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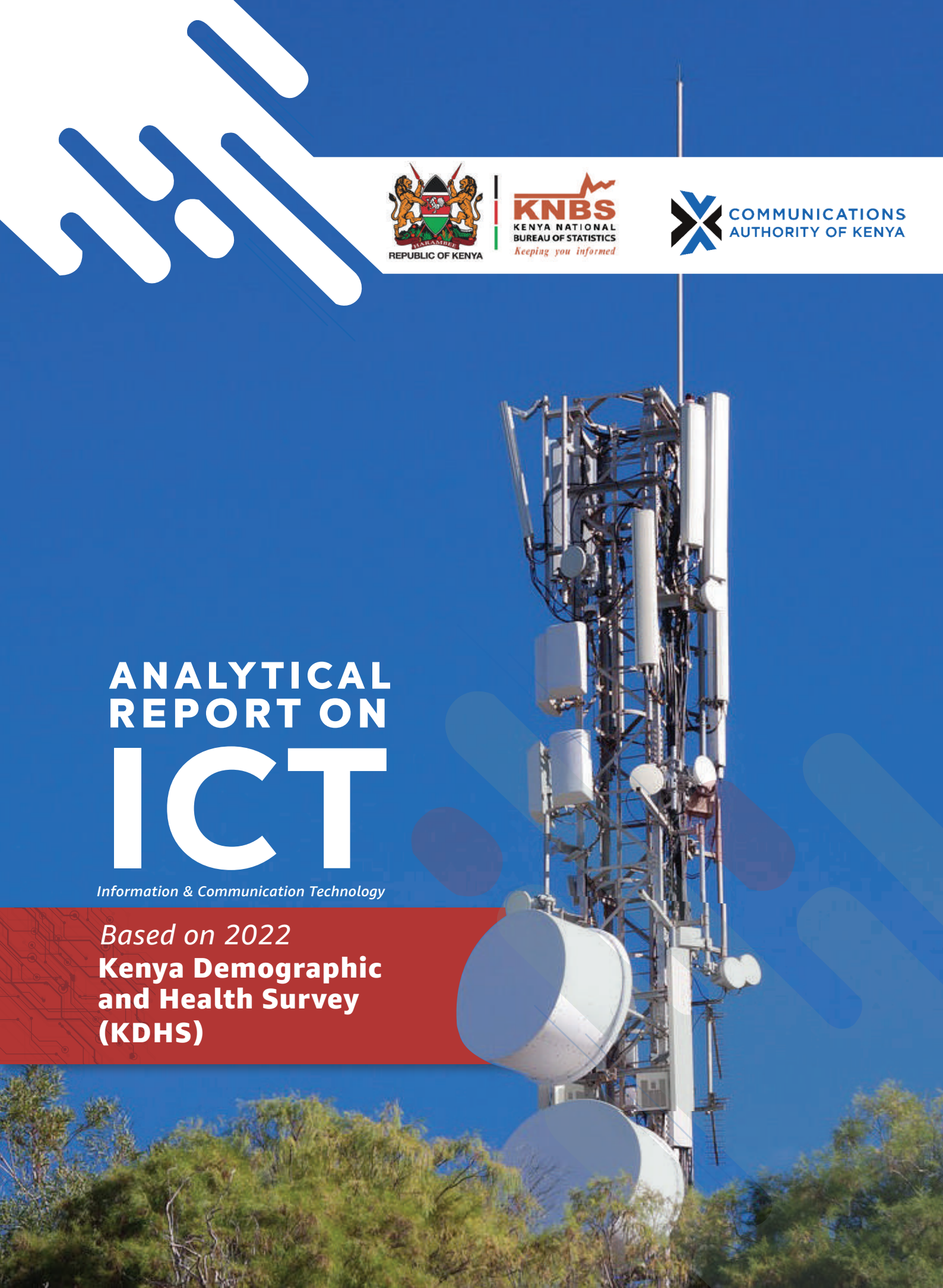
ANALYTICAL REPORT ON ICT

Information & Communication Technology

Based on 2022
Kenya Demographic and Health Survey (KDHS)



ANALYTICAL REPORT ON ICT

Information & Communication Technology

Based on 2022

KENYA DEMOGRAPHIC AND HEALTH SURVEY (KDHS)

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Preface

Information and Communication Technologies continue to be a pivotal anchor to the socio-economic development of nations across the globe. For a couple of the past decades, information and communication technologies have been recognized as a prerequisite for realization of desired developmental outcomes at global, continental and national level. The United Nations' 2030 Agenda for Sustainable Development, the Africa Agenda 2063 and the Kenya's Vision 2030 recognize ICT as a key enabler for development. Rapid technological advancement witnessed over the last decade have had a huge impact on our day to day lives by availing technologies that help automate or simplify the way we conduct business. The benefits emanating from transformations driven by ICTs innovations have been felt in nearly all aspects of life ranging from health, agriculture, manufacturing, trade, education, public administration and defense, entertainment, banking and other financial services among others.

