males with birth certificate is slightly higher (14.3%) than that of females (12.9%). Further results show, 26.0 percent of males and 22.5 percent of females living in urban areas have birth certificates compared with 11.4 of males and 10.4 percent females living in rural areas (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 is an initial document in the process of registering a child's birth. It provides the first legal recognition of the child and is generally required for the child to obtain a birth certificate and other legal documents and rights. The results show that, in Rukwa Region, 2.3 percent of the population have birth notifications; 2.1 percent in rural areas and 2.8 percent in urban areas (Tables 6.1, 6.2, 6.3 and Figure 6.1).

Figure 6.1: Percentage Distribution of Population by Birth Certificate Status and Place of Residence; Rukwa Region, 2022 PHC**Table 6.1: Percentage Distribution of Population by Birth Certificate Status, Sex and Age Groups; Rukwa 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
Total	13.6	14.3	12.9	2.3	2.3	2.2	83.3	82.6	84.0	0.8	0.8	0.8
0 – 4	28.5	28.8	28.3	4.4	4.5	4.4	66.3	66.0	66.5	0.8	0.8	0.8
5 – 9	14.3	14.3	14.2	3.0	3.0	3.0	81.7	81.7	81.7	1.0	1.0	1.0
10 – 14	8.9	8.6	9.1	2.4	2.4	2.5	87.6	87.9	87.3	1.1	1.1	1.1
15 – 19	10.0	9.9	10.1	1.9	2.0	1.8	87.1	87.1	87.1	1.0	1.1	0.9
20 – 24	11.6	13.0	10.4	1.4	1.4	1.4	86.3	84.8	87.5	0.7	0.8	0.6
25 – 29	11.9	13.7	10.4	1.1	1.0	1.1	86.4	84.6	87.9	0.7	0.7	0.6
30 – 34	12.1	14.7	9.7	1.0	0.9	1.0	86.4	83.8	88.8	0.5	0.6	0.5
35 – 39	9.2	11.6	7.0	0.9	0.9	0.9	89.4	86.9	91.6	0.5	0.6	0.4
40 – 44	6.8	8.0	5.6	0.9	0.9	0.8	91.8	90.5	93.0	0.6	0.6	0.5
45 – 49	6.1	7.2	5.2	0.7	0.8	0.6	92.6	91.4	93.6	0.6	0.6	0.5
50 – 54	5.7	6.8	4.6	0.8	0.9	0.7	93.1	91.9	94.2	0.4	0.4	0.4
55 – 59	5.5	6.8	4.2	0.6	0.8	0.4	93.5	92.0	94.8	0.5	0.4	0.6
60 – 64	4.8	6.1	3.5	0.7	0.8	0.6	94.1	92.8	95.4	0.4	0.3	0.5
65 – 69	3.9	5.4	2.6	0.6	0.7	0.5	95.0	93.5	96.3	0.5	0.4	0.6
70 – 74	3.2	4.0	2.5	0.6	0.7	0.5	95.8	95.0	96.5	0.4	0.3	0.5
75 – 79	2.8	3.7	1.9	0.6	0.7	0.5	96.2	95.3	96.9	0.5	0.3	0.6
80+	2.0	2.7	1.5	0.4	0.4	0.4	97.1	96.7	97.3	0.6	0.3	0.8

Table 6. 2: Percentage Distribution of Population by Birth Certificate Status, Sex and Age Groups; Rukwa 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
Total	10.9	11.4	10.4	2.1	2.2	2.1	86.2	85.6	86.7	0.8	0.8	0.8
0 – 4	25.7	25.8	25.6	4.3	4.3	4.3	69.3	69.2	69.3	0.8	0.7	0.8
5 – 9	11.9	11.9	11.9	2.8	2.8	2.8	84.3	84.3	84.3	1.0	0.9	1.0
10 – 14	6.6	6.4	6.7	2.3	2.2	2.3	90.1	90.4	89.9	1.1	1.1	1.0
15 – 19	6.8	6.7	6.8	1.7	1.8	1.6	90.6	90.5	90.7	0.9	1.0	0.8
20 – 24	7.8	8.8	6.9	1.2	1.3	1.2	90.3	89.2	91.2	0.7	0.7	0.6
25 – 29	8.0	9.3	6.9	1.0	0.9	1.1	90.4	89.2	91.5	0.6	0.6	0.6
30 – 34	8.3	10.4	6.4	0.9	0.8	0.9	90.4	88.3	92.3	0.4	0.5	0.4
35 – 39	6.2	8.1	4.5	0.8	0.8	0.7	92.6	90.6	94.4	0.5	0.5	0.4
40 – 44	4.4	5.3	3.6	0.7	0.7	0.7	94.4	93.5	95.2	0.5	0.5	0.5
45 – 49	4.2	5.1	3.4	0.6	0.7	0.5	94.7	93.8	95.6	0.5	0.5	0.5
50 – 54	3.9	4.6	3.1	0.7	0.7	0.6	95.1	94.3	95.9	0.4	0.3	0.4
55 – 59	3.6	4.6	2.7	0.5	0.6	0.3	95.5	94.5	96.4	0.4	0.3	0.5
60 – 64	3.3	4.4	2.3	0.5	0.7	0.4	95.8	94.8	96.9	0.3	0.2	0.5
65 – 69	3.1	4.5	1.8	0.4	0.5	0.3	96.1	94.8	97.3	0.4	0.2	0.6
70 – 74	2.6	3.1	2.1	0.5	0.5	0.4	96.5	96.0	97.0	0.4	0.3	0.5
75 – 79	2.3	3.2	1.6	0.4	0.5	0.4	96.8	96.0	97.4	0.5	0.3	0.6
80+	1.8	2.3	1.5	0.3	0.3	0.3	97.4	97.2	97.5	0.5	0.2	0.7

Table 6.3: Percentage Distribution of Population by Birth Certificate Status, Sex and Age Groups; Rukwa 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
Total	24.2	26.0	22.5	2.8	2.8	2.7	72.1	70.1	73.8	1.0	1.1	0.9
0 – 4	41.3	41.9	40.6	5.2	5.2	5.1	52.7	52.0	53.4	0.8	0.8	0.8
5 – 9	25.0	25.3	24.6	3.8	3.6	3.9	70.1	70.0	70.3	1.1	1.1	1.2
10 – 14	18.8	18.7	18.9	3.2	3.3	3.2	76.6	76.6	76.6	1.4	1.4	1.3
15 – 19	21.9	22.4	21.6	2.6	2.8	2.4	74.2	73.6	74.6	1.3	1.3	1.3
20 – 24	25.3	28.8	22.7	1.9	1.8	2.0	71.9	68.2	74.6	0.9	1.2	0.7
25 – 29	24.4	28.2	21.3	1.3	1.3	1.4	73.3	69.3	76.5	1.0	1.2	0.8
30 – 34	24.4	29.4	20.1	1.4	1.3	1.5	73.5	68.4	77.8	0.7	0.9	0.6
35 – 39	19.3	23.4	15.7	1.3	1.2	1.4	78.7	74.4	82.4	0.7	1.0	0.4
40 – 44	15.0	17.8	12.5	1.4	1.4	1.4	82.8	79.8	85.5	0.8	1.1	0.6
45 – 49	13.2	14.9	11.6	1.3	1.5	1.0	84.7	82.6	86.6	0.9	1.0	0.7
50 – 54	12.7	15.3	10.4	1.3	1.5	1.1	85.4	82.5	88.0	0.6	0.6	0.6
55 – 59	12.6	15.7	9.8	1.2	1.5	0.9	85.5	82.1	88.6	0.7	0.7	0.7
60 – 64	10.8	13.9	8.2	1.4	1.2	1.5	87.2	84.3	89.7	0.6	0.7	0.5
65 – 69	7.3	9.6	5.5	1.3	1.3	1.3	90.6	88.1	92.6	0.8	1.0	0.6
70 – 74	5.9	8.3	4.1	1.1	1.5	0.8	92.4	89.9	94.3	0.6	0.3	0.8
75 – 79	4.5	6.4	3.1	1.3	1.6	1.2	93.7	92.0	95.0	0.4	0.0	0.7
80+	2.8	4.6	1.7	0.8	0.7	0.8	95.5	94.0	96.4	1.0	0.7	1.1

Table 6.4 indicates that the council with the highest percentage of population with birth certificates is Sumbawanga Municipal (23.5%) and the lowest percentage is in Sumbawanga District (10.8%). The Council with a percentage above the regional average (13.6%) is Sumbawanga Municipal (23.5%).

Table 6. 4: Percentage Distribution of Population by Status of Birth Certificate, Sex and Council; Rukwa 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	Female	Both Sexes	Male	Female
Total	13.6	14.3	12.9	2.3	2.3	2.2	83.3	82.6	84.0	0.8	0.8	0.8
Kalambo District	12.2	12.9	11.6	2.8	2.8	2.7	84.3	83.6	85.0	0.7	0.0	0.7
Sumbawanga District	10.8	11.4	10.3	1.8	1.8	1.7	86.7	86.1	87.2	0.7	0.1	0.7
Sumbawanga Municipal	23.5	24.9	22.2	2.5	2.5	2.5	73.1	71.6	74.5	0.9	0.1	0.9
Nkasi District	10.9	11.4	10.3	2.3	2.3	2.3	86.0	85.4	86.5	0.9	0.1	0.9

6.2.3 Other National Identification Documents

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. In addition, 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 57,137 persons (8.53%) aged 18 years and above in Rukwa Region have national identification cards while 135,297 persons (20.21%) have only national identification numbers. Moreover, results show a higher percentage (14.02%) of persons in urban areas with national identification cards than in rural areas (6.98%). Additionally, results reveal that 407,899 persons (60.90%) aged 18 years and above have voters' identification cards. Further results indicate that, 3.74 percent of persons aged 15 years and above who engaged in Informal Activities have a small entrepreneur identification card.

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

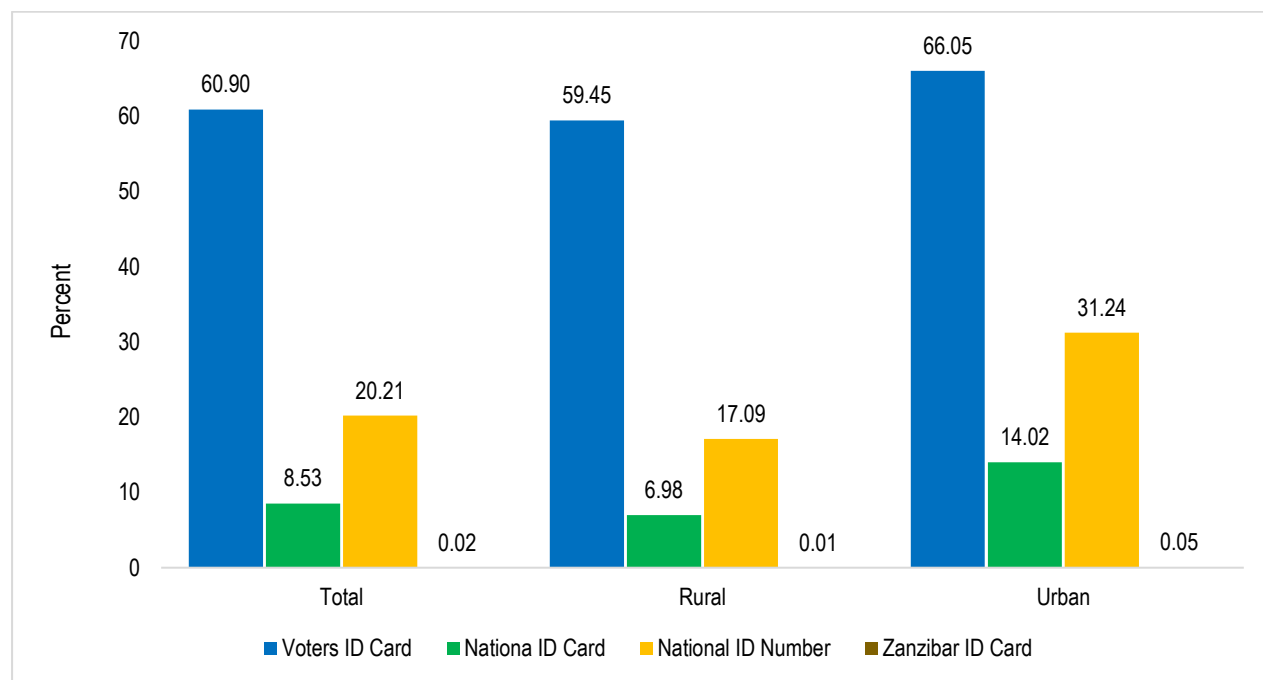


Table 6.5: Percentage of Population Possessing National Identification Documents by Selected Age Groups, Type, Place of Residence and Council; Rukwa Region, 2022 PHC

Place of Residence	Type of National Documents						
	Persons aged 18 and above					Persons of All Ages	Persons 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
Total	8.53	20.21	0.02	1.91	60.90	0.30	3.74
Rural	6.98	17.09	0.01	0.96	59.45	0.22	3.53
Urban	14.02	31.24	0.05	5.29	66.05	0.62	4.22
Council							
Kalambo District	9.00	16.98	0.01	1.02	63.55	0.25	3.15
Sumbawanga District	6.19	13.43	0.01	0.95	54.76	0.24	4.92
Sumbawanga Municipal	11.04	35.06	0.05	5.19	68.35	0.55	3.41
Nkasi District	8.90	18.68	0.01	1.09	60.08	0.23	3.46

6.2.3.2 Health Insurance

Table 6.6 indicates that 4.3 percent of persons in private households in Rukwa Region have health insurance from the National Health Insurance Fund (NHIF) or Community Health Insurance Fund (CHIF). Sumbawanga Municipal Council has the highest percentage (7.4%) of persons who possess NHIF/CHIF insurance, followed by Nkasi District Council while (4.7%), Sumbawanga District Council has the lowest percentage (2.5%). In addition, 0.9 percent of persons have health insurance from other health insurers. Residential analysis indicates that a higher percentage (8.5%) in urban areas have NHIF/CHIF health insurance compared with those in rural areas 3.3%). On the other hand, 0.9 percent of persons in rural areas have other health insurance schemes compared with 1.1 percent of persons in urban areas.

Table 6.6: Percentage Distribution of Population in Private Households by Type of Health Insurance Identification Card, Sex, Place of Residence and Council; Rukwa 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
Total	1,527,355	4.3	4.4	4.3	0.9	0.9	0.9	12.3	12.0	12.5
Rural	1,219,302	3.3	3.4	3.3	0.9	0.9	0.9	11.3	11.1	11.4

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
Urban	308,053	8.5	8.6	8.4	1.1	1.1	1.1	16.5	15.9	16.9
Council										
Kalambo District	316,204	3.8	3.8	3.7	0.9	0.9	0.9	12.2	11.8	12.5
Sumbawanga District	489,766	2.5	2.7	2.4	0.8	0.8	0.8	9.0	9.3	8.7
Sumbawanga Municipal	299,074	7.4	7.4	7.3	0.8	0.9	0.8	17.8	17.5	18.1
Nkasi District	422,311	4.7	4.7	4.8	1.1	1.1	1.1	12.3	11.5	13.0

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 1,537,530 persons (99.8%) out of 1,540,519 persons enumerated in Rukwa Region are Tanzanians. The majority of non-Tanzanians are from other East African Countries (1,637 persons) followed by other African Countries (1,010 persons) (Table 6.7).

Table 6. 7: Distribution of Population by Place of Residence, Sex and Country of Citizenship; Rukwa Region, 2022 PHC

Country of Citizenship	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total	1,540,519	743,119	797,400	1,226,368	594,770	631,598	314,151	148,349	165,802
Tanzania	1,537,530	741,656	795,874	1,223,878	593,571	630,307	313,652	148,085	165,567
Other East African Countries	1,637	899	738	1,337	726	611	300	173	127
Other African Countries	1,010	384	626	899	333	566	111	51	60
Countries Outside Africa	318	169	149	230	129	101	88	40	48
Dual Citizenship	24	11	13	24	11	13	0.0	0.0	0.0

Chapter 7

Survival of Parents

Key Points

- Nine out of ten (90.0%) children under 18 years have both parents alive in Rukwa Region.
- Almost one out of ten (10.0%) children under 18 years are orphans with a higher proportion in urban areas (10.5%) than in rural areas (9.9%).
- About seven percent (7.2%) of children under 18 years are orphans with one parent dead.
- Three percent (2.8%) of children under 18 years are orphans with both parents dead.
- Sumbawanga District Council has the highest percentage (10.6%) of orphans than other councils in Rukwa Region.

7.1 Introduction

This chapter presents information on survival of parents at levels. The information helps to determine the extent of orphanhood in a society for making evidence-based decisions. In Tanzania, an orphan is defined as a child under 18 years of age who has lost one or both parents⁴. This definition is consistent with the United Nations definition.

The death of parents has a significant negative impact on the wellbeing 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 behind⁵. Orphans with no family or community support face risky life situations including: having no family social network; lacking food and healthcare and sometimes having to assume the role of heads of household and taking care of their younger siblings. Furthermore, information on survival of parents was collected from all children under 18 years with respect to a child's biological parents and not adopting or fostering parents.

⁴ The law of Child Act Cap 56, 2019

⁵ Hani K. Atrash (2011)

7.2 Survival of Parents

Results indicate that 90.0 percent of all children under 18 years in Rukwa Region have both parents alive. The percentage of children with both parents alive decreases with increasing age from 94.9 percent for children under one year to 81.4 percent for children aged 17 years. The results further show that the percentage of children with their fathers dead and mothers alive is higher (5.5%) than those with their fathers alive and mothers dead (1.7%). In addition, the patterns of survival of parents are similar 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; Rukwa Region, 2022 PHC

Age	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
Total	859,653	773,808	90.0	14,972	1.7	46,931	5.5	23,942	2.8
0	57,089	54,156	94.9	444	1,124.0	1,365	2.4	1,124	2.0
1	53,600	50,981	95.1	415	867.0	1,337	2.5	867	1.6
2	54,089	50,931	94.2	472	1,118.0	1,568	2.9	1,118	2.1
3	56,495	52,781	93.4	599	1,258.0	1,857	3.3	1,258	2.2
4	56,910	52,684	92.6	711	1,299.0	2,216	3.9	1,299	2.3
5	54,273	49,778	91.7	737	1,358.0	2,400	4.4	1,358	2.5
6	53,283	48,724	91.4	766	1,314.0	2,479	4.7	1,314	2.5
7	52,254	47,401	90.7	837	1,279.0	2,737	5.2	1,279	2.4
8	51,482	46,470	90.3	866	1,321.0	2,825	5.5	1,321	2.6
9	47,574	42,717	89.8	876	1,270.0	2,711	5.7	1,270	2.7
10	49,042	43,527	88.8	1,025	1,354.0	3,136	6.4	1,354	2.8
11	37,840	33,493	88.5	795	1,050.0	2,502	6.6	1,050	2.8
12	53,888	46,914	87.1	1,278	1,735.0	3,961	7.4	1,735	3.2
13	40,552	35,027	86.4	1,021	1,419.0	3,085	7.6	1,419	3.5
14	43,345	36,750	84.8	1,212	1,632.0	3,751	8.7	1,632	3.8
15	34,025	28,772	84.6	919	1,388.0	2,946	8.7	1,388	4.1
16	33,228	27,724	83.4	981	1,517.0	3,006	9.0	1,517	4.6
17	30,684	24,978	81.4	1,018	1,639.0	3,049	9.9	1,639	5.3

Table 7. 2: Number and Percentage Distribution of Male Children Under 18 Years by Survival of Parents and Age; Rukwa 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
Total	424,502	381,600	89.9	7,478	1.8	23,342	5.5	12,082	2.8
0	27,914	26,509	95.0	211	0.8	649	2.3	545	2.0
1	26,228	24,961	95.2	207	0.8	642	2.4	418	1.6
2	26,843	25,301	94.3	223	0.8	756	2.8	563	2.1
3	27,470	25,661	93.4	312	1.1	900	3.3	597	2.2
4	27,915	25,816	92.5	349	1.3	1,097	3.9	653	2.3
5	26,974	24,701	91.6	369	1.4	1,216	4.5	688	2.6
6	26,065	23,786	91.3	385	1.5	1,242	4.8	652	2.5
7	26,011	23,574	90.6	444	1.7	1,348	5.2	645	2.5
8	24,931	22,409	89.9	462	1.9	1,410	5.7	650	2.6
9	22,510	20,186	89.7	422	1.9	1,301	5.8	601	2.7
10	24,945	22,046	88.4	514	2.1	1,647	6.6	738	3.0
11	18,698	16,582	88.7	398	2.1	1,204	6.4	514	2.7
12	27,004	23,402	86.7	642	2.4	1,998	7.4	962	3.6
13	20,222	17,447	86.3	499	2.5	1,529	7.6	747	3.7
14	21,679	18,322	84.5	598	2.8	1,895	8.7	864	4.0
15	17,182	14,497	84.4	450	2.6	1,497	8.7	738	4.3
16	16,402	13,696	83.5	474	2.9	1,497	9.1	735	4.5
17	15,509	12,704	81.9	519	3.3	1,514	9.8	772	5.0

Table 7. 3: Number and Percentage of Female Children Under 18 Years by Survival of Parents and Age; Rukwa 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
Total	435,151	392,208	90.1	7,494	1.7	23,589	5.4	11,860	2.7
0	29,175	27,647	94.8	233	0.8	716	2.5	579	2.0
1	27,372	26,020	95.1	208	0.8	695	2.5	449	1.6
2	27,246	25,630	94.1	249	0.9	812	3.0	555	2.0
3	29,025	27,120	93.4	287	1.0	957	3.3	661	2.3
4	28,995	26,868	92.7	362	1.2	1,119	3.9	646	2.2
5	27,299	25,077	91.9	368	1.3	1,184	4.3	670	2.5
6	27,218	24,938	91.6	381	1.4	1,237	4.5	662	2.4
7	26,243	23,827	90.8	393	1.5	1,389	5.3	634	2.4
8	26,551	24,061	90.6	404	1.5	1,415	5.3	671	2.5
9	25,064	22,531	89.9	454	1.8	1,410	5.6	669	2.7
10	24,097	21,481	89.1	511	2.1	1,489	6.2	616	2.6
11	19,142	16,911	88.3	397	2.1	1,298	6.8	536	2.8
12	26,884	23,512	87.5	636	2.4	1,963	7.3	773	2.9
13	20,330	17,580	86.5	522	2.6	1,556	7.7	672	3.3
14	21,666	18,428	85.1	614	2.8	1,856	8.6	768	3.5
15	16,843	14,275	84.8	469	2.8	1,449	8.6	650	3.9
16	16,826	14,028	83.4	507	3.0	1,509	9.0	782	4.6
17	15,175	12,274	80.9	499	3.3	499	3.3	867	5.7

7.2.1 Survival of Parents by Council

Results from Table 7.4 show that in Rukwa Region, the percentage of children under 18 years with both parents alive ranges from 89.4 percent to 91.2 percent. Kalambo District Council has the highest percentage (91.2%) of children with both parents alive while Sumbawanga District Council has the lowest percentage (89.4%).

The results further show that Sumbawanga District Council has the highest percentage (5.8%) of children with Fathers Dead and Mothers Alive compared with other councils while Sumbawanga Municipal Council has the highest percentage (1.9%) of children with Fathers Alive and Mothers Dead. Nkasi District Council has the highest percentage (3.2%) of children with both parents dead.

Table 7. 4: Percentage Distribution of Children Under 18 Years by Survival of Parents, Place of Residence and Council; Rukwa 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
Total	859,653	773,808	90.0	14,972	1.7	46,931	5.5	23,942	2.8
Rural	698,292	629,400	90.1	11,933	1.7	37,381	5.4	19,578	2.8
Urban	161,361	144,408	89.5	3,039	1.9	9,550	5.9	4,364	2.7
Council									
Kalambo District	179,863	164,057	91.2	2,664	1.5	9,133	5.1	4,009	2.2
Sumbawanga District	281,212	251,488	89.4	4,804	1.7	16,303	5.8	8,617	3.1
Sumbawanga Municipal	155,929	140,771	90.3	3,028	1.9	8,535	5.5	3,595	2.3
Nkasi District	242,649	217,492	89.6	4,476	1.8	12,960	5.3	7,721	3.2

7.3 Orphanhood

The results in Figure 7.1 reveal that Rukwa Region 10.0 percent of children under 18 years are orphans. The results further show that about seven percent (7.2%) of the children has lost either their fathers or mothers while about three percent (2.8%) have lost both of their parents. The percentage of children who are orphans is slightly higher in urban areas (10.5%) than in rural areas (9.9%). The percentage of orphans varies across councils, ranging from 8.8 percent in Kalambo District to 10.6 percent in Sumbawanga District.

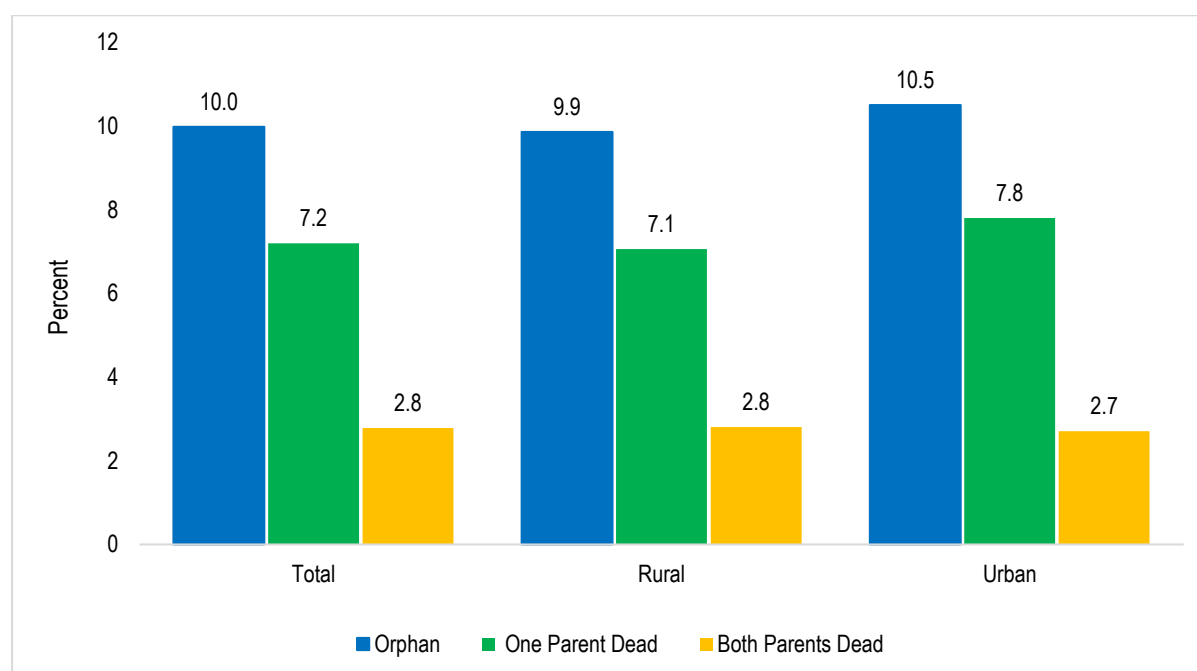
Figure 7. 1: Orphanhood Status by Place of Residence; Rukwa Region, 2022 PHC

Table 7.5: Percentage Distribution of Population Under 18 Years by Orphanhood Status, Place of Residence and Council; Rukwa 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
Total	859,653	773,808	90.0	61,903	7.2	23,942	2.8	85,845	10.0
Rural	698,292	629,400	90.1	49,314	7.1	19,578	2.8	68,892	9.9
Urban	161,361	144,408	89.5	12,589	7.8	4,364	2.7	16,953	10.5
Council									
Kalambo District	179,863	164,057	91.2	11,797	6.6	4,009	2.2	15,806	8.8
Sumbawanga District	281,212	251,488	89.4	21,107	7.5	8,617	3.1	29,724	10.6
Sumbawanga Municipal	155,929	140,771	90.3	11,563	7.4	3,595	2.3	15,158	9.7
Nkasi District	242,649	217,492	89.6	17,436	7.2	7,721	3.2	25,157	10.4

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



Chapter 8

Education, Literacy and Numeracy

Key Points

- About three-quarter (74.1%) of persons aged 15 years and above in Rukwa Region are literate; 70.4 percent in rural and 86.7 percent in urban areas.
- Numeracy rate among persons aged five years and above is 70.2 percent. It is higher among males (71.3%) than females (69.3%)
- Seventy-two percent (72.1%) of the primary school population age (7-13) are attending school and 21.5 percent had never been to school.
- Net Enrolment Rate (NER) for primary schools is 72.1 percent. It is higher (85.5%) in urban than in rural areas (69.1%).
- Majority (80.1%) of population aged four years and above attained primary education and 14.7 percent completed ordinary level secondary school education.
- About four (2.6%) of the population attained university or 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 Rukwa 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 the ability to read and write with an understanding a short simple sentence in any language. It excludes the ability to only write or sign one's own name or write memorised 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 those who were really literate.

Results show that out of 1,262,336 persons aged five years and above 846,957 persons (67.1%) in Rukwa Region are literate. The literacy rate is higher among males (69.9%) than females (64.5%). The literacy rates are generally higher among young population compared with older population. The highest literacy rate of 79.1 percent is observed for age group 15-19 years. Literacy rates below 60 percent are observed among children in the age group of 5-9 years and persons aged 70 years and above. These results indicate a positive impact of the 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 (82.2%) than in rural areas (63.1%). Males are more literate than females in both rural and urban areas as presented in Tables 8.2, 8.3 and Figure 8.1.

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

Age Group	Population			Literate			Literacy Rates		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total	1,262,336	606,749	655,587	846,957	423,966	422,991	67.1	69.9	64.5
5 - 9	258,866	126,491	132,375	101,679	46,755	54,924	39.3	37.0	41.5
10-14	224,667	112,548	112,119	168,252	80,322	87,930	74.9	71.4	78.4
15 - 19	160,052	77,147	82,905	126,643	61,031	65,612	79.1	79.1	79.1
20 - 24	132,105	59,278	72,827	100,381	47,165	53,216	76.0	79.6	73.1
25 - 29	104,884	48,615	56,269	82,621	40,853	41,768	78.8	84.0	74.2
30 - 34	86,068	40,734	45,334	66,124	34,612	31,512	76.8	85.0	69.5
35 - 39	71,943	34,119	37,824	51,269	27,533	23,736	71.3	80.7	62.8
40 - 44	57,977	28,213	29,764	42,815	23,121	19,694	73.8	82.0	66.2
45 - 49	45,587	22,417	23,170	33,411	18,463	14,948	73.3	82.4	64.5
50 - 54	33,818	16,596	17,222	24,713	13,621	11,092	73.1	82.1	64.4
55 - 59	22,629	10,972	11,657	16,615	9,359	7,256	73.4	85.3	62.2
60 - 64	22,225	10,823	11,402	13,882	8,779	5,103	62.5	81.1	44.8
65 - 69	13,578	6,375	7,203	7,304	4,837	2,467	53.8	75.9	34.2
70 - 74	11,472	5,381	6,091	5,300	3,596	1,704	46.2	66.8	28.0
75 - 79	6,313	2,902	3,411	2,730	1,822	908	43.2	62.8	26.6
80+	10,152	4,138	6,014	3,218	2,097	1,121	31.7	50.7	18.6

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

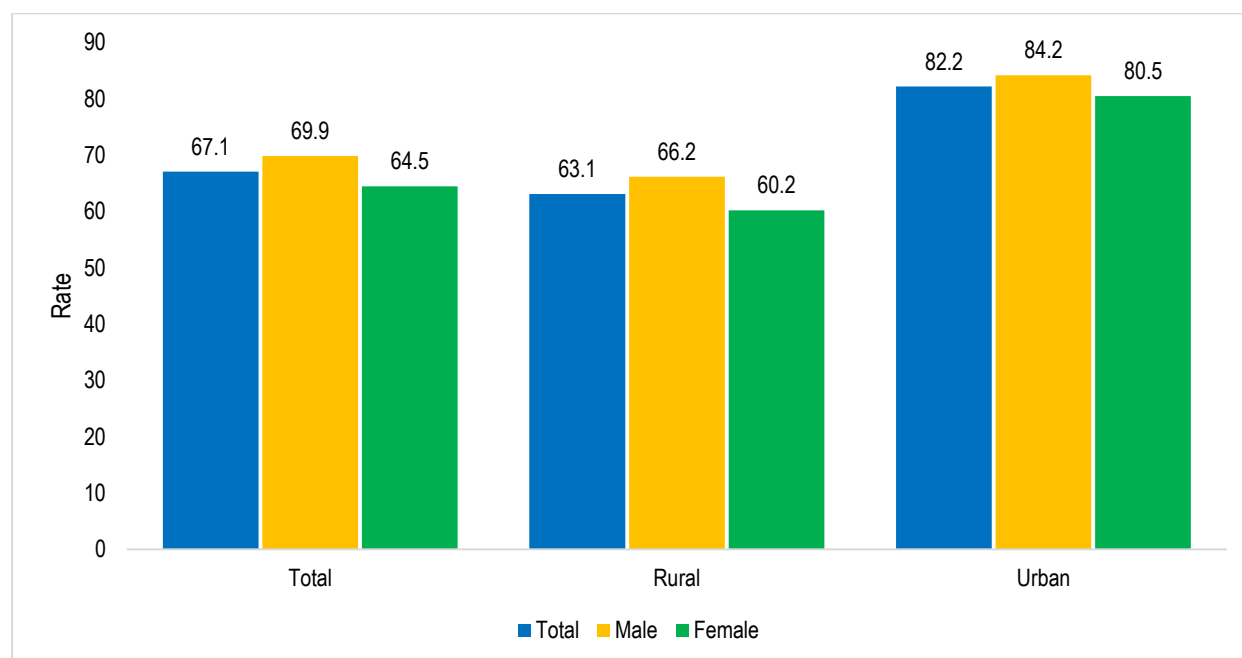
Age Group	Population			Literate			Literacy Rates		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total	998,949	483,472	515,477	630,391	320,186	310,205	63.1	66.2	60.2
5 – 9	211,940	103,685	108,255	73,572	33,596	39,976	34.7	32.4	36.9
10-14	182,289	92,353	89,936	130,809	62,808	68,001	71.8	68.0	75.6
15 – 19	125,423	61,341	64,082	95,209	46,620	48,589	75.9	76.0	75.8
20 – 24	102,021	45,936	56,085	73,459	34,949	38,510	72.0	76.1	68.7
25 – 29	79,738	37,101	42,637	59,890	30,170	29,720	75.1	81.3	69.7
30 – 34	65,473	31,179	34,294	47,850	25,706	22,144	73.1	82.4	64.6
35 – 39	55,394	26,224	29,170	37,269	20,400	16,869	67.3	77.8	57.8
40 – 44	44,911	21,928	22,983	31,592	17,415	14,177	70.3	79.4	61.7
45 – 49	35,686	17,572	18,114	24,937	14,040	10,897	69.9	79.9	60.2
50 – 54	26,827	13,226	13,601	18,724	10,551	8,173	69.8	79.8	60.1
55 – 59	17,966	8,757	9,209	12,669	7,301	5,368	70.5	83.4	58.3
60 – 64	17,736	8,760	8,976	10,488	6,930	3,558	59.1	79.1	39.6
65 – 69	10,877	5,153	5,724	5,453	3,787	1,666	50.1	73.5	29.1
70 – 74	9,296	4,426	4,870	4,000	2,830	1,170	43.0	63.9	24.0
75 – 79	5,099	2,381	2,718	2,062	1,440	622	40.4	60.5	22.9
80+	8,273	3,450	4,823	2,408	1,643	765	29.1	47.6	15.9

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

Age Group	Population			Literate			Literacy Rates		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total	263,387	123,277	140,110	216,566	103,780	112,786	82.2	84.2	80.5
5 – 9	46,926	22,806	24,120	28,107	13,159	14,948	59.9	57.7	62.0
10-14	42,378	20,195	22,183	37,443	17,514	19,929	88.4	86.7	89.8
15 – 19	34,629	15,806	18,823	31,434	14,411	17,023	90.8	91.2	90.4
20 – 24	30,084	13,342	16,742	26,922	12,216	14,706	89.5	91.6	87.8
25 – 29	25,146	11,514	13,632	22,731	10,683	12,048	90.4	92.8	88.4
30 – 34	20,595	9,555	11,040	18,274	8,906	9,368	88.7	93.2	84.9
35 – 39	16,549	7,895	8,654	14,000	7,133	6,867	84.6	90.3	79.4
40 – 44	13,066	6,285	6,781	11,223	5,706	5,517	85.9	90.8	81.4
45 – 49	9,901	4,845	5,056	8,474	4,423	4,051	85.6	91.3	80.1
50 – 54	6,991	3,370	3,621	5,989	3,070	2,919	85.7	91.1	80.6
55 – 59	4,663	2,215	2,448	3,946	2,058	1,888	84.6	92.9	77.1
60 – 64	4,489	2,063	2,426	3,394	1,849	1,545	75.6	89.6	63.7
65 – 69	2,701	1,222	1,479	1,851	1,050	801	68.5	85.9	54.2
70 – 74	2,176	955	1,221	1,300	766	534	59.7	80.2	43.7
75 – 79	1,214	521	693	668	382	286	55.0	73.3	41.3

Age Group	Population			Literate			Literacy Rates		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
80+	1,879	688	1,191	810	454	356	43.1	66.0	29.9

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



8.2.1 Literacy for Selected Age Groups

Results show that youth (using national and international definition) have literacy rates above 70 percent and the rate is the highest (80.3%) among the secondary school age group (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.

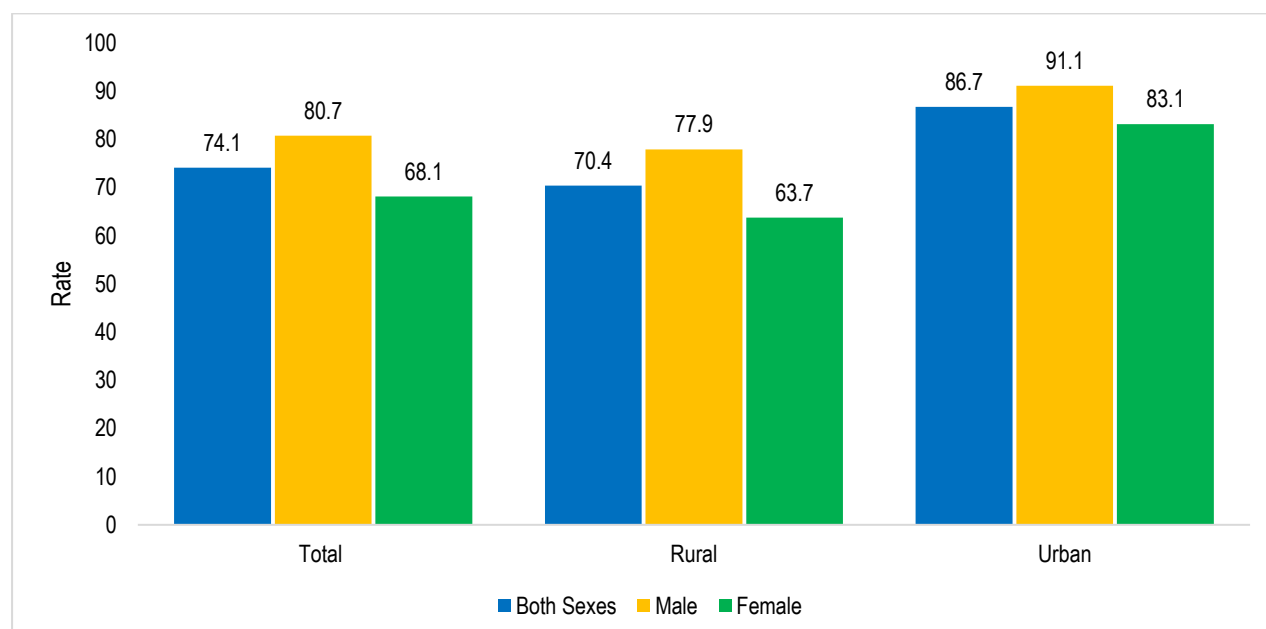
Literacy rate among population in primary school age in Rukwa Region is 63.6 percent and among secondary school age population is 80.3 percent. The literacy rate among primary and secondary population is higher among females than males in both rural and urban areas (Table 8.4).

Table 8.3: Literacy Rates by Place of Residence, Sex and Selected Age Groups; Rukwa Region, 2022 PHC

Selected Age Group	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Youth Population									
Teenagers (13–19 years)	79.0	77.8	80.1	75.9	74.7	77.1	90.6	90.5	90.7
Youth Population (15–24 years)	77.7	79.3	76.3	74.2	76.0	72.5	90.2	91.4	89.2
Youth Population (15–35 years)	77.5	81.3	74.2	73.9	78.2	70.0	89.7	91.9	87.9
Other Population Groups									
Working Age Population (15–64 years)	75.7	81.5	70.5	72.1	78.7	66.2	88.1	91.6	85.1
Elderly population (60+ years)	50.9	71.3	33.1	47.6	68.8	28.7	64.4	82.6	50.2
Population Aged 4 years and above	64.7	67.3	62.3	60.7	63.6	57.9	79.9	81.7	78.4
Population Aged 14+ years and above	74.4	80.5	68.9	70.8	77.6	64.6	86.9	91.0	83.5
Adult Population Aged 18+ years and above	73.1	81.0	66.2	69.4	78.1	61.6	86.1	91.1	81.8
School Age Population									
Primary School (7–13 years)	63.6	60.6	66.6	59.6	56.5	62.7	81.1	79.2	82.9
Secondary School (14–17 years)	80.3	78.2	82.5	77.4	75.2	79.8	91.2	90.6	91.7

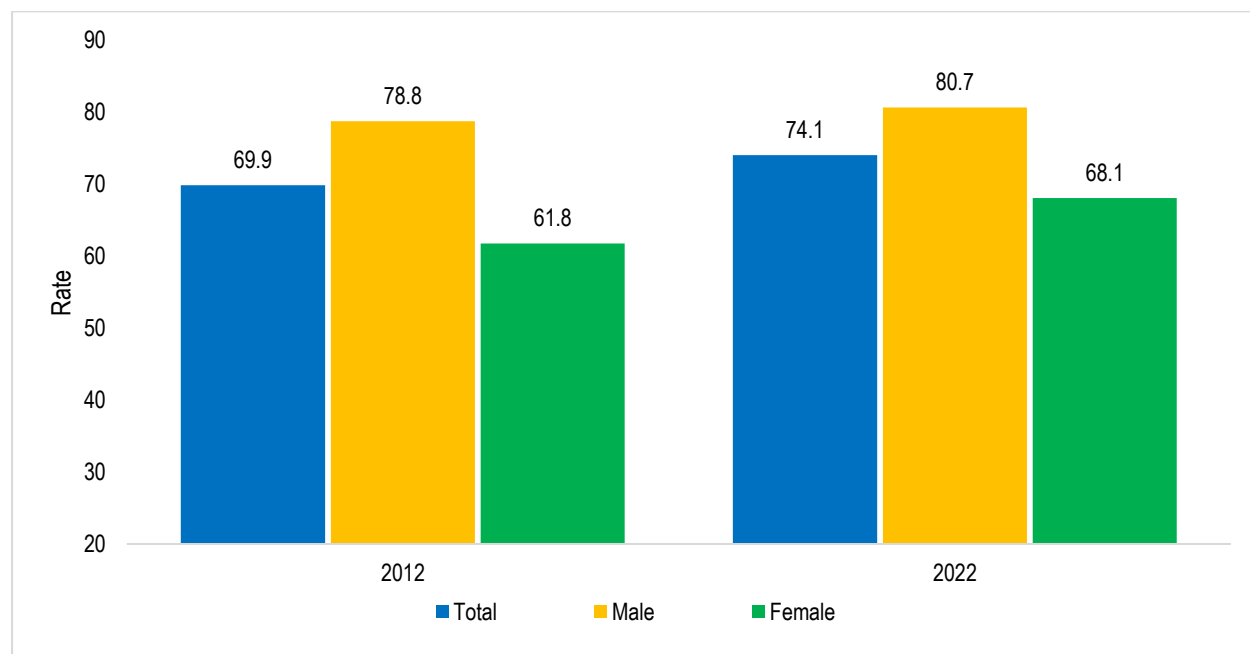
8.2.2 Adult Literacy

The results show that adult literacy rate for persons aged 15 years and above in Rukwa Region is 74.1 percent. The literacy rate is higher among males (80.7%) than females (68.1%). Furthermore, results reveal that in urban areas the adult literacy rate is higher (86.7%) than in rural areas (70.4%). Males are more likely to be literate than females in both rural and urban areas (Figure 8.2).

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

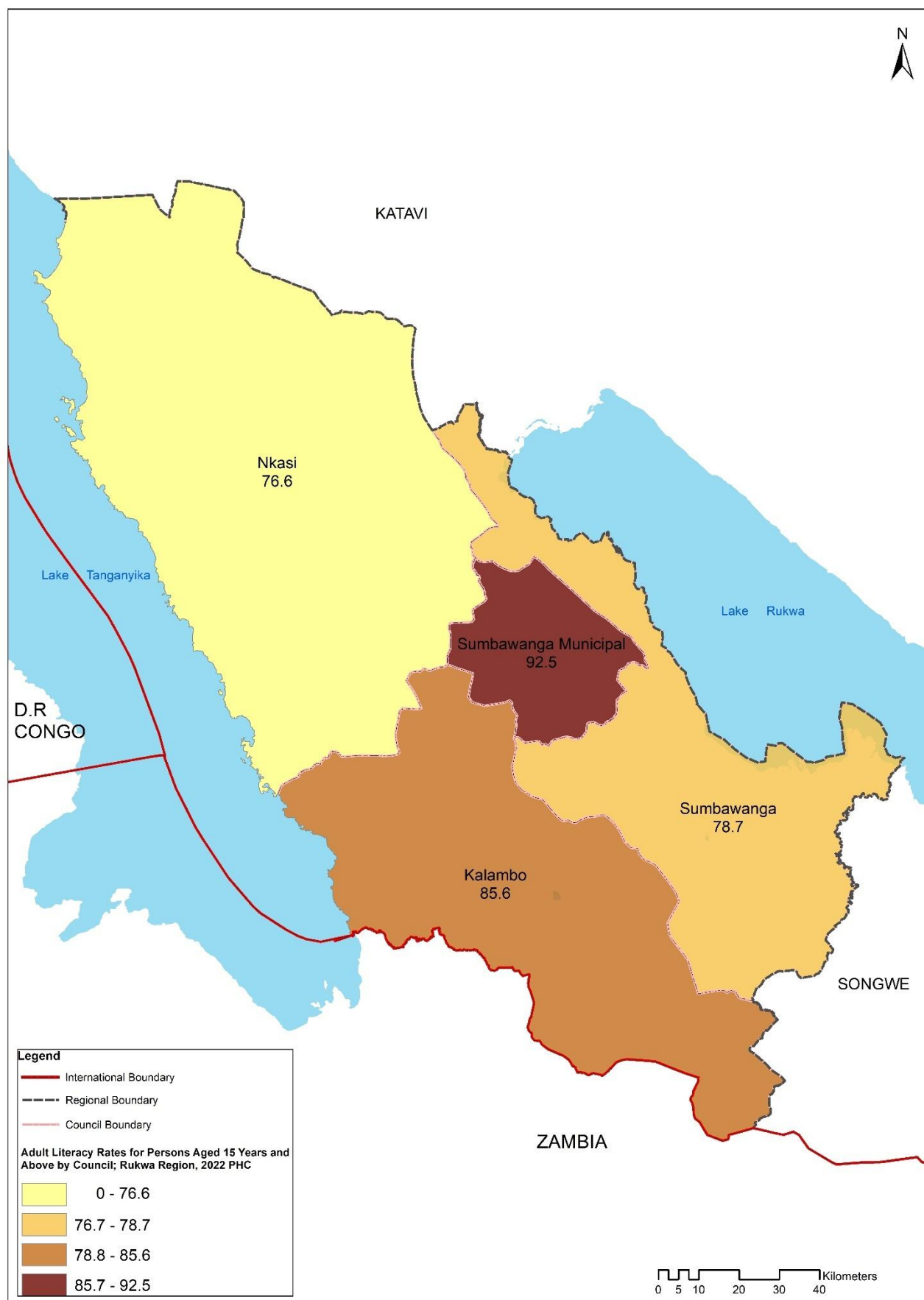
Literacy rates among adults increased from 69.9 percent in 2012 to 74.1 percent in 2022. The increase in adult literacy rate is more pronounced among females (6.3 percentage points difference) than males (1.9 percentage points difference) (Figure 8.3).

Figure 8.2: Adult Literacy Rates for Persons Aged 15 Years and Above by Sex; Rukwa Region, 2012 and 2022 PHCs



Adult literacy rates vary across councils, ranging from 76.6 percent in Nkasi District to 92.5 percent in Sumbawanga Municipal. Another Council with a relatively low adult literacy rate is Sumbawanga District (78.7%) (Map 8.1).

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



Results further reveal that, adult literacy rates increased from 69.9 percent in 2012 to 74.1 percent in 2022 with an overall difference of 4.2 percentage points. Across councils, the highest percentage points change is 17.8 percent observed in Sumbawanga District (Table 8.5).

Table 8.4: Literacy Rates for Persons Aged 15 Years and Above by Sex, Place of Residence and Council; Rukwa Region, 2012 and 2022 PHCs

Place of Residence	Literacy Rate						Percentage Points		
	2012 Census			2022 Census					
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total	69.9	78.8	61.8	74.1	80.7	68.1	4.2	1.9	6.3
Rural	66.1	75.9	57.2	70.4	77.9	63.7	8.0	4.8	10.9
Urban	80.7	87.3	74.9	86.7	91.1	83.1	6.0	3.8	8.2
Council									
Kalambo District	69.1	80.3	59.3	85.6	91.0	81.2	16.5	10.7	21.9
Sumbawanga District	60.9	72.5	50.4	78.7	86.0	72.3	17.8	13.5	21.9
Sumbawanga Municipal	84.7	89.5	80.4	92.5	95.4	90.0	7.8	5.9	9.6
Nkasi District	67.8	75.8	60.5	76.6	82.6	71.6	8.8	6.8	11.1

8.2.3 Adult Literacy in Different Languages

The results in Table 8.6 and Figure 8.4 show that in Rukwa Region, the literacy rate is 74.1. It is highest in Kiswahili only (59.4%) followed by literacy in both Kiswahili and English (13.8%) and is lower for other languages (0.2%). In addition, results show that from age 25 years to age 39 years, illiteracy rates increase with age then decrease slightly with age up to age group 55-59 years and thereafter increase with age up to age 80 years and above.