The results presented in this report pertain to uptake of ICTs in relation to demographic and social characteristics based on the 2022 Kenya Demographic and Health Survey (KDHS). This was a household-based survey that majorly contained questions on demographic and health characteristics of the population as well as those on ownership of ICT devices such as radio, television, mobile phone and usage of internet and ICT services. The report also provides statistics on newspaper and magazines readership, as another channel through which information is shared with intended audience.

For this report, the 2022 KDHS data was analyzed and presented in the context of the various demographic and social characteristics, to bring out key messages that elucidate the role of ICTs in transmission of information and targeted education and promotion of services to enhance the wellbeing of the populace. Some of the critical aspects of society assessed in relation to ICTs include; digital divide across the various; age groups, education level, marital status, occupation, employment status, wealth quintiles, water sources, sanitation types, non-clean cooking devices, reproductive health and experience of gender-based violence. It is also important to note that this work was done in cognizance of the various data reporting requirements at national level as well as regional and global level such as SDGs indicators. The results have therefore been used to update some of the indicators.

This report will go a long way in informing policy formulation and implementation in the various aspects of the ICT sector. We encourage stakeholders to utilize this report and provide feedback to inform similar undertakings in future.

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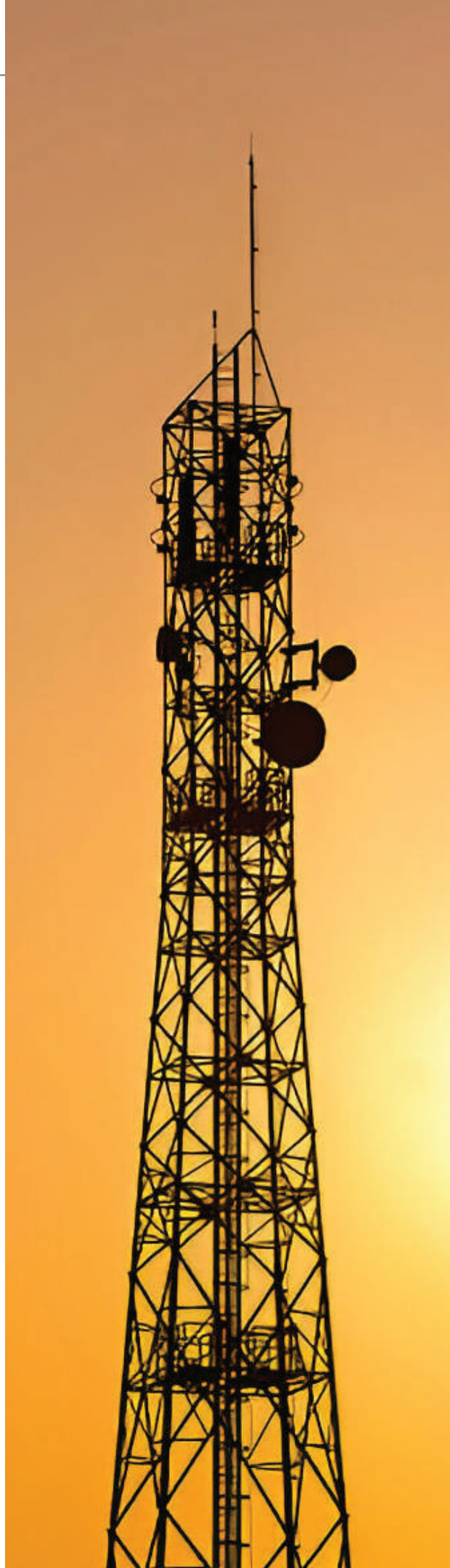
Gratitude goes to the various stakeholders that provided the funding and technical assistance for 2022 KDHS. Special thanks goes to the International Telecommunication Union (ITU) for peer reviewing and providing invaluable input that went a long way in improving this report.