Table 8.5: Percentage Distribution of Adult Population Aged 15 Years and Above by Literacy Status and Five-Year Age Groups; Rukwa Region, 2022 PHC

Age Group	Literacy Status						Total
	Literacy In				Total Literat e	Illiterate	
	Kiswahili Only	English Only	Both English and Kiswahili	Other Language(s)			
Total	59.4	0.7	13.8	0.2	74.1	25.9	778,803
15 – 19	56.5	0.7	21.7	0.2	79.1	20.9	160,052
20 – 24	58.1	0.8	17.0	0.2	76.0	24.0	132,105
25 – 29	62.5	0.7	15.4	0.2	78.8	21.2	104,884
30 – 34	60.0	0.6	16.0	0.2	76.8	23.2	86,068
35 – 39	61.0	0.6	9.4	0.2	71.3	28.7	71,943
40 – 44	66.4	0.6	6.7	0.2	73.8	26.2	57,977
45 – 49	66.0	0.6	6.5	0.2	73.3	26.7	45,587
50 – 54	66.2	0.6	6.1	0.2	73.1	26.9	33,818
55 – 59	66.3	0.5	6.4	0.2	73.4	26.6	22,629
60 – 64	55.0	0.5	6.6	0.3	62.5	37.5	22,225
65 – 69	46.5	0.7	6.2	0.4	53.8	46.2	13,578
70 – 74	40.8	0.6	4.3	0.5	46.2	53.8	11,472
75 – 79	38.6	0.5	3.7	0.5	43.2	56.8	6,313
80+	28.5	0.6	2.0	0.7	31.7	68.3	10,152

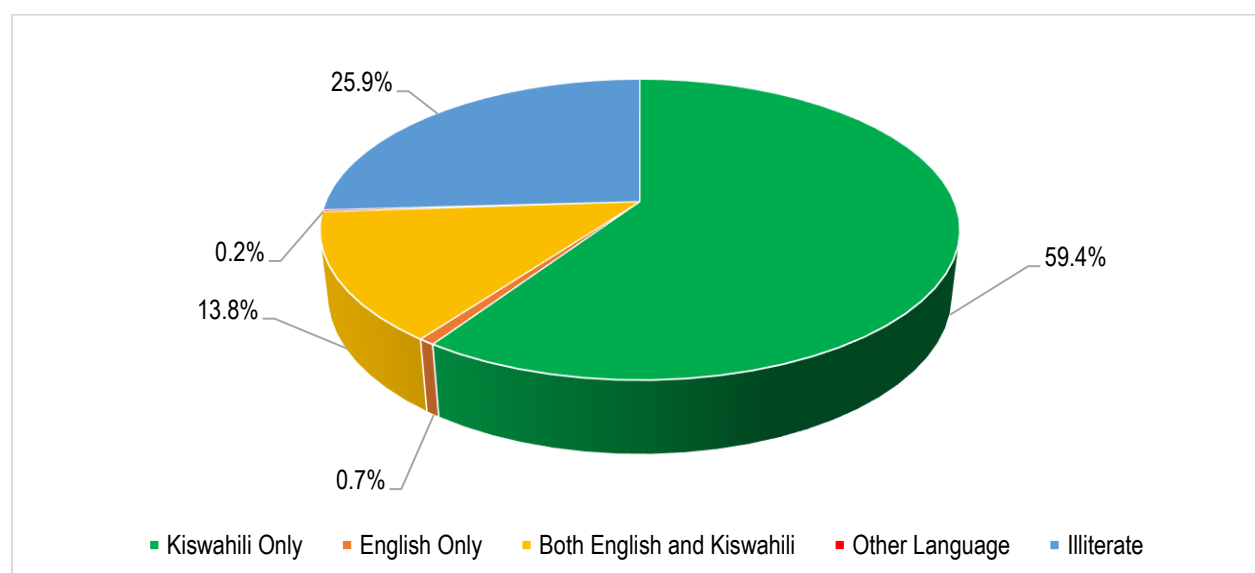
Figure 8.3: Percentage Distribution of Adult Population Aged 15 Years and Above by Literacy Rate; Rukwa Region, 2022 PHC

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 (59.9%) than in urban areas (57.9%). On the other hand, the percentage of those who are literate in both Kiswahili and English is higher in urban (28.0%)

than in rural areas (9.7%). In urban areas, females are more literate in Kiswahili only (58.6%) than males (57.0%).

Table 8.6: Literacy Rates for Adult Population Aged 15 Years and Above by Literacy Status, Place of Residence and Sex; Rukwa 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)			
Total	59.4	0.7	13.8	0.2	74.1	25.9	778,803
Male	63.0	0.7	16.9	0.2	80.7	19.3	367,710
Female	56.2	0.7	11.0	0.2	68.1	31.9	411,093
Rural	59.9	0.6	9.7	0.2	70.4	29.6	604,720
Male	64.7	0.6	12.3	0.2	77.9	22.1	287,434
Female	55.5	0.7	7.3	0.2	63.7	36.3	317,286
Urban	57.9	0.7	28.0	0.2	86.7	13.3	174,083
Male	57.0	0.7	33.2	0.2	91.1	8.9	80,276
Female	58.6	0.7	23.6	0.2	83.1	16.9	93,807

Figure 8.4: Literacy Rates for Adult Population Aged 15 Years and Above; Rukwa Rural, 2022 PHC

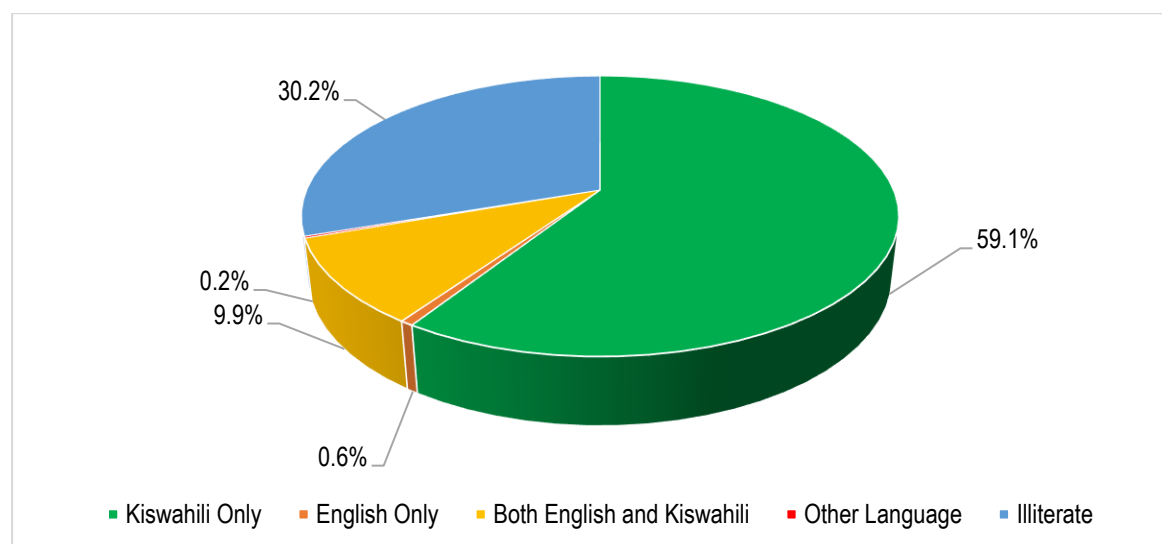


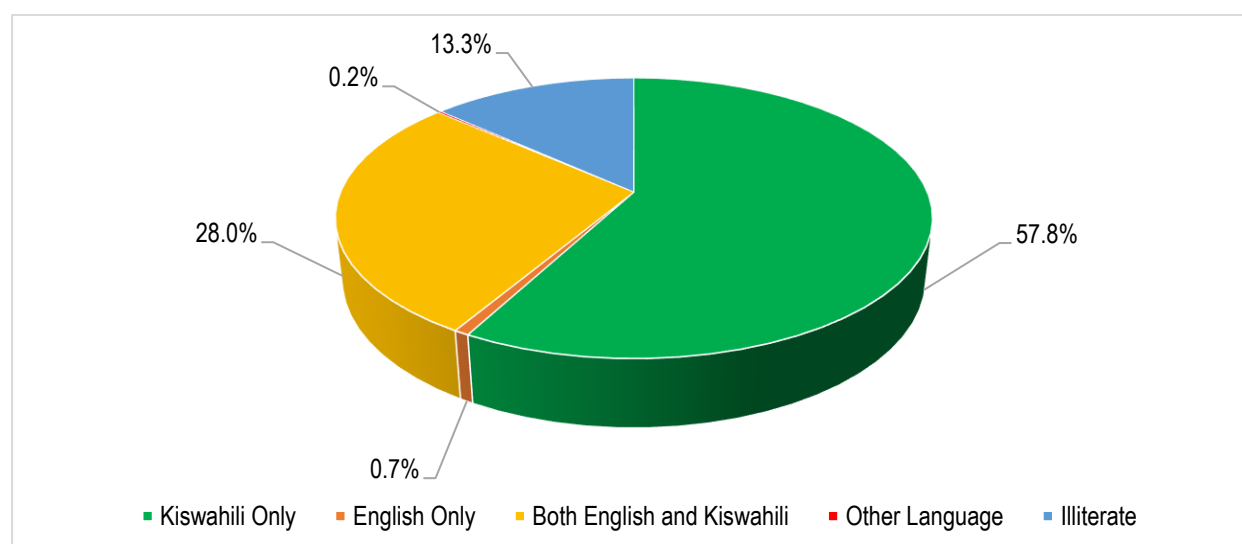
Figure 8.6: Literacy Rates for Adult Population Aged 15 Years and Above; Rukwa Urban, 2022 PHC

Table 8.8 shows that adult illiteracy levels differ across councils with Sumbawanga District having the highest illiteracy rate (32.7%), followed by Nkasi District (28.7%). The Council with the lowest illiterate rate is Sumbawanga Municipal (11.9%).

Table 8.7: Literacy Rates for Adult Population Aged 15 Years and Above by Place of Residence and Council; Rukwa 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)			
Total	59.4	0.7	13.8	0.2	74.1	25.9	778,803
Rural	59.9	0.6	9.7	0.2	70.4	29.6	604,720
Urban	57.9	0.7	28.0	0.2	86.7	13.3	174,083
Council							
Kalambo District	61.8	0.6	10.6	0.3	73.3	26.7	156,467
Sumbawanga District	57.1	0.7	9.3	0.2	67.3	32.7	243,838
Sumbawanga Municipal	60.7	0.5	26.6	0.2	88.1	11.9	168,440
Nkasi District	59.4	0.7	11.0	0.2	71.3	28.7	210,058

8.3 Numeracy

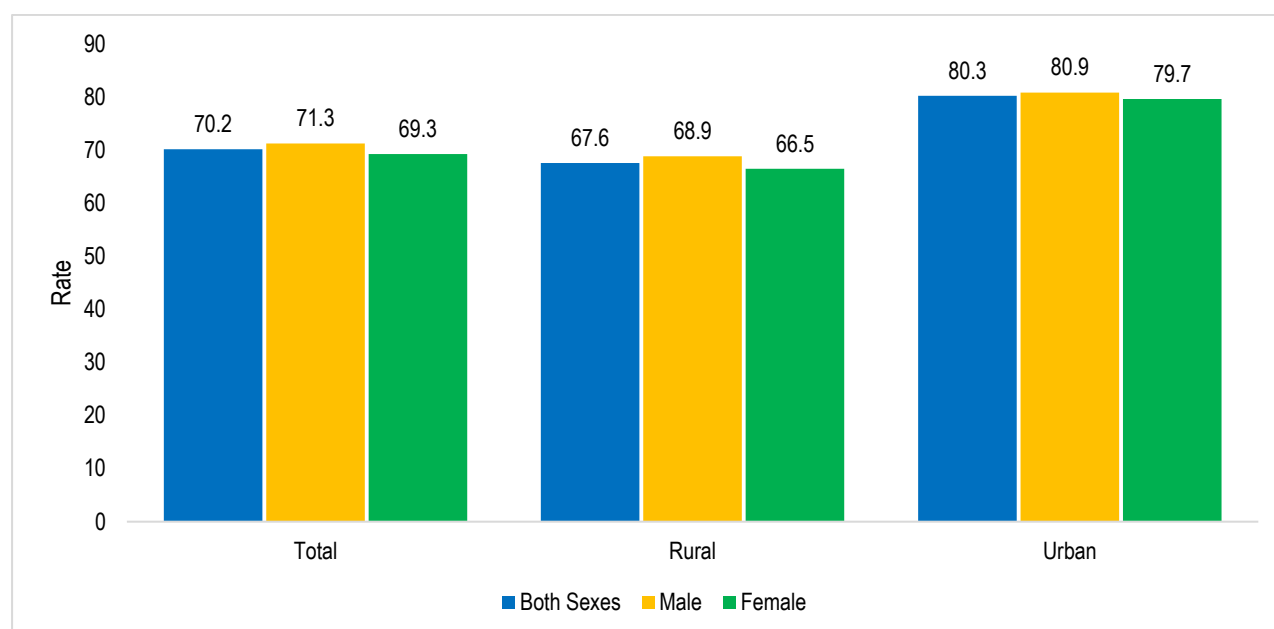
Numeracy is the ability to access, use, interpret and communicate simple mathematical information and ideas, to engage in and manage mathematical demands for a range of situations in adult life. Basic numeracy skills consist of comprehending fundamental arithmetic operations such as addition, subtraction, 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 1,249,894 persons aged 5 years and above in Rukwa Region, 877,870 persons (70.2%) are numerate. The numeracy rate is higher among males (71.3%) than females (69.3%). It is also noted that numeracy rates are higher (more than 80%) for youth aged 15 to 54 years and is relatively low (37.4%) for the young population (5 - 9 years) and older ages (80 years and above) which is 42.4 percent. The numeracy rate is higher (80.3%) in urban areas than in rural areas (67.6%). Furthermore, the rate is higher among males than females in both rural and urban areas (Table 8.9 and Figure 8.7).

Table 8.8: Numeracy Rate of Population Aged Five Years and Above by Place of Residency, Numeracy Rate, Sex and Five-Year Age Groups; Rukwa Region, 2022 PHC

Age Group	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total	70.2	71.3	69.3	67.6	68.9	66.5	80.3	80.9	79.7
5-9	37.4	35.4	39.3	34.4	32.4	36.2	51.1	49.1	53.0
10-14	74.6	71.7	77.4	72.3	69.3	75.4	84.5	83.0	85.8
15 – 19	81.3	80.9	81.7	79.3	78.9	79.6	88.9	88.7	89.1
20 – 24	81.1	82.7	79.8	79.0	80.9	77.4	88.5	89.2	88.0
25 – 29	83.6	86.4	81.2	81.6	85.0	78.6	90.1	91.3	89.2
30 – 34	82.9	87.4	79.0	80.8	85.8	76.2	89.9	92.6	87.8
35 – 39	80.5	85.3	76.3	78.5	83.7	73.9	87.3	90.6	84.4
40 – 44	81.6	85.8	77.7	79.8	84.4	75.4	88.0	90.7	85.5
45 – 49	80.9	85.9	76.0	79.2	84.7	73.9	87.1	90.6	83.8
50 – 54	79.9	85.3	74.8	78.2	84.3	72.4	86.7	89.7	84.1
55 – 59	79.9	87.1	73.3	78.3	86.0	71.1	86.3	91.6	81.6
60 – 64	72.6	84.2	61.6	70.5	82.9	58.5	80.8	89.6	73.4
65 – 69	66.8	80.8	54.5	64.7	79.4	51.5	75.2	86.5	66.0
70 – 74	60.0	74.2	47.4	58.3	72.5	45.4	67.0	82.0	55.3
75–79	55.2	71.2	41.6	54.1	70.2	39.9	59.9	75.8	48.0
80+	42.4	58.3	31.4	41.2	56.4	30.3	47.7	68.0	36.0

Figure 8.4: Numeracy Rates for Persons Aged Five Years and Above by Sex, and Place of Residence; Rukwa Region, 2022 PHC

The results reveal that numeracy rate for the youth aged 15–35 years is 81.9 percent. The rate is slightly higher (83.7%) for males than for females (80.4%) whereas among teenagers the rate is higher (81.6%) for females than for males (79.4%). Numeracy rate for the working age population (15-64 years) is higher (88.4%) in urban than in rural areas (79.3%). A similar pattern is observed for other selected age groups.

Results further reveal that numeracy rate for persons in the secondary school age (14-17 years) in Rukwa Region is 81.3 percent and is 62.6 percent for persons in the primary school age (7–13 years) population. The rate of numeracy for secondary school age is higher (83.0%) for females than for males (79.6%). A similar pattern is observed in rural and urban areas for both primary and secondary school age (Table 8.10).

Table 8.9: Numeracy Rates for Selected Age Groups by Place of Residence and Sex; Rukwa Region, 2022 PHC

Selected Age Group	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Youth Population									
Teenagers (13–19 years)	80.5	79.4	81.6	78.5	77.3	79.6	88.4	88.0	88.8
Youth Population (15–24 years)	81.2	81.6	80.8	79.1	79.8	78.6	88.7	88.9	88.6
Youth Population (15–35 years)	81.9	83.7	80.4	79.8	82.0	78.0	89.2	90.1	88.4
School Age Population									
Primary School (7–13 years)	62.6	60.0	65.0	59.8	57.2	62.3	74.9	73.2	76.6

Selected Age Group	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Secondary School (14-17 years)	81.3	79.6	83.0	79.2	77.5	81.0	89.1	88.3	89.8
Other Selected Groups									
Working Age Population (15-64 years)	81.3	84.4	78.6	79.3	82.7	76.2	88.4	90.3	86.9
Elderly population (60+ years)	62.5	76.7	50.2	60.7	75.2	47.8	70.2	83.5	59.8
Population Aged 14+ years and above	80.0	83.4	77.0	78.0	81.7	74.6	87.3	89.7	85.4
Adult Population Aged 18+ years and above	79.7	84.2	75.8	77.7	82.6	73.3	87.0	90.0	84.5

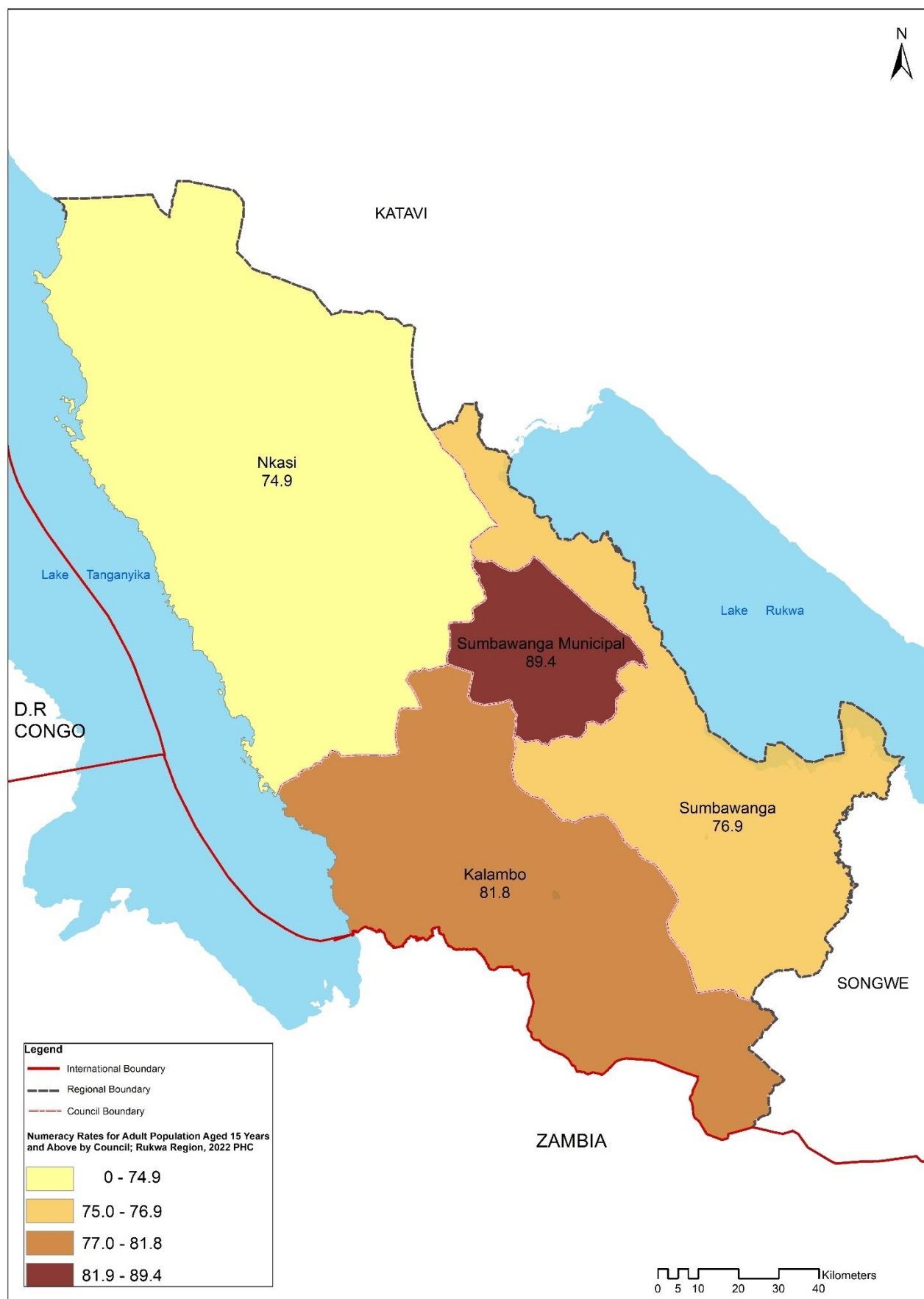
8.3.1 Adult Numeracy Rates

Numeracy rate for persons aged 15 years and above in Rukwa Region is 80.0 percent and is higher (87.3%) in urban areas than in rural areas (78.0%). The numeracy rate is higher for males than females across all councils. The rates vary across councils ranging from 74.9 percent in Nkasi District to 89.4 percent in Sumbawanga Municipal (Table 8.11 and Map 8.2).

Table 8.10: Number and Numeracy Rates for Adult Population Aged 15 Years and Above by Sex, Place of Residence and Council; Rukwa Region, 2022 PHC

Place of Residence	Population			Numerate			Numeracy Rates		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total	767,252	359,692	407,560	613,992	301,245	312,747	80.0	83.8	76.7
Rural	598,791	283,144	315,647	466,935	232,477	234,458	78.0	82.1	74.3
Urban	168,461	76,548	91,913	147,057	68,768	78,289	87.3	89.8	85.2
Council									
Kalambo District	155,949	73,473	82,476	127,574	63,149	64,425	81.8	85.9	78.1
Sumbawanga District	239,920	112,111	127,809	184,423	91,309	93,114	76.9	81.4	72.9
Sumbawanga Municipal	163,979	75,584	88,395	146,577	68,997	77,580	89.4	91.3	87.8
Nkasi District	207,404	98,524	108,880	155,418	77,790	77,628	74.9	79.0	71.3

Map 8. 1: Numeracy Rates for Adult Population Aged 15 Years and Above by Council; Rukwa Region, 2022 PHC



8.4 Education

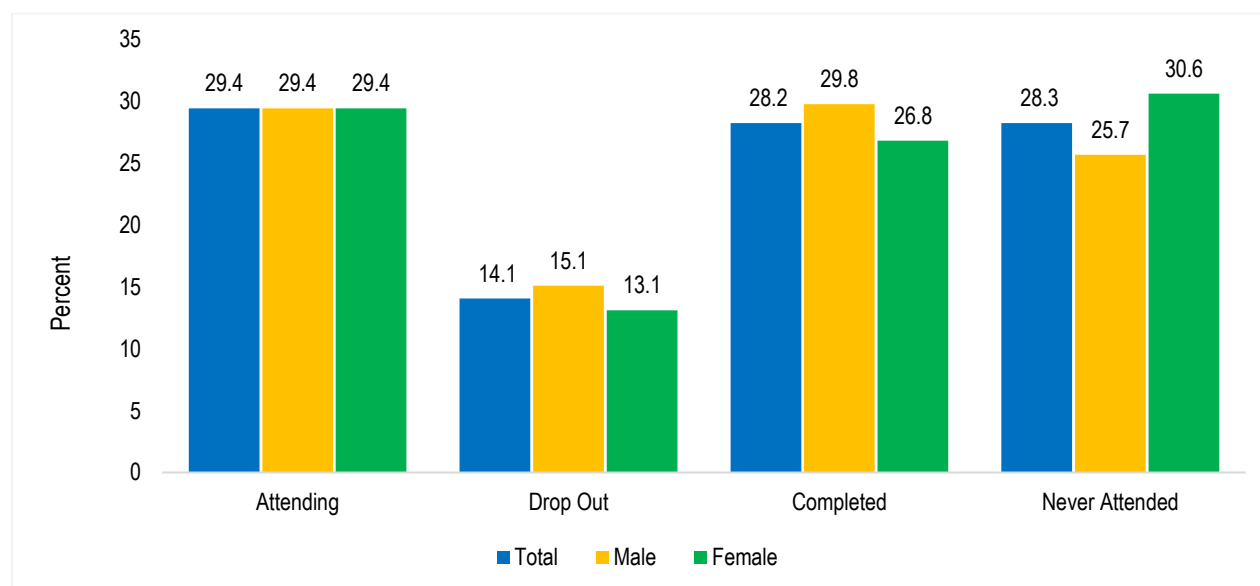
This section provides information on school attendance status, education attainment, net and gross school enrolment.

8.4.1 School Attendance Status

School attendance refers to attendance at any regular authorised or licensed educational institution or programme for organised 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 was not considered under school attendance.

Results show that, out of 1,319,246 persons aged four years and above, 28.2 percent have completed school at different levels of education system, 29.4 percent are currently attending school, 14.1 percent have dropped out and 28.3 percent have never been to school. Percentage of females who have never been to school is higher (30.6%) compared with that of males (25.7%). Furthermore, results show that percentage of dropouts is higher (15.1%) among males than females (13.1%) (Figure 8.8).

Figure 8.5: Percentage Distribution of Population Aged Four Years and Above by Sex and School Attendance Status; Rukwa Region, 2022 PHC



About 332,632 (72.1%) of the primary school age population (7-13 years) are currently attending school and 21.5 percent had never been to school. Among secondary school aged population (14-17 years), 53.3 percent are attending, 15.4 percent had never been to school, while 13.9 percent had completed school. The rate of dropouts is higher (17.3%)

among secondary school age population than among the primary school age population (5.9%) (Table 8.12).

Table 8.11: Percentage Distribution of Population Aged Four Years and Above by Sex, School Attendance Status and Age; Rukwa 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
Total	1,319,246	29.4	14.1	28.2	28.3	634,664	29.4	15.1	29.8	25.7	684,582	29.4	13.1	26.8	30.6
4	56,910	10.2	0.1	0.0	89.6	27,915	9.2	0.1	0.0	90.6	28,995	11.2	0.1	0.0	88.7
5	54,273	30.2	0.2	0.1	69.5	26,974	28.2	0.3	0.1	71.5	27,299	32.2	0.2	0.1	67.5
6	53,283	51.9	0.5	0.1	47.5	26,065	48.6	0.5	0.1	50.7	27,218	54.9	0.5	0.1	44.5
4-6	164,466	30.3	0.3	0.1	69.3	80,954	28.2	0.3	0.1	71.4	83,512	32.3	0.3	0.1	67.3
7	52,254	66.1	1.0	0.1	32.7	26,011	63.7	1.1	0.2	35.0	26,243	68.5	0.9	0.1	30.4
8	51,482	72.1	2.3	0.1	25.5	24,931	69.6	2.6	0.2	27.5	26,551	74.3	2.0	0.1	23.5
9	47,574	75.7	3.4	0.2	20.7	22,510	74.0	3.7	0.2	22.1	25,064	77.3	3.1	0.2	19.4
10	49,042	74.1	5.6	0.3	20.0	24,945	70.9	6.6	0.2	22.3	24,097	77.5	4.6	0.3	17.7
11	37,840	76.1	7.5	0.3	16.1	18,698	72.9	8.7	0.3	18.0	19,142	79.2	6.2	0.3	14.3
12	53,888	71.7	10.3	1.0	17.0	27,004	67.6	12.1	1.1	19.2	26,884	75.8	8.5	1.0	14.7
13	40,552	70.1	12.3	2.1	15.5	20,222	66.1	14.6	1.9	17.4	20,330	74.1	10.0	2.2	13.7
7-13	332,632	72.1	5.9	0.6	21.5	164,321	69.1	6.9	0.6	23.5	168,311	75.1	4.9	0.6	19.5
14	43,345	64.0	14.2	6.1	15.6	21,679	59.8	16.8	5.4	17.9	21,666	68.2	11.7	6.7	13.4
15	34,025	57.3	16.1	11.8	14.7	17,182	54.6	18.7	10.6	16.2	16,843	60.1	13.6	13.1	13.2
16	33,228	48.9	18.7	17.6	14.9	16,402	48.1	21.1	15.4	15.3	16,826	49.7	16.3	19.6	14.4
17	30,684	38.6	21.6	23.2	16.5	15,509	40.0	23.2	20.5	16.3	15,175	37.3	20.0	26.1	16.7
14 - 17	141,282	53.3	17.3	13.9	15.4	70,772	51.5	19.7	12.3	16.5	70,510	55.2	15.0	15.5	14.3
18	34,958	24.2	24.8	30.6	20.4	16,043	29.3	26.1	26.4	18.3	18,915	19.9	23.6	34.2	22.2
19	27,157	16.3	26.2	38.2	19.3	12,011	22.7	26.6	33.9	16.8	15,146	11.2	25.8	41.7	21.3
18 - 19	62,115	20.7	25.4	33.9	20.0	28,054	26.5	26.3	29.6	17.7	34,061	16.0	24.6	37.5	21.8
20	32,431	8.7	26.3	41.7	23.3	14,117	12.8	28.3	38.8	20.1	18,314	5.4	24.7	44.0	25.9
21	20,936	7.3	27.4	47.3	18.0	9,645	10.3	29.3	45.1	15.4	11,291	4.7	25.8	49.2	20.3
22	36,113	4.8	28.0	48.0	19.2	15,807	7.3	31.0	45.1	16.6	20,306	2.8	25.7	50.3	21.2
23	22,239	3.6	25.8	53.1	17.6	10,229	5.2	29.0	50.7	15.1	12,010	2.3	22.9	55.1	19.6
24	20,386	2.6	24.5	54.8	18.1	9,480	3.9	27.5	53.3	15.3	10,906	1.4	21.9	56.1	20.5
20 - 24	132,105	5.6	26.6	48.3	19.6	59,278	8.2	29.2	45.9	16.8	72,827	3.5	24.5	50.2	21.9
25+	486,646	0.6	18.6	54.7	26.1	231,285	0.8	19.8	62.1	17.3	255,361	0.5	17.5	47.9	34.1

In Rukwa Region the percentage of persons aged four years and above who have never been to school in rural areas is about two times (31.2%) that of urban (16.9%). Likewise, dropouts are more common in rural (14.6%) than in urban areas (11.9%). However, the proportion of those who completed school is higher (36.5%) in urban areas than in rural areas (26.1%) (Figure 8.9, Table 8.13 and 8.14).

Figure 8.6: Percentage Distribution of Population Aged Four Years and Above by School Attendance Status and Place of Residence; Rukwa Region, 2022 PHC

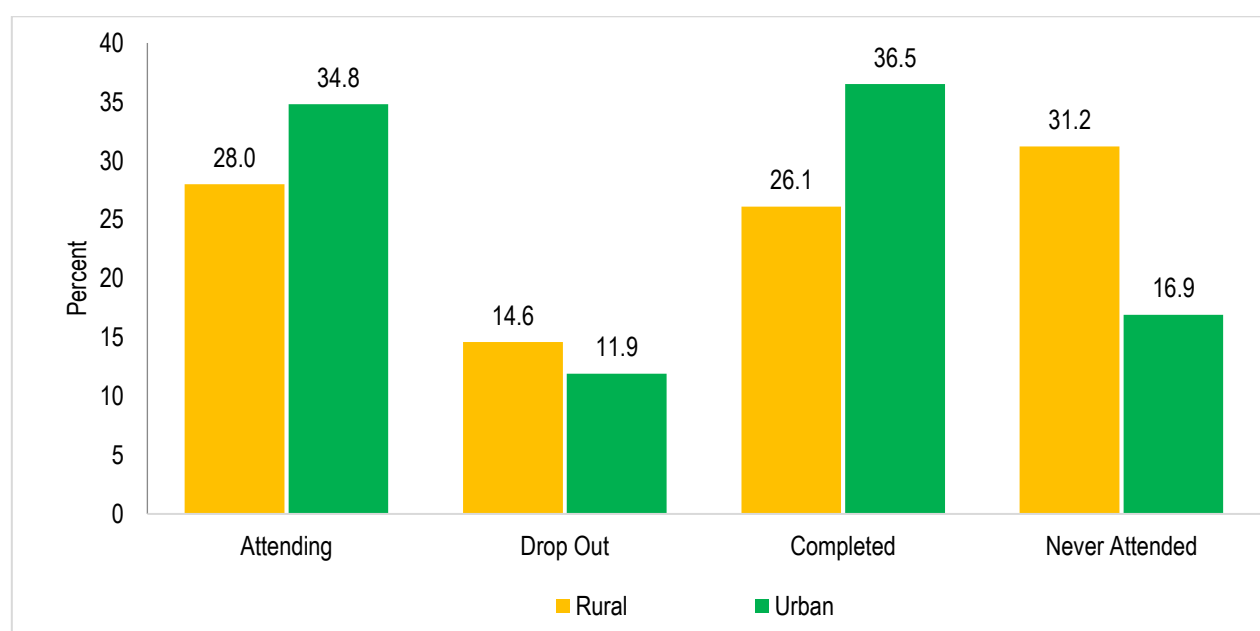


Table 8.12: Number and Percentage Distribution of Population Aged Four Years and Above by Sex, School Attendance Status and Age; Rukwa Rural, 2022 PHC

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
Total	1,045,382	28.0	14.6	26.1	31.2	506,218	27.8	15.9	27.8	28.5	539,164	28.2	13.5	24.5	33.8
4	46,433	7.6	0.1	0.0	92.3	22,746	6.6	0.1	0.0	93.3	23,687	8.5	0.1	0.0	91.4
5	44,491	25.7	0.2	0.0	74.0	22,087	23.7	0.3	0.1	76.0	22,404	27.8	0.2	0.0	71.9
6	43,809	47.8	0.6	0.1	51.5	21,476	44.3	0.6	0.1	55.0	22,333	51.2	0.6	0.1	48.2
5-6	134,733	26.7	0.3	0.1	73.0	66,309	24.5	0.3	0.1	75.1	68,424	28.7	0.3	0.1	70.9
7	42,841	62.5	1.1	0.1	36.2	21,420	59.9	1.3	0.1	38.7	21,421	65.1	1.0	0.1	33.8
8	42,137	69.0	2.6	0.1	28.3	20,426	66.1	3.0	0.2	30.7	21,711	71.7	2.3	0.1	26.0
9	38,662	72.6	3.9	0.2	23.3	18,276	70.7	4.3	0.2	24.8	20,386	74.3	3.5	0.2	22.0
10	40,386	71.2	6.2	0.3	22.3	20,708	67.7	7.3	0.2	24.8	19,678	74.9	5.1	0.3	19.8
11	30,529	73.3	8.3	0.3	18.1	15,118	69.7	9.7	0.4	20.2	15,411	76.8	6.9	0.3	16.0
12	43,943	68.9	11.3	1.0	18.8	22,290	64.3	13.4	1.0	21.3	21,653	73.7	9.2	0.9	16.2
13	32,613	67.2	13.5	2.0	17.3	16,464	62.5	16.1	2.0	19.4	16,149	71.9	10.9	2.0	15.2
7-13	271,111	69.1	6.5	0.5	23.9	134,702	65.7	7.6	0.6	26.1	136,409	72.4	5.3	0.5	21.7
14	34,818	61.0	15.3	6.1	17.5	17,773	56.2	18.1	5.7	20.0	17,045	66.1	12.4	6.6	15.0
15	27,001	53.7	17.4	12.2	16.7	13,980	50.6	20.2	11.1	18.2	13,021	57.1	14.4	13.3	15.1
16	26,038	44.4	20.3	18.5	16.8	13,162	43.6	23.0	16.2	17.3	12,876	45.3	17.5	20.8	16.4
17	23,605	33.9	23.2	23.7	19.2	12,111	35.3	24.7	21.0	19.0	11,494	32.4	21.5	26.6	19.4
14 - 17	111,462	49.6	18.6	14.2	17.5	57,026	47.5	21.1	12.7	18.7	54,436	51.9	16.0	15.8	16.3
18	27,755	20.6	26.1	30.2	23.2	12,788	25.5	27.6	26.2	20.7	14,967	16.3	24.9	33.5	25.3
19	21,024	13.4	27.5	36.8	22.3	9,300	19.3	28.5	32.4	19.8	11,724	8.7	26.7	40.3	24.3
18 - 19	48,779	17.5	26.7	33.0	22.8	22,088	22.9	27.9	28.8	20.3	26,691	13.0	25.7	36.5	24.9
20	25,380	6.4	27.7	39.1	26.7	10,963	10.2	30.4	36.0	23.5	14,417	3.5	25.7	41.5	29.2
21	16,037	5.3	29.8	43.9	21.0	7,376	8.2	32.4	41.4	18.1	8,661	2.9	27.6	46.1	23.4
22	28,096	3.1	29.0	46.1	21.8	12,358	5.1	32.6	43.4	18.9	15,738	1.6	26.2	48.2	24.0
23	16,972	2.4	27.2	50.1	20.3	7,893	3.5	31.0	48.2	17.4	9,079	1.5	23.9	51.8	22.9
24	15,536	1.6	25.8	51.8	20.7	7,346	2.5	29.3	50.9	17.2	8,190	0.8	22.7	52.6	23.8
20 - 24	102,021	3.9	28.0	45.6	22.5	45,936	6.1	31.2	43.3	19.3	56,085	2.1	25.4	47.4	25.0
25+	377,276	0.5	19.3	51.1	29.1	180,157	0.7	20.8	59.1	19.5	197,119	0.4	17.9	43.8	37.9

Table 8. 13: Number and Percentage Distribution of Population Aged Four Years and Above by Sex, School Attendance Status and Age; Rukwa 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
Total	273,864	34.8	11.9	36.5	16.9	128,446	35.8	12.0	37.5	14.7	145,418	33.9	11.8	35.5	18.8
4	10,477	22.1	0.1	0.0	77.8	5,169	20.8	0.1	0.1	79.0	5,308	23.4	0.0	0.0	76.6
5	9,782	50.6	0.2	0.1	49.1	4,887	48.6	0.2	0.0	51.1	4,895	52.6	0.1	0.1	47.1
6	9,474	70.6	0.2	0.2	29.1	4,589	68.9	0.2	0.1	30.8	4,885	72.2	0.1	0.2	27.5
5-6	29,733	46.9	0.1	0.1	52.8	14,645	45.2	0.2	0.1	54.6	15,088	48.7	0.1	0.1	51.1
7	9,413	82.4	0.5	0.3	16.7	4,591	81.1	0.6	0.3	18.1	4,822	83.8	0.5	0.3	15.5
8	9,345	85.9	1.0	0.2	12.9	4,505	85.7	1.0	0.2	13.1	4,840	86.2	1.0	0.2	12.7
9	8,912	89.0	1.5	0.3	9.1	4,234	88.0	1.6	0.4	10.1	4,678	90.0	1.4	0.3	8.3
10	8,656	87.6	2.8	0.3	9.3	4,237	86.2	3.2	0.3	10.3	4,419	88.8	2.4	0.3	8.4
11	7,311	87.7	4.0	0.3	8.0	3,580	86.3	4.6	0.3	8.8	3,731	89.1	3.4	0.3	7.2
12	9,945	83.9	5.9	1.2	9.0	4,714	83.3	6.3	1.1	9.3	5,231	84.5	5.6	1.2	8.7
13	7,939	82.3	7.2	2.3	8.3	3,758	81.7	8.1	1.6	8.6	4,181	82.8	6.3	2.9	8.0
7-13	61,521	85.5	3.2	0.7	10.6	29,619	84.6	3.5	0.6	11.3	31,902	86.4	2.9	0.8	10.0
14	8,527	76.3	10.0	5.9	7.8	3,906	76.4	11.1	4.2	8.3	4,621	76.2	9.1	7.3	7.4
15	7,024	71.2	11.3	10.5	7.0	3,202	72.2	12.1	8.5	7.2	3,822	70.3	10.6	12.2	6.8
16	7,190	65.2	12.8	14.2	7.8	3,240	66.6	13.6	12.3	7.5	3,950	64.1	12.2	15.8	8.0
17	7,079	54.5	16.5	21.6	7.4	3,398	56.7	17.9	18.6	6.8	3,681	52.4	15.2	24.4	8.0
14 - 17	29,820	67.2	12.5	12.7	7.5	13,746	68.2	13.6	10.7	7.5	16,074	66.4	11.6	14.5	7.5
18	7,203	38.2	19.5	32.4	9.8	3,255	43.9	20.2	27.2	8.7	3,948	33.5	19.0	36.7	10.8
19	6,133	26.2	21.6	43.2	9.1	2,711	34.5	20.1	38.8	6.6	3,422	19.6	22.7	46.6	11.0
18 - 19	13,336	32.7	20.5	37.4	9.5	5,966	39.6	20.2	32.5	7.7	7,370	27.0	20.7	41.3	10.9
20	7,051	16.7	20.9	51.2	11.1	3,154	21.9	21.1	48.8	8.3	3,897	12.6	20.9	53.1	13.5
21	4,899	13.7	19.6	58.3	8.4	2,269	17.1	19.2	56.9	6.7	2,630	10.8	19.9	59.4	9.9
22	8,017	10.4	24.5	54.9	10.2	3,449	14.9	25.2	51.3	8.6	4,568	7.0	24.0	57.5	11.4
23	5,267	7.6	21.2	62.5	8.7	2,336	10.9	22.6	59.1	7.4	2,931	5.0	20.1	65.2	9.6
24	4,850	5.6	20.3	64.4	9.7	2,134	8.6	21.2	61.7	8.5	2,716	3.2	19.6	66.6	10.7
20 - 24	30,084	11.2	21.6	57.4	9.8	13,342	15.2	22.1	54.7	8.0	16,742	7.9	21.2	59.6	11.2
25+	109,370	0.9	16.0	67.1	16.0	51,128	1.1	16.2	73.0	9.7	58,242	0.7	15.9	61.9	21.5

Among all councils, Sumbawanga District has the highest percentage of persons who had never attended school (34.0%) and the lowest is in Sumbawanga Municipal with 15.4 percent (Figure 8.10). Regarding sex differentials for never attended school category, the percentage is higher among females than among males in all councils in both rural and urban areas.

Nkasi District is the Council with the highest (15.3%) dropout rate while Sumbawanga has the lowest rate (12.1%). 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 8.7: Percentage Distribution of Population Aged Four Years and Above Who Never Attended School by Council; Rukwa Region, 2022 PHC

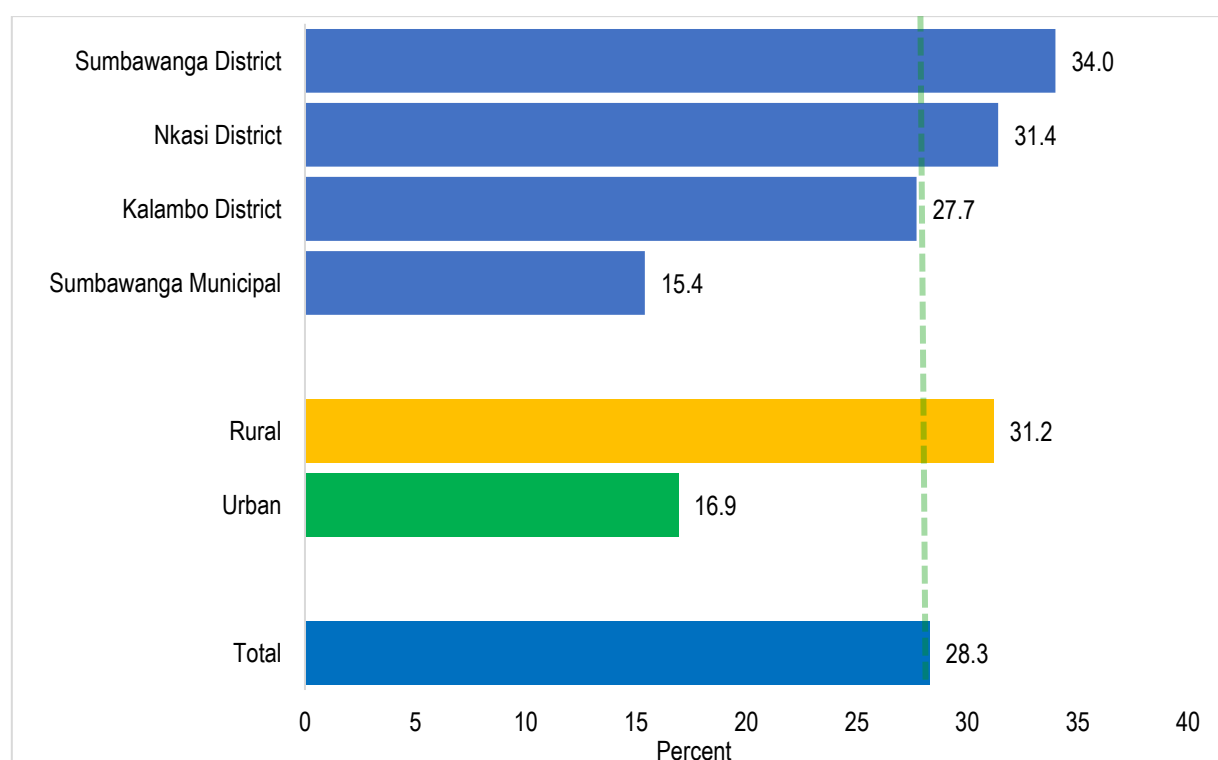


Table 8.14: Percentage Distribution of Population Aged Four Years and Above by Sex, School Attendance Status and Council; Rukwa Region, 2022 PHC

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
Total	1,319,246	29.4	14.1	28.2	28.3	634,664	29.4	15.1	29.8	25.7	684,582	29.4	13.1	26.8	30.6
Rural	1,045,382	28.0	14.6	26.1	31.2	506,218	27.8	15.9	27.8	28.5	539,164	28.2	13.5	24.5	33.8
Urban	273,864	34.8	11.9	36.5	16.9	128,446	35.8	12.0	37.5	14.7	145,418	33.9	11.8	35.5	18.8
Council															
Kalambo District	270,724	28.9	14.7	28.7	27.7	130,423	29.1	15.5	30.9	24.5	140,301	28.7	13.9	26.8	30.6
Sumbawanga District	420,434	26.9	13.8	25.3	34.0	202,503	27.0	15.3	27.5	30.3	217,931	26.9	12.4	23.2	37.4
Sumbawanga Municipal	265,590	34.6	12.1	37.9	15.4	125,894	35.1	12.6	38.2	14.1	139,696	34.1	11.7	37.6	16.6
Nkasi District	362,498	29.0	15.3	24.3	31.4	175,844	28.5	16.4	25.5	29.6	186,654	29.4	14.4	23.1	33.2

Table 8.15: Percentage Distribution of Population Aged Four Years and Above by Sex, School Attendance Status and Council; Rukwa 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
Total	1,045,382	28.0	14.6	26.1	31.2	506,218.0	27.8	15.9	27.8	28.5	539,164	28.2	13.5	24.5	33.8
Kalambo District	265,674	28.8	14.7	28.6	27.9	128,049	28.9	15.6	30.8	24.7	137,625	28.6	13.9	26.6	30.9
Sumbawanga District	377,280	26.4	13.7	24.6	35.3	182,054	26.4	15.2	26.9	31.5	195,226	26.4	12.3	22.6	38.8
Sumbawanga Municipal	104,492	31.3	15.2	31.4	22.0	50,649	30.5	17.0	31.3	21.2	53,843	32.1	13.5	31.6	22.8
Nkasi District	297,936	28.3	15.6	23.8	32.3	145,466	27.7	16.7	25.2	30.5	152,470	28.9	14.5	22.5	34.1

Table 8.16: Percentage Distribution of Population Aged Four Years and Above by Sex, School Attendance Status and Council; Rukwa 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
Total	273,864	34.8	11.9	36.5	16.9	128,446	35.8	12.0	37.5	14.7	145,418	33.9	11.8	35.5	18.8
Kalambo District	5,050	37.5	12.3	36.3	13.9	2,374	39.9	11.9	36.5	11.7	2,676	35.4	12.7	36.0	15.9
Sumbawanga District	43,154	31.5	14.8	30.8	23.0	20,449	31.6	15.8	33.1	19.5	22,705	31.4	13.8	28.7	26.1
Sumbawanga Municipal	161,098	36.7	10.1	42.1	11.1	75,245	38.1	9.7	42.8	9.3	85,853	35.3	10.5	41.4	12.8
Nkasi District	64,562	32.2	14.2	26.4	27.3	30,378	32.6	14.9	27.5	25.1	34,184	31.8	13.6	25.4	29.2

Among persons aged four years and above who joined primary school education, 40.3 percent completed, 38.6 percent are still attending and 21.1 percent dropped out. Those who joined ordinary level secondary school education, 39.8 percent completed, 41.0 percent are still attending and 19.2 percent dropped out. Those who were admitted for university education, 67.4 percent completed, 31.5 percent are still attending and 1.1 percent dropped out. Drop out is minimal at the university level compared with other levels of education. Moreover, slightly more females dropped out at university level (1.3%) than males (1.0%). The percentage of persons who completed primary education, secondary education (ordinary and advanced level) and university level is higher in urban areas compared with rural areas (Tables 8.18, 8.19 and 8.20).