This was a household-based survey that majorly contained questions on demographic and health characteristics of the population as well as those on ownership of ICT devices such as radio, television, mobile phone and usage of internet and ICT services.



Glossary

Appropriate water treatment methods: Includes boiling, bleaching, filtering, and solar disinfecting

Broadband: High-speed internet access that is always on and faster than traditional dial-up access

CAPI (Computer Assisted Personal Interviews): A data collection method where interviewers use electronic devices such as tablets or smartphones to record responses

Currently employed: Is defined as having done work in the last 7 days. Includes persons who did not work in the last 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

Cybersecurity: The practice of protecting systems, networks, and programs from digital attacks

Demographic Factors: Characteristics of a population, including age, gender, income, education, and employment, used in analysis and policy formulation

Digital Divide: The gap between those who have easy access to digital and information technology and those who do not

Digital Literacy: The ability to effectively and critically navigate, evaluate, and create information using a range of digital technologies

Digital superhighway: A term used to describe the extensive infrastructure for digital connectivity, including high-speed internet and broadband networks, that supports a wide range of digital services and applications.

Digital Terrestrial Television (DTT): A technology that enables TV broadcasting over terrestrial platforms using digital signals, resulting in better quality and more channels

E-commerce: Commercial transactions conducted electronically on the internet

E-government: The use of electronic communications devices, computers, and the internet to provide public services to citizens and other persons in a country or region

Emotional Violence: Involves undermining a person's sense of self-worth through constant criticism; belittling one's abilities; name-calling or other verbal abuse; damaging a partner's relationship with the children; or not letting a partner see friends and family.

Family Planning: The ability of individuals and couples to anticipate and attain their desired number of children and the spacing and timing of their births.

Fiber Optic Network: A network of cables that use light to transmit data, providing high-speed internet connections

Gender-Based Violence (GBV): Refers to violence that results in physical, sexual, economic, psychological harm, or suffering to women, girls, men, and boys, as well as threats of such acts, coercion, or the arbitrary deprivation of liberty

Higher education: Includes middle-level colleges and universities

Household Master Sample Frame (K-HMSF): A comprehensive list of households used as a sampling frame for surveys in Kenya

Household-Level Indicators: Measures and data points that describe the conditions and characteristics of households, such as ownership of ICT devices and access to services

Improved sanitation facility: Includes a flush/pour flush toilet that flushes the water and waste to a piped sewer system, septic tank, pit latrine, or unknown destination; a ventilated improved pit (VIP) latrine; a pit latrine with a slab; or a composting toilet.

Improved sources of drinking water: Include piped water, public taps, standpipes, tube wells, boreholes, protected dug wells and springs, rainwater, water delivered via tanker truck or a cart with a small tank, and bottled water.

Individual-Level Indicators: Measures and data points that describe the conditions and characteristics of individuals, such as age, gender, education, and ICT usage patterns

KIHBS (Kenya Integrated Household Budget Survey): A survey conducted to collect information on various aspects of households' expenditure, income, and living standards in Kenya

KPHC (Kenya Population and Housing Census): A comprehensive enumeration of all households in Kenya, collecting detailed demographic, social, and economic data

Mobile Network Coverage: The extent to which mobile telecommunication services are available in different geographic areas

No education: Includes informal education (madrassa/duksi/adult education)

Physical violence: Involves hurting or trying to hurt a partner by hitting, kicking, burning, grabbing, pinching, shoving, slapping, hair-pulling, biting, denying medical care or forcing alcohol and/or drug use, or using other physical force. It may include property damage.

Sample De Jure Population: A population sample that includes individuals who reside in a given area, regardless of whether they were physically present at the time of data collection.

SDG (Sustainable Development Goals): A collection of 17 global goals set by the United Nations General Assembly in 2015 for the year 2030, which include goals related to quality education, gender equality, and industry innovation

Secondary: Includes individuals who reported vocational training as the highest education level attended.

Sexual violence: Involves any sexual act committed against the will of another person, either when this person does not give consent or when consent cannot be given because the person is a child, has a mental disability, or is severely intoxicated or unconscious as a result of alcohol or drugs.