Table 8.17: Number and Percentage of Population Aged Four Years and Above by School Attendance Status, Sex and Level of Education; Rukwa 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	40,482	89.0	10.5	0.5	19,360	88.3	11.2	0.5	21,122	89.6	10.0	0.4
Primary School (1 - 8)	728,169	38.6	21.1	40.3	355,222	37.3	22.3	40.4	372,947	39.8	19.9	40.3
Training After Primary	692	0.0	2.9	97.1	515	0.0	2.5	97.5	177	0.0	4.0	96.0
Pre-Form One	174	0.0	70.7	29.3	116	0.0	66.4	33.6	58	0.0	79.3	20.7
Secondary School O - level (1 - 4)	139,424	41.0	19.2	39.8	72,180	39.3	19.2	41.5	67,244	42.8	19.2	38.0
Secondary School A - level (5 - 6)	10,370	54.6	3.8	41.6	6,963	51.3	4.0	44.7	3,407	61.4	3.4	35.2
Training After Secondary Education	3,889	0.0	2.0	98.0	2,318	0.0	2.1	97.9	1,571	0.0	1.8	98.2
University and Other Related	21,583	31.5	1.1	67.4	13,818	29.4	1.0	69.6	7,765	35.2	1.3	63.5
Education for people with mental disabilities/ mental health disabilities	8	0.0	50.0	50.0	3	0.0	66.7	33.3	5	0.0	40.0	60.0

Table 8.18: Number and Percentage of Population Aged Four Years and Above by School Attendance Status and Level of Education; Rukwa 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	30,264	86.9	12.6	0.5	14,290	85.9	13.6	0.5	15,974	87.9	11.7	0.4
Primary School (1 - 8)	582,064	37.9	22.3	39.8	287,686	36.1	23.7	40.2	294,378	39.6	21.0	39.4
Training After Primary	451	0.0	2.7	97.3	348	0.0	2.0	98.0	103	0.0	4.9	95.1
Pre-Form One	122	0.0	73.8	26.2	81	0.0	69.1	30.9	41	0.0	82.9	17.1
Secondary School O - level (1 - 4)	87,857	43.8	21.4	34.8	47,344	41.3	21.4	37.2	40,513	46.6	21.4	32.0
Secondary School A - level (5 - 6)	5,089	61.2	4.6	34.2	3,545	58.4	4.7	36.8	1,544	67.6	4.3	28.1
Training After Secondary Education	2,041	0.0	2.0	98.0	1,291	0.0	2.2	97.8	750	0.0	1.7	98.3
University and Other Related	10,063	39.1	0.9	60.0	6,865	36.0	0.9	63.1	3,198	45.6	1.0	53.4
Education for people with mental disabilities/ mental health disabilities	7	0.0	42.9	57.1	2	0.0	50.0	50.0	5	0.0	40.0	60.0

Table 8. 19: Number and Percentage of Population Aged Four Years and Above by School Attendance Status and Level of Education; Rukwa 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	10,218	95.0	4.5	0.5	5,070	95.0	4.5	0.5	5,148	95.0	4.4	0.5
Primary School (1 - 8)	146,105	41.5	16.2	42.3	67,536	42.6	16.6	40.8	78,569	40.5	15.9	43.5
Training After Primary	241	0.0	3.3	96.7	167	0.0	3.6	96.4	74	0.0	2.7	97.3
Pre-Form One	52	0.0	63.5	36.5	35	0.0	60.0	40.0	17	0.0	70.6	29.4
Secondary School O - level (1 - 4)	51,567	36.3	15.5	48.2	24,836	35.5	14.9	49.6	26,731	37.1	15.9	47.0
Secondary School A - level (5 - 6)	5,281	48.2	3.0	48.7	3,418	43.8	3.3	52.9	1,863	56.3	2.6	41.1
Training After Secondary Education	1,848	0.0	1.9	98.1	1,027	0.0	1.9	98.1	821	0.0	1.8	98.2
University and Other Related	11,520	24.9	1.3	73.8	6,953	22.8	1.2	76.0	4,567	27.9	1.5	70.6
Education for people with mental disabilities/ mental health disabilities	1	0.0	100.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0	0.0

8.4.2 Net and Gross School Enrolment

Enrolment rate depict the proportions of children currently attending school which is 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

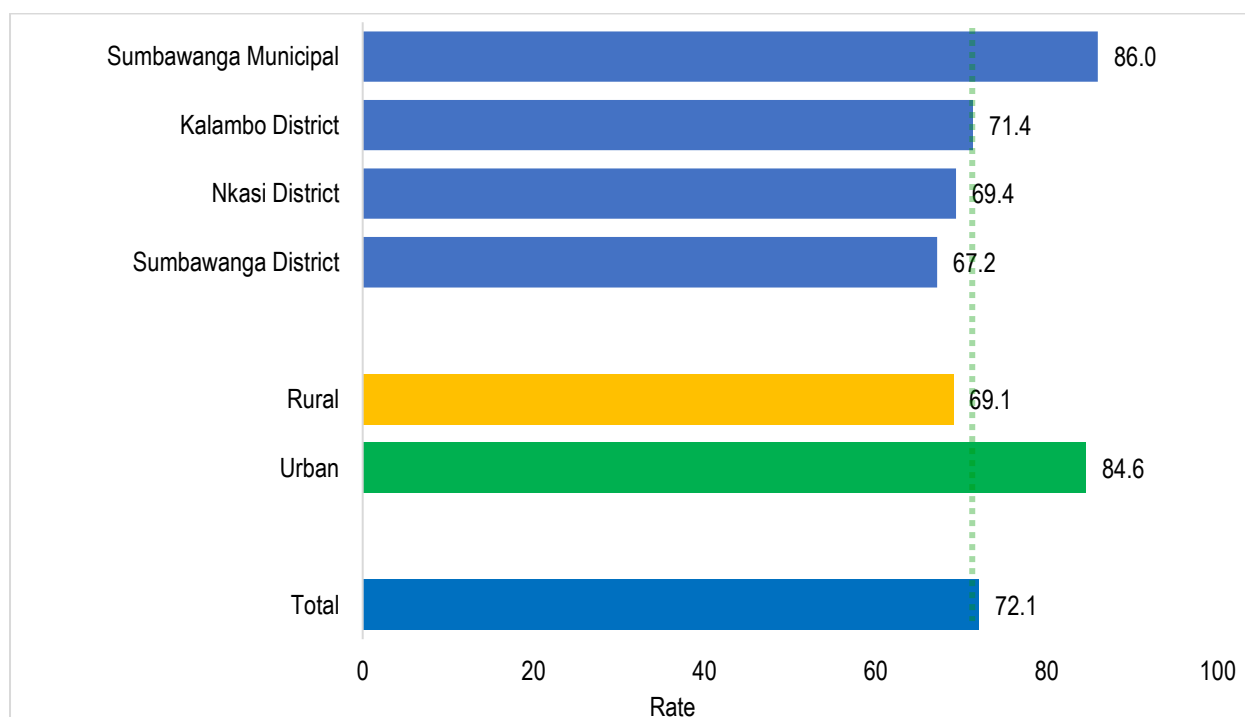
Results show that, for primary schools NER is 72.1 percent; it is higher (85.5%) in urban areas compared with rural areas (69.1%). Furthermore, results show that NER is higher (75.1%) for females than for males (69.1%) (Table 8.21).

Table 8.20: Net Enrolment Rates in Primary Schools by Place of Residence, Sex and Council; Rukwa Region, 2022 PHC

Council	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total	72.1	69.1	75.1	69.1	65.7	72.4	85.5	84.6	86.4
Kalambo District	71.4	68.2	74.5	71.1	67.9	74.2	89.4	88.7	90.0
Sumbawanga District	67.2	64.1	70.2	65.8	62.7	68.8	80.5	78.3	82.5
Sumbawanga Municipal	86.0	84.4	87.6	78.3	74.2	82.3	91.9	92.4	91.5
Nkasi District	69.4	65.8	73.0	68.4	64.6	72.1	74.6	71.8	77.3

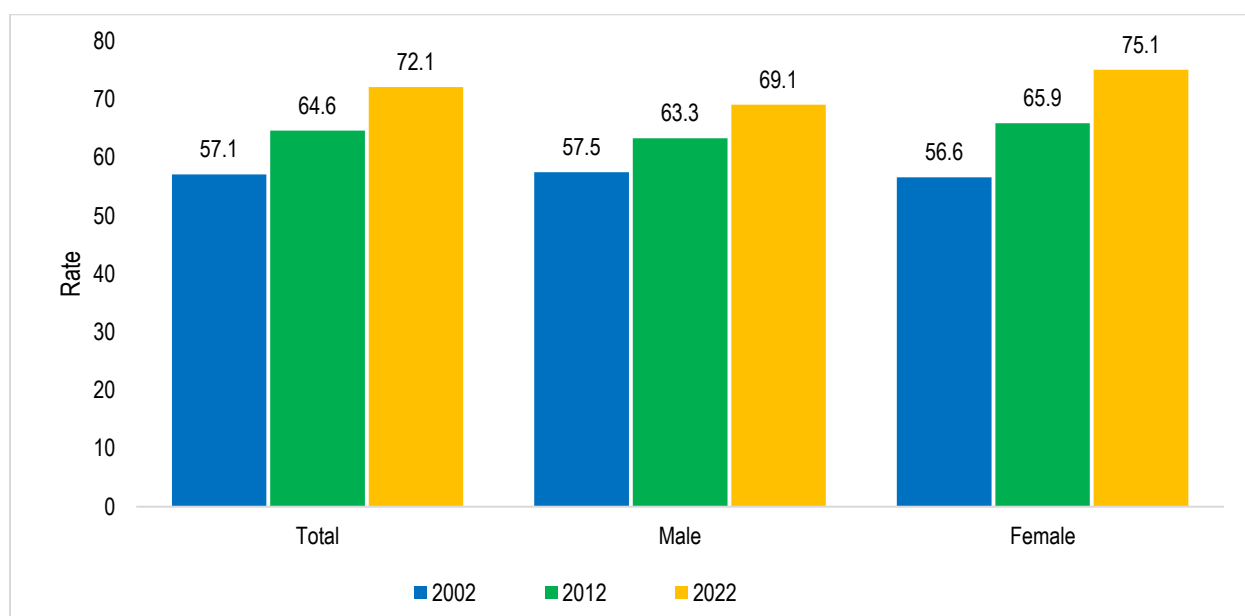
NER in primary schools varies across councils ranging from 67.2 percent in Sumbawanga District to 86.0 percent in Sumbawanga Municipal. Only one Council (Sumbawanga Municipal) has NER above the regional average of 72.1 percent (Figure 8.11).

Figure 8.8: Net Enrolment Rates in Primary Schools (7-13 years) by Council; Rukwa Region, 2022 PHC



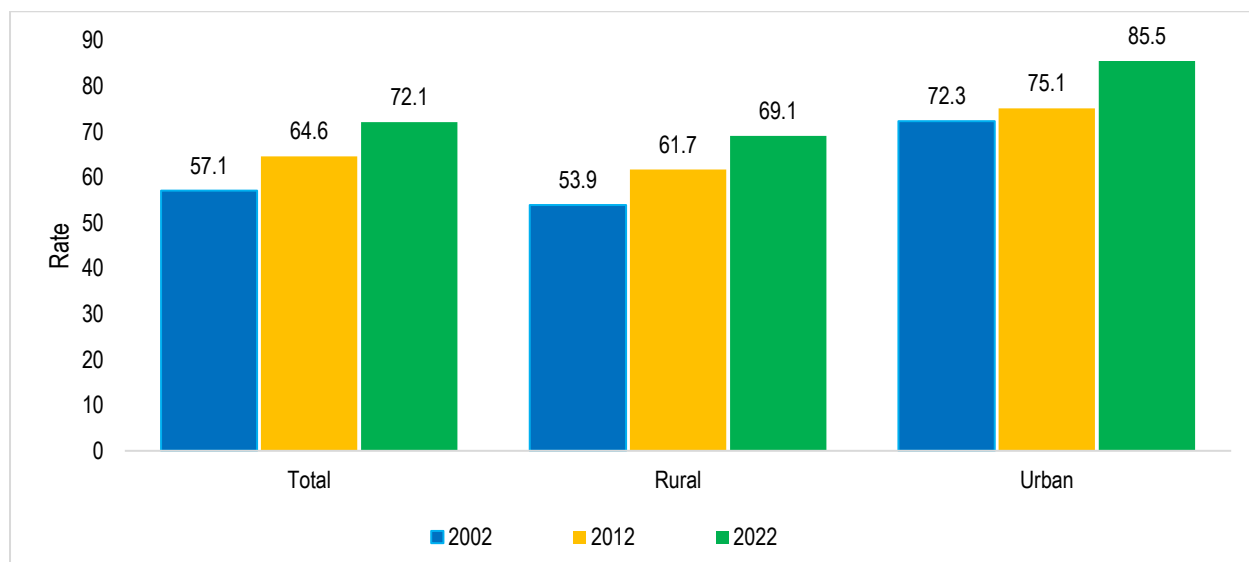
Results show an improvement in net enrolment rates from 2002 to 2022 censuses. The overall NER in primary schools increased from 57.1 percent in 2002 to 72.1 percent in 2022 census. Improvement is more pronounced among females (from 56.6% to 75.1%) than among males (from 57.5 to 69.1%) as shown in Figure 8.12.

Figure 8.9: Primary School Net Enrolment Rates by Sex; Rukwa Region, 2002, 2012 and 2022 PHCs



The rural NER in primary schools increased from 53.9 percent in 2002 to 69.1 percent in 2022 and the urban NER increased from 72.3 percent in 2002 to 85.5 percent in 2022 (Figure 8.13).

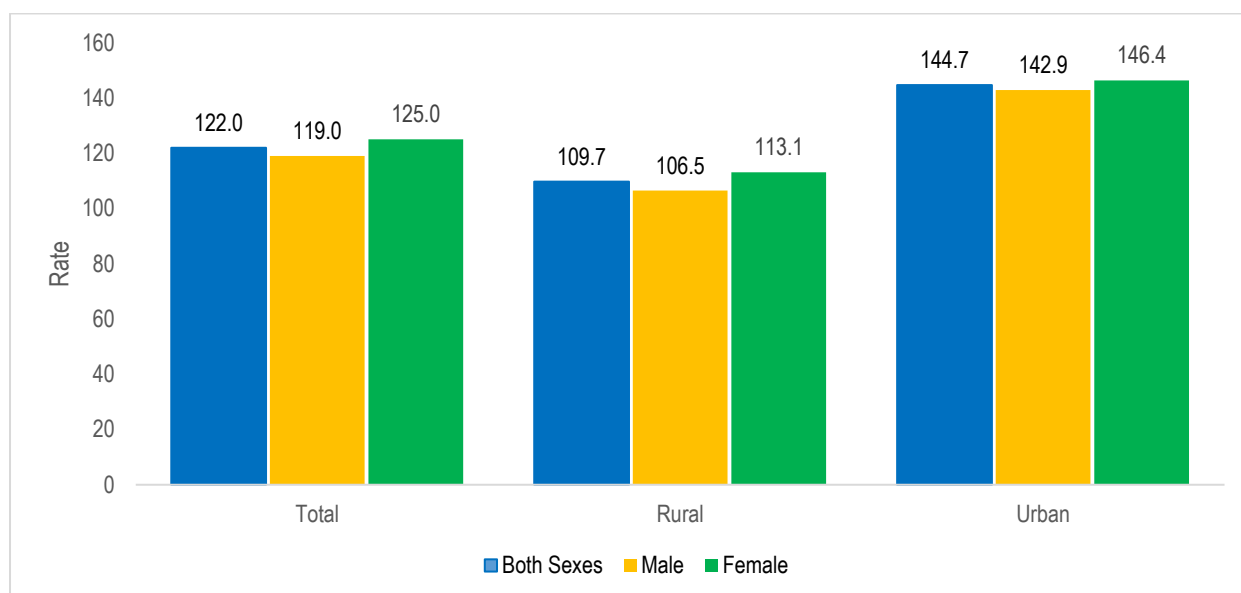
Figure 8.10: Primary School Net Enrolment Rates by Place of Residence; Rukwa Region, 2002, 2012 and 2022 PHCs



8.4.3 Gross Enrolment Rate

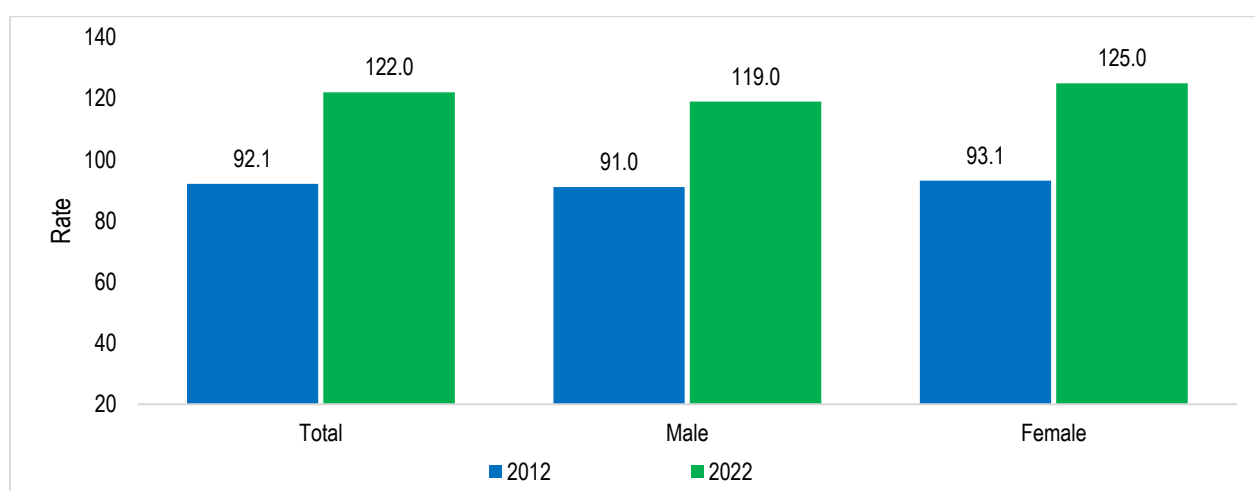
The primary school Gross Enrolment Rate (GER) in Rukwa Region is 122.0 percent. GER is higher (144.7%) in urban areas than in rural areas (109.7%) and is higher (125.0%) for females than males (119.0%). A gross enrolment rate exceeding a hundred percent could be due to over age and underage enrolment of children (Figure 8.14).

Figure 8.11: Primary Schools Gross Enrolment Rate by Place of Residence and Sex; Rukwa Region, 2022 PHC



Results show GER increased from 92.1 percent in 2012 to 122.0 percent in 2022. The increase is more pronounced among females (from 93.1% to 125.0%) than among males (from 91.0% to 119.0%) as shown in Figure 8.15.

Figure 8.12: Primary School Gross Enrolment Rates by Sex; Rukwa 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 (80.1%) of population aged four years and above attained primary education and 14.7 percent completed ordinary level

secondary school education. More females had attained primary education (82.1%) compared with males (78.2%). The same pattern is observed in rural and urban areas. Results also show that 2.6 percent 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; Rukwa Region, 2022 PHC

Level of Education	Population			Percent		
	Both Sexes	Male	Female	Both Sexes	Male	Female
Total	558,187	284,796	273,391	100.0	100.0	100.0
Pre-Primary	4,463	2,267	2,196	0.8	0.8	0.8
Primary School (1 - 8)	447,216	222,634	224,582	80.1	78.2	82.1
Training After Primary	692	515	177	0.1	0.2	0.1
Pre-Form One	174	116	58	0.0	0.0	0.0
Secondary School O - level (1 - 4)	82,250	43,792	38,458	14.7	15.4	14.1
Secondary School A - level (5 - 6)	4,707	3,393	1,314	0.8	1.2	0.5
Training After Secondary Education	3,889	2,318	1,571	0.7	0.8	0.6
University and Other Related	14,788	9,758	5,030	2.6	3.4	1.8
Education for people with mental disabilities/ mental health disabilities	8	3	5	0.0	0.0	0.0
Rural	425,799	221,244	204,555	100.0	100.0	100.0
Pre-Primary	3,955	2,016	1,939	0.9	0.9	0.9
Primary School (1 - 8)	361,715	183,871	177,844	84.9	83.1	86.9
Training After Primary	451	348	103	0.1	0.2	0.1
Pre-Form One	122	81	41	0.0	0.0	0.0
Secondary School O - level (1 - 4)	49,403	27,769	21,634	11.6	12.6	10.6
Secondary School A - level (5 - 6)	1,973	1,473	500	0.5	0.7	0.2
Training After Secondary Education	2,041	1,291	750	0.5	0.6	0.4
University and Other Related	6,132	4,393	1,739	1.4	2.0	0.9
Education for people with mental disabilities/ mental health disabilities	7	2	5	0.0	0.0	0.0
Urban	132,388	63,552	68,836	100.0	100.0	100.0
Pre-Primary	508	251	257	0.4	0.4	0.4
Primary School (1 - 8)	85,501	38,763	46,738	64.6	61.0	67.9
Training After Primary	241	167	74	0.2	0.3	0.1
Pre-Form One	52	35	17	0.0	0.1	0.0
Secondary School O - level (1 - 4)	32,847	16,023	16,824	24.8	25.2	24.4
Secondary School A - level (5 - 6)	2,734	1,920	814	2.1	3.0	1.2
Training After Secondary Education	1,848	1,027	821	1.4	1.6	1.2
University and Other Related	8,656	5,365	3,291	6.5	8.4	4.8
Education for people with mental disabilities/ mental health disabilities	1	1	0.0	0.0	0.0	0.0

Chapter 9

Employment and Economic Activities

Key Points

- The current unemployment rate in Rukwa Region is 5.9 percent; the rate is higher for females (6.9%) than for males (4.8%).
- The overall Labour Force Participation Rate (LFPR) of Rukwa Region is 79.4 percent; it is higher in urban (83.4%) than in rural areas (78.2%).
- Agriculture, forestry and fishing industry has the highest proportion (74.5%) of the total employment.
- Majority (60.5%) of employed persons are agricultural and fishery workers.
- Agricultural sector constitutes the highest share of employed persons (74.6%).
- There are 115,862 persons aged 15 years and above engaged in informal non-agricultural economic activities, with more females (65,764 persons) than males (50,098 persons).

9.1 Introduction

This chapter presents findings on current economic activities for persons aged 15 years and above in Rukwa Region. In particular, it provides information on 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 population enumerated in institutions.

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 and its distribution by main occupation, industry and employment status. Such 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 767,252 persons aged 15 years and above in Rukwa Region, 579,799 persons are in employment, 29,162 are unemployed and 158,291 are economically inactive. Moreover, results show that, there are 451,920 employed persons in rural areas and 127,879 in urban areas in the Region. Furthermore, results show that there are 130,363 inactive persons in rural and 27,928 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; Rukwa Region, 2022 PHC

Sex/ Place of Residence	Economic Activity Status			Total
	Employed	Unemployed	Inactive	
Both Sexes	579,799	29,162	158,291	767,252
Male	280,644	11,720	67,328	359,692
Female	299,155	17,442	90,963	407,560
Place of Residence				
Rural	451,920	16,508	130,363	598,791
Urban	127,879	12,654	27,928	168,461

The results further show that in Rukwa Region 75.6 percent of persons aged 15 and above are employed. The Council with the highest percentage of employed persons is Sumbawanga Municipal (76.9%) while the Council with the lowest percentage is Sumbawanga District (73.4%) (Figure 9.1).

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

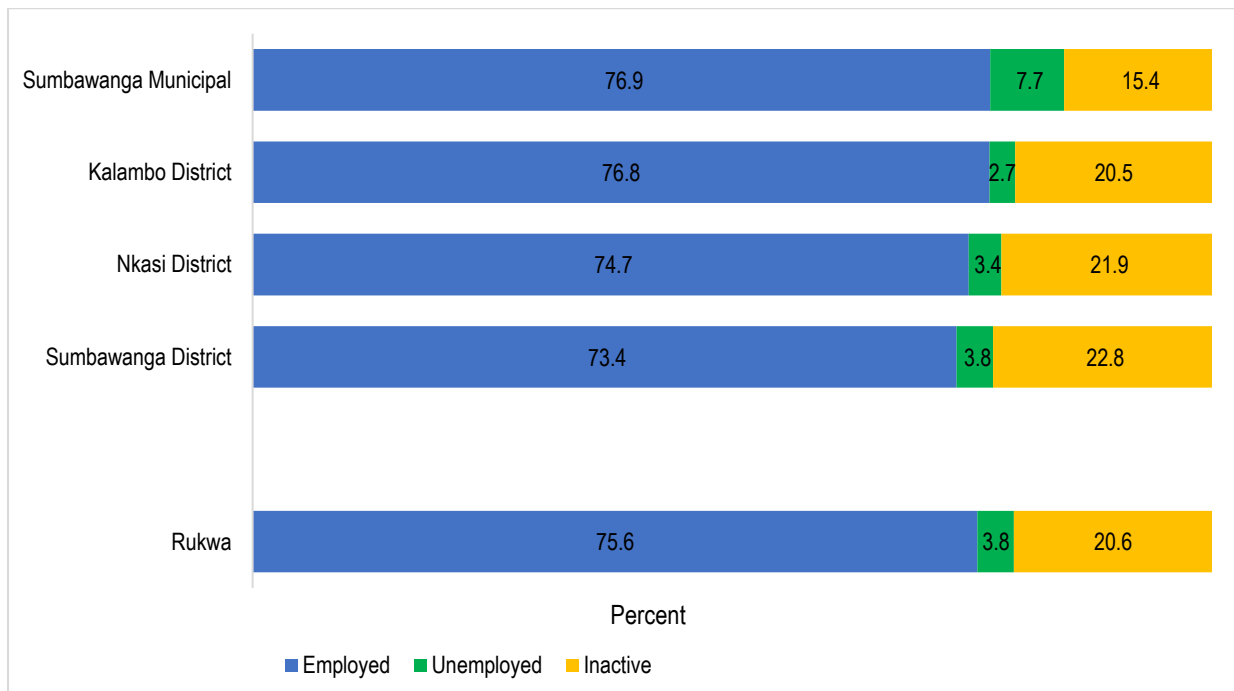


Table 9.2. shows that in rural areas the total number of persons aged 15 years and above who are employed ranges from 117,349 in Kalambo District Council to 156,851 persons in Sumbawanga District. In urban areas the number ranges from 2,446 in Kalambo District Council to 231,715 in Sumbawanga Municipal Council.

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; Rukwa Region, 2022 PHC

Place of Residence		Economic Activity Status			Total
		Employed	Unemployed	Inactive	
Rukwa Region	Total	579,799	29,162	158,291	767,252
	Rural	451,920	16,508	130,363	598,791
	Urban	127,879	12,654	27,928	168,461
Council					
Kalambo District	Total	119,795	4,161	31,993	155,949
	Rural	117,349	3,990	31,564	152,903
	Urban	2,446	171	429	3,046
Sumbawanga District	Total	176,046	9,183	54,691	239,920
	Rural	156,851	6,789	50,419	214,059
	Urban	19,195	2,394	4,272	25,861
Sumbawanga Municipal	Total	231,715	23,138	46,456	301,309
	Rural	NA	NA	NA	NA
	Urban	231,715	23,138	46,456	301,309
Nkasi District	Total	154,853	7,075	45,476	207,404
	Rural	127,183	4,419	38,205	169,807
	Urban	27,670	2,656	7,271	37,597

Table 9.3 shows that out of the employed persons aged 15 years and above, the number of employed persons is largest (363,234) for youths aged 15-35 years, followed by adults in the age group 36-64 years (189,517).

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

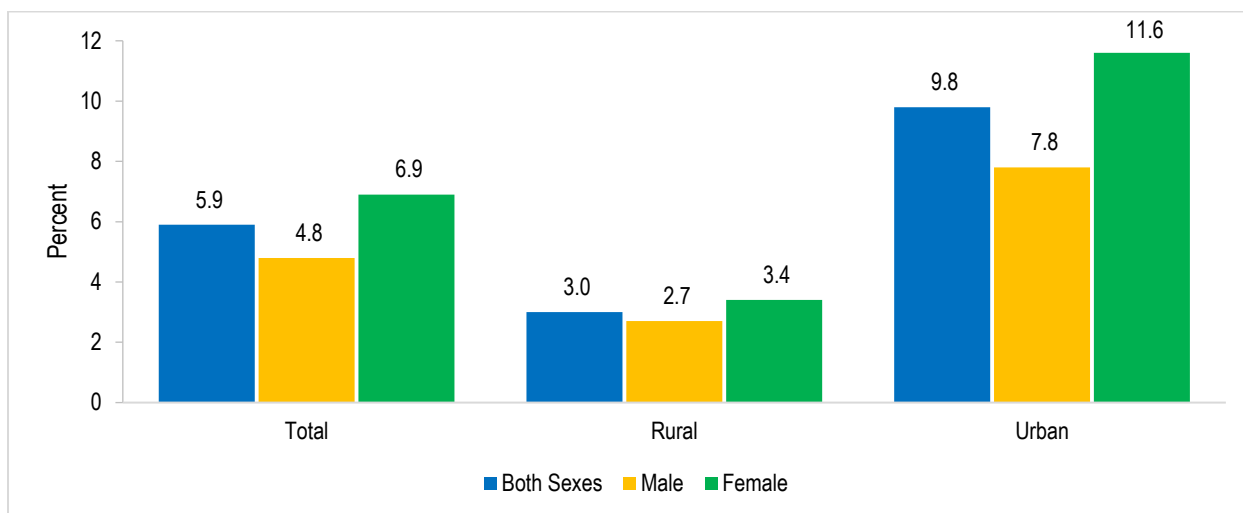
Age Group	Economic Activity Status			Total
	Employed	Unemployed	Inactive	
Total	579,799	29,162	158,291	767,252
15-35	363,234	21,192	108,358	492,784
36-64	189,517	7,539	36,099	233,155
65 years and above	27,048	431	13,834	41,313

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 Rukwa Region based on the relaxed international definition of unemployment. The results reveal that the current unemployment in Rukwa Region is 5.9 percent. The rate is higher (9.8%) in urban than in rural areas (3.0%). Unemployment rate is higher (6.9%) among females than males (4.8%).

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

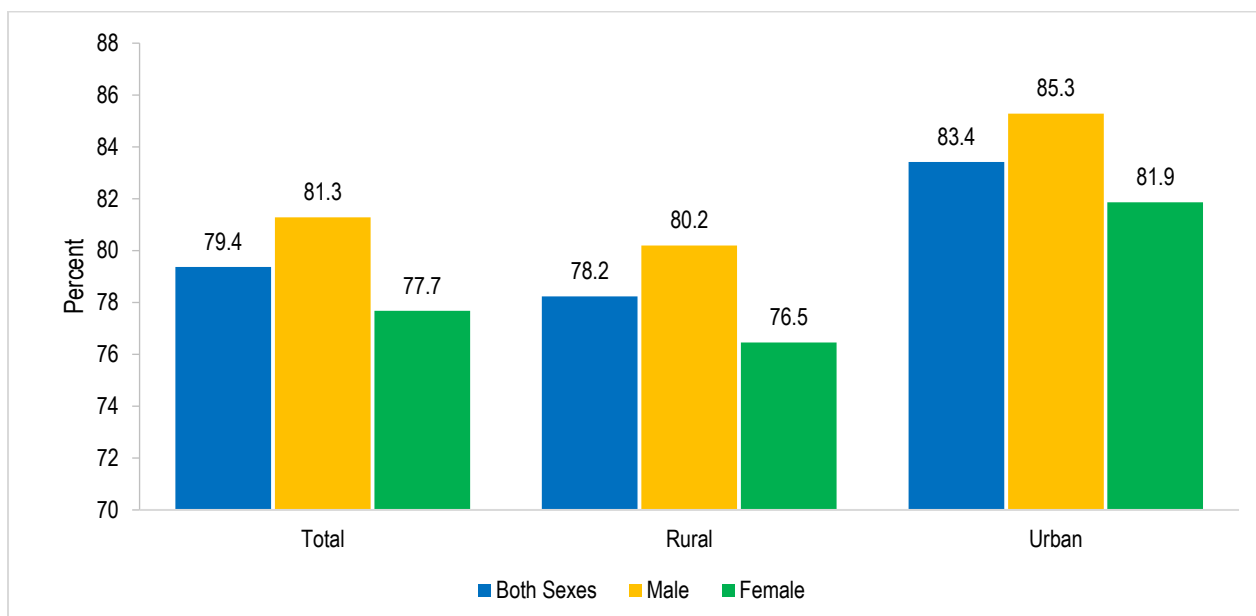


9.4 Labour Force Participation Rate

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 15 years and above. It provides important insights into various policy decisions to enhance performance of the labour market.

Figure 9.3 shows that, the overall Labour Force Participation Rate (LFPR) of Rukwa Region is 79.4 percent; it is higher (83.4%) in urban areas than in rural areas (78.2%). Results also reveal that LFPR is higher (81.3%) for males than for females (77.7%).

Figure 9.2: Labour Force Participation Rates for Persons Aged 15 Years and Above by Place of Residence and Sex; Rukwa 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.

The results show that the 'agriculture, forestry and fishing industry' has the highest proportion (74.5%) of the total employment. The industry of 'Whole sale and retail trade, repair of motor vehicles and motorcycles' ranked second with 6.2 percent, followed by 'Accommodation and food services activities' industry with 2.9 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; Rukwa Region 2022 PHC

Industry of Employment	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total Number	579,799	280,644	299,155	451,920	219,985	231,935	127,879	60,659	67,220
Agriculture, forestry and fishing	74.5	74.4	74.5	82.7	82.4	83.0	45.3	45.5	45.1
Mining and quarrying	1.7	1.7	1.7	1.4	1.5	1.4	2.7	2.4	2.9
Manufacturing	1.9	2.8	1.1	1.2	1.8	0.7	4.3	6.4	2.4
Electricity, gas, steam and air conditioning supply	0.1	0.2	0.0	0.0	0.1	0.0	0.3	0.5	0.1
Water supply sewage waste management and remediation activities	0.1	0.2	0.0	0.1	0.1	0.0	0.2	0.3	0.1
Construction	1.0	1.9	0.2	0.6	1.2	0.1	2.3	4.5	0.4
Whole sale and retail trade, repair of motor vehicles and motorcycles	6.2	4.6	7.7	4.0	3.1	4.9	14.0	10.2	17.3
Transportation and storage	0.7	1.4	0.1	0.3	0.5	0.1	2.3	4.5	0.3
Accommodation and food services activities	2.9	1.6	4.0	2.2	1.4	3.0	5.2	2.6	7.5
Information and communication	0.1	0.2	0.0	0.0	0.1	0.0	0.3	0.4	0.1
Financial and insurance activities	0.1	0.2	0.1	0.1	0.1	0.0	0.4	0.5	0.4
Real estate activities	0.3	0.4	0.2	0.3	0.4	0.2	0.4	0.5	0.2
Professional scientific and technical activities	0.8	1.0	0.5	0.5	0.8	0.3	1.6	1.9	1.3
Administrative and support services activities	2.1	2.1	2.1	1.3	1.4	1.3	4.7	4.8	4.6
Public administration and defence compulsory social security	0.3	0.5	0.2	0.2	0.3	0.1	0.9	1.3	0.6
Education	0.6	0.8	0.5	0.4	0.5	0.2	1.5	1.6	1.4
Human health and social work activities	0.4	0.3	0.5	0.2	0.2	0.3	1.1	0.9	1.2
Arts entertainment and recreation	0.2	0.2	0.2	0.1	0.1	0.1	0.5	0.4	0.6
Other services activities	2.8	2.7	2.9	1.6	1.6	1.5	7.2	6.7	7.6

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 majority (60.5%) of employed persons in Rukwa Region are agricultural and fishery workers, followed by those employed as craft and related workers (16.0%) and those employed in elementary occupations (15.7%) (Table 9.5).

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

Occupation	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total Number	579,799	280,644	299,155	451,920	219,985	231,935	127,879	60,659	67,220
Legislators, administrators and managers	0.2	0.3	0.2	0.1	0.2	0.1	0.6	0.8	0.4
Professionals	0.8	1.1	0.6	0.5	0.6	0.3	2.2	2.8	1.7
Technicians and associate professionals	2.2	3.4	1.1	1.3	2.1	0.6	5.3	8.0	2.8
Clerks	0.2	0.3	0.2	0.1	0.2	0.1	0.5	0.5	0.5
Service workers and shop sales workers	3.6	2.8	4.4	2.3	1.8	2.8	8.4	6.5	10.2
Agricultural and fishery workers	60.5	59.3	61.7	67.2	65.9	68.4	37.0	35.4	38.5
Craft and related workers	16.0	17.2	15.0	14.6	15.7	13.5	21.3	22.7	20.0
Plant and machine operators and assemblers	0.5	1.0	0.1	0.3	0.5	0.1	1.4	2.6	0.2
Elementary occupations	15.7	14.6	16.7	13.6	13.0	14.2	23.3	20.7	25.7

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 (74.6%) share of employed persons followed by the private sector (12.4%) and household activities (10.0%).

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

Sector	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total	579,799	280,644	299,155	451,920	219,985	231,935	127,879	60,659	67,220
Public	3.0	3.8	2.3	2.4	3.1	1.8	5.2	6.4	4.1
Private	12.4	13.7	11.1	7.1	8.2	6.0	31.1	33.6	28.8
Agriculture	74.6	72.9	76.2	81.0	79.3	82.6	52.0	49.9	54.0
Household activities	10.0	9.6	10.4	9.5	9.4	9.6	11.7	10.1	13.2

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 115,862 persons aged 15 years and above engaged in informal non-agricultural economic activities, with 65,764 females and 50,098 males. Moreover, results reveal that majority of persons engaged in informal sector comprise youth aged 15-35; accounting for 63.9 percent of total employment, followed by adults aged 36-64 with 31.9 percent. The lowest participation in the informal sector is observed in adults aged 65 years and above with 4.2 percent. A similar distribution is observed in rural and urban areas.

Table 9.6: 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; Rukwa Region, 2022 PHC

Place of Residence	Sex	Age Group			Total Number
		15 – 35	36 – 64	65 years and above	
Total	Both Sexes	63.9	31.9	4.2	115,862
	Male	63.4	32.3	4.3	50,098
	Female	64.3	31.5	4.1	65,764
Rural	Both Sexes	63.3	32.0	4.6	78,412
	Male	62.6	32.6	4.9	34,912
	Female	63.9	31.6	4.5	43,500
Urban	Both Sexes	65.2	31.5	3.3	37,450
	Male	65.3	31.5	3.2	15,186
	Female	65.1	31.5	3.5	22,264

Chapter 10

Disability

Key Points

- There are 106,114 persons in Rukwa Region, equivalent to 9.3 percent of the total population aged 7 years and above living with some form of disability.
- Most common type of disability is seeing (2.4%) followed by walking (1.7%).
- Most Persons With Disabilities (55.7%) reported disease as a major cause of their disability.
- Over six percent (6.6%) of Persons With Disabilities reported accidents as a cause of their disabilities.
- The use of assistive devices among Persons With Disabilities is very low.

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 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 storiiasis. Other types were autism, mental health, mental disorder, persons with short stature, leprosy and persons with hunchback. 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 authority⁶

⁶ Shirikisho la Vyama vya Watu wenye Ulemavu Tanzania (SHIVYAWATA)



Albinism



Cleft Palate



Hydrocephalus



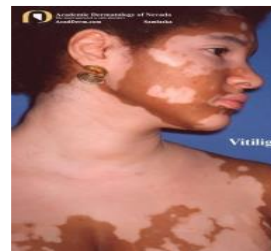
Spinal bifida



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, 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 106,114 persons in Rukwa Region (51,273 males and 54,841 female), which is equivalent to 9.3 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 (9.5%) than in urban areas (8.5%).

Among the six major domains of disabilities, seeing (2.4%) and walking (1.7%) are the most common while self-care is the least with 0.2 percent of the population aged seven years and above reporting this disability. Results further reveal that the prevalence of disabilities of all types is equal among males to that of females, except for hearing and self-care disabilities, where the prevalence is slightly higher among males (1.0% and 3.1% respectively) than females (0.9% and 3.0% respectively). (Table 10.1).

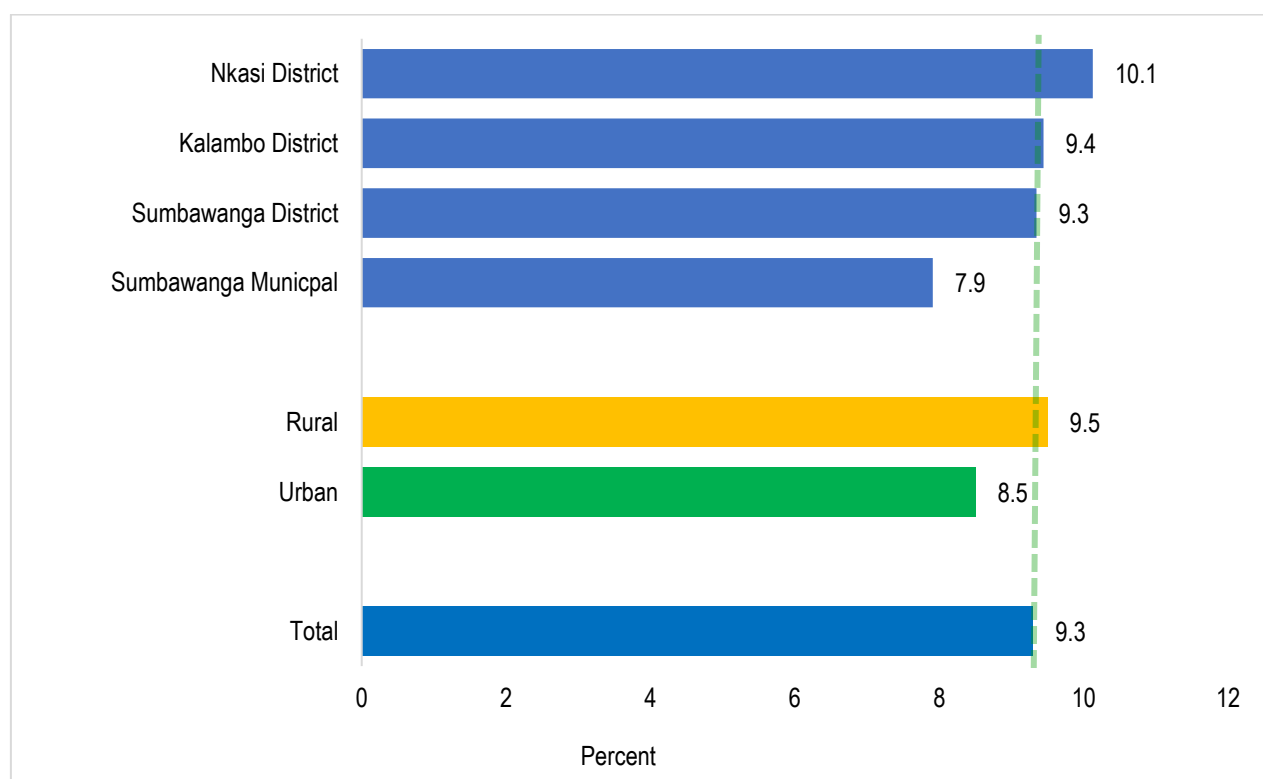
10.2.1 Prevalence of Disability by Councils

The prevalence of disability varies across councils, ranging from 7.9 percent in Sumbawanga Municipal to 10.1 percent in Nkasi District. Two councils have prevalence of disability above the regional average of 9.3 percent (Figure 10.1 and Table 10.1).

Table 10.1: Disability Prevalence Among Persons Aged 7 Years and Above by Type of Disability, Place of Residence and Council; Rukwa 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
Total	9.3	106,114	2.4	2.4	2.4	0.9	1.0	0.9	1.7	1.7	1.7	0.5	0.5	0.5	0.2	0.2	0.2	0.5	0.5	0.5	3.0	3.1	3.0
Rural	9.5	85,742	2.5	2.5	2.4	0.9	1.0	0.9	1.7	1.7	1.7	0.5	0.5	0.5	0.2	0.2	0.2	0.5	0.5	0.5	3.1	3.1	3.1
Urban	8.5	20,372	2.3	2.3	2.4	0.8	0.9	0.8	1.5	1.6	1.4	0.5	0.4	0.5	0.2	0.2	0.2	0.5	0.5	0.5	2.7	2.8	2.6
Council																							
Kalambo District	9.4	22,231	2.5	2.6	2.5	0.9	1.0	0.8	1.7	1.7	1.8	0.4	0.4	0.4	0.2	0.2	0.2	0.5	0.5	0.5	3.1	3.0	3.2
Sumbawanga District	9.3	33,886	2.4	2.3	2.4	0.9	1.0	0.8	1.7	1.7	1.7	0.5	0.5	0.5	0.2	0.2	0.2	0.5	0.6	0.5	3.1	3.1	3.1
Sumbawanga Municipal	7.9	18,383	2.1	2.1	2.1	0.8	0.9	0.8	1.4	1.5	1.3	0.5	0.5	0.4	0.2	0.2	0.2	0.5	0.5	0.5	2.4	2.6	2.3
Nkasi District	10.1	31,614	2.7	2.7	2.7	1.0	1.0	1.0	1.8	1.8	1.8	0.5	0.5	0.5	0.3	0.3	0.3	0.5	0.5	0.5	3.4	3.4	3.4

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



10.2.2 Prevalence of Disability by Sex and Council

The 2022 PHC results show that, prevalence of disability is slightly higher for males than for females in all councils; Kalambo District Councils (9.5% for males and 9.4% females), Sumbawanga District Council (9.4% for males and 9.3% for females), Sumbawanga Municipal Council (8.2% for males and 7.6% for females) and Nkasi District Council (10.2% for males and 10.0% for females) (Table 10.2).

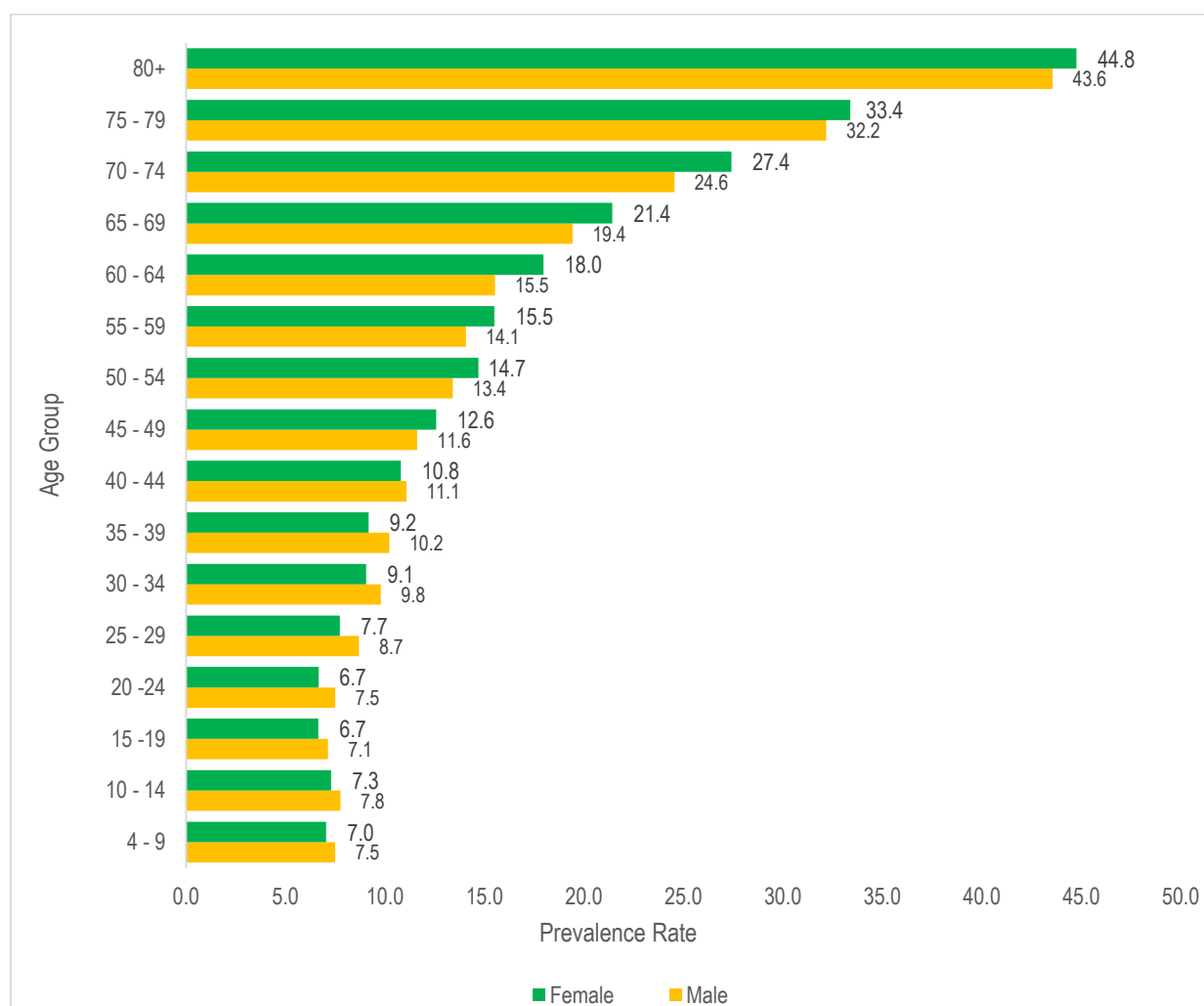
Table 10.2: Disability Prevalence by Sex, Place of Residence and Council; Rukwa Region, 2022 PHC

Place of Residence	Total Number of PWDs			Prevalence of Disability by Sex (%)		
	Both Sexes	Male	Female	Total	Male	Female
Total	106,114	51,273	54,841	9.3	9.4	9.2
Rural	85,742	41,746	43,996	9.5	9.6	9.4
Urban	20,372	9,527	10,845	8.5	8.7	8.4
Council						
Kalambo District	22,231	10,719	11,512	9.4	9.5	9.4
Sumbawanga District	33,886	16,281	17,605	9.3	9.4	9.3
Sumbawanga Municipal	18,383	8,912	9,471	7.9	8.2	7.6
Nkasi District	31,614	15,361	16,253	10.1	10.2	10.0

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 in Rukwa Region is slightly higher among males than females for the younger population (below 44 years). Thereafter, the rate is higher for females than for males which increases sharply from 12.6 and 11.6 percent for females and males aged 45-49 years to 44.8 and 43.6 percent for females and males aged 80 years and above respectively (Figure 10.2).

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



10.3 Prevalence of Persons with Albinism

Rukwa Region has a total of 1,632 persons with albinism which is 0.11 percent of the total population in the Region. Out of that, 992 persons (0.14%) are males and 640 (0.08%) are females. Councils with large numbers of persons with albinism are Sumbawanga District (529 persons), Nkasi District (462 persons) and Sumbawanga Municipal (372 persons) (Table 10.3 and Table 10.4).