Socio-economic Data: Data that describes the social and economic factors affecting a population, such as income, education, and employment

Statistical Applications: Software tools used to analyze data, such as STATA, SPSS, and MS Excel

Submarine Cable: Undersea cables used for telecommunication to provide internet services between continents

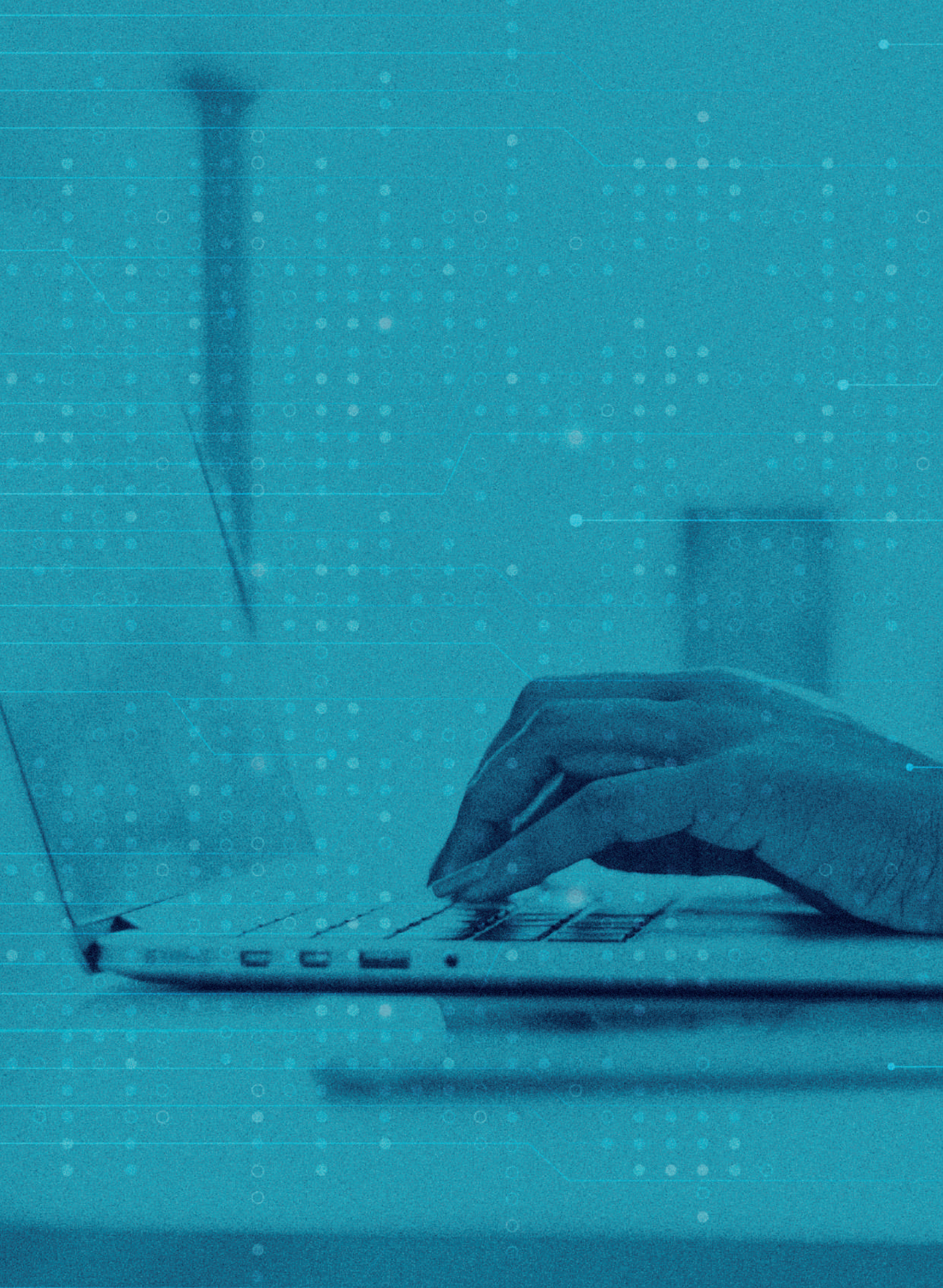
Sub-national Development Agendas: Development plans and initiatives tailored for specific regions or communities within a country

Survey Cluster: Geographically defined areas used in sampling to collect data from households within those areas. Clusters help in managing and organizing the data collection process.