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

Place of Residence	Total Population in Private Households			Persons with Albinism					
				Total		Male		Female	
	Total	Male	Female	Number	Percent	Number	Percent	Number	Percent
Total	1,527,355	734,269	793,086	1,632	0.11	992	0.14	640	0.08
Rural	1,219,302	589,903	629,399	1,254	0.10	774	0.13	480	0.08
Urban	308,053	144,366	163,687	378	0.12	218	0.15	160	0.10
Council									
Kalambo District	316,204	152,762	163,442	269	0.09	158	0.10	111	0.07
Sumbawanga District	489,766	235,474	254,292	529	0.11	317	0.13	212	0.08
Sumbawanga Municipal	299,074	141,327	157,747	372	0.12	224	0.16	148	0.09
Nkasi District	422,311	204,706	217,605	462	0.11	293	0.14	169	0.08

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

Age Group	Both Sexes		Male		Female		Population in Private Households		
	Number	Percent	Number	Percent	Number	Percent	Both Sexes	Male	Female
Total	1,632	0.11	992	0.14	640	0.08	1,527,355	734,269	793,086
0 – 4	106	0.04	63	0.05	43	0.03	277,461	136,008	141,453
5 – 9	101	0.04	57	0.05	44	0.03	258,439	126,279	132,160
10 – 14	85	0.04	43	0.04	42	0.04	224,203	112,290	111,913
15 – 19	95	0.06	47	0.06	48	0.06	158,753	76,347	82,406
20 – 24	171	0.13	91	0.16	80	0.11	128,855	57,066	71,789
25 – 29	191	0.19	130	0.27	61	0.11	103,191	47,456	55,735
30 – 34	189	0.22	119	0.30	70	0.16	84,576	39,681	44,895
35 – 39	152	0.21	100	0.30	52	0.14	70,767	33,259	37,508
40 – 44	135	0.24	86	0.31	49	0.17	57,037	27,503	29,534
45 – 49	105	0.23	56	0.26	49	0.21	44,913	21,911	23,002
50 – 54	76	0.23	55	0.34	21	0.12	33,390	16,275	17,115
55 – 59	52	0.23	39	0.36	13	0.11	22,383	10,793	11,590
60 – 64	72	0.33	52	0.48	20	0.18	22,074	10,723	11,351
65 – 69	31	0.23	16	0.25	15	0.21	13,498	6,322	7,176
70 – 74	38	0.33	21	0.39	17	0.28	11,417	5,348	6,069
75 – 79	15	0.24	7	0.24	8	0.24	6,287	2,886	3,401
80+	18	0.18	10	0.24	8	0.13	10,111	4,122	5,989

10.4 Population with Other Types of Disability

Results reveal that 32,669 persons in Rukwa Region which is equivalent to 2.86 percent of the regional population have other types of disability. Spinal cord injuries (0.34%); and Cleft palate, Hydrocephalus, Spinal bifida and Mental Disorder (0.27% each) are the most common types of other disabilities. The percentages of persons with mental health issues and mental health disorders are higher among males compared with females. 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; Rukwa Region, 2022 PHC

Other Types of Disability	Number of Persons			Percent			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total	32,669	16,575	16,094	2.86	3.04	2.69	2.93	3.08	2.79	2.58	2.87	2.34
Cleft Palate	3,061	1,527	1,534	0.27	0.28	0.26	0.26	0.27	0.25	0.30	0.30	0.30
Hydrocephalus	3,058	1,438	1,620	0.27	0.26	0.27	0.27	0.26	0.28	0.25	0.26	0.25
Spinal bifida	3,033	1,397	1,636	0.27	0.26	0.27	0.27	0.26	0.28	0.25	0.26	0.24
Spinal cord injuries	3,874	1,778	2,096	0.34	0.33	0.35	0.34	0.32	0.36	0.33	0.34	0.32
Epilepsy or seizures	2,712	1,483	1,229	0.24	0.27	0.21	0.26	0.29	0.22	0.17	0.18	0.15
Psoriasis	1,998	886	1,112	0.17	0.16	0.19	0.19	0.17	0.20	0.13	0.12	0.14
Storiosis	946	433	513	0.08	0.08	0.09	0.09	0.08	0.09	0.07	0.07	0.07
Autism	700	382	318	0.06	0.07	0.05	0.06	0.07	0.06	0.05	0.07	0.04
Mental Health	3,421	1,964	1,457	0.30	0.36	0.24	0.30	0.35	0.25	0.29	0.39	0.21
Mental Disorder	3,049	1,737	1,312	0.27	0.32	0.22	0.27	0.31	0.23	0.25	0.34	0.18
Dwarfism	594	280	314	0.05	0.05	0.05	0.05	0.05	0.06	0.04	0.04	0.04
Leprosy	337	201	136	0.03	0.04	0.02	0.03	0.04	0.02	0.02	0.03	0.01
Hunch Back	354	191	163	0.03	0.04	0.03	0.03	0.04	0.03	0.02	0.03	0.02
Other	5,532	2,878	2,654	0.48	0.53	0.44	0.51	0.55	0.47	0.40	0.44	0.36

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 for all types of disability in Rukwa Region. Almost 6 out of 10 PWDs (55.7%) reported disease as a cause of their disability while 23.2 percent of PWDs were born with disabilities. Out of the 80.6 PWDs percent PWDs living in rural areas, 55.7 percent reported diseases as the major cause of their disabilities. A similar situation is observed in urban areas whereby out of the 19.4 percent PWDs living urban areas 55.7 percent reported diseases as the main cause of their disabilities. Another notable cause of disabilities in the Region is accidents (6.6%) reported by 6.5 and 7.0 percent of PWDs in in rural and urban respectively.

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

Place of Residence/Sex	Population	Cause of Disability							
		Percent	Inborn	Disease	Accident	Beaten	Drug abuse	Pregnancy	Others
Total	21,336	100	23.2	55.7	6.6	0.8	0.2	0.6	12.9
Rural	17,206	80.6	23.6	55.7	6.5	0.8	0.2	0.6	12.7
Urban	4,130	19.4	21.9	55.7	7	0.8	0.2	0.8	13.6
Sex									
Male	10,395	48.7	25.6	54.8	8.7	1	0.3	NA	9.7
Female	10,941	51.3	21	56.5	4.7	0.6	0.1	1.3	15.9

**Table 10. 7: Percentage Distribution of Persons with Disability by Sex, Cause of Disability and Type of Disability; Rukwa 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	5,933	16.7	50.1	6.2	1.4	0.2	0.5	25.0	2,869	17.7	50.4	8.5	1.8	0.3	0.0	21.3	3,064	15.8	49.7	4.0	1.1	0.2	0.9	28.4
Hearing	3,343	39.5	44.2	2.6	0.8	0.1	0.4	12.4	1,599	42.5	43.7	3.3	0.8	0.2	0.0	9.6	1,744	36.8	44.7	2.0	0.9	0.1	0.7	14.9
Walking	7,328	20.1	45.9	12.1	0.6	0.0	0.9	20.4	3,470	24.0	44.5	16.2	0.9	0.1	0.0	14.4	3,858	16.6	47.1	8.4	0.4	0.0	1.7	25.7
Remembering	2,281	37.9	37.3	3.0	0.6	0.9	1.0	19.4	1,072	43.0	38.8	3.5	0.9	1.8	0.0	12.0	1,209	33.3	35.9	2.6	0.2	0.1	1.8	26.0
Self-care	2,309	36.4	41.1	6.4	0.4	0.1	0.3	15.2	1,143	41.6	42.0	7.9	0.3	0.1	0.0	8.1	1,166	31.2	40.3	5.0	0.5	0.2	0.6	22.2
Communication	6,098	24.3	72.5	0.4	0.0	0.1	0.5	2.1	3,015	27.1	71.0	0.6	0.1	0.1	0.0	1.2	3,083	21.6	74.1	0.3	0.0	0.1	0.9	3.0

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 persons with albinism, of whom 17.0 percent are using assistive devices. For example, less than one percent (0.5%) of persons with hearing disabilities and 0.7 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; Rukwa Region, 2022 PHC

Type of Disability	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Albinism	17.0	16.7	17.3	17.1	16.5	17.9	16.7	17.4	15.6
Seeing	1.1	1.2	1.1	0.9	1.0	0.8	2.2	2.5	2.0
Hearing	0.5	0.6	0.5	0.5	0.6	0.5	0.5	0.5	0.5
Walking	3.4	4.2	2.7	2.9	3.7	2.1	6.0	6.7	5.3
Self-care	3.0	3.8	2.2	2.4	3.3	1.6	5.3	6.3	4.6
Communication	0.7	0.9	0.6	0.7	0.8	0.5	0.8	1.0	0.6

Chapter 11

Land Ownership

Key Points

- Thirty-four percent (34.4%) of the population aged 15 years and above in Rukwa Region own land.
- Fourteen percent (14.1%) of males in Rukwa Region own land alone compared with 8.0 percent of females.
- About fifty-three percent (52.6%) of persons aged 15 years and above who own land in Rukwa Region do not possess legal-land ownership documents documents;
- Among the land owners possessing legal-land ownership documents in Rukwa Region, 14.1 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.

The results reveal that 34.4 percent of persons aged 15 years and above in Rukwa Region own land. Ownership of land is higher (37.4%) among rural population compared with the urban population (23.6%). 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 Place of Residence and Sex; Rukwa Region, 2022 PHC

Place of Residence	Sex	Land Ownership		Percentage of Persons Owning Land
		Total Population	Number of Individuals Owning Land	
Total	Both Sexes	767,252	263,900	34.4
	Male	359,692	136,952	38.1
	Female	407,560	126,948	31.1
Rural	Both Sexes	598,791	224,137	37.4
	Male	283,144	116,315	41.1
	Female	315,647	107,822	34.2
Urban	Both Sexes	168,461	39,763	23.6
	Male	76,548	20,637	27.0
	Female	91,913	19,126	20.8

About sixty five percent (64.2%) of persons aged 15 years and above do not own land, 10.9 percent own land alone and 22.3 percent own land jointly. The ownership pattern in Rukwa Region reveals that the percentage of females owning land alone (8.0%) is significantly lower than that of males (14.1%). Additionally, the percentage of females owning land jointly (22.1%) is slightly below that of males (22.5%). Further analysis shows that the percentage of females owning land jointly is higher in rural areas (24.7%) compared to urban areas (13.1%), but remains marginally lower than for males (25.0%). (Table 11.2).

Table 11. 2: Percentage Distribution of Persons Aged 15 Years and Above by Land Ownership Status, Place of Residence and Sex; Rukwa Region, 2022 PHC.

Place of Residence	Sex	Land Ownership Status					
		Total	Alone	Jointly	Both alone and jointly	Does not own	Don't Know
Total	Both Sexes	767,252	10.9	22.3	1.2	64.2	1.4
	Male	359,692	14.1	22.5	1.5	60.6	1.4
	Female	407,560	8.0	22.1	1.0	67.5	1.4
Rural	Both Sexes	598,791	11.2	24.9	1.4	61.2	1.4
	Male	283,144	14.4	25.0	1.7	57.5	1.4
	Female	315,647	8.3	24.7	1.2	64.4	1.4
Urban	Both Sexes	168,461	9.9	13.1	0.6	75.2	1.2
	Male	76,548	13.1	13.1	0.7	71.8	1.3
	Female	91,913	7.2	13.1	0.6	78.0	1.2

Results show that percentage of persons who do not own land in Rukwa Region is 64.2 percent, while those who own land (alone, jointly or both) is 34.4 percent. Out of all persons who own land, the proportion is higher (38.1%) for males than for females (31.1%) (Figure 11.1).

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

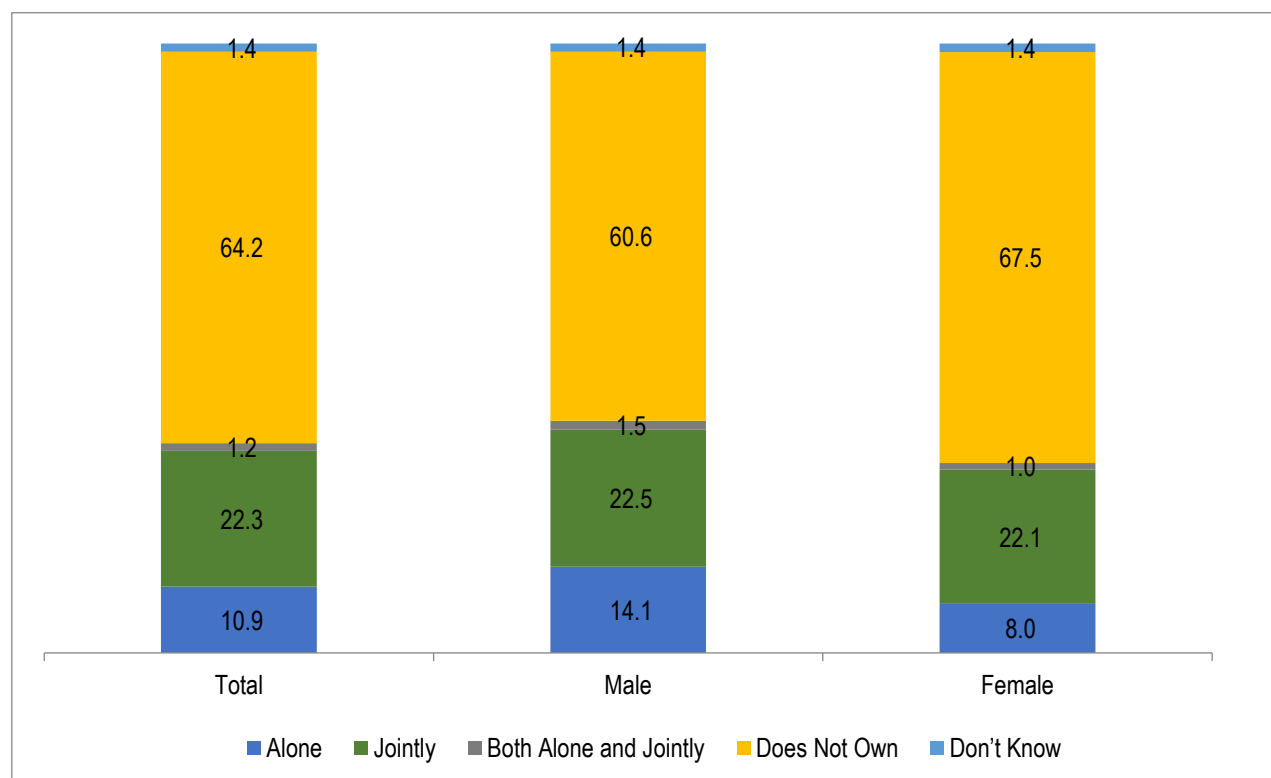


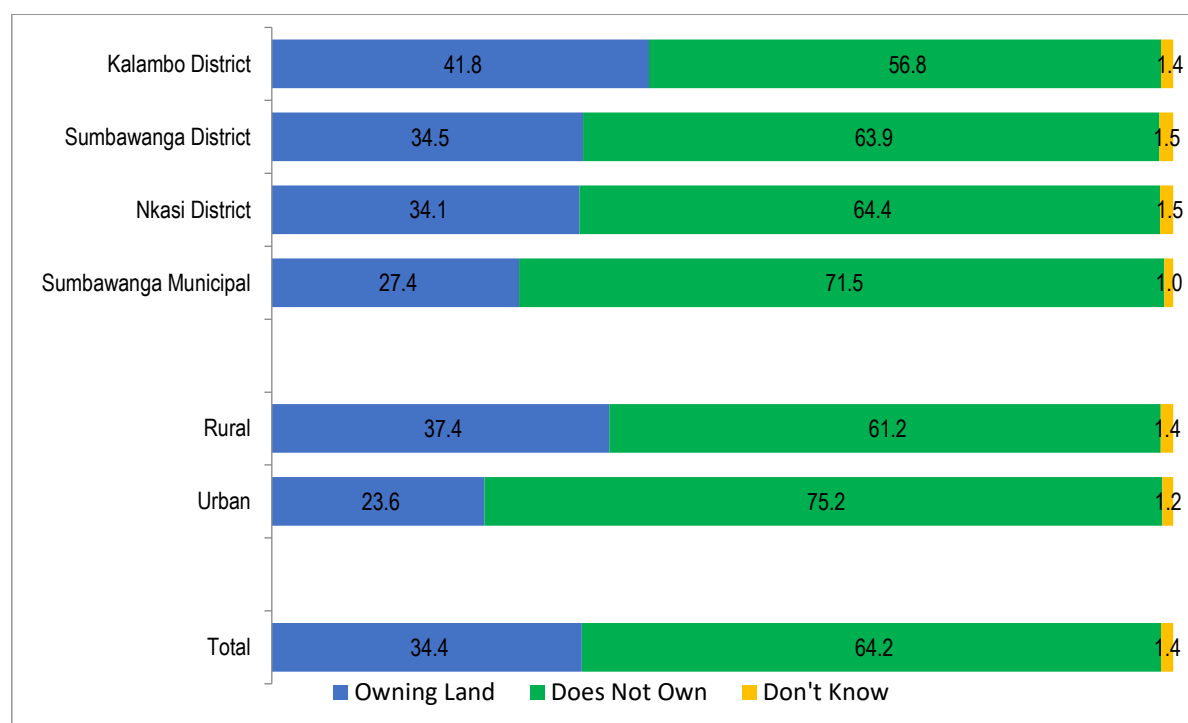
Table 11.3 presents land ownership status for persons aged 15 years and above disaggregated into broad age groups and place of residence. It is observed that land is mostly owned by persons aged 20-64 years (85.3%) followed by those aged 65 years and above (8.1%). Similar ownership patterns by age with differentiated magnitudes are observed in rural and urban areas for 20-64 years (85.0% and 87.0% respectively). On the other hand, the proportion of persons aged 15-19 years owning land in rural areas is higher (7.0%) than those in urban areas (4.2%). 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; Rukwa 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+
Total	767,252	20.7	73.9	5.4	598,791	20.8	73.6	5.6	168,461	20.2	75.2	4.7
Male	359,692	21.2	73.6	5.2	283,144	21.5	73.1	5.4	76,548	20.2	75.5	4.4
Female	407,560	20.2	74.2	5.6	315,647	20.2	74.0	5.7	91,913	20.2	74.9	4.9
Owning land												
Total	263,900	6.6	85.3	8.1	224,137	7.0	85.0	8.0	39,763	4.2	87.0	8.9
Male	136,952	5.7	85.6	8.7	116,315	6.1	85.3	8.6	20,637	3.6	87.3	9.1
Female	126,948	7.5	85.0	7.5	107,822	8.0	84.7	7.3	19,126	4.8	86.6	8.6
Does not own												
Total	965,531	24.0	70.3	5.7	649,508	25.3	68.5	6.2	316,023	21.4	74.0	4.6
Male	420,198	28.0	67.4	4.6	281,611	30.3	64.8	4.9	138,587	23.5	72.6	3.9
Female	545,333	20.9	72.6	6.6	367,897	21.4	71.3	7.2	177,436	19.7	75.2	5.1
Don't Know												
Total	10,547	49.2	45.3	5.5	8,473	50.3	43.9	5.8	2,074	44.3	51.4	4.3
Male	4,918	54.2	42.9	2.9	3,953	56.3	40.7	3.0	965	45.6	52.2	2.2
Female	5,629	44.7	47.5	7.8	4,520	45.1	46.7	8.2	1,109	43.2	50.6	6.2

Findings reveals that Kalambo District Council has a relatively higher proportion (41.8%) of persons aged 15 years and above owning land compared with other councils. On the other hand, a Council with a relatively small proportion of persons owning land is Sumbawanga Municipal Council (27.4%) (Figure 11.2).

Figure 11. 1: Percentage Distribution of Population Aged 15 Years and Above by Land Ownership Status and Council; Rukwa 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 Rukwa Region own land without any legal documents. For those possessing legal documents, 14.1 percent own land alone, 31.3 percent own land jointly and 1.8 percent own land alone and jointly. The results further reveal that ownership of legal documents is in favour of females owning land jointly (34.9%) compared with males (28.0%) (Table 11.4).

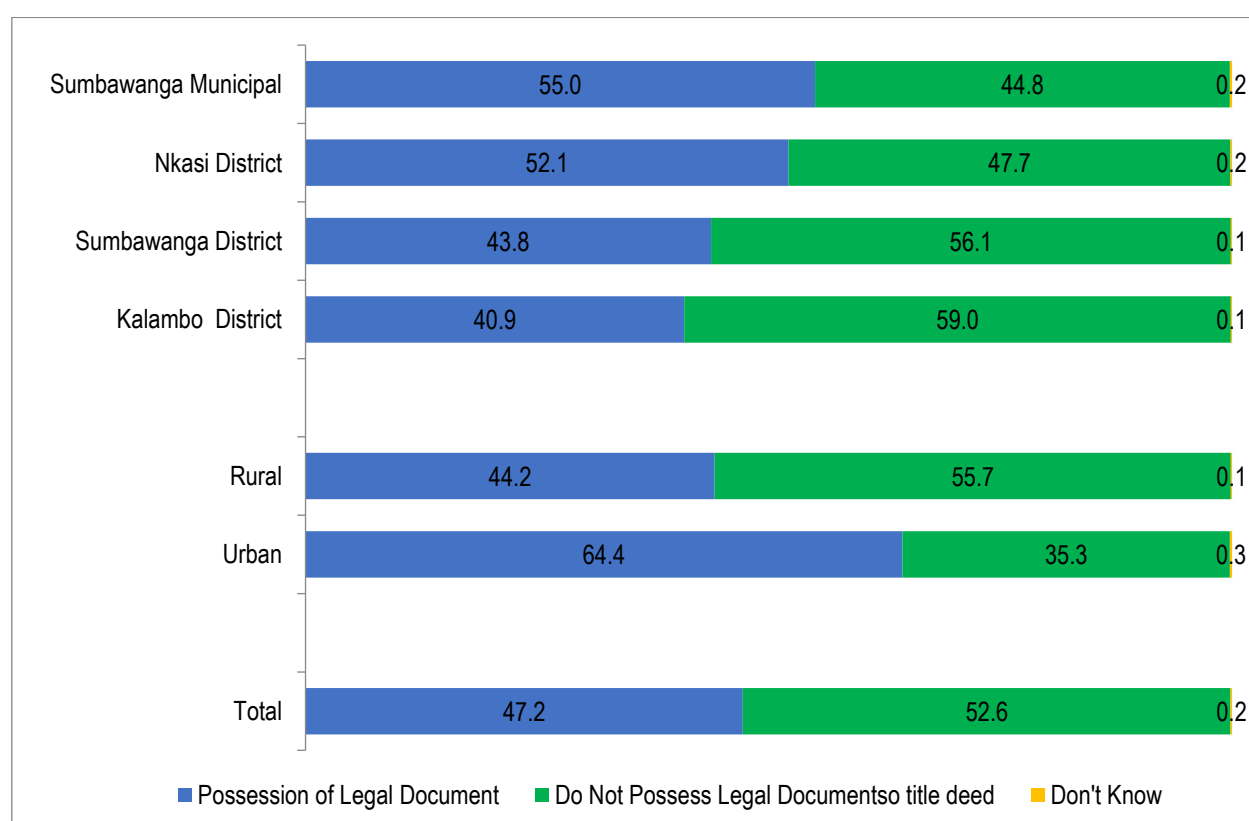
Furthermore, about 55.7 percent of persons owning land in rural areas do not have any legal documents compared with 35.3 percent of persons in urban areas. For those possessing legal documents in rural areas, 12.1 and 30.3 percent own land alone and jointly respectively. On the other hand, 25.5 percent of persons possessing legal documents in urban areas own land alone while 37.3 percent own land jointly. The results also show that in rural areas and urban areas, possession of legal documents is higher among females owning land jointly (33.5% and 42.6% respectively) (Table 11.4).

Table 11.3: Percentage Distribution of Persons Aged 15 Years and Above by Sex, Place of Residence and Legal Documents Status; Rukwa Region, 2022 PHC.

Ownership of Legal Document	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total	263,900	136,952	126,948	224,137	116,315	107,822	39,763	20,637	19,126
Alone	14.1	16.9	11.2	12.1	14.5	9.5	25.5	30.1	20.6
Jointly	31.3	28.0	34.9	30.3	27.2	33.5	37.3	32.3	42.6
Both alone and jointly	1.8	1.8	1.7	1.8	1.9	1.7	1.6	1.6	1.5
No legal document	52.6	53.1	52.1	55.7	56.2	55.1	35.3	35.6	35.0
Don't Know	0.2	0.2	0.1	0.1	0.1	0.1	0.3	0.3	0.2

The Council with the highest proportion of land owners with legal documents is Sumbawanga Municipal (55.0%) followed by Nkasi District (52.1%). On the other hand, council with the lowest proportion of land owners with legal documents is Kalambo District (40.9%) (Figure 11.3).

Figure 11. 2: Percentage Distribution of Persons Aged 15 Years and Above by Legal Documents Status and Council; Rukwa Region, 2022 PHC



Chapter 12

Housing Characteristics, Assets Ownership and Environmental Control

Key Points

- More than sixty five percent (65.6%) of households in Rukwa Region own the houses they live in.
- Almost fifty six percent (55.8%) of households use improved sources of drinking water.
- About thirty six percent (35.7%) of households use improved toilet facilities.
- Nearly eighty percent (76.3%) of households in rural areas and 26.1 percent in urban areas use firewood for cooking.
- Percentage of households using electricity from national grid for lighting increased from 6.7 percent in 2012 to 19.5 percent in 2022.
- Nearly four in ten (38.6%) households use burying 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 Rukwa Region, 65.6 percent of private households are living in their own houses; it is higher (69.8%) in rural areas than

in urban (50.6%). The percentages of male households living in their own houses is higher (67.2%) for male headed households than for female headed (62.6%). Across councils, Kalambo District has the highest percentage (69.9%) of households living in their own houses while Sumbawanga Municipal has the lowest percentage (58.2%) (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, Rukwa Region, 2022 PHC

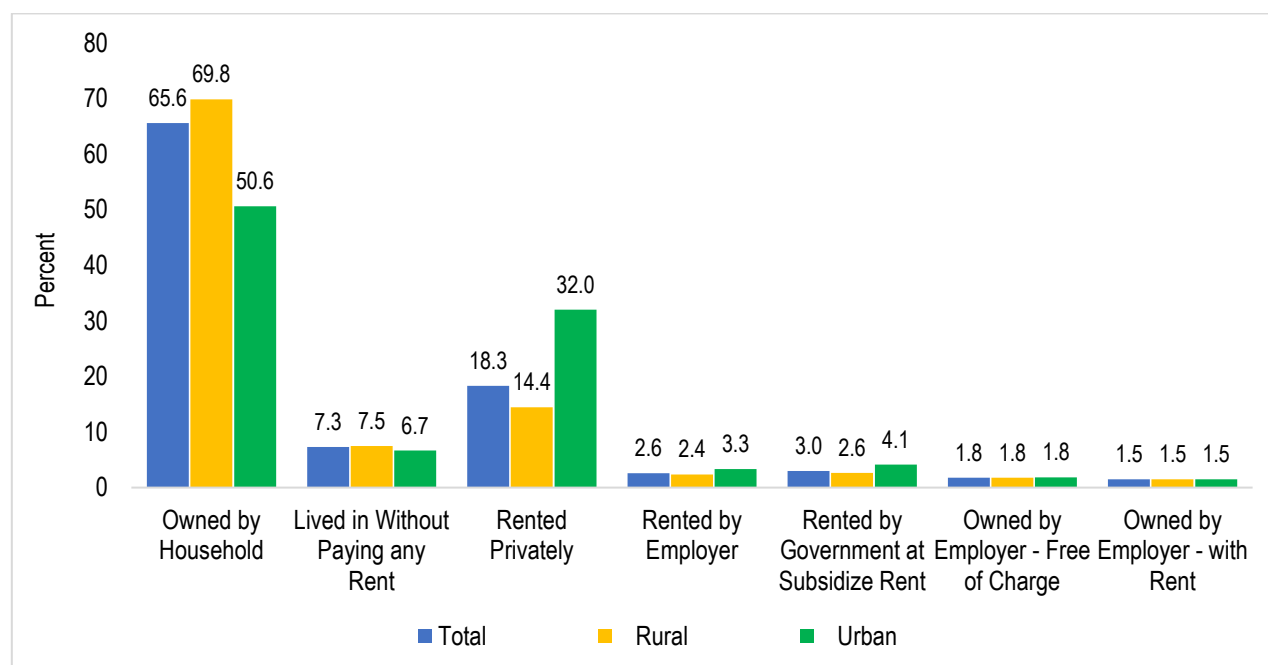


Table 12.1: Percentage Distribution of Households by Ownership Status of the Main Dwelling, Place of Residence, Headship and Council; Rukwa Region, 2022 PHC

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
Total	328,052	65.6	7.3	18.3	2.6	3.0	1.8	1.5
Rural	255,418	69.8	7.5	14.4	2.4	2.6	1.8	1.5
Urban	72,634	50.6	6.7	32.0	3.3	4.1	1.8	1.5
Male Headed Households	212,413	67.2	7.1	17.0	2.5	2.8	1.9	1.5
Female Headed Households	115,639	62.6	7.6	20.8	2.8	3.3	1.5	1.4
Council								
Kalambo District	69,147	69.9	7.8	13.8	2.4	2.6	2.1	1.4
Sumbawanga District	104,452	66.9	7.3	17.7	2.4	2.7	1.6	1.5
Sumbawanga Municipal	69,860	58.2	6.5	25.9	2.9	3.4	1.8	1.4
Nkasi District	84,593	66.5	7.5	16.6	2.8	3.2	1.8	1.6

12.2.1 Legal Ownership of Land

In Rukwa Region, 37.9 percent of the households do not have legal documents for the land where their houses are built while 6.4 percent have title deeds. Among households that live in their own houses, 28.7 percent have customary type of ownership. Households in urban areas are more likely (18.7%) to have title deed documents than those in rural areas (3.9%). On the other hand, rural households living in their own houses are more likely (31.7%) to have customary type of ownership than those living in urban areas (14.0%). The percentage of female-headed households living in their own houses and having title deeds is slightly higher (2.7%) than that of male-headed households (2.3%).

Across councils, the percentage of households with title deeds ranges from 2.5 percent in Kalambo District to 14.7 percent in Sumbawanga Municipal (Table 12.2).

Table 12. 2: Percentage Distribution of Households Living in Own Houses by Type of Legal Rights, Place of Residence, Headship and Council; Rukwa 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
Total	215,139	6.4	0.7	4.7	28.7	4.8	0.0	16.8	37.9
Rural	178,392	3.9	0.4	2.7	31.7	4.1	0.0	16.5	40.7
Urban	36,747	18.7	2.1	14.5	14.0	8.2	0.0	18.5	24.1
Male Headed	31,822	2.3	0.2	2.0	32.8	3.5	0.0	12.3	46.9
Female Headed	16,488	2.7	0.2	1.8	32.6	3.8	0.0	12.7	46.3
Council									
Kalambo District	48,310	2.5	0.2	1.9	32.7	3.6	0.0	12.4	46.7
Sumbawanga District	69,908	3.4	0.4	2.5	33.6	4.3	0.0	21.1	34.7
Sumbawanga Municipal	40,652	14.7	2.2	11.2	20.7	9.9	0.0	16.7	24.6
Nkasi District	56,269	7.5	0.5	5.2	25.0	2.7	0.0	15.3	43.8

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 Rukwa Region, 73.6 percent of households are living in houses with improved roofing materials (iron sheet, tiles, concrete and asbestos). At the Council level, Sumbawanga Municipal has 96.6 percent of its households living in houses with improved roofing materials, followed by Sumbawanga District. (70.0%). Nkasi District has the lowest percentage (62.9%) of households 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; Rukwa Region, 2022 PHC

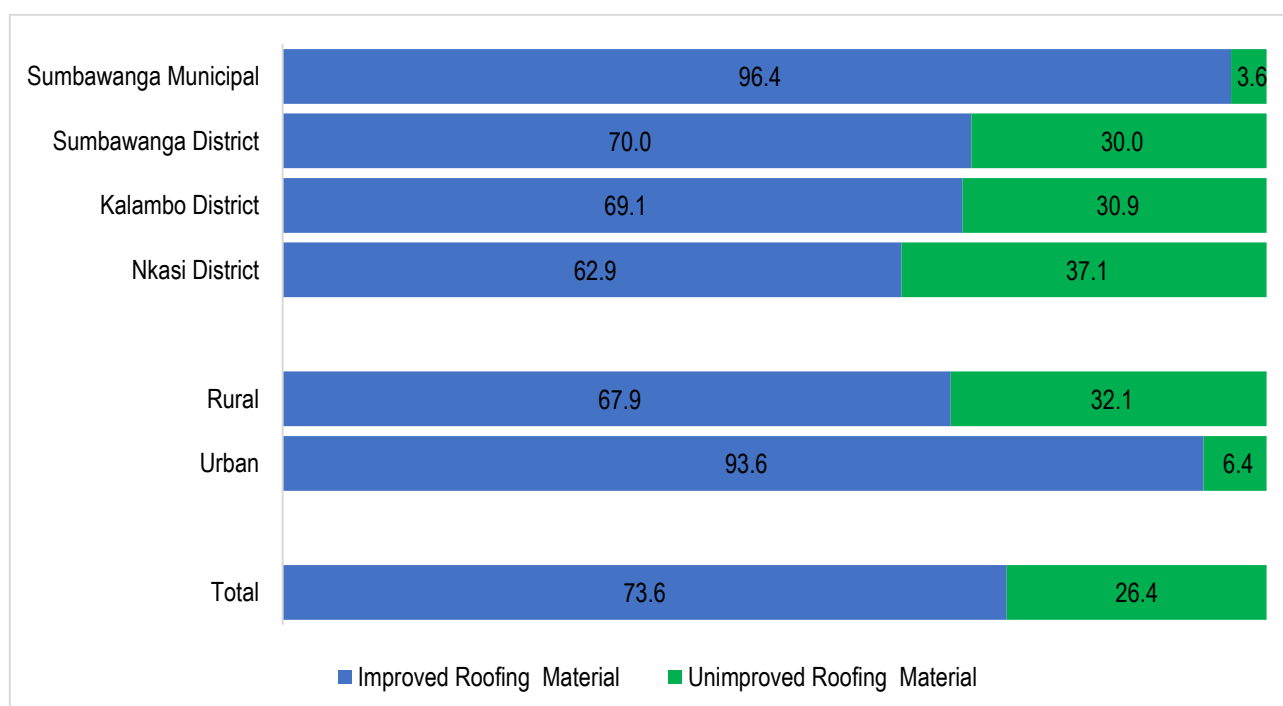


Table 12.3 show that, the majority (93.1%) of households in urban areas are living in houses roofed with iron sheets compared with 67.6 percent of households in rural areas. The percentage of households living in houses roofed with iron sheets ranges from 62.4 percent in Nkasi District Council to 96.1 percent in Sumbawanga Municipal Council. The Council with the highest percentage (34.7%) of households living in houses roofed with grass or leaves is Nkasi District.

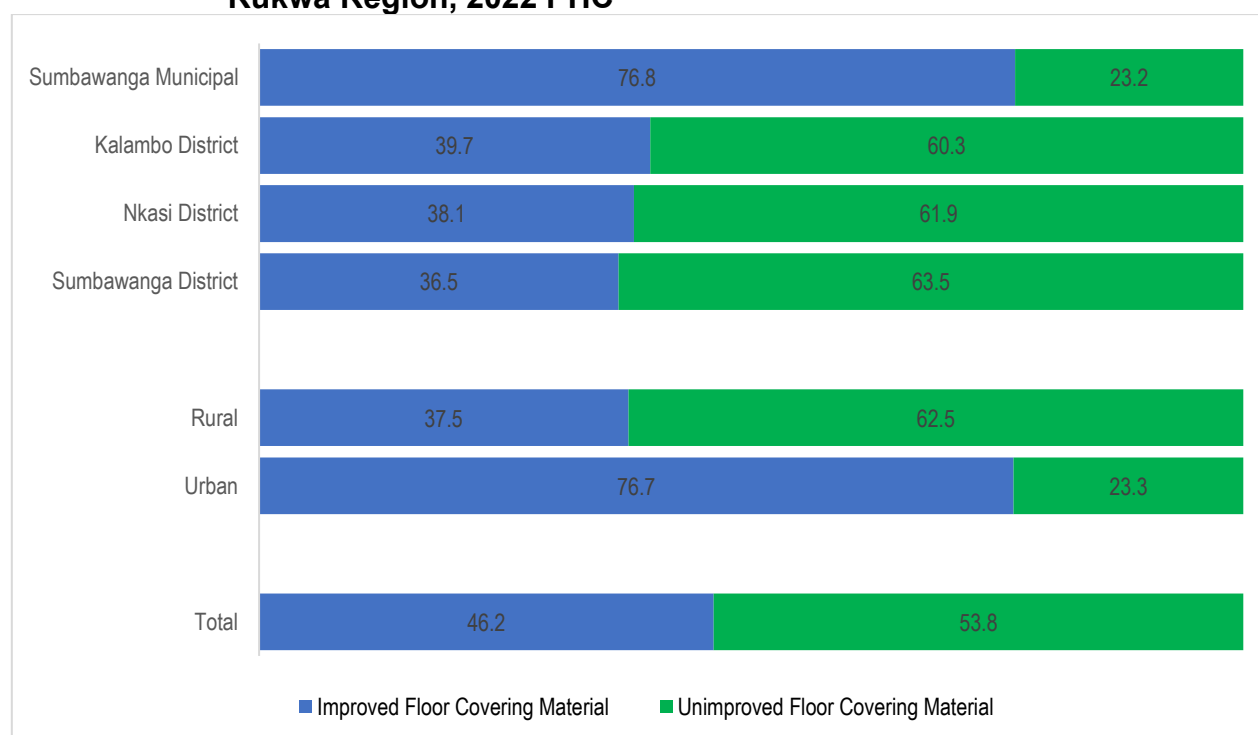
Table 12.3: Percentage Distribution of Households by Type of Roofing Material of Main Dwelling, Place of Residence and Council; Rukwa Region, 2022 PHC

Place of Residence	Total Number of Household	Type of Roofing Materials							
		Iron sheets	Tiles	Concrete	Asbestos	Grass/Leaves	Mud and Leaves	Plastics/Box	Tent
Total	328,052	73.3	0.2	0.0	0.1	24.7	1.4	0.0	0.2
Rural	255,418	67.6	0.1	0.0	0.1	30.1	1.7	0.1	0.2
Urban	72,634	93.1	0.4	0.0	0.1	5.9	0.5	0.0	0.1
Council									
Kalambo District	69,147	68.8	0.1	0.0	0.1	29.4	1.4	0.1	0.2
Sumbawanga District	104,452	69.8	0.1	0.0	0.1	28.0	1.6	0.1	0.3
Sumbawanga Municipal	69,860	96.1	0.2	0.0	0.0	3.3	0.2	0.0	0.1
Nkasi District	84,593	62.4	0.3	0.0	0.1	34.7	2.2	0.0	0.2

12.3.2 Floor Covering Materials

The percentage of households in Rukwa Region living in houses with improved floor covering materials (cement, ceramic tiles, parquet or polished wood, terrazzo, vinyl or asphalt strips) is 46.2 while 53.8 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 36.5 percent in Sumbawanga District to 76.8 percent in Sumbawanga Municipal (Figure 12.3).

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



The results further show that, 59.2 percent of households in Rukwa Region are living in dwellings with earth or sand floors followed by households with cement floors as floor covering materials (44.6%). In urban areas, 71.9 percent of households are living in houses with cement as floor covering materials followed by those living in dwellings with earth or sand floors (23.0%). In rural areas, most households (61.4%) are living in houses that have earth or sand as the floor covering materials followed by those living in dwelling with cement floors (36.8%). The percentage of households living in houses with cement as floor covering materials in the main dwelling is highest (72.1%) in Sumbawanga Municipal. On the other hand, the Council with the lowest percentage of households living in houses with cement as floor covering materials in the main dwelling is Sumbawanga District (35.9%).

Table 12. 4: Percentage Distribution of Households by Type of Floor Covering Material of the Main Dwelling, Place of Residence and Council; Rukwa, 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 ⁷
Total	328,052	44.6	1.4	0.1	0.1	0.0	0.1	0.2	52.9	0.4	0.2
Rural	255,418	36.8	0.5	0.1	0.1	0.0	0.2	0.3	61.4	0.4	0.2
Urban	72,634	71.9	4.5	0.2	0.1	0.0	0.0	0.1	23.0	0.1	0.1
Council											
Kalambo District	69,147	38.9	0.7	0.0	0.1	0.0	0.1	0.1	59.7	0.3	0.2
Sumbawanga District	104,452	35.9	0.4	0.1	0.2	0.0	0.3	0.4	62.1	0.4	0.3
Sumbawanga Municipal	69,860	72.1	4.4	0.2	0.1	0.0	0.0	0.0	22.8	0.2	0.1
Nkasi District	84,593	37.2	0.7	0.1	0.1	0.0	0.1	0.3	60.8	0.5	0.2

⁷ Others include households living in containers or tents.

12.3.3 Wall Materials

Most households in Rukwa Region, have their house walls built with baked bricks (81.7%), followed by Sundried Bricks (12.2%). In urban areas (87.3%) use baked bricks as wall materials, followed by Sundried bricks (6.3%). In rural areas, 80.1 percent of the households are living in houses built with baked bricks as the main wall materials, followed by Sundried bricks (13.9%).

Sumbawanga Municipal has the highest (88.6%) percentage of households with houses built using baked bricks, followed by Kalambo District (85.9%), Sumbawanga District (84.0%) and Nkasi District (69.6%) (Table 12.5).

Table 12.5: Percentage Distribution of Households by Type of Wall Materials of Main Dwelling, Place of Residence and Council; Rukwa 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
Total	328,052	0.4	2.0	12.2	81.7	0.1	0.1	2.0	1.5	0.0	0.1
Rural	255,418	0.4	1.1	13.9	80.1	0.1	0.1	2.3	1.9	0.0	0.1
Urban	72,634	0.4	4.9	6.3	87.3	0.1	0.0	0.7	0.2	0.0	0.0
Council											
Kalambo District	69,147	0.1	0.7	11.0	85.9	0.1	0.1	1.3	0.6	0.0	0.1
Sumbawanga District	104,452	0.2	1.0	9.2	84.0	0.1	0.1	2.3	2.9	0.0	0.2
Sumbawanga Municipal	69,860	0.9	4.9	4.9	88.6	0.1	0.1	0.4	0.1	0.0	0.0
Nkasi District	84,593	0.4	1.7	23.0	69.6	0.1	0.1	3.4	1.7	0.0	0.1

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 forty percent (37.7%) households in Rukwa Region have one room for sleeping, 38.1 percent have two rooms and 15.6 percent have three rooms. On the other hand, 37.9 percent and 38.5 percent of male and female headed households respectively are sleeping in houses with two rooms for sleeping.

The proportion of households with only one room for sleeping is higher in rural (38.0%) rural than in urban areas (36.5%). Sumbawanga District Council has the highest (42.5%) 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 Nkasi District (33.5%) (Figure 12.4 and Table 12.6).

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

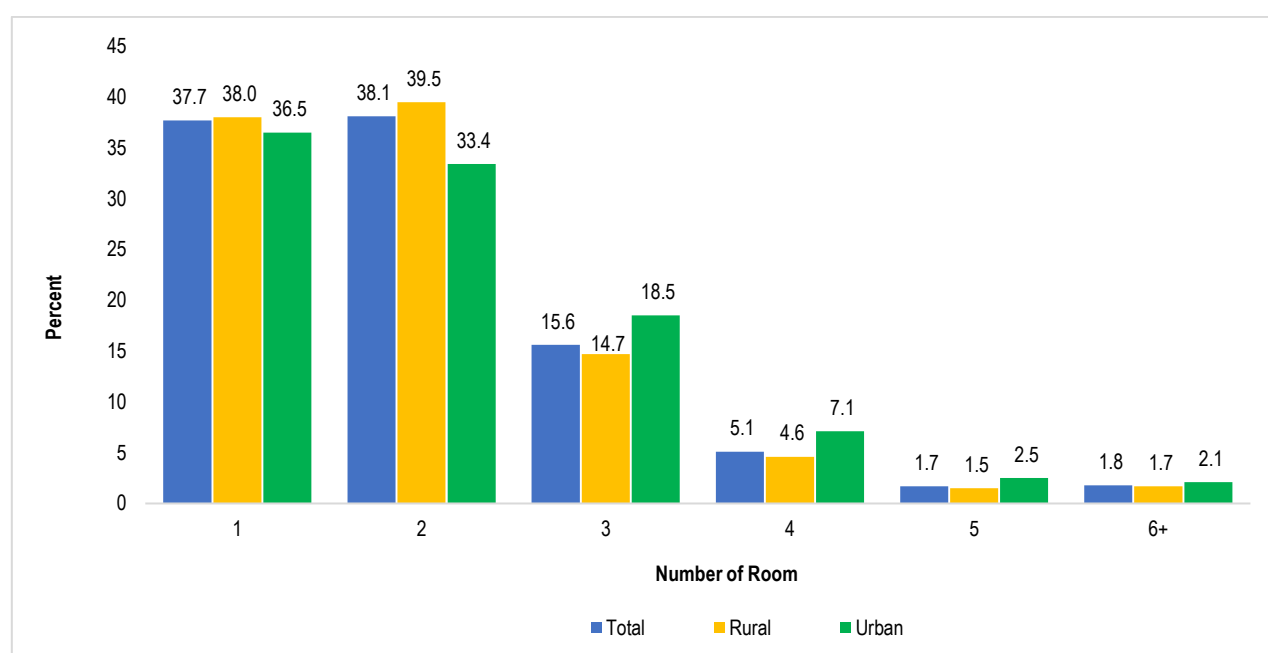


Table 12.5: Percentage Distribution of Households by Number of Rooms for Sleeping, Place of Residence, Headship and Council; Rukwa Region, 2022 PHC

Residence/Headship/	Total Number of Households	Average Household size	Number of Rooms						Average Number of Rooms
			1	2	3	4	5	6+	
Total	328,052	4.7	37.7	38.1	15.6	5.1	1.7	1.8	2.0
Rural	255,418	4.8	38.0	39.5	14.7	4.6	1.5	1.7	2.0
Urban	72,634	4.2	36.5	33.4	18.5	7.1	2.5	2.1	2.1
Male Headed Households	212,413	4.9	36.4	37.9	16.3	5.6	1.8	1.9	2.1
Female Headed Households	115,639	4.3	39.9	38.5	14.2	4.4	1.5	1.5	2.0
Council									
Kalambo District	69,143	4.6	39.3	39.5	14.6	4.4	1.2	1.0	1.9
Sumbawanga District	104,452	4.7	42.5	37.7	12.7	4.1	1.4	1.5	1.9
Sumbawanga Municipal	69,860	4.3	33.7	35.6	18.6	7.2	2.4	2.5	2.2
Nkasi District	84,593	5.0	33.5	39.6	17.4	5.4	1.9	2.1	2.1

12.4 Water and Sanitation

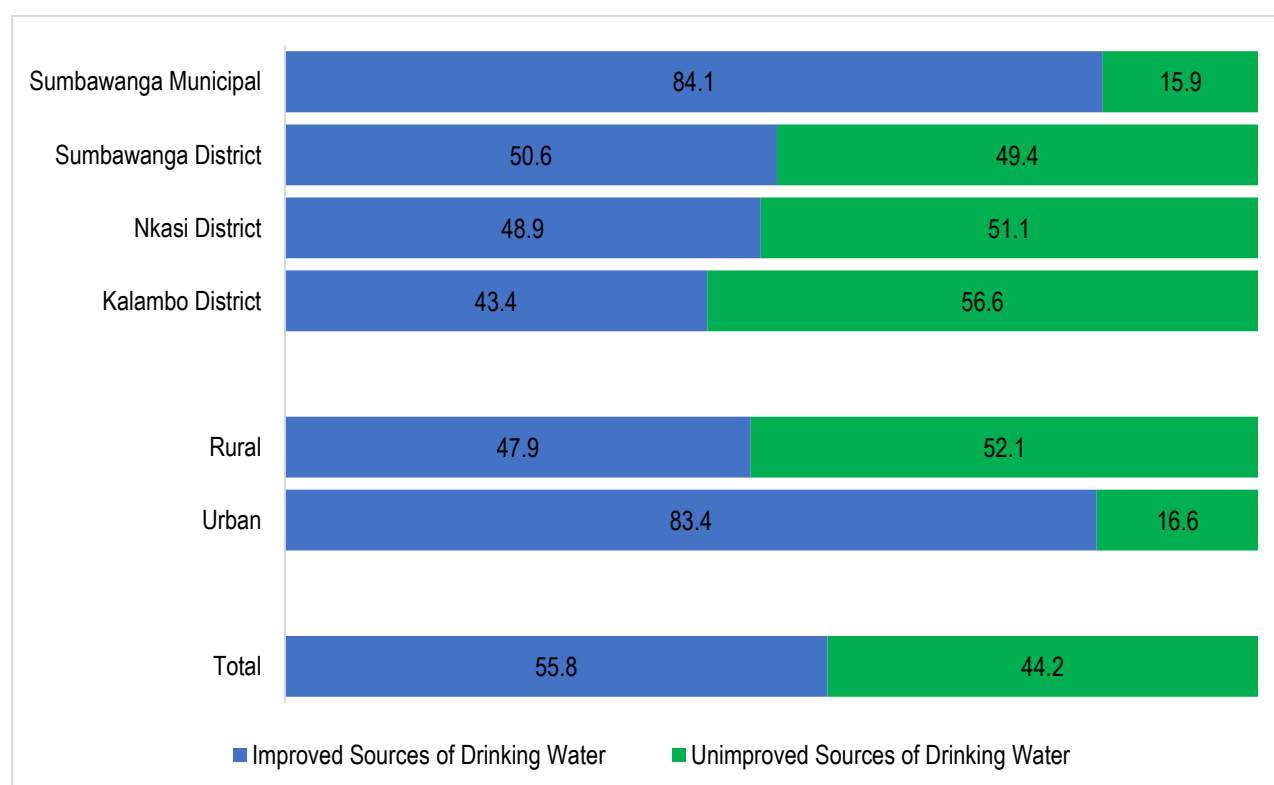
Inadequate and inequitable access to water and sanitation services along with inappropriate hygiene practices at household level, largely contributes to barriers that hinder efforts to support realisation of personal rights to live in a safe and clean environment.

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.

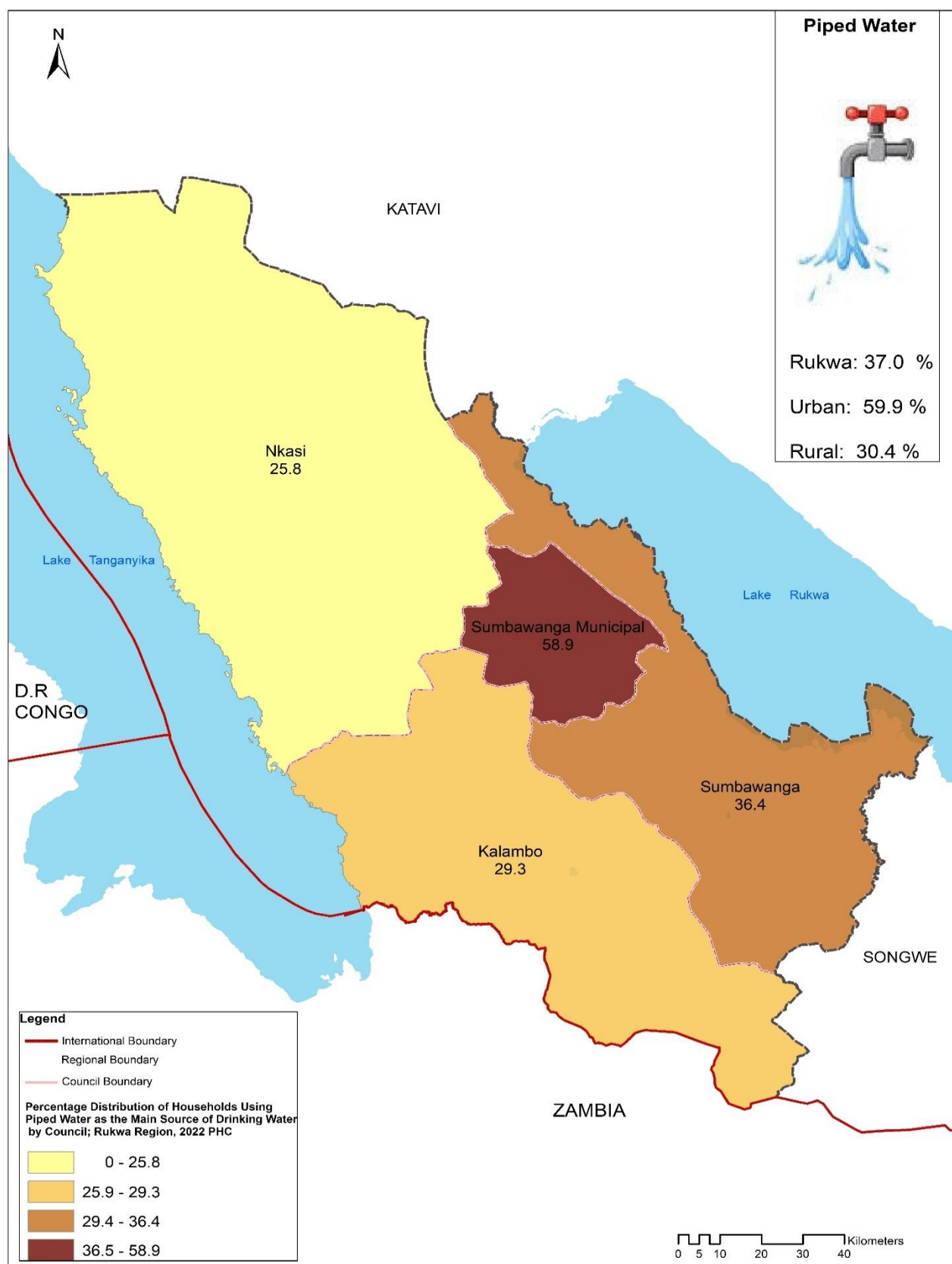
Results show that in Rukwa Region 55.8 percent of households use improved sources of drinking water. Across councils, Sumbawanga Municipal has the highest percentage (84.1%) of households using improved sources of drinking water followed by Sumbawanga District (50.6%). Kalambo District Council has the lowest percentage (43.4%) (Figure 12.5).