Wealth Quintile: A division of the population into five equal groups according to wealth, from the poorest to the richest

Acronyms and Abbreviations

AU	African Union
BETA	Bottom-Up Economic Transformation Agenda
CA	Communications Authority of Kenya
CAPI	Computer Assisted Personal Interviews
CD	Compact Disc
CIDP	County Integrated Development Plan
Dare1	Djibouti Africa Regional Express 1
DTT	Digital Terrestrial Television
DVD	Digital Versatile Disc
EASSy	The Eastern Africa Submarine Cable System
GBV	Gender-Based Violence
ICT	Information and Communication Technology
ITU	International Telecommunication Union
KDHS	Kenya Demographic and Health Survey
K-HMSF	Kenya Household Master Sample Frame
KIHBS	Kenya Integrated Household Budget Survey
KNBS	Kenya National Bureau of Statistics
KPHC	Kenya Population and Housing Census
LION	The Lower Indian Ocean Network
MS Excel	Microsoft Excel
MSME	Micro, Small and Medium Enterprises (MSME) Economy
MTP	Medium Term Plan
PEACE	Pakistan and East Africa Connecting Europe
SDGs	Sustainable Development Goals
SPSS	Statistical Package for the Social Sciences
STATA	Statistical Software for Data Science
TEAMS	The East African Marine System
UNESCO	United Nations Educational, Scientific and Cultural Organization
WHO	World Health Organisation



Executive Summary

In today's world, Information and Communication Technologies (ICTs) are part and parcel of almost every aspect of life and contribute significantly to social, economic, and cultural development. Unfortunately, not every individual has the same opportunity to access and use the various ICTs. Moreover, ownership of ICT devices, which facilitates usage of ICTs, is uneven across the country. The inequality is commonly manifested through digital divide among various demographics. The 2022 Kenya Demographic and Health Survey (KDHS) therefore collected data on ownership of ICT devices and usage of ICT services by various demographics to inform relevant policy interventions for addressing these disparities. The survey targeted males and females aged 15-49 years. The survey also included socio-economic data such as housing conditions, sanitation, education, economic activity and access to reproductive health services. By examining how different demographics use ICTs, this report aims to inform policy formulation and programming in ICT sector.

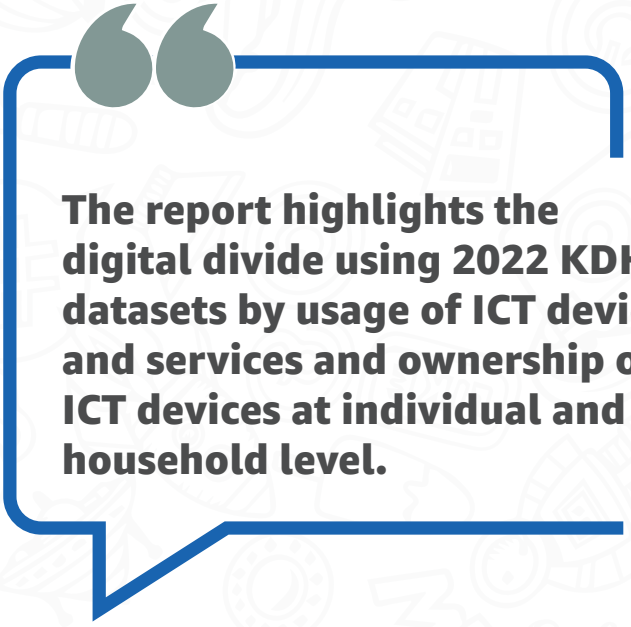
The report highlights the digital divide using 2022 KDHS datasets by usage of ICT devices and services and ownership of ICT devices at individual and household level. The selected ICTs include radio, television, mobile phones, smart phone, internet usage, computer, newspaper or magazines among others.

Nationally, 80.4 per cent of males and 77.5 per cent of females owned a mobile phone, out of which 49.1 per cent of males and 42.7 per cent of females owned a smartphone. In the 12 months preceding the survey, 56.2 per cent of males and 44.2 per cent of females used the internet at least once. A significant proportion of males (71.1%) and females (62.2%) listened to the radio at least once a week. Television viewership was also high at 59.6 per cent of males and 55.2 per cent of females watching at least once a week. However, the proportion of males who read a newspaper at least once a week prior to the survey declined from 62.8 per cent in 2014 to 39.0 per cent in 2022, while that of females dropped from 38.6 per cent in 2014 to 20.1 per cent in 2022.