Figure 12. 5: Percentage Distribution of Households Using Improved and Unimproved Sources of Drinking Water by Council; Rukwa 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, 37.0 percent of households in Rukwa 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; Rukwa Region, 2022 PHC



Households living in urban areas are more likely to use piped water than those living in rural areas (59.9% urban and 30.4% rural). Households in urban areas having piped water into their dwelling or yard is 29.5 percent, while 14.0 percent are getting water from a neighbours' piped supply and 16.4 percent from a public tap. In rural areas, 8.3 percent of households have piped water into their dwelling or yard, 2.6 percent get drinking water from a neighbours' piped supply and 19.5 percent from a public tap. The percentage of households using piped water ranges from 25.8 percent in Nkasi District Council to 58.9 percent in Sumbawanga Municipal Council (Map 12.1 and Table 12.7).

Table 12.6: Percentage Distribution of Households by Main Source of Drinking Water, Place of Residence, Headship and Council; Rukwa Region, 2022 PHC

Residence/Headship/Council	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/Bicycle/Motorcycle	Tanker Truck	Surface Water
Total	328,052	10.4	2.7	18.8	5.1	6.7	8.1	18.0	2.8	14.0	0.2	0.3	0.7	0.1	12.2
Rural	255,418	7.2	1.1	19.5	2.6	7.4	5.7	20.4	3.3	17.1	0.2	0.2	0.7	0.1	14.7
Urban	72,634	21.4	8.1	16.4	14.0	4.2	16.4	9.7	1.0	3.3	0.2	0.8	0.8	0.0	3.5
Male Headed Households	212,413	9.9	2.6	18.6	4.7	6.7	8.1	18.6	2.8	14.5	0.2	0.3	0.6	0.0	12.3
Female Headed Household	115,639	11.1	2.8	19.3	5.8	6.7	8.1	16.9	2.7	13.1	0.3	0.2	0.8	0.1	12.1
Council															
Kalambo District	69,147	6.2	1.5	19.2	2.4	5.5	5.2	19.3	2.8	27.7	0.2	0.2	0.2	0.0	9.6
Sumbawanga District	104,452	10.5	1.5	21.4	3.0	1.9	5.5	18.0	5.1	12.0	0.3	0.2	0.9	0.1	19.5
Sumbawanga Municipal	69,860	20.9	7.4	16.7	13.9	7.1	15.9	9.5	1.2	4.7	0.1	0.7	0.2	0.0	1.7
Nkasi District	84,593	5.0	1.1	17.1	2.6	13.3	7.0	24.0	1.1	13.0	0.2	0.2	1.2	0.1	14.1

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.

Almost thirty-six percent (35.7%) of households in Rukwa Region use improved toilet facilities. In rural households, 24.3 percent are using improved toilet facilities; this is below the Third Tanzania Five Years Development Plan target of 75 percent by 2025/26. Sumbawanga Municipal Council has the highest percentage (69.3%) of households using improved toilet facilities, while Kalambo District Council has the lowest (21.2%). The most commonly used toilet facilities in private households are pit latrines without slab (open pit) (59.9%). A higher proportion of households using pit latrines without slab/open pit are in rural than in urban areas (70.6% in rural and 22.6% urban). The percentage of households without toilet facilities (open defecation) ranges from 0.6 percent in Sumbawanga Municipal to 6.0 percent in Kalambo and Nkasi District Councils (Figure 12.6 and Table 12.8).

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

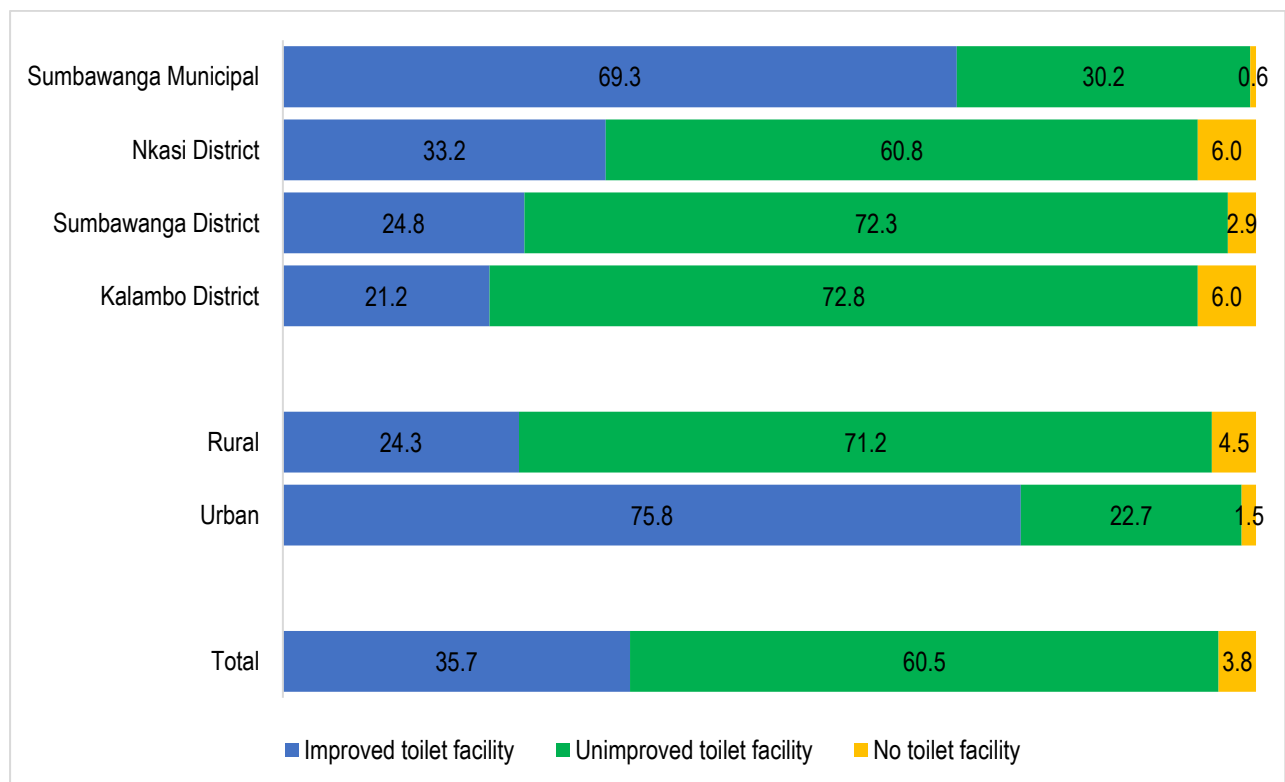


Table 12.7: Percentage Distribution of Households by Main Type of Toilet Facility, Place of Residence, Headship and Council; Rukwa Region, 2022 PHC

Residence/Headship/Council	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
Total	328,052	1.5	3.2	12.8	1.4	3.2	2.2	5.3	6.2	59.9	0.5	3.8
Rural	255,418	0.5	0.7	6.7	1.0	2.5	1.7	4.4	6.8	70.6	0.7	4.5
Urban	72,634	4.8	11.7	34.5	2.8	5.4	3.9	8.3	4.4	22.6	0.1	1.5
Male Headed Households	212,413	1.4	3.1	12.6	1.4	3.1	2.1	5.1	6.3	60.6	0.5	3.8
Female Headed Households	115,639	1.7	3.3	13.2	1.4	3.3	2.3	5.5	6.1	58.7	0.5	4.0
Council												
Kalambo District	69,147	0.6	0.6	6.2	0.7	3.3	1.3	3.5	5.0	72.4	0.3	6.0
Sumbawanga District	104,452	0.8	0.8	5.5	0.9	2.0	2.0	5.7	7.2	72.0	0.3	2.9
Sumbawanga Municipal	69,860	4.3	12.1	31.5	2.7	4.1	3.5	6.8	4.2	28.9	1.2	0.6
Nkasi District	84,593	0.8	0.8	11.9	1.5	3.7	1.9	4.9	7.8	60.4	0.4	6.0

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 12.10 shows that the majority (65.2%) of households in Rukwa Region use firewood as the main source of energy for cooking followed by charcoal (27.8%). In rural areas 76.3 percent of households use firewood for cooking while in urban is 26.1 percent. The percentage of households using charcoal for cooking in rural areas is 18.1 percent and in urban areas it is 62.0 percent.

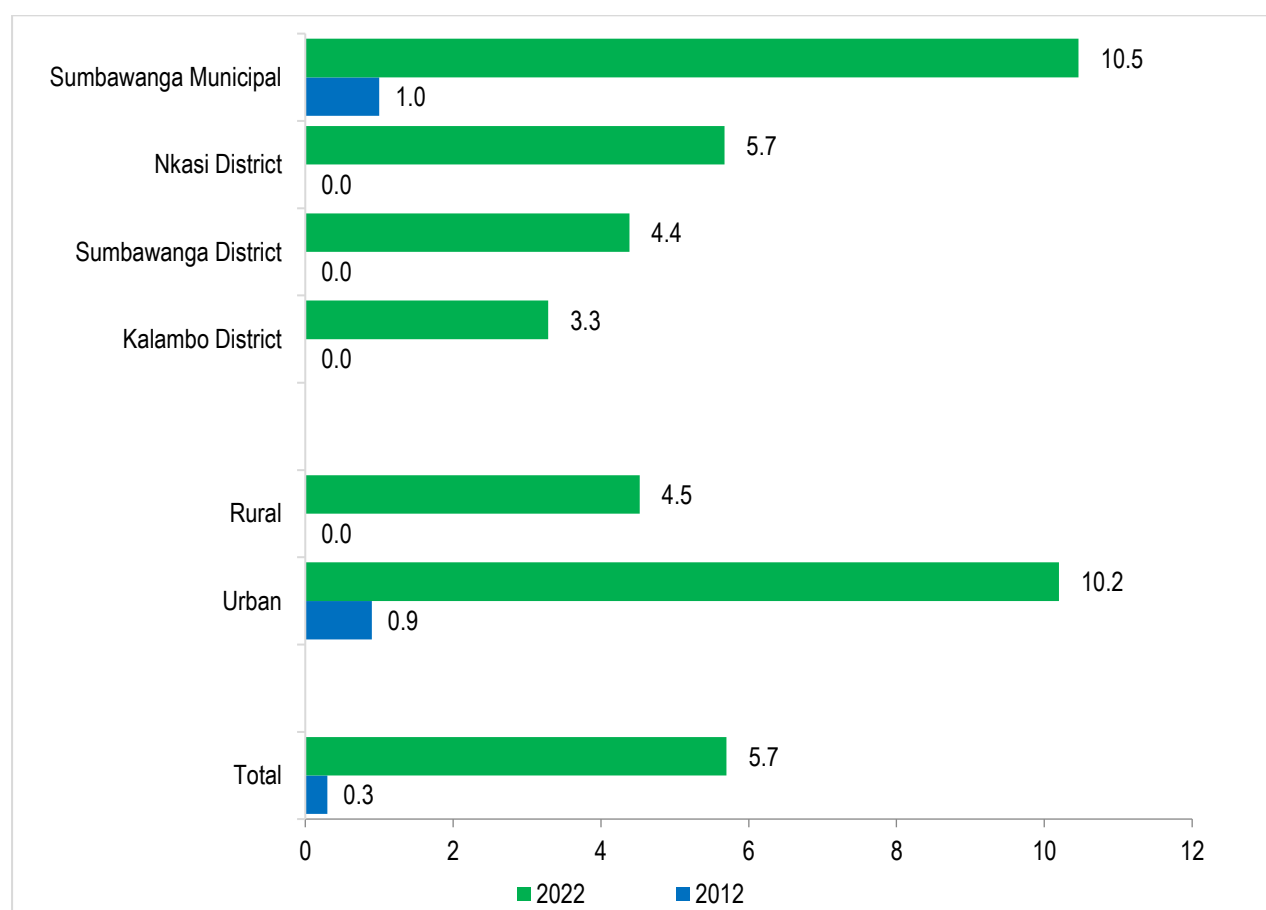
Across councils, the percentage of households using firewood for cooking ranges from 38.8 percent in Sumbawanga Municipal to 77.7 percent in Sumbawanga District. On the other hand, the percentage of households using charcoal for cooking ranges from 16.8 percent in Sumbawanga District Council to 49.0 percent in Sumbawanga Municipal Council (Table 12.9).

Table 12.8: Percentage Distribution of Households by Main Source of Energy for Cooking, Place of Residence, Headship and Council; Rukwa Region, 2022 PHC

Residence/Headship/Council	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
Total	328,052	1.1	2.6	0.2	1.9	0.0	0.0	0.4	0.1	27.8	65.2	0.0	0.0	0.0	0.6
Rural	255,418	0.8	2.9	0.2	0.7	0.0	0.0	0.4	0.1	18.1	76.3	0.0	0.0	0.0	0.5
Urban	72,634	2.2	1.4	0.2	6.4	0.1	0.0	0.3	0.2	62.0	26.1	0.0	0.0	0.0	1.0
Male Headed Households	212,413	1.1	2.7	0.1	2.1	0.0	0.0	0.4	0.1	26.4	66.1	0.0	0.0	0.0	0.9
Female Headed Households	115,639	1.0	2.5	0.2	1.6	0.0	0.0	0.5	0.1	30.4	63.3	0.0	0.0	0.0	0.2
Council															
Kalambo District	69,147	0.6	1.9	0.0	0.8	0.0	0.0	0.5	0.1	20.7	74.8	0.0	0.0	0.0	0.5
Sumbawanga District	104,452	0.5	3.0	0.2	0.8	0.0	0.0	0.2	0.1	16.8	77.7	0.0	0.0	0.0	0.7
Sumbawanga Municipal	69,860	2.5	1.6	0.2	6.1	0.1	0.0	0.6	0.2	49.0	38.8	0.0	0.0	0.0	0.8
Nkasi District	84,593	1.1	3.5	0.2	0.9	0.0	0.0	0.4	0.1	29.6	63.5	0.0	0.0	0.0	0.5

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 Rukwa Region has increased from 0.3 percent in 2012 to 5.7 percent in 2022. At Council level, there is high increase in percentage of households using clean energy in Sumbawanga Municipal from 1.0 percent in 2012 to 10.5 percent in 2022 and in Nkasi District from 0.0 percent in 2012 to 5.7 percent in 2022 (Figure 12.7).

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



12.5.2 Sources of Energy for Lighting

Results show that, 19.5 percent of households in Rukwa Region use electricity from the national grid (TANESCO) as the main source of energy for lighting, followed by 38.5 percent of households using solar energy. Electricity is predominantly used in the urban households (52.1%) compared with the rural households (10.2%). Use of electricity as the main source for lighting ranges from 8.4 percent of households in Sumbawanga District Council to 46.8 percent of households in Sumbawanga 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 Nkasi District (48.5%) followed by Kalambo District (42.1%) (Figure 12.8 and Table 12.11).

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

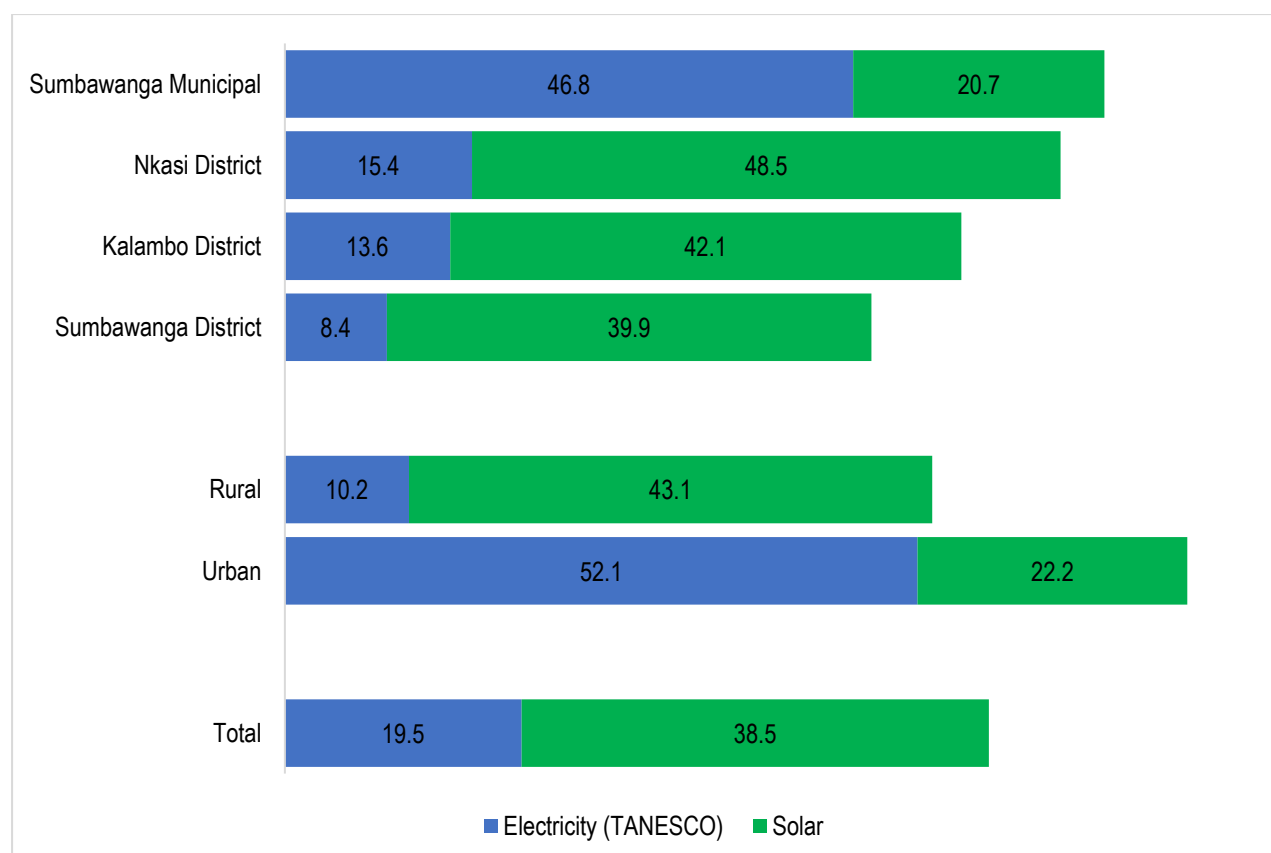


Figure 12.9 shows that, there is an increase in use of national grid electricity for lighting in Rukwa Region. Percentage of households using electricity from the national grid for lighting increased from 6.7 percent in 2012 to 19.5 percent in 2022. A similar increase is observed in all councils.

Figure 12. 6: Percentage Distribution of Households Using Electricity from National Grid for Lighting by Council; Rukwa Region, 2012 and 2022 PHCs

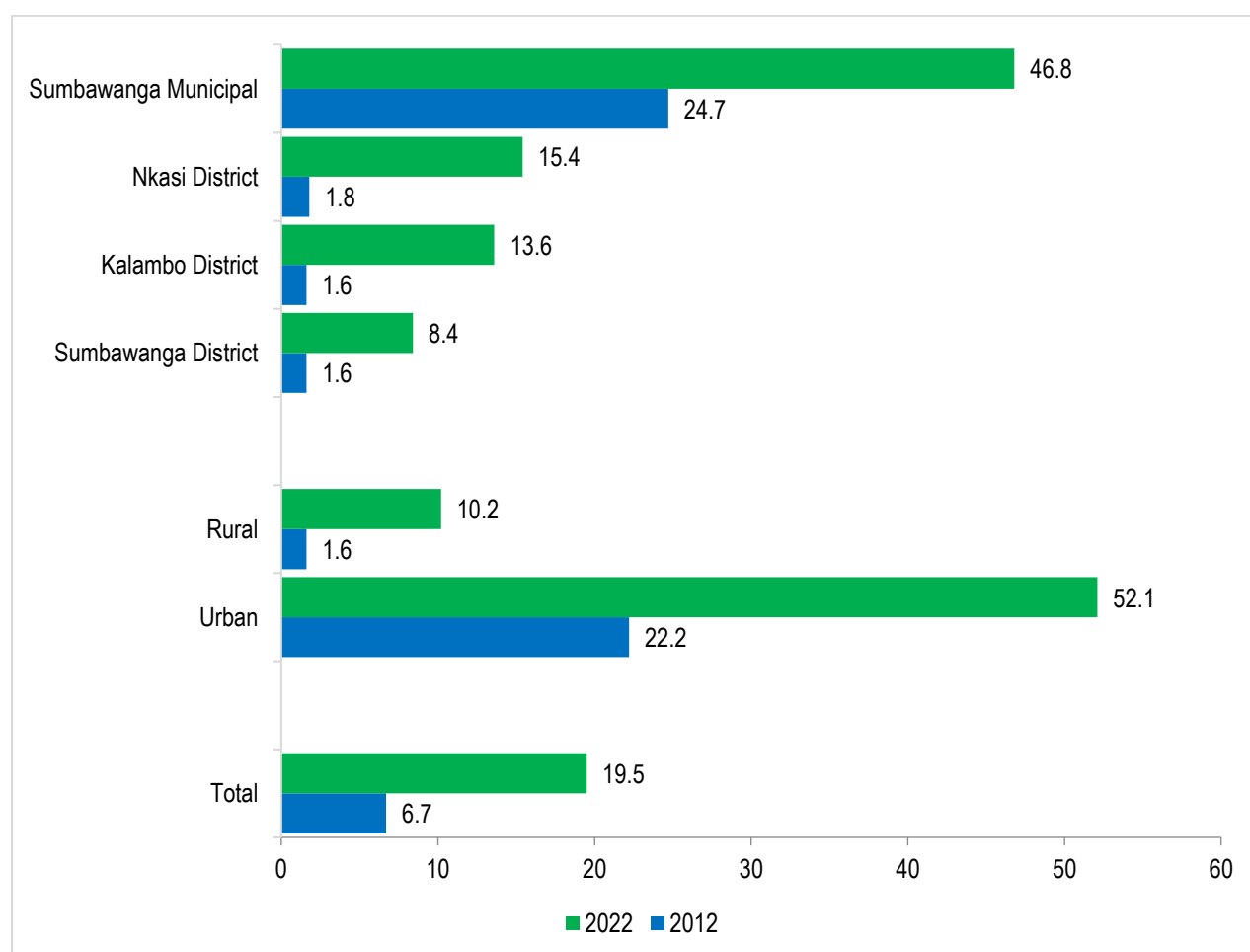


Table 12.9: Percentage Distribution of Households by Main Source of Energy for Lighting, Place of Residence, Headship and Council; Rukwa Region, 2022 PHC

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)
Total	328,052	19.5	38.5	0.3	0.0	0.1	0.1	1.5	0.4	9.7	0.6	2.4	26.8	0.0
Rural	255,418	10.2	43.1	0.3	0.0	0.1	0.1	1.5	0.4	10.1	0.6	2.8	30.7	0.0
Urban	72,634	52.1	22.2	0.2	0.0	0.0	0.3	1.5	0.5	8.3	0.9	0.8	13.1	0.0
Male Headed Households	212,413	19.5	41.3	0.3	0.0	0.1	0.1	1.3	0.4	8.9	0.6	2.3	25.2	0.0
Female Headed Households	115,639	19.5	33.4	0.3	0.0	0.1	0.1	1.8	0.5	11.3	0.7	2.5	29.8	0.0
Council														
Kalambo District	69,147	13.6	42.1	0.2	0.0	0.0	0.0	1.4	0.3	9.0	0.5	2.4	30.4	0.1
Sumbawanga District	104,452	8.4	39.9	0.3	0.0	0.0	0.0	0.7	0.2	5.0	0.8	3.7	40.9	0.0
Sumbawanga Municipal	69,860	46.8	20.7	0.2	0.0	0.4	0.3	3.0	1.0	20.1	0.7	0.9	5.8	0.0
Nkasi District	84,593	15.4	48.5	0.3	0.0	0.1	0.2	1.3	0.4	7.6	0.5	1.9	23.8	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 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 four out of ten (38.6%) households in Rukwa Region use burying of solid waste as the main method of solid disposal, followed by burning or pit (34.5%) and regular collection (9.9%). In urban areas, 32.2 percent of private households use burying as means of disposing solid waste, followed by regular collection methods (24.9%) and burying or pit (23.4%). In rural areas, 40.5 percent of households use burying followed by burning or pit (37.7%) and open space (8.3%). Sumbawanga Municipal Council has the highest percentage (22.7%) of households using regular collection of solid waste as a means of waste disposal followed by Sumbawanga District (6.8%) (Table 12.11).

Table 12.10: Percentage Distribution of Households by Main Means of Solid Waste Disposal, Place of Residence, Headship and Council; Rukwa 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
Total	328,052	9.9	3.2	34.5	0.6	38.6	7.1	0.4	3.3	2.3
Rural	255,418	5.7	0.7	37.7	0.7	40.5	8.3	0.3	3.6	2.6
Urban	72,634	24.9	11.8	23.4	0.4	32.2	2.9	0.9	2.2	1.3
Male Headed Households	212,413	9.4	3.0	34.7	0.6	39.0	7.0	0.4	3.6	2.3
Female Headed Households	115,639	10.9	3.5	34.2	0.6	37.9	7.3	0.5	2.8	2.3
Council										
Kalambo District	69,147	6.0	0.6	46.1	0.9	30.3	11.4	0.3	2.0	2.3
Sumbawanga District	104,452	6.8	0.8	34.5	0.5	46.7	6.4	0.2	2.1	2.1
Sumbawanga Municipal	69,860	22.7	11.9	26.9	0.4	29.0	3.4	0.6	4.5	0.7
Nkasi District	84,593	6.4	1.0	31.5	0.6	43.5	7.7	0.6	4.8	4.0

12.6.2 Waste Collection Authorities

The results show that Councils (46.4%) and private individuals (48.3%) are the main authorities that usually collect solid waste in private households. Out of the total households which reported that household waste is collected, households in rural areas are more likely (91.3%) to use private individuals as waste collectors while urban households are more likely to use Councils (75.6%) (Figure 12.10 and Table 12.12).

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

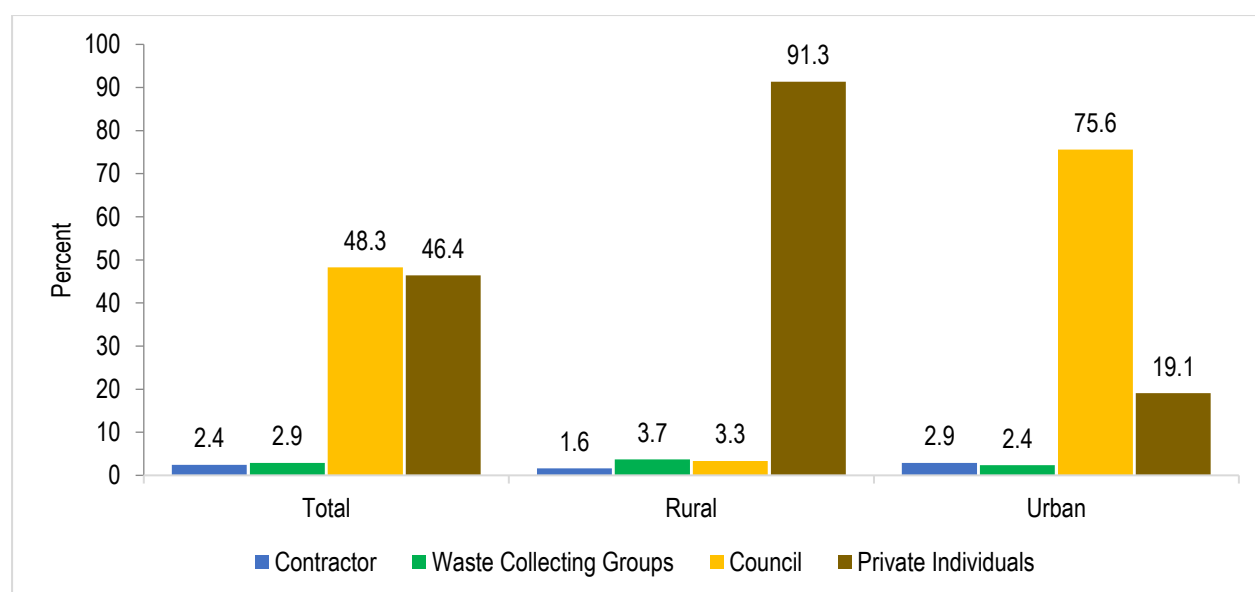


Table 12.11: Percentage Distribution of Households by Type of Authorities Collecting Waste, Place of Residence, Headship and Council; Rukwa Region, 2022 PHC

Place of Residence/Headship	Number of Households	Type of Authority			
		Contractor	Waste Collecting Groups	Council	Private Individuals
Total	42,926	2.4	2.9	48.3	46.4
Rural	16,238	1.6	3.7	3.3	91.3
Urban	26,688	2.9	2.4	75.6	19.1
Male Headed Households	26,310	2.5	3.0	46.9	47.7
Female Headed Households	16,616	2.4	2.7	50.5	44.5
Council					
Kalambo District	4,623	1.0	1.4	1.8	95.9
Sumbawanga District	7,889	1.3	2.5	4.2	92.0
Sumbawanga Municipal	24,155	3.2	2.7	81.0	13.2
Nkasi District	6,259	2.1	5.3	11.9	80.7

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 60.2 percent of households in Rukwa Region mix electronic waste with other refuse. Households living in urban areas (72.7%) and 56.7 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 (67.1%) in Sumbawanga Municipal followed by Nkasi District (60.0%). All councils have more than 50 percent of their households mixing electronic waste with other refuse (Table 12.13).

Table 12.12: Percentage Distribution of Households by Methods of Disposing Electronic Waste by Place of Residence, Headship and Council; Rukwa 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)
Total	328,052	60.2	0.7	0.1	5.0	0.3	12.3	16.3	3.8	1.3
Rural	255,418	56.7	0.2	0.1	5.5	0.4	13.6	18.1	4.1	1.3
Urban	72,634	72.7	2.5	0.2	3.2	0.2	7.5	10.0	2.7	1.1
Male Headed Households	212,413	59.8	0.7	0.1	5.0	0.3	12.3	16.5	4.0	1.3
Female Headed Households	115,639	61.0	0.7	0.1	5.0	0.3	12.2	16.0	3.4	1.3
Council										
Kalambo District	69,147	58.0	0.1	0.0	5.8	0.5	16.4	15.3	3.0	0.8
Sumbawanga District	104,452	57.3	0.2	0.1	4.8	0.3	12.7	20.1	3.3	1.3
Sumbawanga Municipal	69,860	67.1	2.5	0.1	3.2	0.3	8.6	12.5	4.2	1.5
Nkasi District	84,593	60.0	0.3	0.1	5.9	0.3	11.5	15.6	4.8	1.4

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 Rukwa Region, bicycle is the main transportation asset owned by households (18.9%) followed by motorcycles (4.6%) and motor vehicles (1.1%). The percentage of households owning bicycles is higher in male-headed households (22.6%) compared with female-headed households (12.1%). The percentage of households owning bicycles is slightly higher (19.1%) in rural areas than in urban areas (18.1%). Across councils, the percentage of households owning bicycles ranges from 20.1 percent in Kalambo District to 44.9 percent in Nkasi District (Table 12.14).

Table 12.13: Percentage Distribution of Households by Type of Transport Assets Owned, Place of Residence, Headship and Council; Rukwa 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
Total	328,052	18.9	1.1	4.6	0.1	0.3	1.8
Rural	255,418	19.1	1.0	4.6	0.1	0.3	1.7
Urban	72,634	18.1	1.2	4.4	0.1	0.3	2.2
Male Headed Households	212,413	22.6	0.6	5.0	0.1	0.2	2.6
Female Headed Households	115,639	12.1	1.9	3.8	0.1	0.4	0.3
Council							
Kalambo District	61,345	20.1	0.6	4.9	0.1	0.2	1.9
Sumbawanga District	79,373	23.1	0.6	5.7	0.2	0.2	3.7
Sumbawanga Municipal	47,527	26.8	4.4	8.3	0.2	1.1	1.1
Nkasi District	41,604	44.9	1.3	8.4	0.2	0.2	2.9

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 65.7 percent of households own houses. The percentage of households in Rukwa Region owning houses is higher (69.5%) in rural than in urban areas (52.2%). The percentage of male headed households

owning houses is higher (68.0%) than that of female headed households (61.4%). Other housing and cooking assets owned by households are electric iron (4.8%), charcoal iron (6.9%), electric or gas cooker (3.8%) and refrigerator or freezer (1.6%). Except for ownership of houses, households living in urban areas are more likely to own housing and cooking assets than households living in rural areas (Table 12.15).

Table 12.14: Percentage Distribution of Households by Type Housing and Cooking Assets Owned, Place of Residence, Headship and Council; Rukwa Region, 2022 PHC

Place of Residence/Headship	Number of Households	Types of Assets				
		House	Electric Iron	Charcoal Iron	Electric or Gas Cooker	Refrigerator or Freezer
Total	328,052	65.7	4.8	6.9	3.8	1.6
Rural	255,418	69.5	1.8	5.8	1.1	0.5
Urban	72,634	52.2	15.5	11.0	13.1	5.3
Male Headed Households	212,413	68.0	5.0	7.7	3.9	1.7
Female Headed Households	115,639	61.4	4.5	5.5	3.5	1.5
Council						
Kalambo District	69,147	71.4	2.1	5.7	1.3	0.6
Sumbawanga District	104,452	65.8	1.7	5.5	1.2	0.6
Sumbawanga Municipal	69,860	59.2	14.2	9.7	12.4	4.9
Nkasi District	84,593	66.2	3.2	7.4	1.8	1.0

12.7.3 Agricultural Assets

Agricultural assets include plough, power tiller, hand hoe, oxen, land or farm and tractor. In Rukwa Region, 63.0 percent of households own land or farm and 66.2 percent own a hand hoe. The percentage of households owning land or farm is higher among households living in rural areas (68.2%) than in urban (44.6%). Households in rural areas are also more likely to own hand hoes than those in urban areas (68.9% versus 56.6%).

Across councils, ownership of land or farm ranges from 37.1 percent in Nkasi District to 69.4 percent in Kalambo District. On the other hand, the percentage of households own hand hoe ranges from 59.1 percent in Sumbawanga Municipal Council to 69.7 percent in Kalambo District Council (69.7%) (Table 12.16).

Table 12.15: Percentage Distribution of Households by Type of Agricultural Assets Owned, Place of Residence, Headship and Council; Rukwa Region, 2022 PHC

Place of Residence/Headship	Total Number of Households	Types of Assets						
		Plough	Power Tiller	Hand Hoe	Wheel barrow	Oxen	Farm or Land	Tractor
Total	328,052	18.6	0.2	66.2	1.9	20.4	63.0	0.1
Rural	255,418	22.1	0.2	68.9	1.8	24.2	68.2	0.1
Urban	72,634	6.4	0.3	56.6	2.3	7.0	44.6	0.2
Male Headed Households	212,413	21.8	0.2	68.4	2.2	23.8	66.6	0.2
Female Headed Households	115,639	12.8	0.2	62.1	1.4	14.1	56.3	0.1
Council								
Kalambo District	69,147	25.1	0.2	69.7	1.1	26.8	69.4	0.1
Sumbawanga District	104,452	21.0	0.3	67.8	2.4	22.3	56.9	0.1
Sumbawanga Municipal	69,860	8.5	0.2	59.1	2.0	9.8	45.8	0.1
Nkasi District	84,593	18.8	0.2	67.2	1.9	21.5	37.1	0.1

Chapter 13

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

- About seven out of ten (72.1%) persons aged 15 years and above own mobile phones.
- About eight percent (8.4%) of persons aged 15 years and above own both smart phone and non-smart phones.
- Less than one percent (0.4%) of persons aged 15 years and above own only smart phone or tablets.
- More than sixty percent (63.2%) of persons aged 15 years and above own only non-smart phones
- Almost seven out of ten households (69.4%) have at least one person aged 4 or above who own a mobile phone in Rukwa Region.
- Less than one percent (0.7%) of persons aged 15 years and above own desktop and almost two percent (1.2%) own Laptop computers.
- About third-quarter of persons (74.5%) aged 15 years and above use ICT equipment for communication.
- Non-smartphone is mostly owned by individuals with training after primary education (98.5%).

13.1 Introduction

Information, Communication and 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 access and the use of Information and Communication Technology (ICT) in Rukwa 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 4 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 33.3 percent of households in Rukwa Region have a radio⁸. Higher proportions of households with radios are in urban areas (37.4%) than rural areas (32.2%). The Council with the highest percentage of households with radio is

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

Kalambo District (57.1%), followed by Sumbawanga Municipal (33.1%) and Nkasi District (27.5%). Sumbawanga District has the lowest percentage (22.4%) of households with radio (Table 13.1).

13.3 Ownership of Television

According to the 2022 PHC results, 20.4 percent of the households in Rukwa Region own televisions. Analysis by the place of residence indicates that urban areas have a higher proportion (31.9%) of households with television sets than rural areas (17.1%). Across councils, Kalambo District has the highest proportion of households owning television (43.0%), followed by Sumbawanga Municipal (28.0%) and Nkasi District (11.9%). On the other hand, Sumbawanga District Council has the lowest proportion (7.2%) (Table 13.1).

13.4 Households with Landline Telephone

According to the Tanzania Communications Regulatory Authority (TCRA) communication statistics report, landline telephone market is characterised by general stagnation, manifested by drastically decreasing subscriptions from 176,367 fixed telephone lines in 2012 to 3,378 in 2022.

The 2022 PHC results reveal that one percent (1.0%) of households in Rukwa Region has landline telephones. The percentage of households with landline telephones in rural areas is proportionately higher (1.2%) than in of urban areas (0.5%). Kalambo District Council has the highest percentage (3.4%) of households with landline telephones, followed by Sumbawanga Municipal Council (0.5%). Sumbawanga District Council has the lowest percentage (0.3%) of households with landline telephones (Table 13.1).

13.5 Households with Internet Facility

The 2022 PHC results reveal that 0.2 percent of households in Rukwa Region have Internet⁹ facilities. Urban areas have higher proportion (0.5%) of households with Internet facilities than in rural areas (0.2%). Sumbawanga Municipal Council has the largest percentage of households with internet facilities (0.5%), followed by Kalambo and Sumbawanga District Councils (0.2% each) while Nkasi District has the lowest percentage (0.1%) (Table 13.1).

⁹ '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; Rukwa Region, 2022 PHC

Place of Residence	Total Number of Households	Percentage of Household							
		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
Total	328,052	33.3	26.5	6.8	20.4	16.3	4.0	1.0	0.2
Rural	255,418	32.2	26.3	5.9	17.1	14.1	3.0	1.2	0.2
Urban	72,634	37.4	27.5	9.9	31.9	24.3	7.6	0.5	0.5
Council									
Kalambo District	69,147	57.1	45.9	11.1	43.0	34.6	8.3	3.4	0.2
Sumbawanga District	104,452	22.4	18.5	3.9	7.2	6.1	1.1	0.3	0.2
Sumbawanga Municipal	69,860	33.1	24.5	8.6	28.0	21.4	6.6	0.5	0.5
Nkasi District	84,593	27.5	22.2	5.3	11.9	9.9	2.0	0.4	0.1

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 72.1 percent of the population aged 15 years and above in Rukwa Region own any mobile phone. Individuals in urban areas reported higher proportions (81.7%) of households owning mobile phones than rural areas (69.3%). Ownership of mobile phones is higher among males (82.6%) than females (62.8%) (Figure 13.1 and Table 13.2).

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

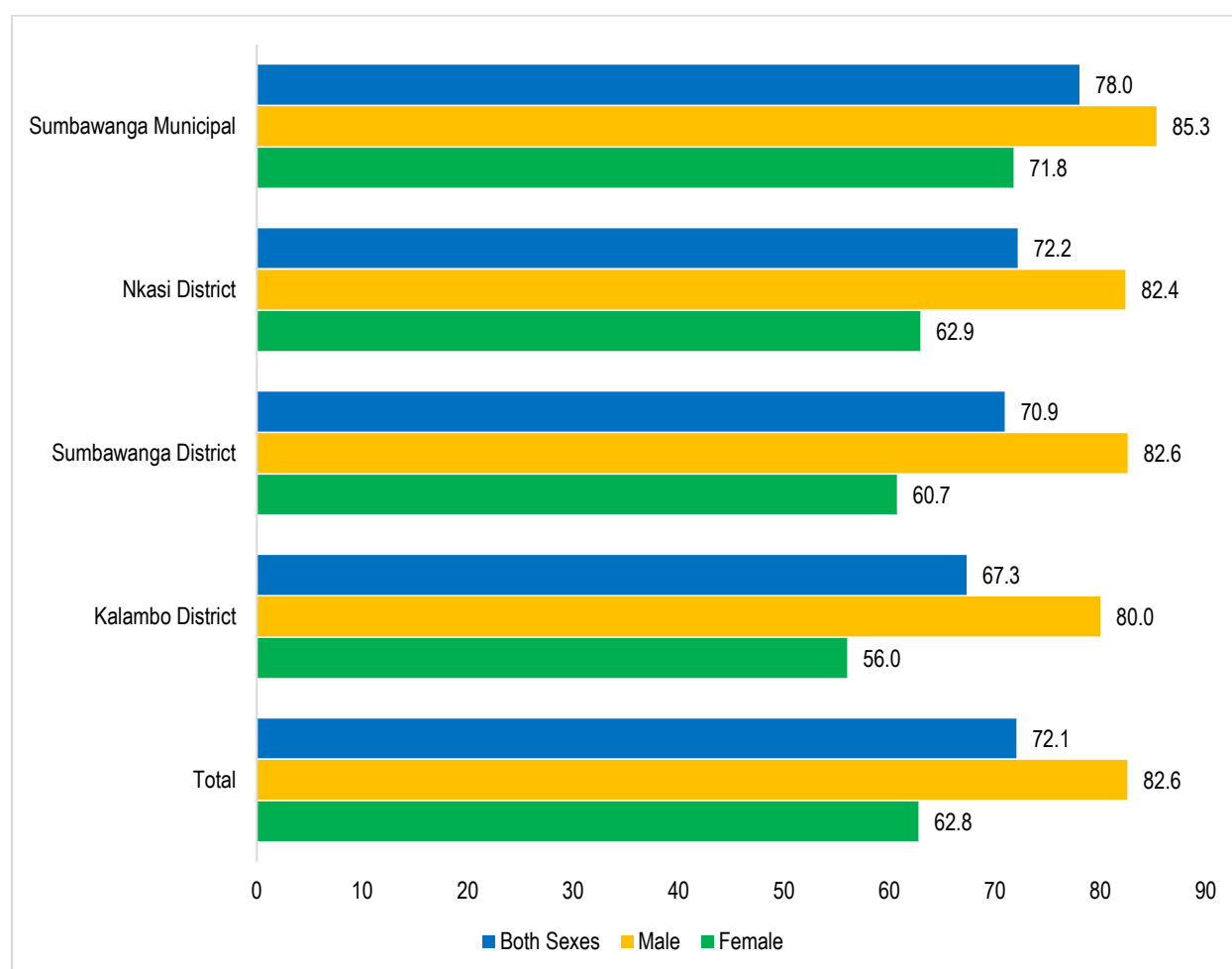
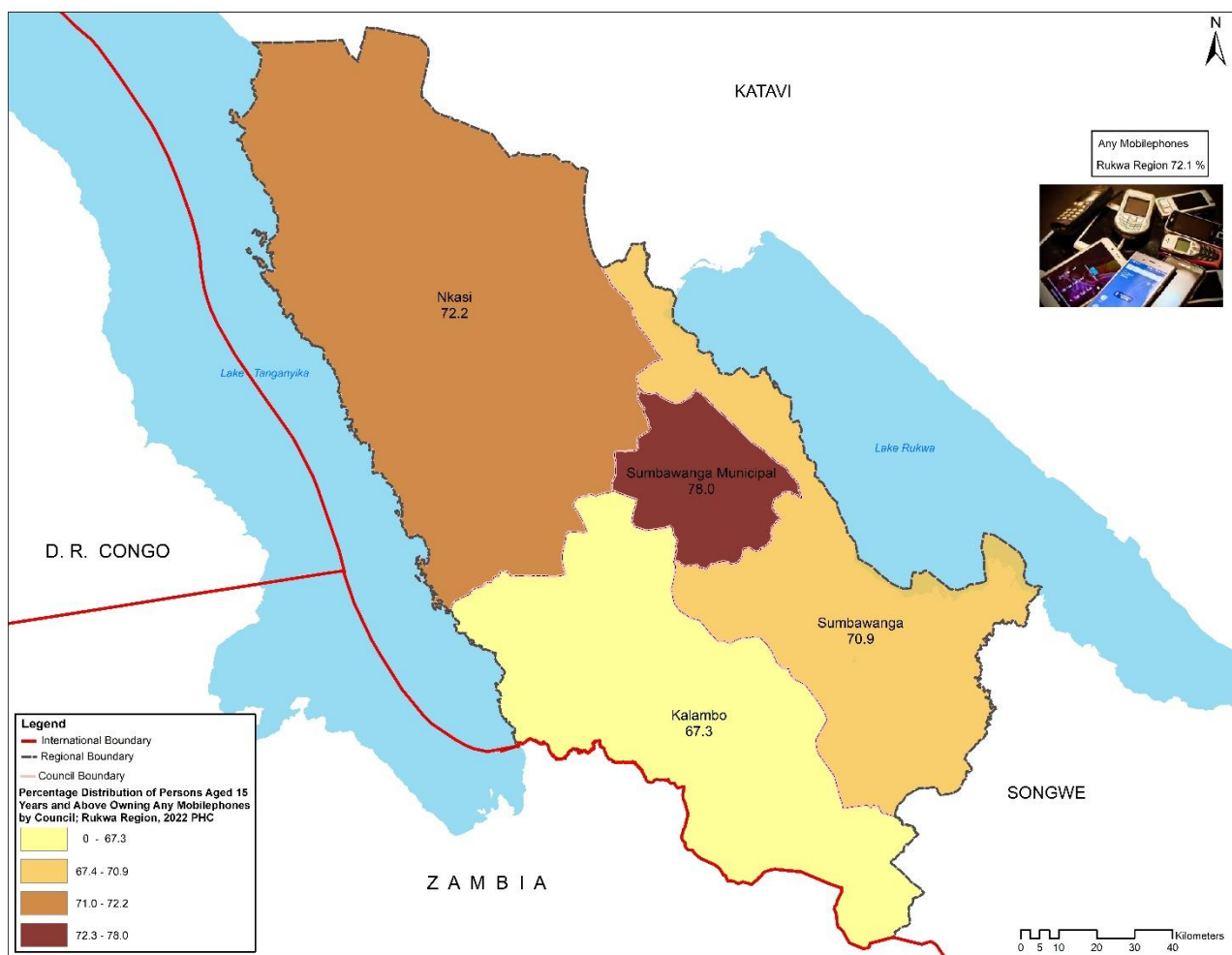


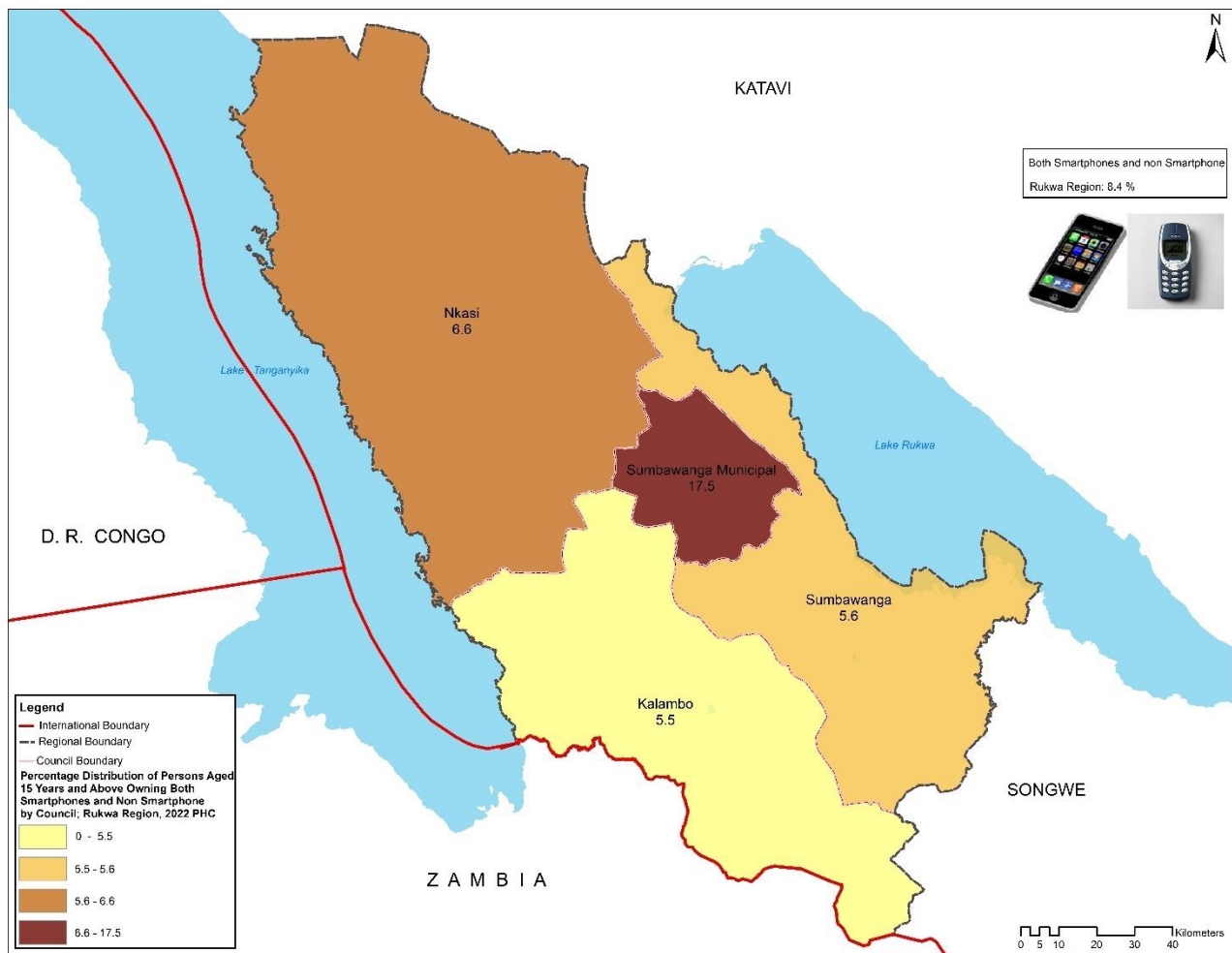
Table 13.2: Percentage of Population Aged 15 Years and Above Owning Mobile Phones by Type, Sex, Place of Residence and Council; Rukwa Region, 2022 PHC

Place of Residences	Number of Persons			Percentage of Mobile Phone Ownership											
				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
Total	767,252	359,692	407,560	72.1	82.6	62.8	8.4	11.2	6.0	0.4	0.4	0.4	63.2	71.0	56.3
Rural	598,791	283,144	315,647	69.3	81.6	58.4	5.3	7.7	3.2	0.3	0.3	0.4	63.7	73.6	54.8
Urban	168,461	76,548	91,913	81.7	86.3	77.9	19.3	24.1	15.4	0.7	0.8	0.7	61.6	61.4	61.7
Council															
Kalambo District	155,949	73,473	82,476	67.3	80.0	56.0	5.5	8.0	3.4	0.4	0.3	0.5	61.4	71.8	52.2
Sumbawanga District	239,920	112,111	127,809	70.9	82.6	60.7	5.6	8.2	3.4	0.3	0.2	0.3	65.1	74.2	57.1
Sumbawanga Municipal	163,979	75,584	88,395	78.0	85.3	71.8	17.5	21.3	14.2	0.8	0.7	0.8	59.8	63.3	56.7
Nkasi District	207,404	98,524	108,880	72.2	82.4	62.9	6.6	9.2	4.3	0.4	0.4	0.4	65.2	72.8	58.3

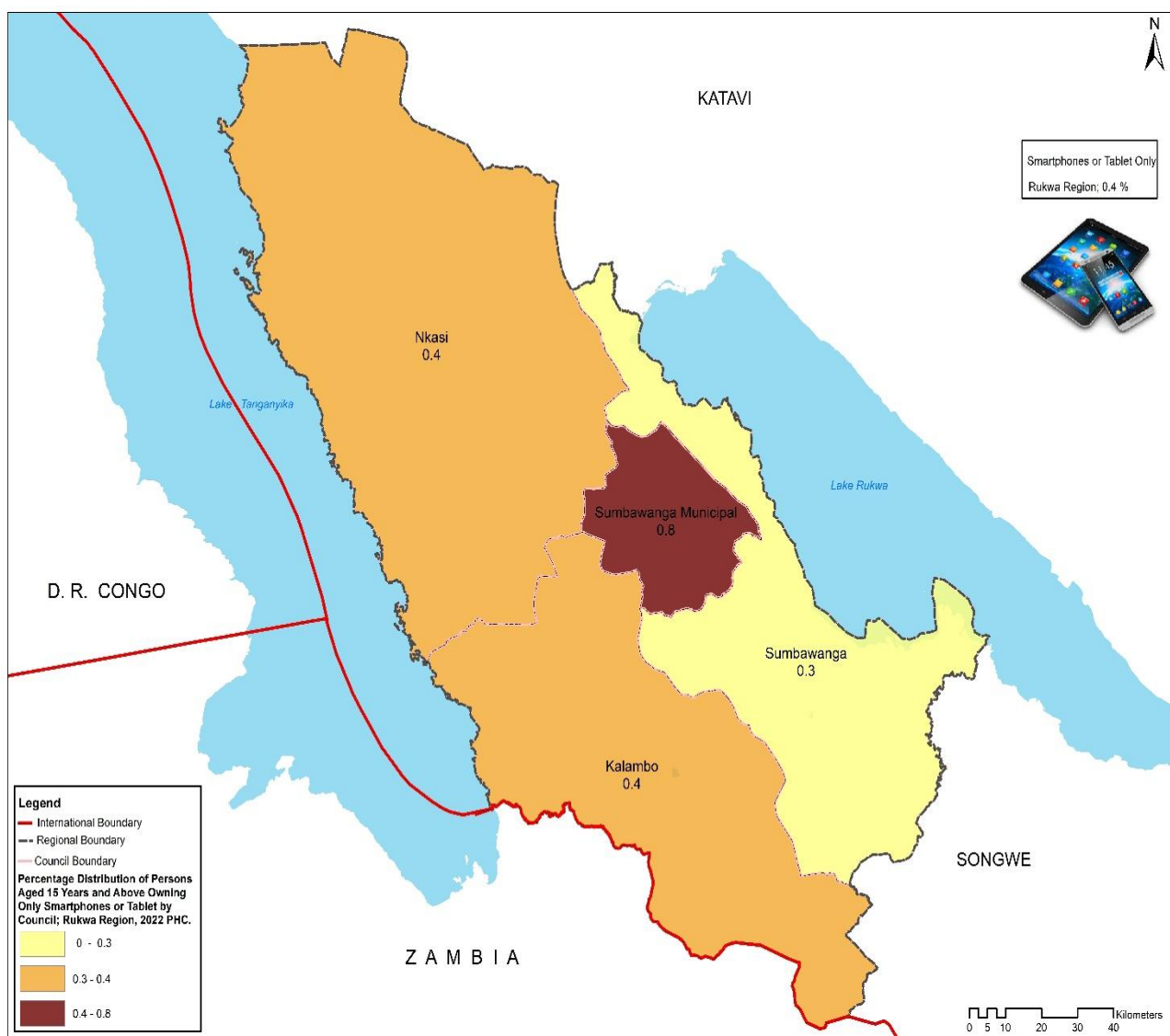
Map 13.1: Percentage Distribution of Persons Aged 15 Years and Above Owning Any Mobile Phones by Council; Rukwa Region, 2022 PHC.