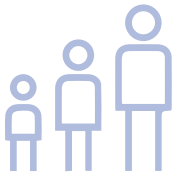
The proportion of households with at least one member owning a mobile phone stood at 94.6 per cent at the national level. Similarly, household ownership of mobile phone stood at 97.8 per cent and 93.0 per cent in urban areas and rural areas, respectively. Additionally, 93.5 per cent of households used mobile phones for financial transactions, while the proportion of households in urban areas was 97.2 per cent and 91.5 per cent in rural areas. The proportion of households with at least one member registered for mobile money services was 94.8 per cent at the national level, 98.2 per cent and 93.0 per cent in urban and rural areas, respectively.

Nationally, ownership of radio, television and computer by households stood at 65.8 per cent, 53.4 per cent and 8.7 per cent, respectively. Proportion of households in the rural areas that owned radio, television and computer stood at 62.2 per cent, 39.7 per cent and 3.4 per cent, respectively. On the other hand, 72.5 per cent, 79.2 per cent and 18.5 per cent of the households in urban areas owned radio, television and computer, respectively.

Access to electricity significantly drives ICT adoption, as households with reliable power are more likely to use various ICT devices and internet services. Among households with electricity, 97.6 per cent owned mobile phones, 70.9 per cent owned televisions, and 74.0 per cent owned radios. For households without electricity,



ownership of mobile phones, televisions, and radios stood at 88.0 per cent, 21.6 per cent, and 54.5 per cent, respectively. About a third of the households (33.5%) with electricity and 10.4 per cent without electricity used the internet. Additionally, the wealthiest households showed the highest ICT ownership across various devices, with 99.5 per cent owning mobile phones, 90.6 per cent owning televisions, and 49.6 per cent using the internet, highlighting the strong correlation between wealth and access to ICT. Furthermore, computer ownership and internet usage significantly increase with wealth, as seen with 38.0 per cent of the richest households owning a computer compared to only 0.2 per cent of the poorest households.



15-49 Years

The targeted population to produce this report both male and females.

80.4%

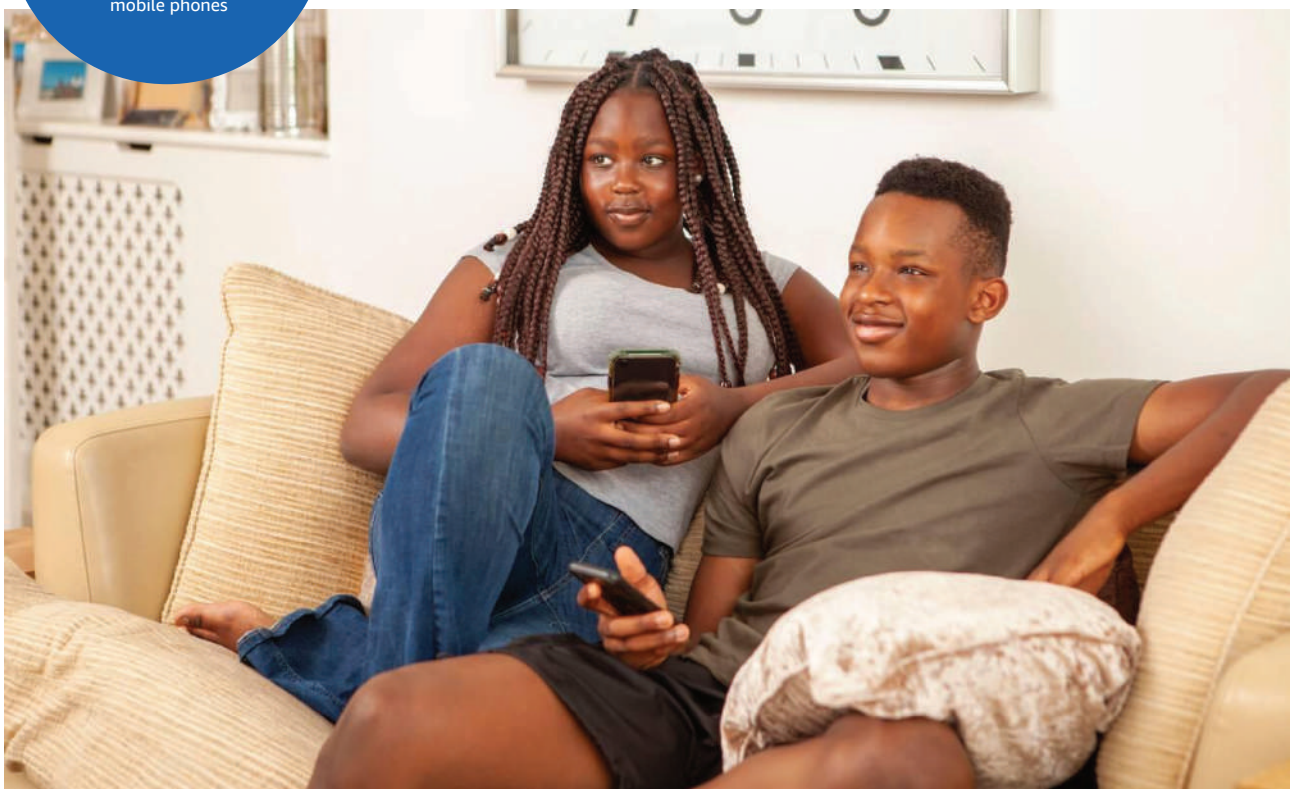
The percentage of male population and 77.5 per cent of female population who owned a mobile phone, out of which 49.1 per cent of males and 42.7 per cent of females owned a smartphone.