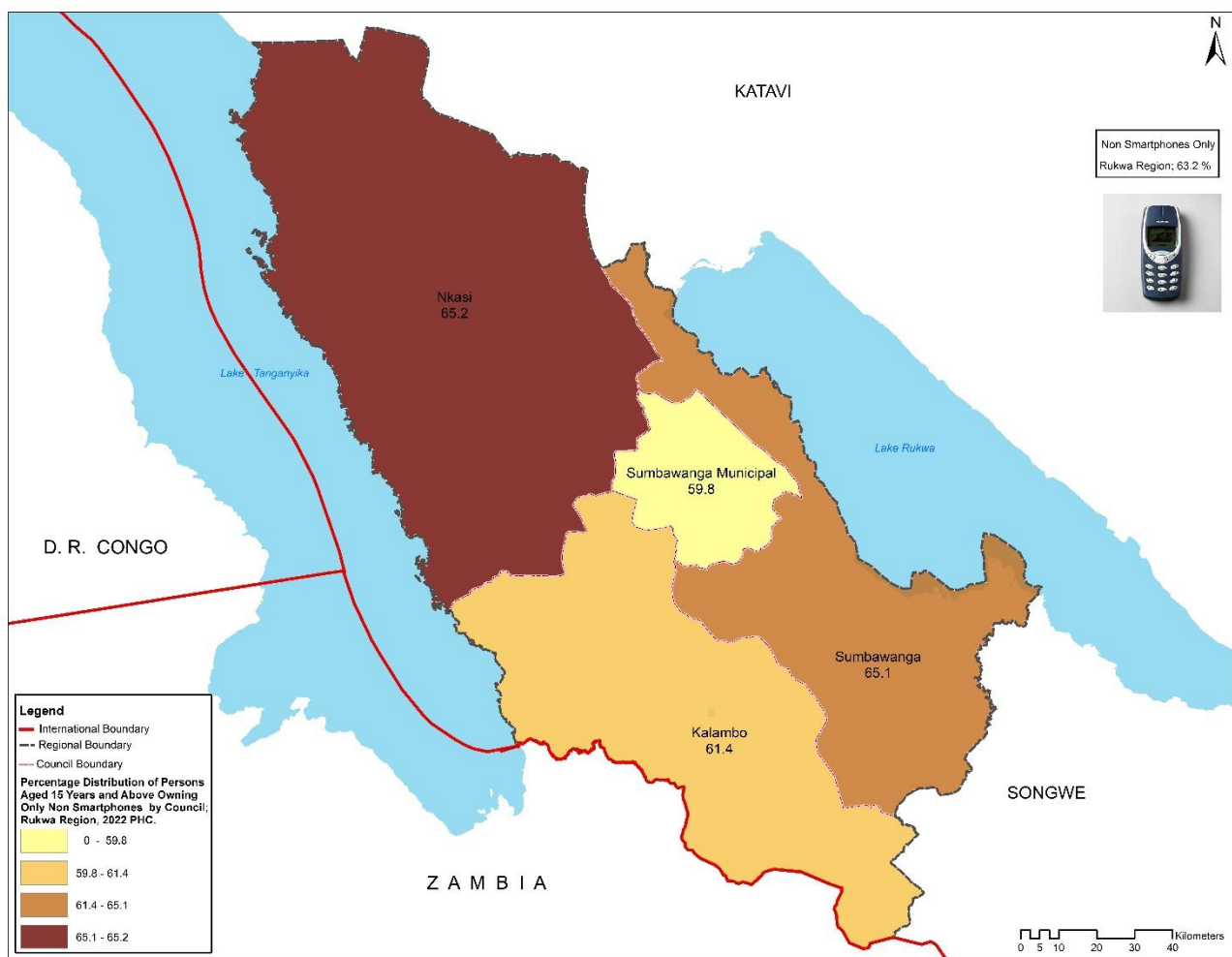
Map 13.1: Percentage of Persons Aged 15 Years and Above Owning Both Smartphones and Non-Smartphone by Council; Rukwa Region 2022 PHC.



Map 13.2: Percentage of Persons Aged 15 Years and Above Owning only Smartphones or Tablet by Council; Rukwa Region, 2022 PHC.



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



13.6.2 Ownership of Mobile Phones by Households

Ownership by of mobile phones type indicates that in Rukwa Region 69.4 percent of households have at least one member aged four years and above owning any type of mobile phone. The proportion of households owning a mobile phone is higher (85.3%) in urban areas than in rural areas (64.8%). In urban areas, the proportion of households that own smart mobile phone is 29.0 percent and 79.2 percent for non-smartphone; which is higher than in rural areas (8.2% and 63.6%, respectively).

Across all councils in Rukwa Region, the proportion of households with smartphones is 12.8 percent of all households. Results indicate that Sumbawanga Municipal has the highest percentage (26.3%) of households that own smart mobile phones, followed by Nkasi District (10.9%) and Sumbawanga District (8.6%) while Kalambo District recorded 8.1 percent which is the lowest (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; Rukwa Region, 2022 PHC

Council	Number of Private Households	Percentage of Household Owning Mobile Phone		
		At least one Member Owning a Mobile Phone	Households with Smart Phone	Households with Non-Smart Phone
Total	328,052	69.4	12.8	67.1
Rural	255,418	64.8	8.2	63.6
Urban	72,634	85.3	29.0	79.2
Council				
Kalambo District	69,147	59.9	8.1	58.7
Sumbawanga District	104,452	65.6	8.6	64.5
Sumbawanga Municipal	69,860	81.3	26.3	75.6
Nkasi District	84,593	71.8	10.9	70.2

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 Rukwa Region; it is owned by 42.5 percent of all individuals (47.8% of males and 37.8% of females). When the data is disaggregated by locality, 40.3 percent of individuals in rural areas own non-smartphones compared with 51.2 percent of those in urban areas (Table 13.4).

The proportion of ownership of smartphones is the highest (14.3%) for individuals in the age group 30-34 years while for non-smartphone, it is the highest (83.2%) in the age group 60

– 64 years. The results further show that the proportion of ownership of non-smart phone increases almost steadily from age group 5-9 years and attains its maximum point at age group 60 - 64, thereafter declines steadily to persons of age groups 80 years and above. Ownership of smart phone follows a similar pattern, increasing from age group 5 – 9 years and attains its maximum point at age group 30 - 34 and then steadily declines to older age groups (Figure 13.2).

Figure 13.2: Percentage of Individuals Aged Four Years and Above Owning Mobile Phone by Type and Age Group; Rukwa Region, 2022 PHC

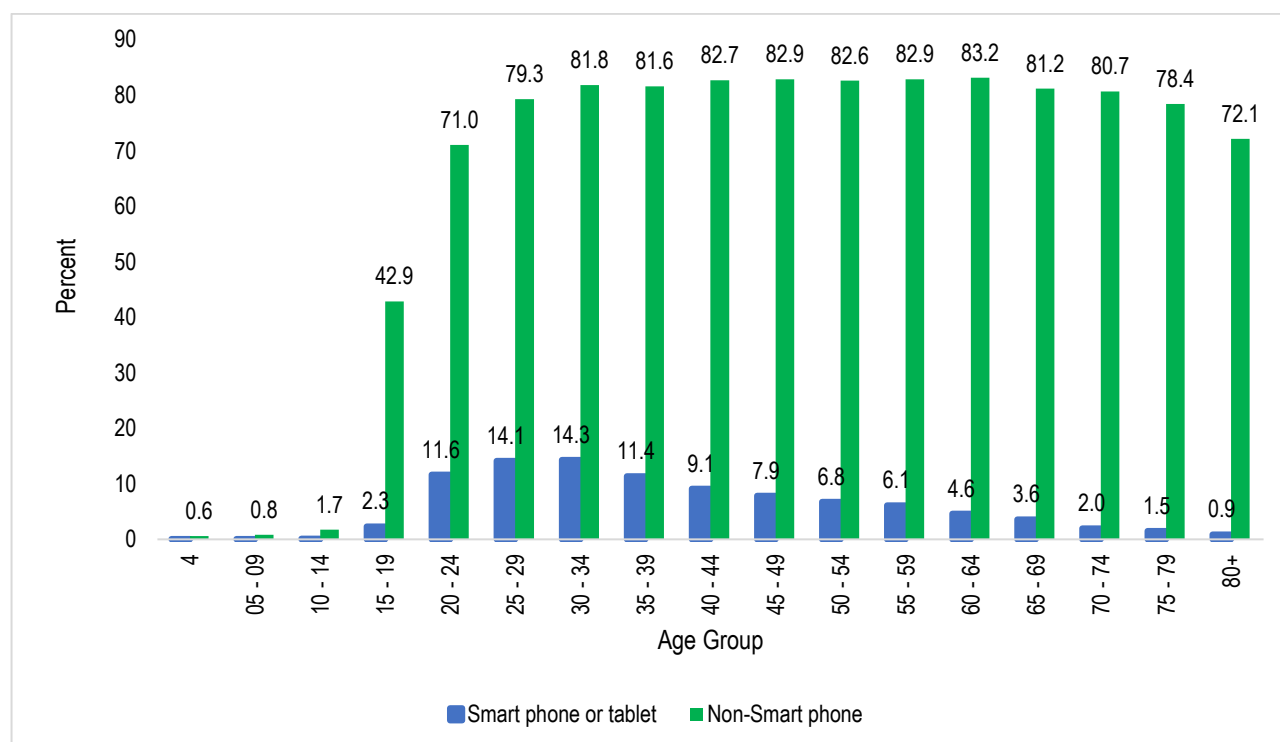


Table 13.4: Percentage of Population Aged Four Years and Above Owning Mobile Phone by Type, Place of Residence, Sex and Age Groups; Rukwa Region, 2022 PHC

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
Total	42.5	47.8	37.8	40.3	46.5	34.5	51.2	52.9	49.8	5.2	6.7	3.9	3.3	4.5	2.1	12.7	15.3	10.4
4	0.6	0.6	0.6	0.6	0.6	0.7	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5 - 9	0.8	0.8	0.8	0.9	0.9	0.9	0.6	0.5	0.7	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
10- 14	1.7	1.9	1.5	1.8	2.0	1.6	1.5	1.7	1.3	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1
15 - 19	42.9	45.5	40.5	40.6	43.8	37.6	51.1	52.0	50.4	2.3	2.9	1.8	1.5	2.0	1.1	5.4	6.8	4.3
20 - 24	71.0	84.3	60.5	67.8	83.3	55.3	82.4	87.7	78.4	11.6	15.4	8.7	7.7	10.9	5.0	25.9	32.1	21.2
25 - 29	79.3	93.0	67.7	76.2	92.4	62.2	89.4	94.9	84.9	14.1	18.2	10.6	9.2	12.8	6.1	30.0	36.1	24.9
30 - 34	81.8	94.4	70.7	79.1	94.1	65.7	90.7	95.7	86.4	14.3	18.8	10.4	9.7	13.8	6.0	29.3	35.6	24.1
35 - 39	81.6	94.6	70.1	78.9	94.2	65.3	90.7	95.9	86.1	11.4	15.7	7.5	7.4	11.3	4.0	24.9	30.9	19.7
40 - 44	82.7	94.7	71.5	80.1	94.4	66.7	91.5	96.0	87.5	9.1	12.2	6.3	5.6	8.2	3.2	21.3	26.5	16.6
45 - 49	82.9	95.0	71.3	80.5	94.7	66.9	91.5	96.0	87.2	7.9	10.2	5.6	4.9	6.9	3.0	18.6	22.8	14.7
50 - 54	82.6	94.6	71.2	80.3	94.1	67.1	91.4	96.4	86.8	6.8	8.7	4.9	3.9	5.5	2.4	17.9	21.9	14.2
55 - 59	82.9	95.1	71.5	80.7	94.8	67.4	91.3	96.3	86.9	6.1	8.4	4.0	3.4	5.1	1.8	16.9	21.8	12.5
60 - 64	83.2	95.0	71.9	81.4	94.8	68.4	90.3	96.3	85.3	4.6	6.5	2.8	2.5	3.8	1.2	13.1	18.1	8.8
65 - 69	81.2	94.7	69.2	79.3	94.3	65.8	88.7	96.3	82.5	3.6	5.3	2.1	1.9	2.8	1.1	10.4	16.2	5.7
70 - 74	80.7	92.8	70.0	79.5	92.6	67.7	85.7	93.8	79.4	2.0	2.9	1.1	1.1	1.6	0.7	5.6	9.0	2.9
75 - 79	78.4	91.6	67.3	77.2	91.1	65.1	83.5	93.8	75.8	1.5	2.4	0.8	0.8	1.2	0.4	4.6	7.8	2.2
80 +	72.1	85.2	63.1	72.1	85.4	62.5	72.4	83.9	65.7	0.9	1.2	0.7	0.6	0.8	0.5	2.2	3.5	1.5

13.6.4 Ownership of Mobile Phones by Level of Education

The 2022 PHC results reveal that non-smartphones are mostly owned by individuals with training after secondary education (97.3%) compared with other levels of education and least owned by those with Secondary School O - level (67.1%). Analysis by sex shows that, non-smartphone ownership is higher among males than among females in all education levels (Table 13.5).

Table 13.5: Number and Percentage of Population Aged 15 Years and Above Owning Non-smartphone by Place of Residence, Sex and Education Level Attained; Rukwa 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	61.5	75.3	50.8	59.8	75.0	48.2	71.9	77.0	67.7	1,320	702	618	1,105	598	507	215	104	111
Primary School (1 - 8)	74.5	86.2	63.3	72.2	85.4	59.0	84.3	89.7	79.9	315,156	178,833	136,323	246,538	146,131	100,407	68,618	32,702	35,916
Secondary School O - level (1 - 4)	67.1	71.2	62.6	62.4	68.1	55.7	75.3	77.4	73.4	85,680	47,390	38,290	50,869	30,102	20,767	34,811	17,288	17,523
Secondary School A - level (5 - 6)	74.9	77.3	70.1	71.1	74.1	63.9	79.3	81.3	75.9	6,685	4,581	2,104	3,402	2,477	925	3,283	2,104	1,179
University and Other Related	93.1	94.3	91.1	90.5	92.5	86.1	95.6	96.2	94.7	19,049	12,302	6,747	8,860	6,149	2,711	10,189	6,153	4,036
Training After Primary	98.1	99.4	94.3	97.7	99.4	92.2	98.7	99.4	97.3	666	501	165	432	338	94	234	163	71
Training After Secondary Education	97.3	97.9	96.6	97.5	98.1	96.6	97.1	97.6	96.5	3,698	2,207	1,491	1,940	1,230	710	1,758	977	781

The 2022 PHC results reveal that, smartphones in Rukwa Region are mostly owned by individuals who attained training after secondary school education (70.7%) and least owned by those who have attained pre-primary education (3.1%). Ownership of Smartphone in Rukwa Region is higher in urban areas than in rural areas for all education levels (Table 13.6).

Table 13.4: Number and Percentage of Population Aged 15 Years and Above Owning Smartphone by Place of Residence, Sex and Education Level Attained; Rukwa 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	3.1	3.9	2.5	2.3	3.0	1.7	8.0	8.9	7.3	66	36	30	42	24	18	24	12	12
Primary School (1 - 8)	5.6	7.2	4.2	4.1	5.5	2.6	12.3	15.0	10.1	23,878	14,848	9,030	13,853	9,362	4,491	10,025	5,486	4,539
Secondary School O - level (1 - 4)	16.1	18.0	14.0	11.3	13.3	8.9	24.6	27.3	22.1	20,563	11,985	8,578	9,194	5,891	3,303	11,369	6,094	5,275
Secondary School A - level (5 - 6)	30.9	33.7	25.4	25.3	28.5	18.0	37.4	40.5	32.2	2,761	2,000	761	1,212	952	260	1,549	1,048	501
University and Other Related	68.8	70.0	66.8	59.8	62.7	53.6	77.1	77.5	76.5	14,079	9,128	4,951	5,857	4,169	1,688	8,222	4,959	3,263
Training After Primary	36.4	35.5	38.9	31.0	29.7	35.3	46.4	47.6	43.8	247	179	68	137	101	36	110	78	32
Training After Secondary Education	70.7	68.7	73.7	69.2	67.7	71.7	72.4	69.9	75.5	2,687	1,549	1,138	1,376	849	527	1,311	700	611

13.6.5 Usage of Mobile Phones by Individuals

Results reveal that 77.9 percent of individuals aged 15 years and above in Rukwa Region are using non-smartphones and 9.1 percent are using smartphones. The proportion of individuals using non-smartphones is higher (84.8%) in urban areas than in rural areas (76.0%). A similar situation is observed in the usage of smartphones, where the proportion of individuals using smartphones in urban areas is higher (20.8%) than that of rural areas (5.9%). Generally, the proportion of males who are using mobile phones is slightly higher than that of females for both smart and non-smart mobile phones.

Across all councils, the proportion of individuals using mobile is the highest in Sumbawanga Municipal (82.5% non-smartphone and 18.9% smartphone), followed by Nkasi District (77.2% non-smartphone and 7.2% smartphone). On the other hand, the Council with the lowest proportion of individuals using mobile phones is Kalambo District (75.6% non-smartphone and 6.2% smartphone) (Table 13.7).

Table 13.5: Percentage of Population Aged 15 Years and Above Using Mobile phone by Type, Sex, Place of Residence and Council; Rukwa Region, 2022 PHC

Place of Residence	Number of Persons Using ICT Equipment			Percent					
				Smart mobile phone			Non-smartphone		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total	767,252	359,692	407,560	9.1	11.9	6.7	77.9	85.2	71.5
Rural	598,791	283,144	315,647	5.9	8.2	3.8	76.0	84.5	68.3
Urban	168,461	76,548	91,913	20.8	25.5	16.8	84.8	87.9	82.3
Council									
Kalambo District	155,949	73,473	82,476	6.2	8.5	4.1	75.6	83.8	68.3
Sumbawanga District	239,920	112,111	127,809	6.1	8.7	3.8	76.9	85.3	69.6
Sumbawanga Municipal	163,979	75,584	88,395	18.9	22.6	15.7	82.5	87.3	78.3
Nkasi District	207,404	98,524	108,880	7.2	9.9	4.8	77.2	84.7	70.5

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

Majority (48.0%) of persons aged four years and above mostly used non-smartphone in the three months prior to the 2022 PHC. The proportion of males using non-smartphones is higher (51.2%) than that of females (44.9%). Non-smartphone usage among individuals living in rural areas is lower (46.1%) compared with that of individuals living in urban areas (55.3%). A similar pattern is observed in the usage of smart phone where the proportion of

individuals using smart phones in urban areas is higher (13.6%) than that of individuals living in rural areas (3.6%) (Table 13.8).

Non-smart phones are mostly used by individuals aged 25 – 79 years while smart phones are mostly used by individuals aged 25 – 34 years. The use of non-smartphones increases steadily from age 5-9 before peaking at age group 45 - 49, thereafter declines to 75.0 percent for those aged 80 and above (Figure 13.3).

Figure 13. 3: Percentage Distribution of Individuals Using Mobile Phone by Type and Age Group; Rukwa Region, 2022 PHC.

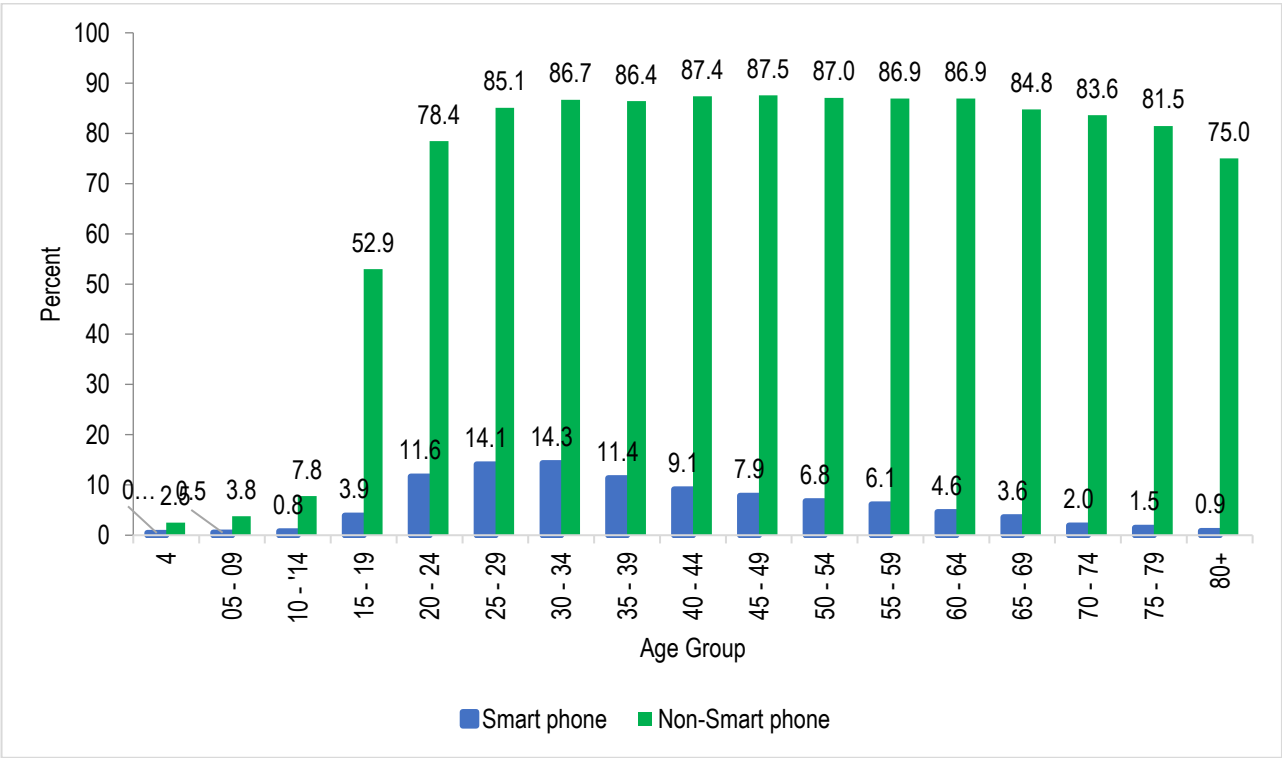


Table 13. 6: Percentage of Population Aged 4 Years and Above Using Mobile Phone by Type, Place of Residence, Sex and Age Groups; Rukwa Region, 2022 PHC.

Age Group	Percent of Non-Smartphone Users									Percentage of Smartphone 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
Total	48.0	51.2	44.9	46.1	50.1	42.3	55.3	55.9	54.7	5.6	7.1	4.3	3.6	4.8	2.4	13.6	16.2	11.3
4	2.5	2.4	2.7	2.5	2.4	2.6	2.7	2.6	2.8	0.5	0.5	0.5	0.3	0.4	0.3	0.9	0.9	1.0
05-09	3.8	3.7	3.8	3.8	3.8	3.8	3.7	3.5	3.9	0.5	0.5	0.5	0.4	0.4	0.4	1.2	1.2	1.2
10-14	7.8	7.8	7.8	7.9	7.9	7.9	7.5	7.3	7.7	0.8	0.7	0.8	0.5	0.5	0.6	1.8	1.7	1.9
15 - 19	52.9	54.2	51.8	51.3	52.9	49.8	59.1	59.2	58.9	3.9	4.5	3.3	2.6	3.0	2.1	8.7	10.1	7.6
20 - 24	78.4	87.4	71.3	76.1	86.6	67.6	86.8	90.1	84.2	11.6	15.4	8.7	7.7	10.9	5.0	25.9	32.1	21.2
25 - 29	85.1	94.4	77.1	82.7	93.9	73.1	92.5	96.0	89.6	14.1	18.2	10.6	9.2	12.8	6.1	30.0	36.1	24.9
30 - 34	86.7	95.5	78.8	84.7	95.2	75.2	93.1	96.6	90.1	14.3	18.8	10.4	9.7	13.8	6.0	29.3	35.6	24.1
35 - 39	86.4	95.6	78.2	84.5	95.3	74.9	93.0	96.6	89.7	11.4	15.7	7.5	7.4	11.3	4.0	24.9	30.9	19.7
40 - 44	87.4	95.8	79.6	85.5	95.5	76.2	93.8	96.8	91.2	9.1	12.2	6.3	5.6	8.2	3.2	21.3	26.5	16.6
45 - 49	87.5	96.1	79.4	85.8	95.8	76.2	93.8	97.0	90.8	7.9	10.2	5.6	4.9	6.9	3.0	18.6	22.8	14.7
50 - 54	87.0	95.6	78.9	85.4	95.2	75.9	93.5	97.1	90.2	6.8	8.7	4.9	3.9	5.5	2.4	17.9	21.9	14.2
55 - 59	86.9	96.0	78.5	85.3	95.8	75.5	93.2	96.7	90.1	6.1	8.4	4.0	3.4	5.1	1.8	16.9	21.8	12.5
60 - 64	86.9	95.9	78.4	85.5	95.6	75.7	92.4	96.9	88.7	4.6	6.5	2.8	2.5	3.8	1.2	13.1	18.1	8.8
65 - 69	84.8	95.6	75.2	83.3	95.3	72.6	90.6	96.8	85.4	3.6	5.3	2.1	1.9	2.8	1.1	10.4	16.2	5.7
70 - 74	83.6	93.8	74.7	82.6	93.6	72.6	87.9	94.4	82.9	2.0	2.9	1.1	1.1	1.6	0.7	5.6	9.0	2.9
75 - 79	81.5	92.8	71.8	80.3	92.4	69.8	86.3	94.7	80.0	1.5	2.4	0.8	0.8	1.2	0.4	4.6	7.8	2.2
80 +	75.0	86.9	66.8	74.8	87.0	66.1	75.9	86.2	69.9	0.9	1.2	0.7	0.6	0.8	0.5	2.2	3.5	1.5

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 the majority (74.5%) of persons aged 15 and above years in Rukwa Region mostly use ICT equipment for communication, followed by sending and receiving money (36.4%), while online businesses recorded about one percent (2.4 %) which is the least (Table 13.9).

Results show that persons who are living in both rural and urban areas mostly use ICT equipment for communication (72.3% for rural and 82.4% for urban), followed by sending and receiving money (31.0% for rural and 55.4% for urban) and searching or receiving information (19.9% for rural and 35.9% for urban). However, the likelihood of using ICT equipment for any purpose 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 councils is for communication followed by sending and receiving money and searching/receiving information. Online business was the least use of ICT equipment across councils in Rukwa Region (Table 13.9).

Table 13.7: Percentage of Persons Aged 15 Years and Above Using ICT Equipment by Type of Use, Sex, Place of Residence and Council; Rukwa Region, 2022 PHC

Place of Residence	Communication			Searching/receiving 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
Total	74.5	81.6	68.2	23.4	27.7	19.6	2.4	3.1	1.8	5.4	6.9	4.0	7.2	9.8	4.9	36.4	42.2	31.2	767,252	359,692	407,560
Rural	72.3	80.6	64.8	19.9	24.3	15.9	1.9	2.5	1.4	3.9	5.2	2.8	6.4	8.9	4.2	31.0	37.7	25.0	598,791	283,144	315,647
Urban	82.4	85.5	79.7	35.9	40.1	32.5	4.3	5.3	3.4	10.5	13.1	8.4	10.2	13.3	7.6	55.4	59.2	52.2	168,461	76,548	91,913
Council																					
Kalambo District	72.2	80.1	65.2	20.5	25.2	16.4	1.8	2.3	1.4	4.0	5.4	2.8	6.4	9.1	4.0	28.5	34.9	22.7	155,949	73,473	82,476
Sumbawanga District	72.5	80.7	65.4	18.9	23.2	15.1	1.9	2.5	1.4	3.8	5.1	2.6	6.4	8.8	4.2	31.0	38.0	24.8	239,920	112,111	127,809
Sumbawanga Municipal	80.5	85.2	76.5	34.2	38.2	30.8	3.9	4.7	3.2	9.7	11.9	7.9	10.2	13.1	7.7	52.2	56.5	48.6	163,979	75,584	88,395
Nkasi District	73.7	81.1	67.0	22.2	26.6	18.3	2.3	3.0	1.6	4.8	6.3	3.5	6.5	9.0	4.3	36.0	41.6	30.9	207,404	98,524	108,880

13.6.8 Usage of Mobile phone by Level of Education

The 2022 PHC results reveal that, in Rukwa Region non-smartphone is mostly used by individuals who attained training after primary education (98.5%) and least used by those who have attained pre-primary and secondary school Ordinary levels (70.8% and 73.7% respectively). Analysis by sex shows that, the usage of non-smartphone is higher for males than females in all levels of education.

The use of non-smartphones in Rukwa Region is higher in urban areas than in rural areas for all levels of education (Table 13.10).

Table 13.8: Number and Percentage of Population Aged 15 Years and Above Using Non-smartphones by Place of Residence, Sex and Education Level; Rukwa Region, 2022 PHC

Education Level	Percentage of Non-Smartphone User									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	70.8	79.6	64.0	69.9	79.7	62.5	76.3	79.3	73.8	1,520	742	778	1,292	635	657	228	107	121
Primary School (1 - 8)	81.1	88.8	73.7	79.5	88.2	70.7	88.0	91.5	85.2	342,908	184,228	158,680	271,229	150,871	120,358	71,679	33,357	38,322
Secondary School O - level (1 - 4)	73.7	76.4	70.8	70.4	74.0	66.0	79.6	81.2	78.2	94,161	50,858	43,303	57,354	32,729	24,625	36,807	18,129	18,678
Secondary School A - level (5 - 6)	80.8	82.3	77.7	77.7	79.8	72.9	84.3	85.6	82.1	7,213	4,882	2,331	3,722	2,667	1,055	3,491	2,215	1,276
University and Other Related	94.5	95.5	92.8	92.4	94.2	88.7	96.4	96.9	95.8	19,333	12,458	6,875	9,052	6,261	2,791	10,281	6,197	4,084
Training After Primary	98.5	99.4	96.0	98.2	99.4	94.1	99.2	99.4	98.6	669	501	168	434	338	96	235	163	72
Training After Secondary Education	98.1	98.4	97.7	98.3	98.6	98.0	97.8	98.1	97.4	3,726	2,218	1,508	1,956	1,236	720	1,770	982	788

In Rukwa Region, smartphones are mostly used by individuals who attained university and other related levels of education (68.8%) compared with other levels of education and it is less used by those who attained pre-primary level (3.1%). The percentage of individuals who use smartphone is higher for males in all levels of education than for females except for those with training after primary levels and training after secondary education whereby it is higher for females than for males. The percentage of individuals who use smartphones in Rukwa Region is higher in urban areas than in rural areas for all education levels (Table 13.11).

Table 13. 9: Number and Percentage Distribution of Population Aged 15 Years and Above Using Smartphones by Place of Residence Sex and Education Level; Rukwa 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	3.1	3.9	2.5	2.3	3.0	1.7	8.0	8.9	7.3	66	36	30	42	24	18	24	12	12
Primary School (1 - 8)	5.8	7.3	4.4	4.2	5.6	2.8	12.6	15.2	10.4	24,523	15,106	9,417	14,287	9,558	4,729	10,236	5,548	4,688
Secondary School O - level (1 - 4)	17.3	19.2	15.2	12.2	14.2	9.8	26.3	29.1	23.6	22,081	12,778	9,303	9,942	6,285	3,657	12,139	6,493	5,646
Secondary School A - level (5 - 6)	32.7	34.9	28.2	26.3	29.1	19.8	40.0	42.5	36.0	2,917	2,071	846	1,259	972	287	1,658	1,099	559
University and Other Related	68.8	70.0	66.8	59.8	62.7	53.6	77.1	77.5	76.5	14,079	9,128	4,951	5,857	4,169	1,688	8,222	4,959	3,263
Training After Primary	36.4	35.5	38.9	31.0	29.7	35.3	46.4	47.6	43.8	247	179	68	137	101	36	110	78	32
Training After Secondary Education	70.7	68.7	73.7	69.2	67.7	71.7	72.4	69.9	75.5	2,687	1,549	1,138	1,376	849	527	1,311	700	611

13.6.9 Usage of Mobile Phone by Employment Status and Sex

Results reveal that, in Rukwa Region, the percentage of individuals who use non-smartphones ranges from 81.7 percent among unclassified workers to 92.4 percent among the paid employees. Regarding the usage of mobile phones across Employment status categories by sex and place of residence, results show that usage of mobile phones by males is higher than females across all employment statuses. Furthermore, results show that individuals who use non-smartphones is higher in urban than in rural areas for all types of employment statuses (Table 13.12).

Table 13. 10: Number and Percentage of Population Aged 15 Years and Above Using Non-smartphone by Place of Residence, Sex and Employment Status; Rukwa 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	92.4	93.7	83.4	91.6	93.3	79.8	95.5	95.6	95.2	1,982	1,756	226	1,578	1,412	166	404	344	60
Self-employed without employees	86.0	95.4	78.8	84.3	95.2	75.8	92.7	96.3	89.8	5,676	2,747	2,929	4,402	2,171	2,231	1,274	576	698
Self-employed with employees	88.5	94.1	78.0	88.1	94.3	77.8	90.6	93.3	80.0	804	559	245	669	448	221	135	111	24
Casual labourers	91.0	93.6	82.9	90.3	93.4	81.1	94.2	94.2	94.1	1,897	1,486	411	1,538	1,191	347	359	295	64
Workers not classified by status	81.7	92.5	74.5	79.9	92.3	71.7	92.1	94.1	90.6	1,309	595	714	1,088	500	588	221	95	126

Results reveal that the percentage of employed persons aged 15 years and above using smart phones in Rukwa Region ranges from 7.6 percent among the workers not classified by status to 15.9 percent among paid employees. In regard to the use of smart phones across the employment status categories by sex and place of residence, the Census results show that use of smart phones is higher for males than females across all employment categories. Furthermore, results show that smart phones usage is higher in urban areas than in rural areas for all types of employment categories (Table 13.13).

Table 13.11: Number and Percentage of Population Aged 15 Years and Above Using Smartphones by Place of Residence, Sex and Employment Status; Rukwa 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	15.9	16.8	9.2	12.0	12.9	5.3	31.7	33.3	22.2	340	315	25	206	195	11	134	120	14
Self-employed without employees	9.7	12.9	7.3	6.5	9.9	3.8	22.2	24.6	20.3	642	372	270	337	225	112	305	147	158
Self-employed with employees	11.5	13.0	8.6	9.5	9.9	8.8	21.5	25.2	6.7	104	77	27	72	47	25	32	30	2
Casual labourers	12.8	14.5	7.5	10.0	11.1	6.8	25.2	28.1	11.8	267	230	37	171	142	29	96	88	8
Workers not classified by status	7.6	11.5	5.0	5.1	7.9	3.3	21.7	30.7	15.1	122	74	48	70	43	27	52	31	21

13.6.10 Usage of Mobile Phones by Occupation

The 2022 PHC results reveal that in Rukwa Region, non-smart phones are mostly used among professionals (97.9%). Analysis by sex shows that the use of mobile phones among males is higher than among female across all occupations categories. There is no significant difference in the use of non-smart phones between rural and urban areas across all categories (Table 13.14)

Table 13. 12: Number and Percentage of Population Aged 15 Years and Above Using Non-Smartphones by Place of Residence, Sex and Occupation Status; Rukwa Region, 2022 PHC

Occupation	Percentage of People Using Non-Smart Phone Usage									Number of People								
	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.	96.8	98.3	93.8	96.4	97.6	93.2	97.2	99.0	94.2	1,350	924	426	594	443	151	756	481	275
Professionals.	97.9	98.3	97.1	97.7	98.8	95.3	98.0	97.9	98.1	4,752	3,027	1,725	1,989	1,375	614	2,763	1,652	1,111

Occupation	Percentage of People Using Non-Smart Phone Usage									Number of People								
	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
Technicians and associate professionals.	95.1	96.7	90.9	94.8	96.7	88.5	95.5	96.6	92.6	12,140	9,130	3,010	5,707	4,466	1,241	6,433	4,664	1,769
Clerks	93.0	96.0	88.9	89.9	95.0	80.3	96.0	97.3	94.7	1,233	727	506	587	403	184	646	324	322
Service workers and shop sales workers	91.2	95.7	88.6	90.4	96.4	86.7	92.0	94.9	90.3	19,299	7,553	11,746	9,371	3,816	5,555	9,928	3,737	6,191
Agricultural and fishery workers	77.8	86.3	70.2	77.0	86.2	68.5	83.5	87.0	80.5	273,237	143,698	129,539	233,742	125,016	108,726	39,495	18,682	20,813
Craft and related workers	84.7	91.7	77.3	83.4	91.9	73.9	88.0	90.9	85.1	78,843	44,249	34,594	54,900	31,731	23,169	23,943	12,518	11,425
Plant and machine operators and assemblers	95.2	96.2	86.5	95.2	97.1	82.7	95.1	95.5	90.8	2,894	2,626	268	1,236	1,097	139	1,658	1,529	129
Elementary occupations	81.0	87.6	75.6	78.5	86.8	71.3	86.1	89.4	83.7	73,837	35,967	37,870	48,170	24,749	23,421	25,667	11,218	14,449

The 2022 PHC results reveal that in Rukwa Region, smartphone are mostly used among professionals (76.4%) and least used among agricultural and fishery workers (6.0%). Analysis by sex shows that, use of smart phones among males is higher than among females in most all types of occupation categories except technicians and associate professionals categories. Usage is more pronounced among those living in urban than rural areas (Table13.15).

Table 13.13: Number and Percentage of Population Aged 15 Years and Above Using Smart Phones by Place of Residence, Sex and Occupation Status; Rukwa Region, 2022 PHC

Occupation	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.	67.3	69.3	63.2	61.0	60.6	62.3	72.2	77.4	63.7	938	651	287	376	275	101	562	376	186
Professionals.	76.4	79.2	71.6	76.4	78.5	71.9	76.4	79.7	71.4	3,710	2,439	1,271	1,556	1,093	463	2,154	1,346	808

Occupation	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
Technicians and associate professionals.	42.1	41.1	44.9	35.7	35.1	37.7	47.9	47.0	50.2	5,376	3,887	1,489	2,150	1,621	529	3,226	2,266	960
Clerks	62.1	64.7	58.5	55.7	63.7	41.0	68.2	66.1	70.3	823	490	333	364	270	94	459	220	239
Service workers and shop sales workers	28.4	37.7	22.8	21.1	30.7	15.2	35.3	44.6	29.9	6,001	2,974	3,027	2,191	1,216	975	3,810	1,758	2,052
Agricultural and fishery workers	6.0	8.0	4.2	4.8	6.7	3.0	14.0	16.9	11.6	21,120	13,313	7,807	14,491	9,690	4,801	6,629	3,623	3,006
Craft and related workers	10.5	13.0	7.8	6.7	8.8	4.3	19.7	23.5	15.9	9,768	6,279	3,489	4,396	3,048	1,348	5,372	3,231	2,141
Plant and machine operators and assemblers	32.7	33.7	23.2	25.8	27.1	17.3	37.8	38.4	30.3	993	921	72	335	306	29	658	615	43
Elementary occupations	10.5	13.6	8.0	5.9	8.2	4.0	20.0	25.8	15.8	9,604	5,573	4,031	3,631	2,330	1,301	5,973	3,243	2,730

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 Rukwa Region. Results show that one percent (1.2%) of persons aged 15 years and above in Rukwa Region own Laptops and less than one percent (0.7%) own desktop computers. Sumbawanga Municipal Council has the highest percentage of persons owning Laptops and desktop computers (2.3% for Laptops and 1.0% for desktop).. The Councils with the lowest percentage of persons owning desktop computers are Sumbawanga, Kalambo and Nkasi Districts (0.6% each) and for Laptops, it is Kalambo District (0.8%).

Table 13.14: Percentage of Persons Aged 15 Years and Above Owning Computers by Type, Sex, Place of Residence and Council; Rukwa Region, 2022 PHC

Place of Residence	Desktop			Laptop		
	Both Sexes	Male	Female	Both Sexes	Male	Female
Total	0.7	0.9	0.5	1.2	1.6	0.8
Rural	0.5	0.7	0.4	0.8	1.1	0.6
Urban	1.1	1.6	0.7	2.6	3.7	1.7
Council						
Kalambo District	0.6	0.7	0.4	0.8	1.2	0.6
Sumbawanga District	0.6	0.7	0.5	0.9	1.1	0.7
Sumbawanga Municipal	1.0	1.4	0.7	2.3	3.3	1.5
Nkasi District	0.6	0.7	0.5	1.0	1.2	0.7

13.7.2 Usage of Computers by Individuals

Results, reveal that one percent (2.1%) of persons aged 15 years and above in Rukwa Region use Laptops and less than one percent (1.4%) use desktop computers. Generally, the proportion of males that use Laptops and/or desktop computers is slightly higher than that of females.

The use of computers by individuals varies across councils, with Sumbawanga Municipal having the highest percentage (2.3% use desktop and 3.9% use Laptop). In Sumbawanga District and Kalambo District Councils have the lowest percentages of individuals using computers (Table 13.17).

Table 13. 15: Percentage of Persons Aged 15 and Above Using Computers by Type, Sex, Place of Residence and Council; Rukwa Region, 2022 PHC

Place of Residence	Number of Persons Using ICT			Use of Computers					
	Equipment			Use a Desktop Computer			Use a Laptop Computer		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total	767,252	359,692	407,560	1.4	1.8	1.0	2.1	2.7	1.6
Rural	598,791	283,144	315,647	1.1	1.3	0.8	1.5	1.9	1.2
Urban	168,461	76,548	91,913	2.6	3.5	1.8	4.3	5.7	3.1
Council									
Kalambo District	155,949	73,473	82,476	1.1	1.4	0.9	1.6	2.0	1.2
Sumbawanga District	239,920	112,111	127,809	1.1	1.4	0.8	1.6	2.0	1.3
Sumbawanga Municipal	163,979	75,584	88,395	2.3	3.1	1.7	3.9	5.1	2.8
Nkasi District	207,404	98,524	108,880	1.2	1.5	0.9	1.7	2.1	1.4

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 3 months period prior to the Census are given in Table 13.18. The table shows that during the reference period, Rukwa Region had one percent (1.0%) and about two percent (1.6%) of individuals aged 4 years and above that used desktop and Laptop computers. The proportion of persons that used both desktop and Laptop computers in the reference period increases with age from age 4 years and attains the maximum point at age group 30 – 34 years and thereafter decreases as 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 15 – 29 years to 80 and above but is almost the same for males and females in younger age groups (age 4 years to age group 15 -19 years) (Table 13.18).

Table 13. 16: Percentage of Persons Aged 4 Years and Above, Using Computers by type, Sex and Age Groups; Rukwa Region, 2022 PHC

Age Group	Desktop			Laptop			Number of Persons Using ICT Equipments		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total	1.0	1.2	0.8	1.6	1.9	1.3	1,306,688	626,126	680,562
4	0.3	0.3	0.3	0.7	0.7	0.7	56,794	27,865	28,929
5 - 9	0.3	0.3	0.4	0.8	0.8	0.8	258,439	126,279	132,160
10 -14	0.4	0.4	0.4	0.9	0.9	0.9	224,203	112,290	111,913
15 - 19	0.7	0.8	0.6	1.2	1.3	1.2	158,753	76,347	82,406
20 - 24	1.5	1.9	1.1	2.3	2.9	1.8	128,855	57,066	71,789
25 - 29	1.9	2.6	1.3	2.9	3.8	2.1	103,191	47,456	55,735
30 - 34	2.0	2.7	1.4	3.0	4.2	2.0	84,576	39,681	44,895
35 - 39	1.8	2.4	1.2	2.8	3.8	1.9	70,767	33,259	37,508
40 - 44	1.5	1.9	1.1	2.1	2.7	1.5	57,037	27,503	29,534
45 - 49	1.3	1.6	1.1	1.9	2.3	1.5	44,913	21,911	23,002
50 - 54	1.3	1.5	1.1	1.9	2.3	1.5	33,390	16,275	17,115
55 - 59	1.3	1.6	1.0	1.6	2.1	1.3	22,383	10,793	11,590
60 - 64	1.0	1.2	0.8	1.4	1.8	1.1	22,074	10,723	11,351
65 - 69	0.9	1.2	0.6	1.3	1.6	1.1	13,498	6,322	7,176
70 - 74	0.8	1.1	0.6	1.1	1.4	0.9	11,417	5,348	6,069
75 - 79	0.8	1.0	0.6	0.9	1.0	0.8	6,287	2,886	3,401
80 +	0.5	0.7	0.4	0.8	0.9	0.8	10,111	4,122	5,989

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 to the census in Rukwa Region had attained university and other related education levels (23.4%) with males having a higher proportion (26.6%) than females (17.7%).