38.0%

Computer ownership and internet usage significantly increase with wealth, as seen with 38.0 per cent of the richest households owning a computer compared to only 0.2 per cent of the poorest households.

99.5%

The wealthiest households showed the highest ICT ownership across various devices, with 99.5 per cent owning mobile phones



Summary of Indicators on Ownership and Use of ICTs

	Note: Individuals in here represent male and female aged 15-49 years old		Proportions/Per cent					
	INDICATORS AT INDIVIDUAL LEVEL		National		Urban		Rural	
			Male	Female	Male	Female	Male	Female
Penetration of Ownership of ICT devices and Use at Individual Level	Proportion of individuals who owned mobile phone (all types)		80.4	77.5	90.2	88.9	74.1	69.6
	Proportion of individuals who owned smartphone		49.1	42.7	70.2	64.7	35.3	27.5
	Proportion of individuals who read newspaper/magazine at least once a week		39.0	20.1	49.5	22.7	32.2	18.2
	Proportion of individuals listned to radio at least once a week		87.3	76.1	83.8	73.6	89.6	77.8
	Proportion of individuals viewed a television at least once a week		80.3	66.0	88.5	82.6	74.9	54.5
	Proportion of individuals used internet in the last 12 months preceding the survey		56.2	44.2	80.0	67.7	40.7	27.9
Usage of ICTs by frequencies	Proportion of individuals listening to radio, by frequency	Less than once a week	16.1	13.9	20.8	12.4	13.1	14.8
		At least once a week	71.1	62.2	63.0	61.1	76.5	62.9
	Proportion of individuals viewing television, by frequency	Less than once a week	20.7	10.8	16.9	8.5	23.2	12.4
		At least once a week	59.6	55.2	71.6	74.1	51.7	42.1
	Proportion of individuals using Internet, by frequency (in the last 12 months preceding the survey)	Less than once a week	6.9	6.7	4.5	4.9	10.0	9.8
		At least once a week	19.3	23.2	14.3	20.1	25.7	28.5
		Almost every day	68.7	63.5	77.0	69.8	58.0	53.1
Source of Family Planning Information by ICTs	Proportion of individuals who accessed family planning infromation through mobile phone		14.6	7.2	21.8	8.4	21.0	10.0
	Proportion of individuals who accessed family planning infromation through social media		40.0	16.8	58.3	25.4	28.2	10.8
	Proportion of individuals who accessed family planning infromation through radio		68.5	30.7	68.4	29.7	68.6	31.4
	Proportion of individuals who accessed family planning infromation through watching television		54.9	25.7	64.9	32.6	48.4	21.0
	Proportion of individuals who accessed family planning infromation through internet in the last 12 months		38.5	15.9	56.6	24.6	26.7	9.9
Gender Based Violence by ICTs	Proportion of individuals who experienced GBV and owned mobile phone		87.2	81.0	93.1	90.8	82.6	75.0
	Proportion of individuals who experienced GBV and owned smart phone		51.9	39.2	72.1	59.1	36.3	27.1
	Proportion of individuals who experienced GBV and read newspapers/ magazine		36.5	19.0	44.5	21.9	30.3	17.2
	Proportion of individuals who experienced GBV and listened to radio		88.5	78.7	85.8	75.7	90.6	80.6
	Proportion of individuals who experienced GBV and watched television		77.2	65.2	84.0	81.1	71.9	55.6
	Proportion of individuals who experienced GBV internet in the last 12 months preceding the survey		61.0	40.9	82.6	63.5	44.3	27.2