The results further show that the percentage of persons who used desktop computers is higher among males than females for most of levels of education except for those who attained pre-primary of which the percentage of males is lower (0.5%) than that of females (0.9%).

The percentage of persons who used desktop computers is higher for persons living in urban areas than rural areas across all levels of education (Table 13.19).

Table 13.17: 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; Rukwa 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	0.7	0.5	0.9	0.7	0.4	1.0	1.0	1.5	0.6	2,148	932	1,216	1,849	797	1,052	299	135	164
Primary School (1 - 8)	1.2	1.3	1.1	1.1	1.2	0.9	1.8	2.1	1.6	422,825	207,539	215,286	341,383	171,067	170,316	81,442	36,472	44,970
Secondary School O - level (1 - 4)	2.4	2.7	2.0	1.8	2.0	1.5	3.5	4.2	2.9	127,724	66,548	61,176	81,503	44,210	37,293	46,221	22,338	23,883
Secondary School A - level (5 - 6)	6.1	6.7	4.9	4.6	4.8	3.9	7.9	9.1	5.9	8,930	5,929	3,001	4,788	3,341	1,447	4,142	2,588	1,554
University and Other Related	23.4	26.6	17.7	18.7	21.3	13.3	27.7	32.2	21.0	20,454	13,044	7,410	9,794	6,647	3,147	10,660	6,397	4,263
Training After Primary	5.6	6.0	4.6	3.8	4.7	1.0	8.9	8.5	9.6	679	504	175	442	340	102	237	164	73
Training After Secondary Education	15.2	16.9	12.6	13.3	14.2	11.8	17.2	20.3	13.3	3,799	2,255	1,544	1,989	1,254	735	1,810	1,001	809

Table 13.20 reveals that the highest proportion of persons aged 15 years and above who used Laptop computers in the three months prior to the census in Rukwa Region had attained university and other related education levels (13.1%) with a higher proportion for males (14.6 %) than females (10.4%).

The results also show that the percentage of persons who used Laptop computers increases as the level of education and attains the maximum position at university and other related education levels.

Table 13. 18: 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; Rukwa 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	0.4	0.4	0.3	0.4	0.4	0.4	0.3	0.7	0.0	2,148	932	1,216	1,849	797	1,052	299	135	164
Primary School (1 - 8)	0.9	1.0	0.8	0.8	0.9	0.7	1.2	1.4	1.0	422,825	207,539	215,286	341,383	171,067	170,316	81,442	36,472	44,970
Secondary School O - level (1 - 4)	1.7	2.1	1.3	1.3	1.6	1.0	2.4	3.1	1.8	127,724	66,548	61,176	81,503	44,210	37,293	46,221	22,338	23,883
Secondary School A - level (5 - 6)	4.2	4.7	3.3	3.7	4.1	2.8	4.8	5.5	3.7	8,930	5,929	3,001	4,788	3,341	1,447	4,142	2,588	1,554
University and Other Related	13.1	14.6	10.4	11.6	12.7	9.2	14.5	16.6	11.3	20,454	13,044	7,410	9,794	6,647	3,147	10,660	6,397	4,263
Training After Primary	3.4	3.6	2.9	1.8	2.4	0.0	6.3	6.1	6.8	679	504	175	442	340	102	237	164	73
Training After Secondary Education	10.0	10.3	9.5	9.4	9.3	9.5	10.7	11.6	9.5	3,799	2,255	1,544	1,989	1,254	735	1,810	1,001	809

13.7.5 Usage of Computers by Employment Status and Sex

Results reveal that the percentage of persons who used desktop computers in Rukwa Region in the last three months prior the Census' date ranges from 1.1 percent for the self-employed without employees category to 1.6 percent for the paid employees category. Results further show that the percentage of persons who used desktop computers is higher for males than for females.

Furthermore, results show that the proportion of persons who used desktop computers is higher for persons living in urban than for those living in rural areas for all employment categories (Table 13.21).

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 Employment Status; Rukwa 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	1.6	1.9	0.0	1.3	1.5	0.0	3.1	3.6	0.0	2,145	1,874	271	1,722	1,514	208	423	360	63
Self-employed without employees	1.1	1.7	0.7	1.0	1.6	0.4	1.7	1.8	1.5	6,597	2,878	3,719	5,222	2,280	2,942	1,375	598	777
Self-employed with employees	1.1	1.3	0.6	0.8	0.8	0.7	2.7	3.4	0.0	908	594	314	759	475	284	149	119	30
Casual labourers	1.3	1.4	1.0	0.8	0.9	0.7	3.4	3.5	2.9	2,084	1,588	496	1,703	1,275	428	381	313	68
Workers not classified by status	1.0	1.7	0.5	0.7	0.9	0.5	2.9	5.9	0.7	1,602	643	959	1,362	542	820	240	101	139

Results reveal that the percentage of persons who used Laptop computers in the last three months prior the Census' date ranges from 2.0 percent among workers not classified by status category to 2.6 percent among the self-employed with employees and among the casual labourers categories. Regarding the use of Laptop computers by sex, results show that the percentage of persons who used Laptop computers during the reference period 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 live in urban than in rural areas for all types of employment categories (Table 13.22).

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 Sex and Employment Status; Rukwa 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	2.5	2.7	1.5	1.8	1.8	1.4	5.4	6.1	1.6	2,145	1,874	271	1,722	1,514	208	423	360	63
Self-employed without employees	2.1	3.1	1.3	1.7	2.8	0.8	3.6	4.3	3.0	6,597	2,878	3,719	5,222	2,280	2,942	1,375	598	777
Self-employed with employees	2.6	3.5	1.0	2.1	2.7	1.1	5.4	6.7	0.0	908	594	314	759	475	284	149	119	30
Casual labourers	2.6	2.8	2.0	1.9	1.9	1.9	5.8	6.4	2.9	2,084	1,588	496	1,703	1,275	428	381	313	68
Workers not classified by status	2.0	2.8	1.5	1.2	1.3	1.2	6.3	10.9	2.9	1,602	643	959	1,362	542	820	240	101	139

13.7.6 Usage of Computers by Occupation

The 2022 PHC results reveal that in Rukwa Region professionals constitute the highest percentage (6.4 percent) of persons who used desktop computers in the three months prior to the Census date compared with other occupations in the Region, while agricultural and fishery workers recorded the lowest percentage (0.5%).

The percentage of persons who used desktop computers is higher among males than females across all the occupation categories. The percentage of persons who used desktop is more common among persons who live in urban than in rural areas across all occupation categories (Table 13.23).

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 Occupation Status; Rukwa 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.	6.2	6.7	5.1	4.9	4.2	6.8	7.2	9.1	4.1	1,394	940	454	616	454	162	778	486	292
Professionals.	6.4	8.0	3.7	6.1	7.2	3.9	6.6	8.6	3.5	4,856	3,080	1,776	2,036	1,392	644	2,820	1,688	1,132
Technicians and associate professionals.	2.6	2.7	2.1	2.3	2.5	1.7	2.8	2.9	2.4	12,759	9,446	3,313	6,022	4,620	1,402	6,737	4,826	1,911
Clerks.	3.8	4.9	2.5	3.7	5.0	1.3	4.0	4.8	3.2	1,326	757	569	653	424	229	673	333	340
Service workers and shop sales workers.	1.7	2.6	1.1	1.5	2.2	1.1	1.8	2.9	1.2	21,158	7,895	13,263	10,366	3,957	6,409	10,792	3,938	6,854
Agricultural and fishery workers.	0.5	0.6	0.4	0.5	0.6	0.4	0.8	1.1	0.5	351,060	166,457	184,603	303,741	144,991	158,750	47,319	21,466	25,853
Craft and related workers.	0.8	0.9	0.7	0.7	0.7	0.7	1.1	1.3	0.8	93,053	48,278	44,775	65,851	34,509	31,342	27,202	13,769	13,433
Plant and machine operators and assemblers.	1.6	1.7	0.6	1.2	1.2	0.6	2.0	2.1	0.7	3,041	2,731	310	1,298	1,130	168	1,743	1,601	142

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
Elementary occupations.	0.8	1.0	0.6	0.6	0.7	0.5	1.0	1.5	0.7	91,152	41,060	50,092	61,337	28,508	32,829	29,815	12,552	17,263

The 2022 PHC results reveal that Professionals have the highest percentage (29.0%) of persons who used Laptop computers in the last three months prior to the census date compared with other occupation categories in Rukwa Region, while Agricultural and fishery workers recorded the lowest (1.4%).

The percentage of persons who used Laptop computers is higher among males than females across all occupation categories. The percentage of persons who used Laptop computers is more pronounced among persons who live in urban than in rural areas across all occupation categories (Table 13.24).

Table 13.22: Number and 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; Rukwa Region, 2022 PHC

Occupation	Percent									Total Population Aged 15 Years and Above								
	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	Both Sexes
Legislators' administrators and managers.	24.8	27.2	19.8	17.4	18.1	15.4	30.7	35.8	22.3	1,394	940	454	616	454	162	778	486	292
Professionals.	29.0	33.7	20.9	24.1	27.3	17.2	32.6	38.9	23.1	4,856	3,080	1,776	2,036	1,392	644	2,820	1,688	1,132
Technicians and associate professionals.	10.2	10.5	9.2	8.0	8.2	7.6	12.1	12.8	10.4	12,759	9,446	3,313	6,022	4,620	1,402	6,737	4,826	1,911
Clerks.	18.3	20.2	15.8	15.5	19.3	8.3	21.1	21.3	20.9	1,326	757	569	653	424	229	673	333	340
Service workers and shop sales workers.	3.8	5.6	2.8	2.6	3.8	1.8	5.0	7.4	3.6	21,158	7,895	13,263	10,366	3,957	6,409	10,792	3,938	6,854

Occupation	Percent									Total Population Aged 15 Years and Above								
	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	Both Sexes
Agricultural and fishery workers.	1.4	1.7	1.2	1.2	1.4	1.0	2.8	3.5	2.2	351,060	166,457	184,603	303,741	144,991	158,750	47,319	21,466	25,853
Craft and related workers.	1.9	2.2	1.6	1.4	1.6	1.3	3.2	3.8	2.5	93,053	48,278	44,775	65,851	34,509	31,342	27,202	13,769	13,433
Plant and machine operators and assemblers.	4.3	4.5	2.6	2.8	2.9	1.8	5.4	5.6	3.5	3,041	2,731	310	1,298	1,130	168	1,743	1,601	142
Elementary occupations.	2.2	2.8	1.7	1.5	1.9	1.2	3.5	4.8	2.6	91,152	41,060	50,092	61,337	28,508	32,829	29,815	12,552	17,263

Chapter 14

Information on Buildings

Key Points

- Forty percent (40.7%) of all buildings have permanent flooring materials (sand-cement or tiles/with cement or concrete, tiles or marble).
- Thirteen percent (13.1%) of all buildings/units in Rukwa Region are connected to the national grid electricity, while 29.9 percent are powered by other sources.
- About Sixteen percent (15.7%) of all buildings/units have water services.
- Three percent (3.0%) of all buildings in Rukwa Region have infrastructure for the Persons With Disabilities.
- About seventy percent (69.6%), of all individually owned buildings/units in Rukwa Region are owned by men, 18.8 percent by women, and 9.2 percent are jointly owned.
- Three-quarter (76.2%) of all buildings/units in Rukwa Region are occupied by the owners themselves, and 10.4 percent are occupied by tenants.
- Almost seven out of ten (69.8%) of all buildings in Rukwa Region are built on un-surveyed land.
- About forty percent (39.6%) of all buildings/units in Rukwa 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 Rukwa Region and Council levels as per the 2022 Tanzania Building Census (2022 TBC) results. It also presents findings on buildings 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 TBC results show that Rukwa Region has a total of 302,368 buildings whereby 242,894 buildings are in rural areas and 59,474 in urban areas. Sumbawanga District Council has the highest number (96,353 buildings) of buildings in the Region followed by Nkasi District Council (73,349 buildings). On the other hand, Sumbawanga Municipal and Kalambo District Councils have fewer numbers of buildings (63,529 and 69,137 respectively). Further results show that Sumbawanga Municipal Council has the highest number (101) of multi-storey buildings, followed by Sumbawanga District Council (26) while Kalambo District Council and Nkasi District Council have relatively small numbers (23 each) of multi-storey buildings (Map 14.1 and Table 14.1).

Table 14. 1: Number of Buildings by Place of Residence, Type, and Council; Rukwa Region, 2022 TBC

Council	Total				Rural				Urban			
	Total Number of Buildings	Multi Storeys	Single Storeys	Under Construction	Total Number of Buildings	Multi Storeys	Single Storeys	Under Construction	Total Number of Buildings	Multi Storeys	Single Storeys	Under Construction
Total	302,368	173	290,707	11,488	242,894	75	234,645	8,174	59,474	98	56,062	3,314
Kalambo District	69,137	23	66,862	2,252	67,863	23	65,639	2,201	1,274	0	1,223	51
Sumbawanga District	96,353	26	93,278	3,049	86,792	24	84,022	2,746	9,561	2	9,256	303
Sumbawanga Municipal	63,529	101	59,720	3,708	27,834	10	26,490	1,334	35,695	91	33,230	2,374
Nkasi District	73,349	23	70,847	2,479	60,405	18	58,494	1,893	12,944	5	12,353	586

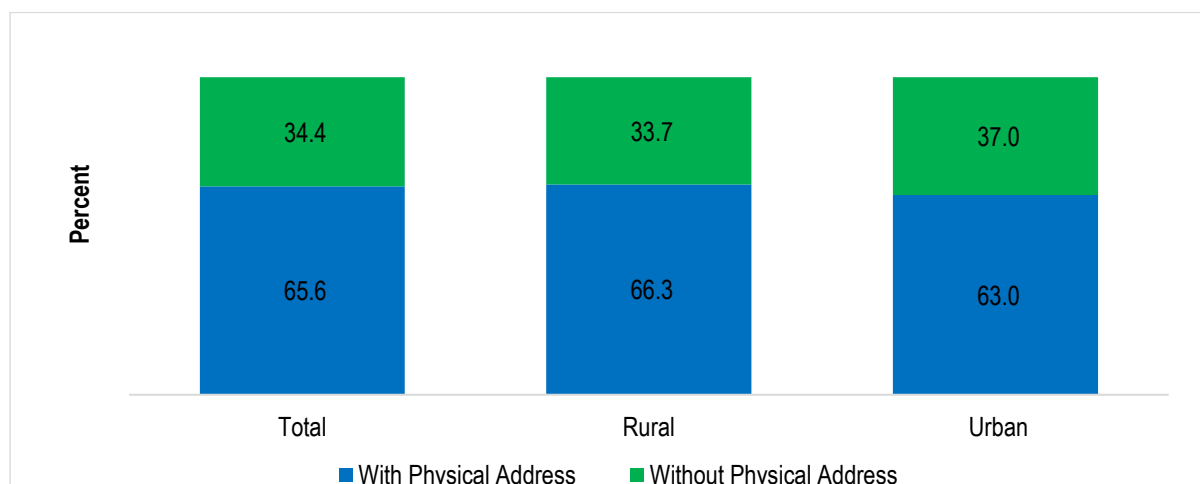
Map 14. 1: Number of Buildings by Council; Rukwa Region, 2022 TBC



14.2.1 Buildings with Physical Address

The results show that 65.6 percent of all buildings in Rukwa Region have physical address. The percentage of buildings with physical address is relatively high in Rural (66.3%) than in urban areas (63.0%) (Figure 14.1 and Table 14.2).

Figure 14. 1: Percentage Distribution of Buildings with and Without Physical Address by Place of Residence; Rukwa Region, 2022 TBC

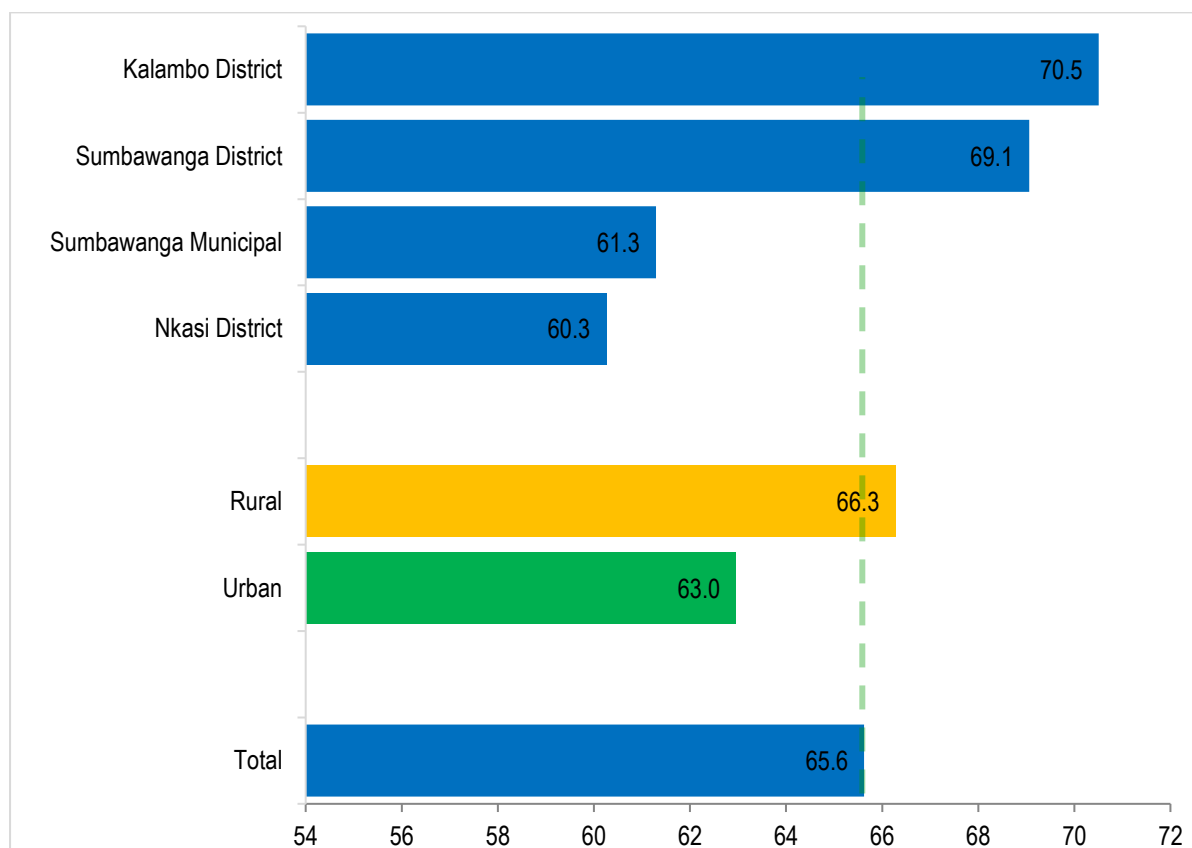


Across councils, results show that, percentage of buildings with physical addresses ranges from 60.3 percent in Nkasi District to 70.5 percent in Kalambo District (Table 14.2 and Figure 14.2).

Table 14. 2: Number of Buildings by Place of Residence, Physical Address and Council; Rukwa 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
Total	302,368	198,424	103,944	242,894	160,977	81,917	59,474	37,447	22,027
Kalambo District	69,137	48,746	20,391	67,863	48,014	19,849	1,274	732	542
Sumbawanga District	96,353	66,541	29,812	86,792	59,450	27,342	9,561	7,091	2,470
Sumbawanga Municipal	63,529	38,937	24,592	27,834	16,595	11,239	35,695	22,342	13,353
Nkasi District	73,349	44,200	29,149	60,405	36,918	23,487	12,944	7,282	5,662

Figure 14. 2: Percentage Distribution of Buildings with Physical Address by Council: Rukwa Region, 2022 TBC

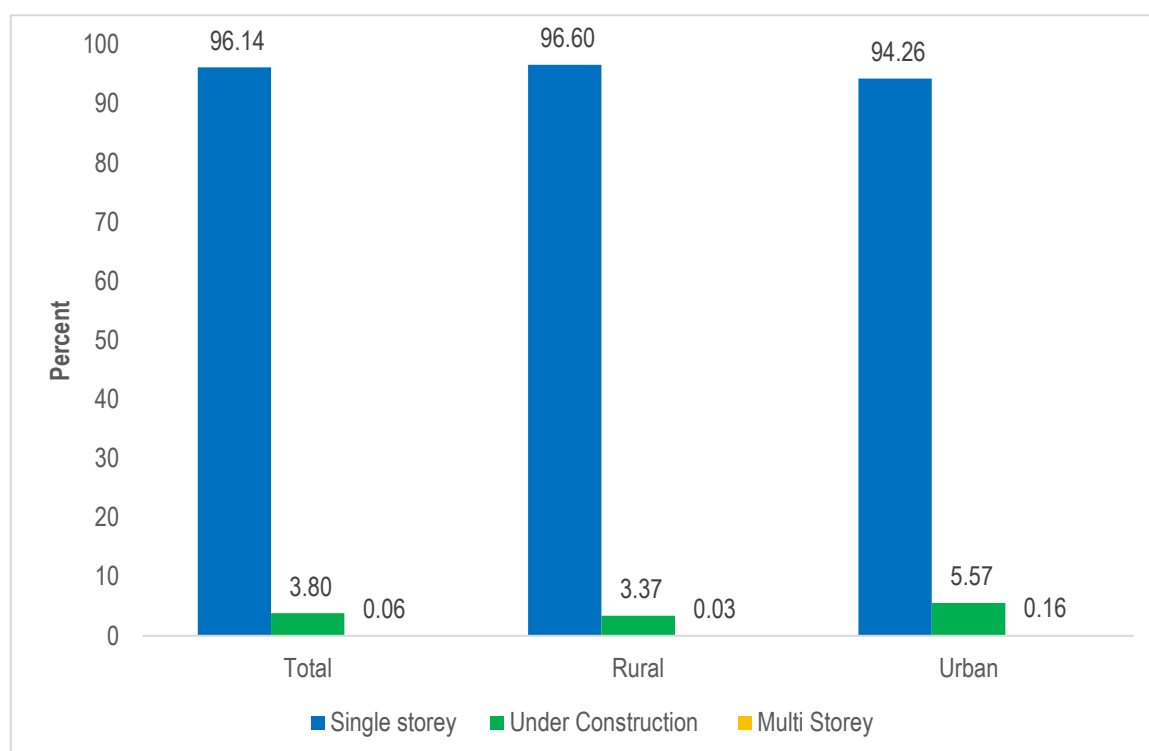


14.2.2 Type of Buildings

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, 96.14 percent of all buildings in Rukwa Region are single storey and only less than one percent (0.06%) are multi-storey. The percentage of multi-storey buildings is slightly higher (0.16%) in urban than in rural areas (0.03%). Results further reveal that about four percent (3.80%) of all buildings in the Region are under construction. Percentage of buildings undergoing construction in urban areas (5.57%) is almost twice that of rural areas (3.37%) (Figure 14.3).

Figure 14.3: Percentage Distribution of Buildings by Type and Place of Residence, Rukwa 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 93.2 percent of buildings in Rukwa Region are used for residential purposes, 3.2 percent for commercial-residential and 3.7 percent for non-residential. The pattern of use of building is almost similar in rural and urban areas.

At the Council level, Nkasi District Council has the highest proportion (94.0%) of residential buildings while Sumbawanga Municipal has the lowest proportion (91.7%). With regard to non-residential buildings, Sumbawanga Municipal Council has the highest proportion (3.9%) while Nkasi District Council has lowest (3.4%) (Table 14.3).

Table 14.3: Number and Percentage Distribution of Buildings by Main Use, Council and Place of Residence; Rukwa Region, 2022 TBC

Council	Place of Residence	Main Use			
		Total Buildings	Residential	Residential and Commercial	Non-Residential use
Total	Total	302,368	93.2	3.2	3.7
	Rural	242,894	93.8	2.7	3.4
	Urban	59,474	90.5	4.9	4.5
Kalambo District	Total	69,137	93.5	2.8	3.6
	Rural	67,863	93.6	2.8	3.7
	Urban	1,274	90.7	6.1	3.2
Sumbawanga District	Total	96,353	93.3	3.0	3.7
	Rural	86,792	93.7	2.9	3.4
	Urban	9,561	89.7	4.1	6.2
Sumbawanga Municipal	Total	63,529	91.7	4.4	3.9
	Rural	27,834	93.6	3.0	3.4
	Urban	35,695	90.2	5.5	4.3
Nkasi District	Total	73,349	94.0	2.7	3.4
	Rural	60,405	94.4	2.4	3.2
	Urban	12,944	92.0	3.9	4.1

The main use of non-residential buildings in Rukwa Region is for commercial purposes (30.9%), followed by religious institutions (24.0%) and institutions (20.2%) Sumbawanga District Council has the highest percentage (1,287 buildings, 36.2%) of buildings used for commercial purposes, followed by Nkasi District Council (761 buildings; 30.6%), while Kalambo District Council has the lowest number (606 buildings; 24.0%) (Table 14.4).

Table 14. 4: Percentage Distribution of Non-Residential Buildings by Type of Use, Place of Residence and Council; Rukwa 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
Total	11,048	8.2	30.9	1.7	0.1	3.6	0.9	6.0	20.2	0.1	24.0	6.9
Kalambo District	2,522	8.2	24.0	1.5	0.1	2.1	0.4	5.4	24.0	0.2	30.1	5.6
Sumbawanga District	3,552	6.3	36.2	1.0	0.0	3.0	0.7	7.6	19.0	0.0	22.2	5.4
Sumbawanga Municipal	2,485	11.8	30.5	2.2	0.0	5.9	1.7	3.9	20.3	0.1	21.9	7.3
Nkasi District	2,489	7.4	30.6	2.4	0.5	3.7	0.9	6.3	17.9	0.0	22.6	9.9

14.2.4 Number of Units in a Building

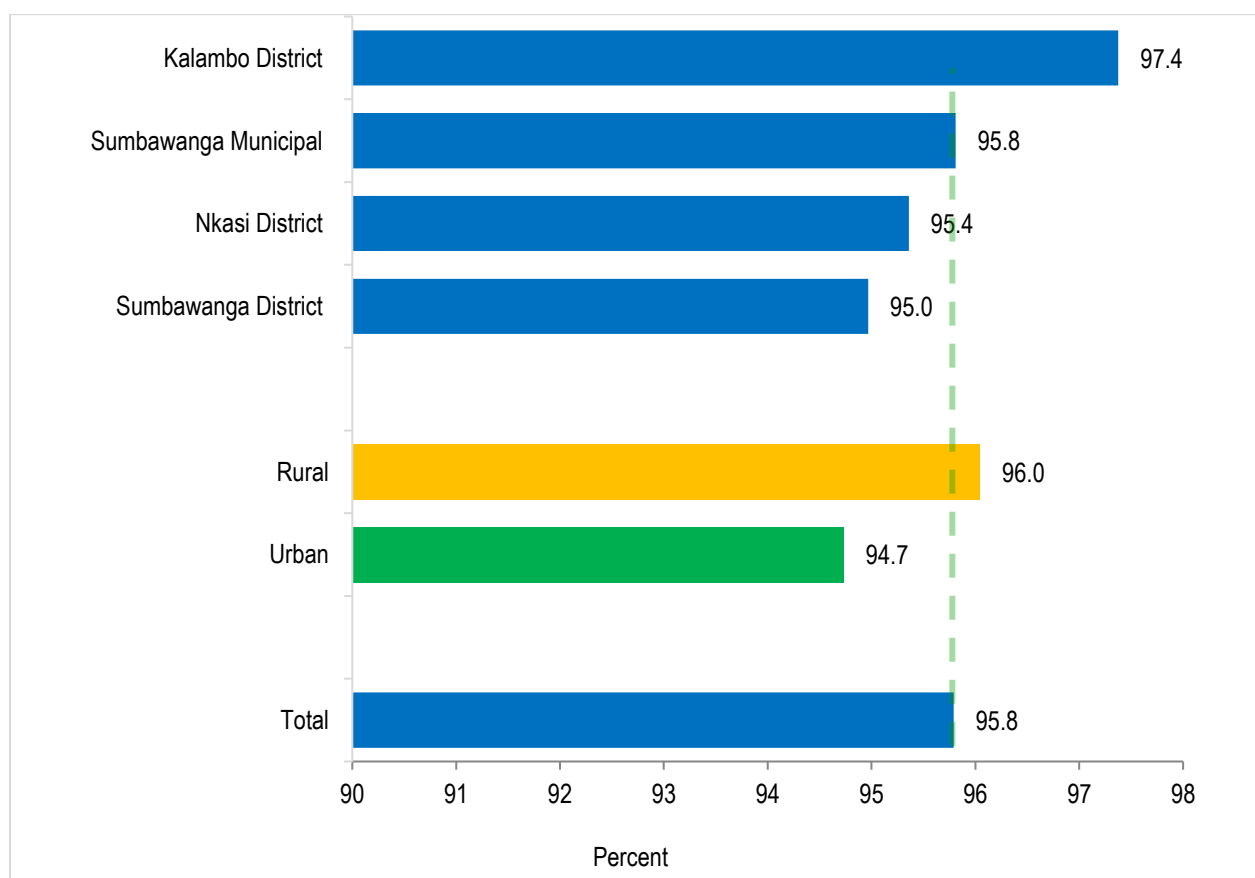
Information on the number of units in the building was collected only in residential and commercial-residential buildings. Results show that, most buildings in Rukwa Region (95.8%) have one unit. The distribution pattern of buildings by the number of units is similar for both rural and urban areas.

At the Council level, Kalambo District has highest proportion (97.4%) of buildings with single unit followed by Sumbawanga Municipal (95.8%), while the Sumbawanga District has lowest (95.0%). Results further show that, the percentage of buildings with two units range from 1.0 percent in Kalambo District Council to 1.8 percent in Sumbawanga Municipal Council (Table 14.5 and Figure 14.4).

Table 14. 5: Number and Percentage Distribution of Residential and Commercial-Residential Buildings by Number of Units, Place of Residence and Council; Rukwa Region, 2022 TBC

Council	Number of Units																				
	Total							Rural							Urban						
	Number of Buildings	1	2	3	4	5	6+	Number of Buildings	1	2	3	4	5	6+	Number of Buildings	1	2	3	4	5	6+
Total	291,320	95.8	1.5	0.7	0.7	0.6	0.7	234,549	96.0	1.3	0.7	0.6	0.6	0.6	56,771	94.7	2.3	0.9	0.7	0.7	0.7
Kalambo District	66,615	97.4	1.0	0.4	0.4	0.4	0.4	65,382	97.4	1.0	0.4	0.4	0.4	0.4	1,233	96.2	1.7	0.6	0.6	0.4	0.5
Sumbawanga District	92,801	95.0	1.7	0.9	0.8	0.8	0.8	83,836	94.8	1.7	0.9	0.8	0.9	0.9	8,965	96.3	1.6	0.7	0.5	0.4	0.5
Sumbawanga Municipal	61,044	95.8	1.8	0.7	0.6	0.6	0.6	26,881	97.2	0.8	0.6	0.5	0.5	0.4	34,163	94.7	2.5	0.7	0.7	0.7	0.6
Nkasi District	70,860	95.4	1.6	0.9	0.8	0.7	0.7	58,450	95.8	1.4	0.8	0.7	0.6	0.6	12,410	93.5	2.1	1.4	1.0	1.0	1.0

Figure 14.4: Percentage Distribution of Residential and Commercial-Residential Buildings with One Unit by Council; Rukwa Region, 2022 TBC



14.3 Buildings' Attributes

This section presents findings on attributes of buildings which constitute categories, occupancy status, ownership, construction status, materials used for construction, number of bedrooms, tenure status and condition of buildings. Buildings in this section refer to all buildings irrespective of their use and ownership.

14.3.1 Building Categories

For the purpose of 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 (88.9%) of the buildings in Rukwa Region are detached or stand-alone buildings. The same pattern is observed in rural and urban areas and across all councils in Rukwa Region (Table 14.6).

Table 14. 6: Number and Percentage Distribution of Buildings by Building Category, Place of Residence and Council; Rukwa Region, 2022 TBC

Place of Residence	Buildings Category						
	Total Number of Buildings	Semi-detached	Percent	Terrace/Row of Houses	Percent	Detached/Stand Alone	Percent
Total	302,368	15,982	5.3	17,588	5.8	268,798	88.9
Rural	242,894	11,465	4.7	11,413	4.7	220,016	90.6
Urban	59,474	4,517	7.6	6,175	10.4	48,782	82.0
Council							
Kalambo District	69,137	2,336	3.4	2,327	3.4	64,474	93.3
Sumbawanga District	96,353	5,130	5.3	5,932	6.2	85,291	88.5
Sumbawanga Municipal	63,529	4,547	7.2	4,856	7.6	54,126	85.2
Nkasi District	73,349	3,969	5.4	4,473	6.1	64,907	88.5

14.3.2 Construction Status of Buildings

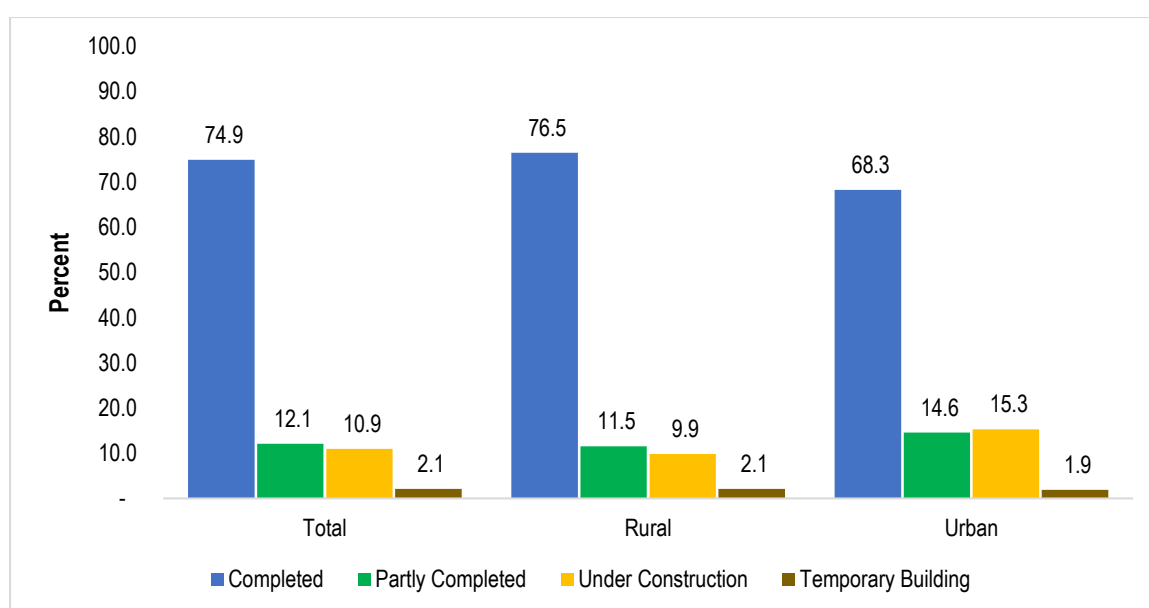
The construction status of buildings is divided into four categories, namely completed, partly completed, under construction and temporary buildings. The 2022 TBC results show that 74.9 percent of all buildings in Rukwa Region have been completed and 12.1 percent are partly completed. Buildings under construction account for 10.9 percent while temporary buildings account for 2.1 percent. The results also indicate that, 76.5 percent of all buildings in the rural areas are completed compared with 68.3 percent of buildings in urban areas.

Kalambo District Council has the highest percentage (79.7%) of completed buildings while Sumbawanga Municipal Council has the lowest percentage (66.2%). Percentage of temporary buildings ranges from 1.7 percent in Sumbawanga Municipal Council to 2.5 percent in Nkasi District Council (Table 14.7).

Table 14.7: Number and Percentage Distribution of Buildings by Construction Status, Place of Residence and Council; Rukwa Region, 2022 TBC

Place of Residence	Total Number of Buildings	Completed	Partly Completed	Under Construction	Temporary Building
Total	302,368	74.9	12.1	10.9	2.1
Rural	242,894	76.5	11.5	9.9	2.1
Urban	59,474	68.3	14.6	15.3	1.9
Council					
Kalambo District	69,137	79.7	8.9	9.3	2.1
Sumbawanga District	96,353	75.8	11.9	10.4	2.0
Sumbawanga Municipal	63,529	66.2	17.1	15.1	1.7
Nkasi District	73,349	76.7	11.1	9.7	2.5

Figure 14. 5: Percentage Distribution of Buildings by Construction Status and Place of Residence; Rukwa Region, 2022 TBC



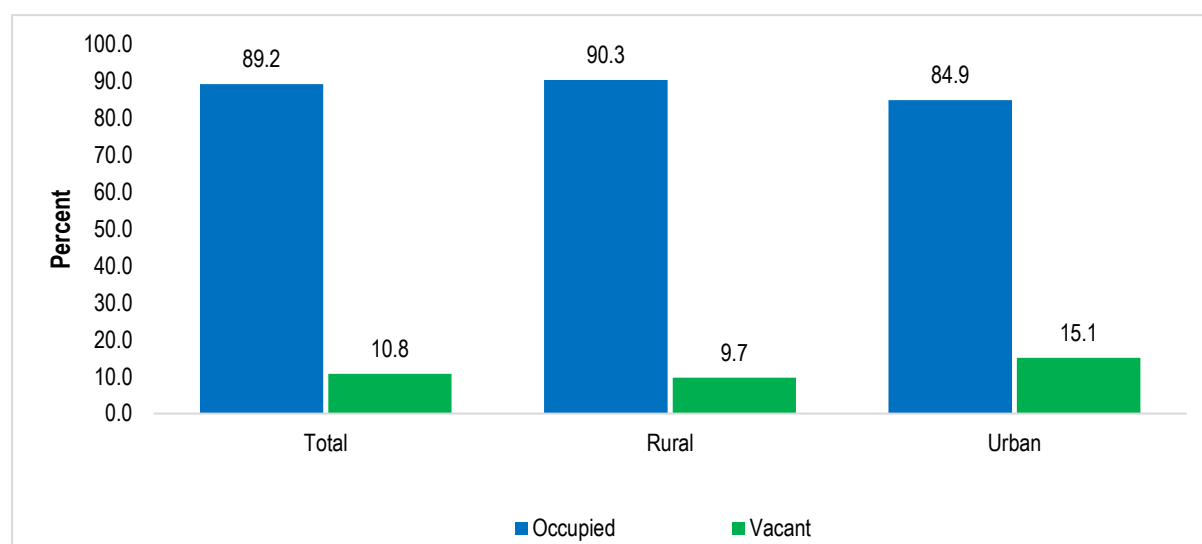
14.3.3 Building Occupancy Status

The occupancy status of buildings refers to whether the building is in use or vacant. The results show that 89.2 percent of all buildings in Rukwa Region are in use, while 10.8 percent are vacant. Furthermore, the results indicate that rural areas have a higher proportion (90.3%) of buildings in use compared with urban areas (84.9%). Nkasi District Council has the highest percentage (90.6%) of buildings in use while Sumbawanga Municipal Council has the lowest percentage (85.0%) (Figure 14.6 and Table 14.8).

Table 14. 8: Number and Percentage Distribution of Buildings by Occupancy Status, Place of Residence and Council; Rukwa Region, 2022 TBC

Place of Residence	Total Number of Buildings	Percent	
		Occupied	Vacant
Total	302,368	89.2	10.8
Rural	242,894	90.3	9.7
Urban	59,474	84.9	15.1
Council			
Kalambo District	69,137	90.1	9.9
Sumbawanga District	96,353	90.4	9.6
Sumbawanga Municipal	63,529	85.0	15.0
Nkasi District	73,349	90.6	9.4

Figure 14.6: Percentage Distribution of Buildings by Place of Residence and Occupancy Status; Rukwa Region, 2022 TBC



14.3.4 Building Construction Materials

This section describes the types of building materials used in flooring, wall 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 floor 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. About fifty-one percent of buildings in Rukwa Region

(50.7%) have earth/soil or sand floors, followed by buildings with cement floors (39.5%). Buildings with no floor account for 8.3 percent.

Furthermore, in rural areas, buildings with cement floors constitute 33.7 percent of all buildings in rural areas compared with 63.4 percent in urban areas. Sumbawanga Municipal Council has the highest percentage (59.6%) of buildings with cement floor while Sumbawanga District Council has the lowest percentage of 26.0 percent (Table. 14.9).

Table 14.9: Percentage of Buildings by Type of Flooring Materials, Place of Residence and Council; Rukwa 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	
Total	302,368	39.5	1.0	0.0	0.1	0.0	0.1	50.7	0.3	8.3
Rural	242,894	33.7	0.4	0.0	0.1	0.0	0.1	57.8	0.3	7.6
Urban	59,474	63.4	3.5	0.0	0.1	0.0	0.0	21.7	0.1	11.1
Council										
Kalambo District	69,137	36.3	2.3	0.0	0.3	0.0	0.5	44.5	0.1	16.0
Sumbawanga District	96,353	26.0	1.6	0.0	0.2	0.0	0.8	58.6	0.2	12.6
Sumbawanga Municipal	63,529	59.6	18.9	0.0	0.7	0.1	0.1	9.1	0.0	11.5
Nkasi District	73,349	37.1	1.1	0.0	0.2	0.0	0.4	41.9	0.1	19.1

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 Rukwa Region have walls built with burnt bricks (84.9%), followed by sundried bricks (11.4%). About ninety percent (89.7%) of buildings in urban areas have walls constructed with burnt blocks or stone blocks followed by sundried bricks (4.9%). However, in rural areas most (83.7%) of the buildings are constructed using burnt bricks followed by sundried bricks (13.0%). Sumbawanga Municipal Council has the highest percentage (91.0%) of buildings built with burnt bricks walls while Nkasi District Council has the lowest percentage (73.9%) ((Table 14.10).

Table 14.10: Number and Percentages Distribution of Buildings by Type of Wall Materials, Place of Residence and Council; Rukwa 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	
Total	302,368	0.1	0.8	11.4	84.9	0.0	0.1	1.0	0.8	0.0	1.0
Rural	242,894	0.1	0.4	13.0	83.7	0.0	0.1	1.1	0.9	0.0	0.7
Urban	59,474	0.2	2.7	4.9	89.7	0.0	0.0	0.3	0.2	0.0	2.0
Council											
Kalambo District	69,137	0.1	0.3	10.3	87.4	0.0	0.0	0.5	0.5	0.0	0.8
Sumbawanga District	96,353	0.1	0.3	9.1	87.4	0.0	0.1	1.3	1.1	0.0	0.5
Sumbawanga Municipal	63,529	0.2	2.4	4.2	91.0	0.0	0.1	0.1	0.1	0.0	1.8
Nkasi District	73,349	0.1	0.5	21.6	73.9	0.0	0.0	1.7	1.1	0.0	1.0

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 (68.9%) of all buildings in Rukwa Region are roofed with corrugated iron sheets, followed by grass/leaves (23.4%). In urban areas, 85.5 percent of all buildings are roofed with corrugated iron sheets compared with 64.8 percent in rural areas. The percentage of buildings roofed with corrugated iron sheets ranges from 60.5% in Nkasi District Council to 88.1 percent in Sumbawanga Municipal Council (Table 14.11).

Table 14.11: Number and Percentage Distribution of Buildings by Type of Roofing Materials, Place of Residence and Council; Rukwa Region, 2022 TBC

Place of Residence	Total	Roofing Materials								No roof
		Corrugated Iron sheets	Tiles	Concrete	Asbestos	Grass/ leaves	Mud and leaves	Plastics/ Tins	Tent/ Container	
Total	302,368	68.9	0.1	0.0	0.1	23.4	1.2	0.0	0.1	6.3
Rural	242,894	64.8	0.1	0.0	0.1	27.8	1.5	0.0	0.1	5.7
Urban	59,474	85.5	0.3	0.0	0.0	5.3	0.3	0.0	0.0	8.4
Council										
Kalambo District	69,137	64.6	0.0	0.0	0.0	28.2	1.2	0.0	0.1	6.0
Sumbawanga District	96,353	65.7	0.0	0.0	0.1	26.5	1.5	0.0	0.1	6.1
Sumbawanga Municipal	63,529	88.1	0.1	0.0	0.0	3.4	0.3	0.0	0.0	8.1
Nkasi District	73,349	60.5	0.3	0.0	0.1	32.1	1.8	0.0	0.0	5.1

14.3.5 Number of Bedrooms

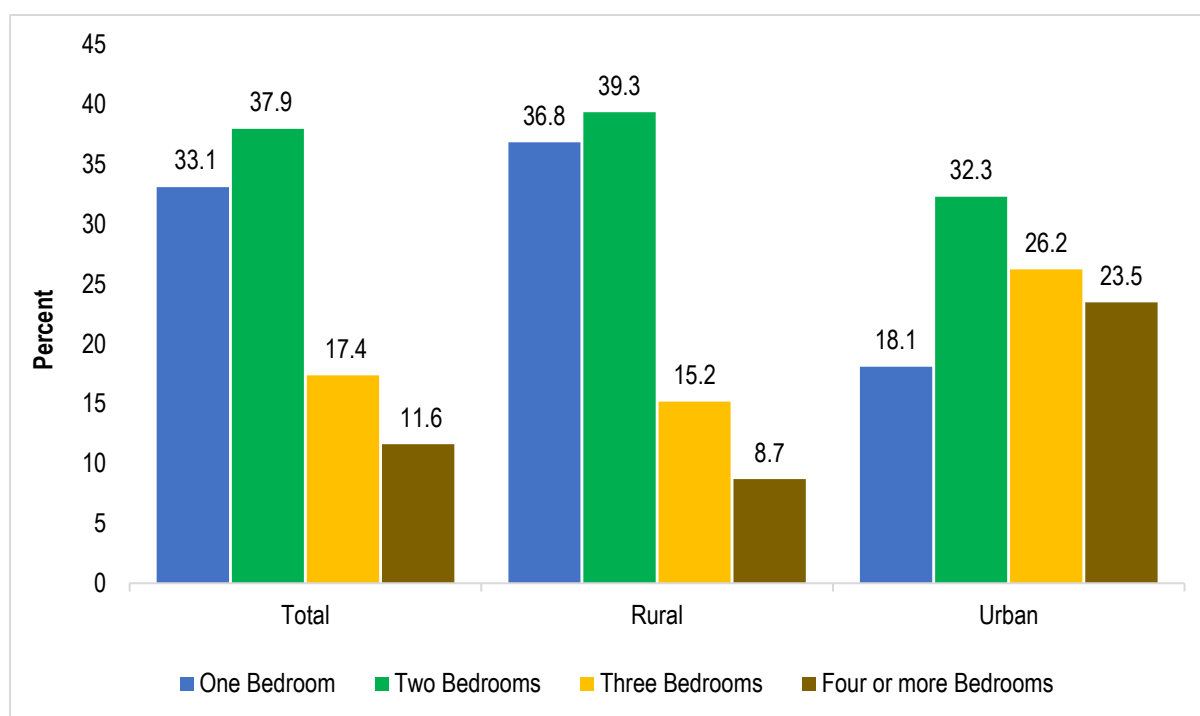
This section provides information on the number of bedrooms in residential and commercial-residential buildings only. The results show that 33.1 percent of such buildings/units in Rukwa Region have one bedroom, 37.9 percent have two bedrooms, 17.4 percent have three bedrooms and 11.6 percent have four or more bedrooms.

Furthermore, in rural areas, the proportion of buildings/units with two bedrooms is high (39.3%) compared with 36.8 percent of those with one bedroom. In urban areas, 32.3 percent of buildings/units have two bedrooms, followed by those with three bedrooms (26.2%) (Figure 14.7 and Table 14.12).

Table 14.12: Percentages of Residential and Commercial Residential Buildings/Units by Number of Bedrooms, Place of Residence and Council; Rukwa Region, 2022 TBC

Place of Residence	Number of Buildings/Units	Bedrooms						
		1	2	3	4	5	6	7+
Total	306,231	33.1	37.9	17.4	6.2	2.6	1.4	1.4
Rural	245,383	36.8	39.3	15.2	4.8	1.9	1.0	1.0
Urban	60,848	18.1	32.3	26.2	11.5	5.4	3.2	3.4
Council								
Kalambo District	69,696	37.7	39.5	14.9	4.5	1.7	0.9	0.8
Sumbawanga District	97,500	39.9	37.6	13.9	4.5	1.9	1.1	1.2
Sumbawanga Municipal	64,606	20.2	35.3	24.4	10.5	4.5	2.5	2.6
Nkasi District	74,429	31.0	39.2	18.0	6.2	2.7	1.5	1.4

Figure 14. 7: Percentage Distribution of Residential and Commercial – Residential Buildings/Units by Number of Bedrooms and Place of Residence; Rukwa Region, 2022 TBC



14.4 Basic Services in Buildings

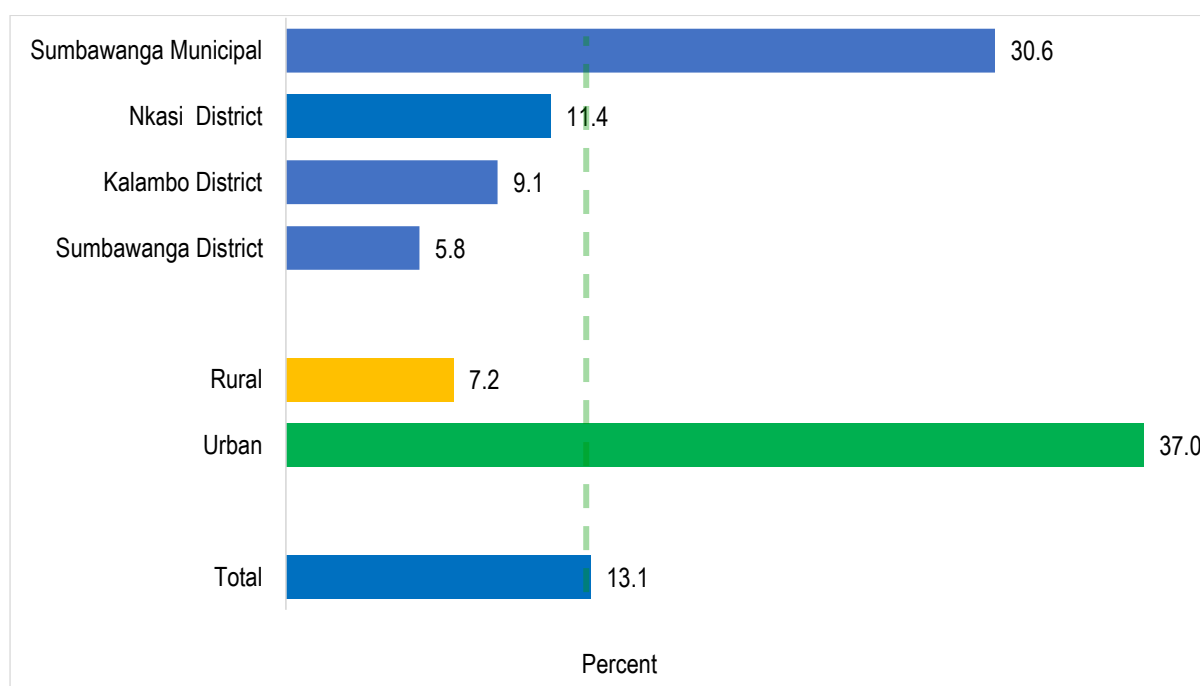
This section presents information on basic services in buildings/units. The services are electricity, water, and toilets

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 13.1 percent of all buildings/units in Rukwa Region are connected to the national grid. At least (37.0%) of all buildings/units in urban areas are connected to the national grid compared with 7.2 percent in rural areas. Across councils of Rukwa Region, Sumbawanga Municipal has the highest proportion (30.6%) of buildings/units connected to the national grid while Sumbawanga District has the lowest percentage (5.8%) (Figure 14.8 and Table 14.13).

Figure 14.8: Percentage Distribution of Buildings/Units with Electricity from the National Grid (TANESCO) by Council; Rukwa Region, 2022 TBC



Alternative sources of electricity include all other sources such as solar electricity and generators. The results reveal that 29.9 percent of all buildings/units in Rukwa Region have alternative sources of electricity. The percentage of buildings/units with alternative sources of electricity is high in rural areas (32.6%) than in urban areas (18.8%).

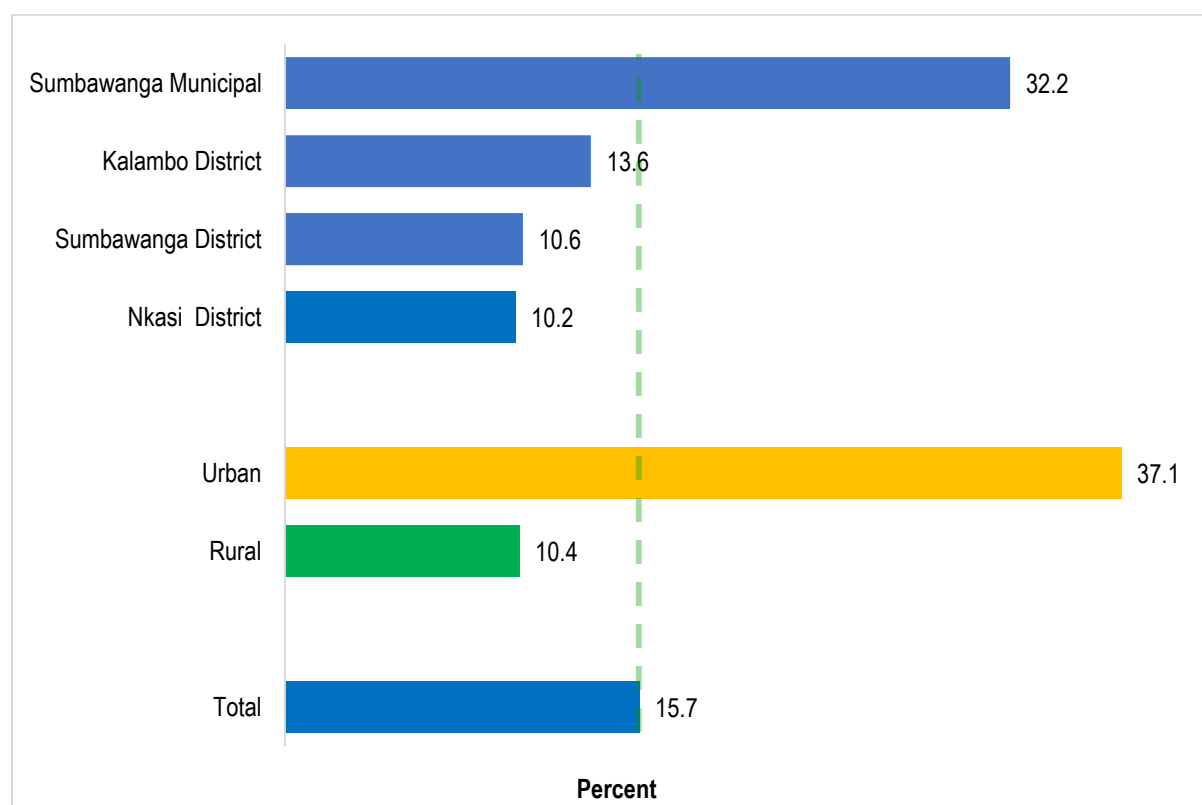
Percentage of buildings with alternative source of energy is generally high in councils with low percentage of buildings/units connected to the national grid, ranging from 16.4 percent in Sumbawanga Municipal Council to 38.1 percent in Nkasi District Council (Table 14.13).

14.4.2 Water

According to the 2022 TBC, water service in a building/units means the presence of water inside the building/units and/or on the premises of the relevant building/units. The results reveal that 15.7 percent of all buildings/units in Rukwa Region have water service. Across councils, Sumbawanga Municipal has the highest percentage (32.2%)

of buildings/units with water service while, Nkasi District Council has the lowest percentage (10.2%) (Figure 14.9 and Table 14.13).

Figure 14.9: Percentage Distribution of Buildings/Units with Water Services by Council; Rukwa, 2022 TBC



14.4.3 Toilets

Toilet service in a building/units includes the presence of a toilet inside the building/units and/or on the premises of the concerned building. The results reveal that 81.9 percent of all buildings/units in Rukwa Region have toilet facilities. The percentage of buildings/units with toilet facilities in rural areas is slightly higher (82.1%) than in urban areas (81.3%). There are marked small disparities in percentages of households with toilet facilities across councils, ranging from 80.3 percent in both Nkasi District and Kalambo District to 83.6 percent in Sumbawanga District (Figure 14.10 and Table 14.13).

Figure 14.10: Percentage Distribution of Buildings/Units with Toilet Facility by Council; Rukwa Region, 2022 TBC

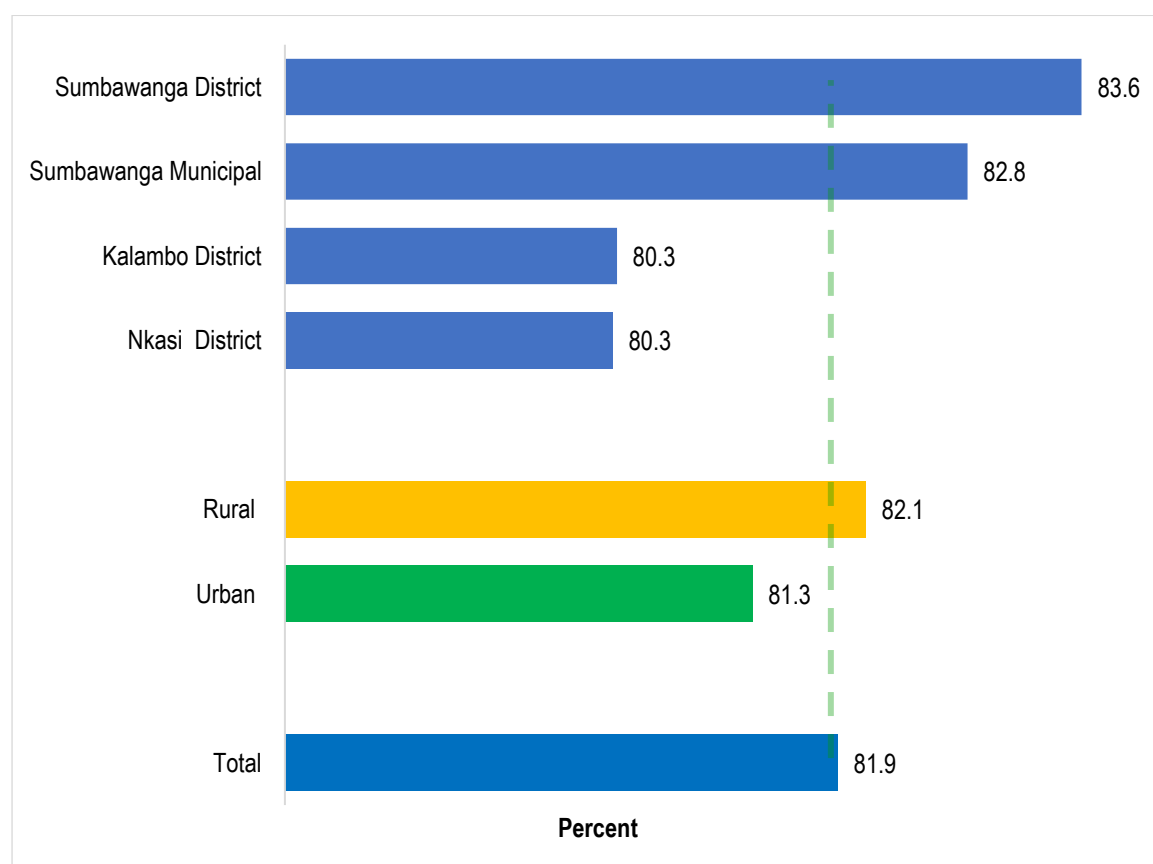


Table 14.13: Percentage of Buildings/Units by Type of Basic Services, Place of Residence and Council; Rukwa Region, 2022 TBC

Place of Residence	Number of Buildings/Units	Electricity		Water	Toilet
		National Grid	Alternative source		
Total	306,231	13.1	29.9	15.7	81.9
Rural	245,383	7.2	32.6	10.4	82.1
Urban	60,848	37.0	18.8	37.1	81.3
Council					
Kalambo District	69,696	9.1	33.7	13.6	80.3
Sumbawanga District	97,500	5.8	29.8	10.6	83.6
Sumbawanga Municipal	64,606	30.6	16.4	32.2	82.8
Nkasi District	74,429	11.4	38.1	10.2	80.3

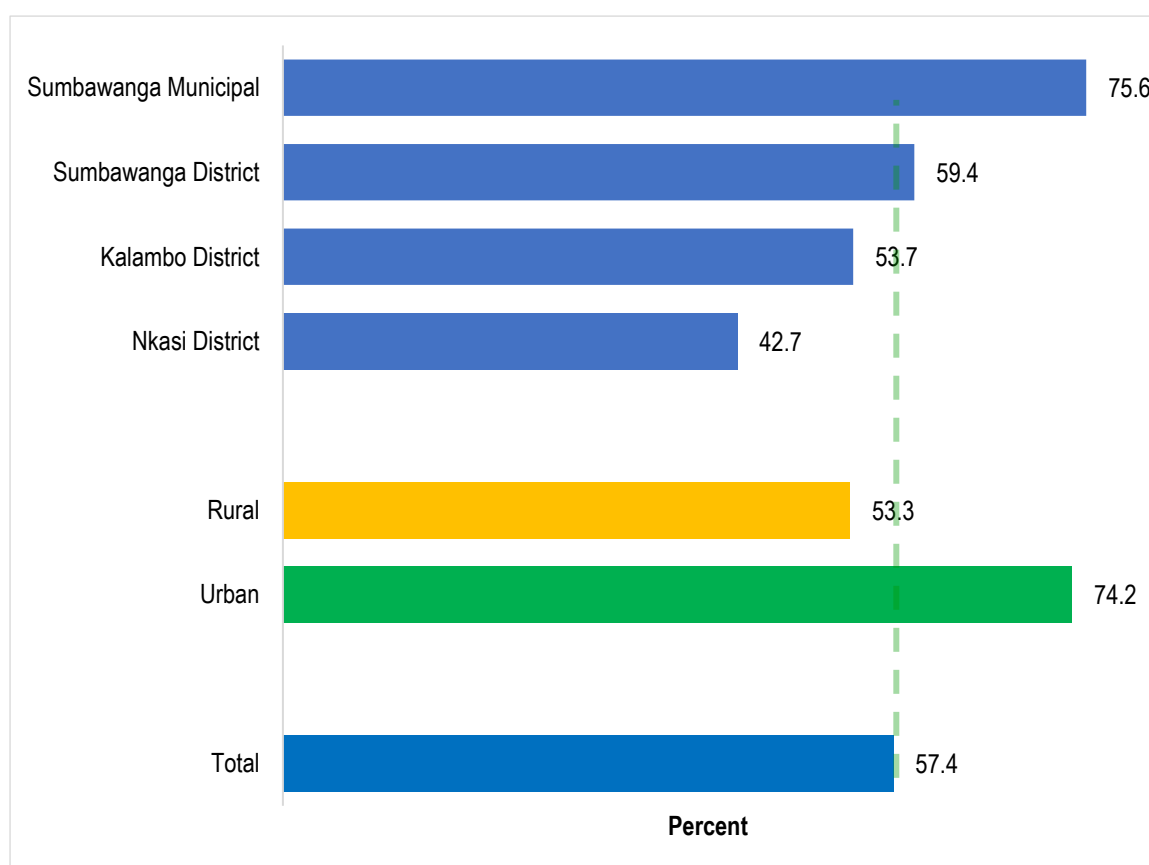
14.5 Accessibility of the Building

This section provides information on the accessibility of buildings by road and the presence of infrastructure for Persons With Disabilities.

14.5.1 Access Roads

The results indicate that 57.4 percent of all buildings in Rukwa Region are accessible by road. Notably, most of the buildings (74.2%) in urban areas are accessible by road, while it is 53.3 percent in rural areas. Sumbawanga Municipal Council has the highest percentage (75.6%) of buildings accessible by road while Nkasi District Council has the lowest percentage (42.7%) (Figure 14.11).

Figure 14.11: Percentage Distribution of Buildings with Access Road by Council; Rukwa Region, 2022 TBC

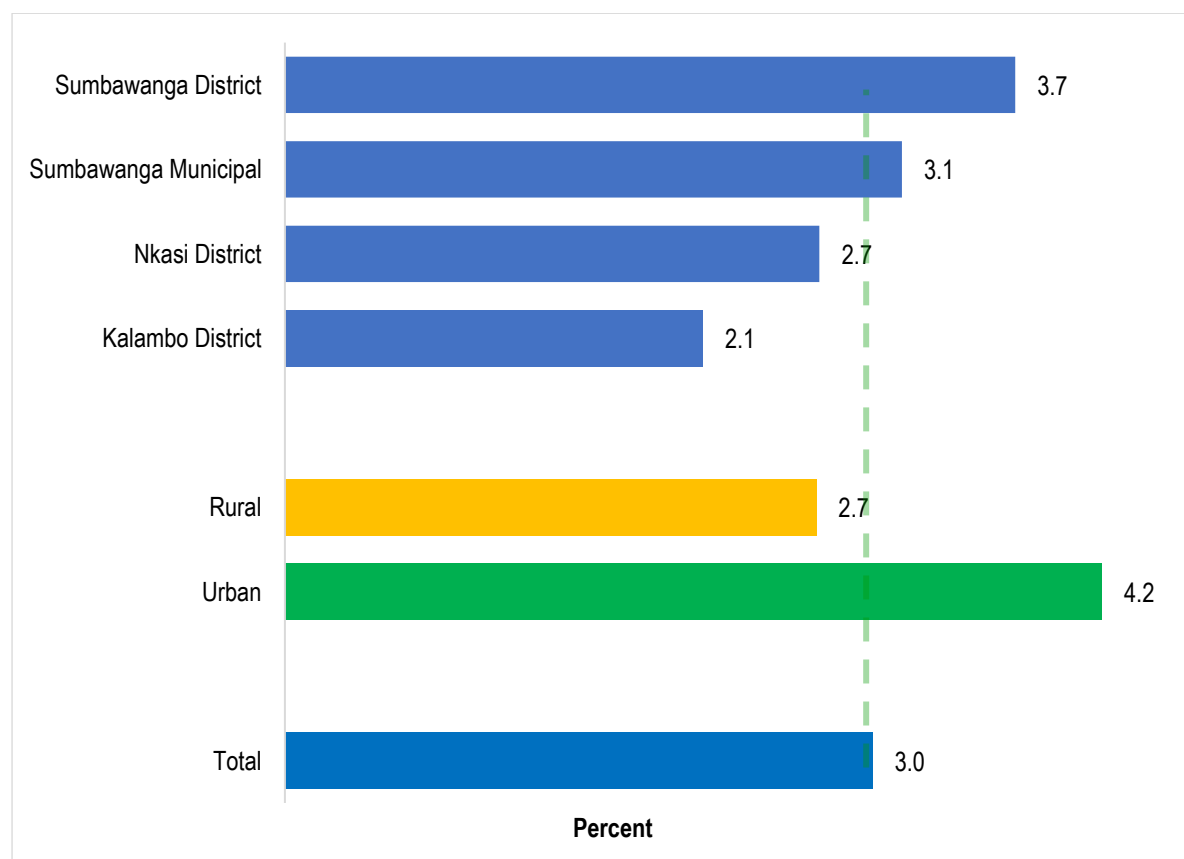


14.5.2 Infrastructure for Persons With Disabilities

Results reveal that 3.0 percent of all buildings in Rukwa Region have infrastructure for Persons with Disabilities (PWDs). Buildings with infrastructure for PWDs account for 4.2 percent and 2.7 percent of buildings in urban and rural areas respectively.

Sumbawanga District Council has the highest percentage (3.7%) of buildings with infrastructure for PWDs while Kalambo 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; Rukwa Region, 2022 TBC



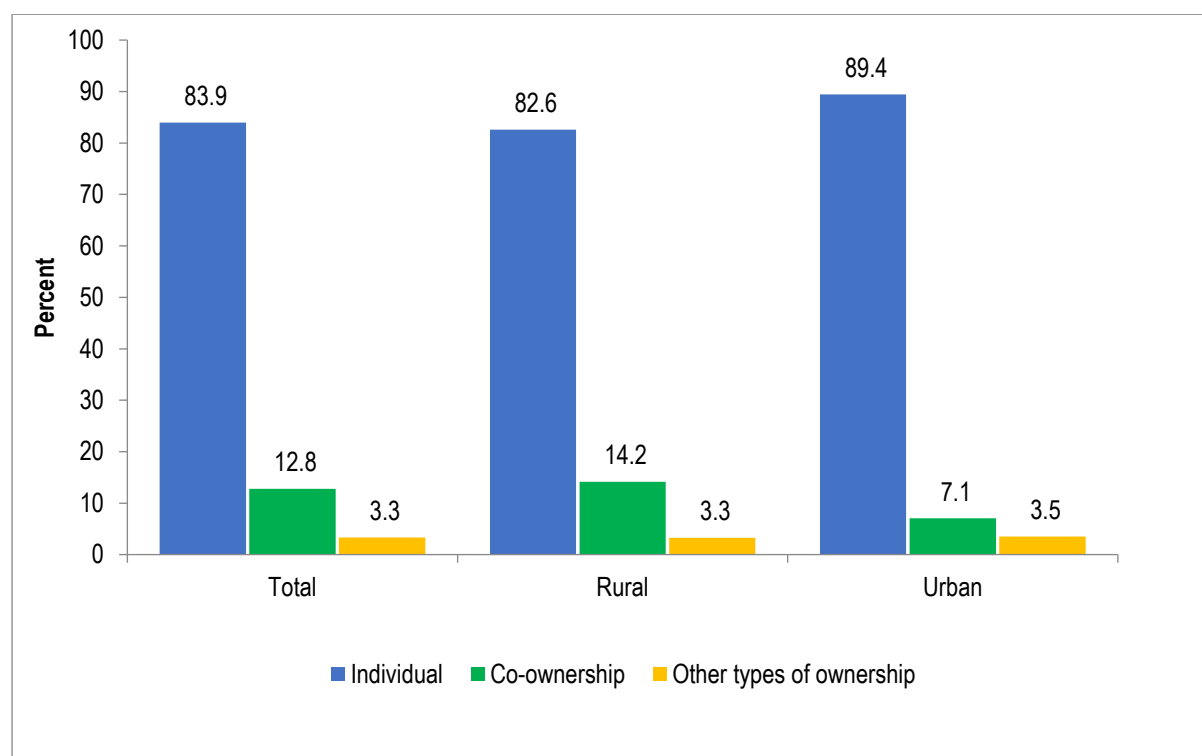
14.6 Tenure Status of Buildings

This section provides an overview of buildings/units ownership status, land surveying and the presence of legal documents for the land ownership where the building is built.

14.6.1 Building Ownership Status

The results reveal that the majority (83.9%) of buildings/units in Rukwa Region are individually owned followed by 12.8 percent of co-owned buildings. A similar pattern is observed in rural and urban areas (Figure 14.13).

Figure 14.13: Percentage Distribution of Buildings/Units by Ownership Status and Place of Residence; Rukwa Region, 2022 TBC



14.6.2 Building Ownership by Sex

Ownership by sex considers only individually owned buildings/units. Ownership status may belong to male only, female only or jointly. The results show that most of the buildings/units in Rukwa Region are owned by male only (69.6%), followed by female only (18.8%) and 9.2 percent by male(s) and female(s) jointly. The same pattern is observed in rural and urban areas.

Sumbawanga Municipal Council has the highest proportion (20.7%) of buildings/units owned by females alone while Sumbawanga District and Kalambo District Councils have the lowest proportion (17.7% each) (Table 14.14).

Table 14.14: Number and Percentage Distribution of Individual Owned Building/Units by Place of Residence, Sex of Owner and Council; Rukwa Region, 2022 TBC

Council	Total						Rural						Urban					
	Number of Building/Units	Male	Female	Male(s) and Female(s)	Males Only Jointly	Females Only Jointly	Number of Building/Units	Male	Female	Male(s) and Female(s)	Males Only Jointly	Females Only Jointly	Number of Building/Units	Male	Female	Male(s) and Female(s)	Males Only Jointly	Females Only Jointly
Total	306,231	69.6	18.8	9.2	1.2	1.1	245,383	70.2	17.8	9.7	1.2	1.1	60,848	67.3	22.9	7.2	1.3	1.2
Kalambo District	69,696	66.6	17.7	13.1	1.3	1.2	68,372	66.9	17.6	13.0	1.3	1.2	1,324	53.5	22.8	20.4	1.7	1.7
Sumbawanga District	97,500	72.3	17.7	7.2	1.4	1.3	87,779	73.0	17.1	7.1	1.4	1.3	9,721	65.5	22.9	8.8	1.5	1.3
Sumbawanga Municipal	64,606	69.7	20.7	7.6	1.0	1.1	27,993	72.5	17.2	8.6	0.8	0.8	36,613	67.5	23.3	6.7	1.2	1.2
Nkasi District	74,429	68.9	19.6	9.6	1.0	0.9	61,239	68.8	19.1	10.4	0.9	0.8	13,190	69.7	21.9	6.0	1.3	1.1

14.6.3 Building Occupancy Tenure Status

Occupancy tenure status considers only occupied buildings/units. The 2022 TBC results indicate that 76.2 percent of all buildings/units in Rukwa Region are occupied by the owners themselves, followed by buildings/units occupied by tenants alone (10.4%).

In rural areas, the results reveal that 78.8 percent of all buildings/units are occupied by owners themselves followed by tenants alone (8.9%). A similar pattern is observed in urban areas. However, the proportion of buildings/units occupied by tenants alone (16.7%) is substantially higher in urban areas.

Kalambo District Council has the highest percentage (78.8%) of buildings/units occupied by owners themselves, while Sumbawanga Municipal Council has the lowest percentage (70.9%). In addition, Sumbawanga Municipal Council has the highest percentage (13.1%) of tenant-occupied buildings/units, while the Kalambo District Council has the lowest (8.7%) (Table 14.15).

Table 14.15: Percentage Distribution of Occupied Buildings/Units by Place of Residence, Occupancy Tenure Status and Council; Rukwa Region, 2022 TBC

Council	Total					Rural					Urban				
	Number of Building/Units	Occupied by Owner	Live in Without paying rent	Occupied by Both Owner and Tenant(s)	Occupied by Tenant(s)	Number of Building/Units	Occupied by Owner	Live in Without paying rent	Occupied by Both Owner and Tenant(s)	Occupied by Tenant(s)	Number of Building/Units	Occupied by Owner	Live in Without paying rent	Occupied by Both Owner and Tenant(s)	Occupied by Tenant(s)
Total	306,231	76.2	7.2	6.2	10.4	245,383	78.8	7.1	5.3	8.9	60,848	65.7	7.7	9.9	16.7
Kalambo District	69,696	78.8	7.3	5.1	8.7	68,372	79.2	7.3	5.1	8.4	1,324	60.1	9.4	9.6	20.9
Sumbawanga District	97,500	77.6	6.9	5.7	9.8	87,779	0.0	7.0	5.2	9.1	9,721	68.2	6.6	9.3	15.9
Sumbawanga Municipal	64,606	70.9	7.8	8.3	13.1	27,993	80.0	7.2	5.2	7.6	36,613	63.9	8.2	10.6	17.2
Nkasi District	74,429	76.3	7.0	6.1	10.5	61,239	77.9	7.0	5.7	9.5	13,190	69.2	7.1	8.3	15.3

14.6.4 Building Land Survey Status

Results reveal that the majority (69.8%) of buildings in Rukwa Region are built on un-surveyed land, while 21.0 percent are built on surveyed land and 6.5 percent are built on regularized land. Moreover, 39.0 percent of urban buildings are built on surveyed land compared with 16.7 percent of rural buildings. Sumbawanga District has the highest percentage (77.2%) of buildings built on un-surveyed land while the Sumbawanga Municipal has the lowest (59.9%) (Table 14.16).

Table 14.166: Number and Percentage Distribution of Building Plots by Place of Residence, Land Survey Status and Council; Rukwa Region, 2022 TBC

Council	Total					Rural					Urban				
	Number of Buildings	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
Total	302,368	21.0	69.8	6.5	2.7	242,894	16.7	75.4	5.7	2.2	59,474	39.0	46.7	9.5	4.8
Kalambo District	69,137	14.6	75.7	7.1	2.7	67,863	14.1	76.4	6.9	2.6	1,274	39.4	37.9	16.7	6.0
Sumbawanga District	96,353	15.7	77.2	5.3	1.9	86,792	15.3	78.0	4.7	1.9	9,561	18.5	70.1	10.2	1.3
Sumbawanga Municipal	63,529	28.8	59.9	7.7	3.5	27,834	11.1	84.5	3.3	1.2	35,695	42.7	40.8	11.1	5.4
Nkasi District	73,349	27.4	62.9	6.5	3.2	60,405	23.9	66.4	7.0	2.6	12,944	43.8	46.7	3.8	5.7

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 39.6 percent of all buildings/units are built on land without legal documents, 18.5 percent are built on land with certificate of customary right of occupancy land ownership documents and 5.5 percent have title deeds (Table 14.17).

Table 14. 17: Percentage of Buildings/Units and Land Ownership Status by Council; Rukwa Region, 2022 TBC

Council	Total Buildings/Units	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
Total	306,231	5.5	0.6	5.3	18.5	4.3	NA	22.2	39.6	4.0
Kalambo District	69,696	1.9	0.1	1.8	22.8	3.0	NA	16.7	49.9	3.9
Sumbawanga District	97,500	2.8	0.3	2.2	21.0	3.6	NA	28.2	38.2	3.8
Sumbawanga Municipal	64,606	11.9	1.9	13.7	13.3	9.0	NA	20.8	24.2	5.1
Nkasi District	74,429	6.7	0.2	5.3	15.8	2.5	NA	20.6	45.2	3.6

Chapter 15

Summary of Key Findings, Implication and Recommendations

15.1 Introduction

This chapter presents key findings of the 2022 PHC results with the aim of informing Regional and Local Government Authorities as well as stakeholders on the key findings, implications and recommendations for policies and programmes to realise socio-economic development of Rukwa Region.

15.2 Key Findings

Key findings summarized here are on the selected areas of Rukwa 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. The population of Rukwa Region has increased from 1,004,539 persons in 2012 to 1,540,519 persons in 2022; and
- ii. The population of Rukwa Region has been growing at an average rate of 4.3 percent annually during the 2012 – 2022 intercensal period.

Implications for Policies and Programmes

- i. With the current annual growth rate of 4.3 percent (which is above the national average of 3.2%), the population of Rukwa Region is expected to double in the next 16 years;
- ii. On the positive side, growth rate of 4.3 percent annually may lead to greater human capital, higher economic growth and higher economies of scale; and
- iii. On the negative side, growth of 4.3 percent annually may lead to increased pressure on social services, contribute to depletion of natural and environmental resources, as well as on land use, urban housing and other urban infrastructure.

Recommendations

- i. Regional and Local Government Authorities as well as stakeholders need to implement effectively 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 planning, urban planning and put in place effective supervision and implementation mechanism to ensure compliance; and
- iii. Regional Authorities, Local Government Authorities and stakeholders to strengthen enforcement mechanism (through by - laws) to protect and safeguard the environment in line with the National Environmental Policy (2022) and other sector policies on environment to ensure that negative impact caused by human activities as a result of population growth on environment is minimized.

15.2.2 Age Profile

- i. About eighteen percent (18.1%) of Rukwa Region population is aged below five years;
- ii. About fifty-six percent (55.8%) of total population is below 18 years of age;
- iii. About thirty three percent (32.5%) of Rukwa Region population are youths aged 15 – 35 years; and
- iv. Percentage of persons aged 60 years and above increased from 3.9 percent in 2012 to 4.1 percent in 2022.

Implications for Policies and Programmes

- i. Relatively 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 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) exert 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; and

- iv. The 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 programmes that are intended to provide services to the elderly as indicated in related national and sectoral policies.

15.2.3 Marital Status and Early Marriages

- i. Eighteen percent (18.0%) of the female population aged 15 - 19 in Rukwa Region is married; and
- ii. About seven percent (7.4%) of females aged 15 years and above are 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 decline in economic growth and increase in poverty levels as well as change of family formation and unbalanced child upbringing.

Recommendations

- i. Regional and Authorities, Local Government Authorities 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 develop supportive programmes for widows including cash transfer, public works programmes such as those implemented under Tanzania Social Action Fund (TASAF).

15.2.4 Possession of National Identification Documents

- i. Sixty-six percent (66.3%) of children aged below five years in Rukwa Region have neither birth certificate nor birth notification;
- ii. About nine percent (8.53%) and 20.21 percent of persons aged 18 years and above have national identification cards (NIDA) and national identification numbers respectively; and
- iii. About four percent (4.3%) of persons in Rukwa 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 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);

- ii. 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;
- iii. Health Insurance Identification card is important for ensuring accessibility to quality health care services.

Recommendations

- i. Regional and Local Government Authorities as well as other stakeholders need to regularly sensitize the public, especially the youths on the importance of national identification documents; and
- ii. Regional and local government authorities as well as stakeholders need to educate and regularly sensitive the public on the importance and benefits of Universal Health Insurance Act of 2023.

15.2.5 Orphanhood

- i. Ten percent (10.0%) of children under age 18 in Rukwa Region are orphans (7.2 percent with one parent dead and 2.8 percent with both parents' dead); and
- ii. Percentage of orphaned children range from 8.8 percent in Kalambo District Council to 10.6 percent in Sumbawanga District 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. Orphanhood may lead to increased costs of care to families, households, communities and councils.

Recommendations

- i. Region, Councils and stakeholders need to sensitize communities on the plight of orphan children and encourage stakeholders to take actions to minimize their suffering; and
- ii. Regional and Local Government Authorities should consider sustaining mobilisation and allocation of adequate resources to support plans and strategies regarding to orphanage services including education subsidies and running cost of caring centres.

15.2.6 Literacy and Education

- i. About three-quarters (74.1%) of population aged 15 years and above in Rukwa Region are literate. Literacy rates range from 76.6 percent in Nkasi District Council to 92.5 percent in Sumbawanga Municipal Council;
- ii. Net Enrolment Rate (NER) in primary school in Rukwa Region increased from 64.6 in 2012 to 72.1 percent in 2022. The rate for 2022 ranges from 67.2 percent in Sumbawanga District to 86.0 percent in Sumbawanga Municipal;
- iii. Seventeen percent (17.3%) of secondary school age children (14-17 years) dropped out of school;
- iv. Fifty percent (50.0%) of Persons with Disabilities (PWD) dropped out of education for people with mental health challenges; and
- v. Primary education Gross Enrolment Ratio (GER) increased from 92.1 percent in 2012 to 122.0 percent in 2022.

Implications for Policies and Programmes

- i. Adult literacy rate in the Region is relatively low when compared with the national average of 83 percent which signifies the presence of a significant number of illiterate persons in the Region which may hinder the regional and national efforts of achieving set development targets;
- ii. The NER for Rukwa Region is below the national average (of over 83 percent) indicating that a significant number of children of official primary school age are not enrolled, which may translate into negative education outcomes for region's children and in a long term resulting to poverty and inequality;
- iii. An increased rate of net enrolment in primary schools implies increased resources required to finance education sector resulting from increased capitation grant, facilities and human resources;
- iv. School dropout has significant implication both at individual and society level. Dropouts lead to cycle of poverty and increased risks of committing crime and may also imply inefficiency in education system;
- v. Persons with Disabilities are already disadvantaged; this coupled with lack or poor education aggravates their level of poverty leading to an increase in intergenerational poverty; and

- vi. Increase of Gross Enrolment Ratio (GER) implies that Rukwa 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 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 gains in education outcomes to achieve national targets on education in time and address disparities among councils;
- 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);
- iii. Regional and Local Authorities to establish major causes of relatively high drop-out rate in secondary schools, create supportive learning environment, address individual needs and provide resources to keep students engaged and motivated;
- iv. 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
- v. 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

- i. Overall unemployment rate in Rukwa Region is 5.9 percent. The rate is higher in urban (9.8%) than in rural areas (3.0%);
- ii. Agriculture, forestry and fishing industry has the highest proportion (74.5%) of the total employment rate in Rukwa Region; and
- iii. About sixty-four percent (63.9%) of youth population aged 15 - 35 are engaged in informal non-agricultural economic activities.

Implications for Policy 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 5.9 percent unemployment for Rukwa Region is slightly below the national level (7.8%) and therefore moderate, which indicates that its impact on economic growth is also moderate;
- ii. Unemployment can also have a significant 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 a key sector for employment in the 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 Rukwa Region. The sector generates income for youth leading to poverty reduction. This sector also leads to local community development. However, if measures are not taken to improve the working environment for the sector it can become insecure and have weak social protection.

Recommendations

- i. Regional and Local Government Authorities to put in place measures aimed at improving agriculture, forestry and fishing industry in line with national policies so as to increase sector productivity;
- ii. Regional and Local Government Authorities in collaboration with other stakeholders to develop programs and projects that promote entrepreneurship and self-employment, access to education and vocational training for the youth; and
- iii. Regional and Local Government Authorities to create conducive business environment by streamlining bureaucratic procedures, regulations, and facilitate access to affordable credit.

15.2.8 Persons with Disabilities

- i. About nine percent (9.3%) of the Rukwa Region population aged 7 years and above have some form of disability;
- ii. Most Persons with Disabilities (55.7%) reported diseases as major cause of their disabilities;
- iii. Almost seven percent (6.6%) of Persons with Disabilities (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 poor health 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 resources available in the region;
- ii. Regional, Local Government Authorities and stakeholders to strengthen health and nutrition programs for prevention and cure so as to reduce the incidence of diseases leading to reduction of prevalence of disability 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 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

- i. About fifty three percent (52.6%) of persons aged 15 years and above own land without any legal documents in Rukwa Region, the percentage ranges from 59.0 in Kalambo District to 44.8 in Sumbawanga Municipal Council;
- ii. The proportion of males aged 15 years and above who own land alone is higher (14.1%) than that of females (8.0%).

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 the region, with significant implications;
- iii. Existence of gender inequality in land ownership leads to unequal economic opportunities;
- iv. Lack of legal documents for land ownership leads to insecurity of land properties and inaccessibility to economic opportunities
- v. Women who own land can engage in income generating activities leading to empowerment, poverty reduction and better livelihood; and

Recommendations

- i. Regional and Local Government Authorities to strengthen monitoring implementation of the 1997 Land Policy to accelerate land ownership process by strengthening capacities of responsible institutions;
- ii. Regional and Local Government Authorities need to address gender disparity including vulnerable groups in land ownership to guarantee economic empowerment and achieve human rights outcomes;
- iii. Regional, Local Authorities and other stakeholders should conduct education and awareness campaigns about women's land rights and benefits of joint land ownership to promote gender equality for sustainable development and poverty reduction;

- iv. Regional and Local Government Authorities to accelerate issuance of land ownership legal documents; and
- v. Regional and Local Government Authorities to continue addressing discriminatory customs, promoting gender equality in land ownership, strengthening legal provisions and ensure that land allocation processes are fair to both men and women.

15.2.10 Drinking Water

- i. About fifty-six of private households (55.8%) in Rukwa Region are drinking water from improved sources; with significant disparity between councils ranging from 43.4 percent in Kalambo District to 84.1 percent in Sumbawanga Municipal; and
- ii. There is significant disparity between urban (83.4%) and rural (47.9%) on percentage private households in Rukwa Region use improved source of drinking water.

Implications for Policy and Programmes

The use of water from unimproved sources implies human health as these sources are easily contaminated leading to poor health outcomes. About thirteen seven percent of private household in Rukwa Region is using water from unimproved sources for drinking, hence a likelihood of poor health outcome emanating from water usage.

Recommendations

- i. Region and Local Government Authorities needs to initiate new water supply projects especially in underserved rural areas and Councils; and
- ii. Region and Local Government Authorities should allocate enough resources to rural areas and councils that are lagging behind in the use of improved source of water for drinking.

15.2.11 Sanitation

- i. About thirty six percent (35.7%) of households in Rukwa Region is using improved toilet facility; with significant disparities between councils, ranging from 21.2 in Kalambo District to 69.3 percent in Sumbawanga Municipal; and

- ii. About four percent (3.8%) of households in Rukwa Region have no toilet facility with notable disparity between councils ranging from 0.6 percent in Sumbawanga Municipal to 6.0 percent each in Kalambo and Nkasi District Councils.

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 effectively supervise and implement sanitation projects at local/community level to avoid adverse effects of poor sanitation;
- ii. Regional and Local Government Authorities to strengthen and enforce by-laws for better implementation of sanitation and hygiene initiatives; and
- iii. Regional and Local Government Authorities in collaboration with stakeholders to undertake sanitation and hygiene education awareness campaigns in the communities.

15.2.12 Energy

- i. Sixty-five percent (65.2%) and 27.8 percent of private households in Rukwa Region use firewood and charcoal respectively as the main source of energy for cooking;
- ii. About six percent (5.7%) of households in Rukwa Region use clean energy for cooking;
- iii. Almost twenty percent (19.5%) of households use electricity from national grid for lighting; with significant disparity between councils ranging from 8.4 percent in Sumbawanga District Council to 46.8 in Sumbawanga Municipal; and

- iv. Almost thirty nine percent (38.5%) of households in Rukwa Region use solar energy for lighting.

Implications for Policy 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 Rukwa Region is generally low, 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 the importance of using clean energy, negative effects of dirty energy and deforestation which are main causes of climate change; and
- iii. Regional and Local Government Authorities in collaboration with TANESCO and REA to identify and put in place a 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

- i. About seventy percent (69.4%) of households in Rukwa Region have at least one member aged 4 years and above who owns a mobile phone;
- ii. Less than one percent of both males and females (0.4% each) aged 15 years and above own a smartphone or tablet;
- iii. Less than one (0.7%) and about one percent (1.2%) of persons aged 15 years and above own a desktop and Laptop computer respectively; and

- iv. About one-third (33.3%) of households in Rukwa Region own radio while 20.4 percent own television with notable disparities between councils ranging from 22.4 percent in Sumbawanga District to 57.1 percent in Kalambo District (Radio) and from 7.2 in Sumbawanga District to 43.0 percent in Kalambo (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 services and digital skills.

15.2.14 Information on Buildings

- i. About sixty six percent (65.6%) of all buildings in Rukwa Region have physical addresses;

- ii. Forty three percent (43.0%) of all buildings/units in Rukwa Region have electricity services, of which 13.1 percent are connected to the national grid and 29.9 percent are powered by other sources;
- iii. About sixteen percent (15.7%) of all buildings/units have water services;
- iv. Three percent (3.0%) of all buildings in Rukwa Region have infrastructure for Persons with Disabilities;
- v. About seven out of ten (69.8%) buildings in Rukwa Region are built on un-surveyed land with significant disparity between Councils ranging from 59.9 percent in Sumbawanga Municipal to 77.2 percent in Sumbawanga District; and
- vi. About forty percent (39.6%) of all buildings/units in Rukwa 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. Addresses are 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 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 the identification and posting of physical addressees and regularly undertake the exercise to take into account growth of settlements;
- ii. Regional and Local Government Authorities to support national efforts to ensure each house has physical address by regularly conducting the exercise of placement of addresses;
- iii. 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 citizens to be connected to these services;
- iv. Regional and Local Government Authorities to strengthen supervision and enforce laws that require buildings to have friendly infrastructure for PWDs;
- v. Regional and Local Government Authorities to strengthen supervision of implementation of National Programme of Land Use Planning, Surveying and Titling together with Land Tenure Improvement Programme (LTIP); and
- vi. 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; Rukwa Region, 2022 PHC

Council	Total	Place of residence		Sex	
		Rural	Urban	Female	Male
Total	1,540,519	1,226,368	314,151	797,400	743,119
Kalambo District	316,783	310,946	5,837	163,659	153,124
Sumbawanga District	494,330	444,164	50,166	255,730	238,600
Sumbawanga Municipal	303,986	121,016	182,970	159,329	144,657
Nkasi District	425,420	350,242	75,178	218,682	206,738

N.A Not Applicable

Table A2. 2: Total Population in Private Household by Place of Residence, Sex and Council; Rukwa Region, 2022 PHC

Council	Total	Place of residence		Sex	
		Rural	Urban	Female	Male
Total	1,527,355	1,219,302	308,053	793,086	734,269
Kalambo District	316,204	310,384	5,820	163,442	152,762
Sumbawanga District	489,766	440,438	49,328	254,292	235,474
Sumbawanga Municipal	299,074	120,378	178,696	157,747	141,327
Nkasi District	422,311	348,102	74,209	217,605	204,706

N.A Not Applicable

Table A2. 3: Total Population in Collective Household by Place of Residence, Sex and Council; Rukwa Region, 2022 PHC

Council	Total	Place of residence		Sex	
		Rural	Urban	Female	Male
Total	13,164	7,066	6,098	4,314	8,850
Kalambo District	579	562	17	217	362
Sumbawanga District	4,564	3,726	838	1,438	3,126
Sumbawanga Municipal	4,912	638	4,274	1,582	3,330
Nkasi District	3,109	2,140	969	1,077	2,032

N.A Not Applicable

Table A8. 1 : Literate Population by Place of Residence, Sex and Selected Age Groups; Rukwa 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)	243,949	119,048	124,901	192,854	95,578	97,276	51,095	23,470	27,625
Youth Population (15–24 years)	292,157	136,425	155,732	227,444	107,277	120,167	64,713	29,148	35,565
Youth Population (15–35 years)	500,802	234,163	266,639	386,403	182,051	204,352	114,399	52,112	62,287
Primary School (6–12 years)	345,363	170,164	175,199	282,307	139,714	142,593	63,056	30,450	32,606
Primary School (7–13 years)	332,632	164,321	168,311	271,111	134,702	136,409	61,521	29,619	31,902
Secondary School (13-16 years)	151,150	75,485	75,665	120,470	61,379	59,091	30,680	14,106	16,574
Secondary School (14-17 years)	141,282	70,772	70,510	111,462	57,026	54,436	29,820	13,746	16,074
Working Age Population (15-64 years)	737,288	348,914	388,374	571,175	272,024	299,151	166,113	76,890	89,223
Elderly population (60+ years)	63,740	29,619	34,121	51,281	24,170	27,111	12,459	5,449	7,010
Population Aged 4 years and above	1,319,246	634,664	684,582	1,045,382	506,218	539,164	273,864	128,446	145,418
Population Aged 14+ years and above	822,148	389,389	432,759	639,538	305,207	334,331	182,610	84,182	98,428
Adult Population Aged 18+ years and above	680,866	318,617	362,249	528,076	248,181	279,895	152,790	70,436	82,354

Table A8. 2: Population and Literate Population for Persons Aged 15 Years and Above by Sex, Place of Residence and Council; Rukwa Region 2022 PHC

Council	Population			Literate Population		
	Both Sexes	Male	Female	Both Sexes	Male	Female
Total	778,803	367,710	411,093	577,026	296,889	280,137
Rural	604,720	287,434	317,286	426,010	223,782	202,228
Urban	174,083	80,276	93,807	151,016	73,107	77,909
Council						
Kalambo District	156,467	73,806	82,661	114,728	60,131	54,597
Sumbawanga District	243,838	114,893	128,945	164,070	87,437	76,633
Sumbawanga Municipal	168,440	78,688	89,752	148,362	71,771	76,591
Nkasi District	210,058	100,323	109,735	149,866	77,550	72,316

Table A8. 3: Numerate Population Aged Five Years and Above by Place of Residence, Sex and Five-Year Age Groups; Rukwa Region, 2022 PHC

Age Group	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total	1,249,894	598,261	651,633	992,354	478,830	513,524	257,540	119,431	138,109
5-9	258,439	126,279	132,160	211,617	103,528	108,089	46,822	22,751	24,071
10-14	224,203	112,290	111,913	181,946	92,158	89,788	42,257	20,132	22,125
15 - 19	158,753	76,347	82,406	124,789	60,908	63,881	33,964	15,439	18,525
20 - 24	128,855	57,066	71,789	100,782	45,024	55,758	28,073	12,042	16,031
25 - 29	103,191	47,456	55,735	78,846	36,469	42,377	24,345	10,987	13,358
30 - 34	84,576	39,681	44,895	64,616	30,580	34,036	19,960	9,101	10,859
35 - 39	70,767	33,259	37,508	54,658	25,697	28,961	16,109	7,562	8,547
40 - 44	57,037	27,503	29,534	44,336	21,490	22,846	12,701	6,013	6,688
45 - 49	44,913	21,911	23,002	35,249	17,239	18,010	9,664	4,672	4,992
50 - 54	33,390	16,275	17,115	26,562	13,025	13,537	6,828	3,250	3,578
55 - 59	22,383	10,793	11,590	17,837	8,659	9,178	4,546	2,134	2,412
60 - 64	22,074	10,723	11,351	17,665	8,710	8,955	4,409	2,013	2,396
65 - 69	13,498	6,322	7,176	10,830	5,119	5,711	2,668	1,203	1,465
70 - 74	11,417	5,348	6,069	9,270	4,407	4,863	2,147	941	1,206
75 - 79	6,287	2,886	3,401	5,090	2,374	2,716	1,197	512	685
80+	10,111	4,122	5,989	8,261	3,443	4,818	1,850	679	1,171

Table A8. 4: Numerate Population by Place of Residence, Sex and Selected Age Groups; Rukwa Region, 2022 PHC

Selected Age Group	Nurate Population								
	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Teenagers (13–19 years)	243,949	119,048	124,901	192,854	95,578	97,276	51,095	23,470	27,625
Youth Population (15–24 years)	292,157	136,425	155,732	227,444	107,277	120,167	64,713	29,148	35,565
Youth Population (15–35 years)	500,802	234,163	266,639	386,403	182,051	204,352	114,399	52,112	62,287
Primary School (6–12 years)	345,363	170,164	175,199	282,307	139,714	142,593	63,056	30,450	32,606
Primary School (7–13 years)	332,632	164,321	168,311	271,111	134,702	136,409	61,521	29,619	31,902
Secondary School (13-16 years)	151,150	75,485	75,665	120,470	61,379	59,091	30,680	14,106	16,574
Secondary School (14-17 years)	141,282	70,772	70,510	111,462	57,026	54,436	29,820	13,746	16,074
Working Age Population (15-64 years)	737,288	348,914	388,374	571,175	272,024	299,151	166,113	76,890	89,223
Elderly population (60+ years)	63,740	29,619	34,121	51,281	24,170	27,111	12,459	5,449	7,010
Population Aged 4 years and above	1,319,246	634,664	684,582	1,045,382	506,218	539,164	273,864	128,446	145,418
Population Aged 14+ years and above	822,148	389,389	432,759	639,538	305,207	334,331	182,610	84,182	98,428
Adult Population Aged 18+ years and above	680,866	318,617	362,249	528,076	248,181	279,895	152,790	70,436	82,354

Table A8. 5: Population and Children Age (7-13 Years) Attending Primary Schools by Place of Residence, Sex and Council; Rukwa 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
Total	332,632	164,321	168,311	271,111	134,702	136,409	61,521	29,619	31,902	434,662	215,195	219,467	329,355	163,152	166,203	105,307	52,043	53,264
Kalambo District	70,487	34,992	35,495	69,272	34,380	34,892	1,215	612	603	72,870	36,261	36,609	66,573	33,140	33,433	6,297	3,121	3,176
Sumbawanga District	109,155	54,279	54,876	98,904	49,308	49,596	10,251	4,971	5,280	30,935	15,589	15,346	30,632	15,441	15,191	303	148	155
Sumbawanga Municipal	60,321	29,194	31,127	26,086	12,867	13,219	34,235	16,327	17,908	48,378	24,425	23,953	44,712	22,622	22,090	3,666	1,803	1,863
Nkasi District	92,669	45,856	46,813	76,849	38,147	38,702	15,820	7,709	8,111	13,706	6,744	6,962	4,225	2,141	2,084	9,481	4,603	4,878

Table A8. 6: Population and All Children Attending Primary Schools by Place of Residence, Sex and Council; Rukwa Region, 2022 PHC

Council	Population (7-13 Years)									All Children Attending								
	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
Total	504,140	255,135	249,005	393,522	200,084	193,438	110,618	55,051	55,567	619,016	305,558	313,458	463,812	229,273	234,539	155,204	76,285	78,919
Kalambo District	76,517	38,440	38,077	70,057	35,237	34,820	6,460	3,203	3,257	101,992	50,470	51,522	92,504	45,813	46,691	9,488	4,657	4,831
Sumbawanga District	32,295	16,464	15,831	31,987	16,315	15,672	308	149	159	44,671	22,541	22,130	44,211	22,318	21,893	460	223	237
Sumbawanga Municipal	53,069	27,039	26,030	49,292	25,177	24,115	3,777	1,862	1,915	69,301	34,940	34,361	63,869	32,290	31,579	5,432	2,650	2,782
Nkasi District	14,084	6,963	7,121	4,372	2,241	2,131	9,712	4,722	4,990	20,384	9,993	10,391	6,181	3,125	3,056	14,203	6,868	7,335

Table A14. 1: Number of Buildings by Ownership Status, Place of Residence and Council; Rukwa Region, 2022 TBC

Council	Ownership Status													
	Total (Number of Buildings)	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 PPROPERTIES)	Joint Venture	Political Parties/Sports clubs	Mixed Ownership
Total	302,368	253,773	38,603	235	1,317	93	3,459	1,007	761	2,586	20	16	142	356
Rural	242,894	200,592	34,403	214	896	75	3,009	778	608	1,910	13	15	99	282
Urban	59,474	53,181	4,200	21	421	18	450	229	153	676	7	1	43	74
Council														
Kalambo District	69,137	53,891	12,602	41	276	30	1,199	156	170	657	7	8	23	77
Sumbawanga District	96,353	81,273	12,025	109	392	29	1,017	394	224	732	3	4	39	112
Sumbawanga Municipal	63,529	56,698	4,745	27	351	21	585	177	156	618	8	1	54	88
Nkasi District	73,349	61,911	9,231	58	298	13	658	280	211	579	2	3	26	79

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