INDICATORS AT HOUSEHOLD LEVEL				
		National	Urban	Rural
Uptake of ICTs	Proportion of households that owned mobile phone (atleast one member of the households owned a mobile phone)	93.5	97.4	90.9
	Proportion of households that owned radio	65.8	71.2	62.1
	Proportion of households that owned television	50.1	67.6	38.2
	Proportion of households that owned computer	10.7	20.6	4.1
	Proportion of households that owned fixed line telephone	2.0	2.4	1.8
	Proportion of households that owned DVD Player	15.6	25.5	8.8
	Proportion of households that owned Casette or CD Player	8.0	13.1	4.5
	Proportion of household that used Internet (atleast one member of the households used internet in the 12 months preceding the survey)	23.8	36.1	15.4
Households with NO electricity by ICTs	Proportion of households without electricity and owned mobile Phone	88.0	88.5	87.9
	Proportion of households without electricity and used Internet	10.4	11.8	10.3
	Proportion of households without electricity and owned computer	1.4	1.9	1.3
	Proportion of households without electricity and owned television	21.6	18.3	21.9
	Proportion of households without electricity and owned radio	54.5	43.1	55.7
Uptake of ICTs by Households with members below age 15 years	Proportion of households with members below age 15 years that owned mobile phone	94.6	97.8	93.0
	Proportion of households with members below age 15 years that owned radio	65.8	72.5	62.2
	Proportion of households with members below age 15 years that owned television	53.4	79.2	39.7
	Proportion of households with members below age 15 years that owned computer	8.7	18.5	3.4
	Proportion of households with members below age 15 years that use internet (atleast one member of the households used internet in the 12 months preceding the survey)	50.9	66.5	42.6
	Proportion of households with members below age 15 years that used a mobile phone for financial transactions	93.5	97.2	91.5
	Proportion of households with members below age 15 years that registered for mobile money	94.8	98.2	93.0
Uptake of ICTs by sex of household head	Proportion of Female-headed households that owned mobile phone	91.3	97.2	87.9
	Proportion of Female-headed households that owned radio	56.4	63.1	52.6
	Proportion of Female-headed households that owned television	45.1	65.1	33.6
	Proportion of Female-headed households that owned computer	8.3	16.9	3.3
	Proportion of Female-headed households that used internet (atleast one member of the households used internet in the 12 months preceding the survey)	26.7	43.4	17.1
	Proportion of female-headed households that used a mobile phone for financial transactions	89.6	95.6	86.2
	Proportion of female-headed households that registered for mobile money	91.0	97.1	87.5
	Proportion of male-headed households that owned mobile phone	94.6	97.5	92.5
	Proportion of male-headed households that owned radio	70.6	74.7	67.5
	Proportion of male-headed households that owned television	52.6	68.7	40.9
	Proportion of male-headed households that owned computer	12.0	22.3	4.5
	Proportion of male-headed households that used internet (atleast one member of the households used internet in the 12 months preceding the survey)	22.2	32.8	14.5
	Proportion of male-headed households that used a mobile phone for financial transactions	93.9	97.1	91.6
	Proportion of male-headed households who registered for mobile money	94.9	97.9	92.7

INDICATORS AT HOUSEHOLD LEVEL				
		National	Urban	Rural
Uptake of ICTs by households with a member who has a disability	Proportion of households with atlaest a member with seeing difficulty and owned radio	58.8	65.3	57.1
	Proportion of households with atlaest a member with seeing difficulty and owned television	37.1	63.6	29.8
	Proportion of households with atlaest a member with seeing difficulty and owned computer	3.6	11.4	1.4
	Proportion of households with atlaest a member with seeing difficulty and used mobile telephone for financial transactions	85.2	89.5	84.0
	Proportion of households with atlaest a member with hearing difficulty and owned radio	60.3	53.8	54.8
	Proportion of households with atlaest a member with hearing difficulty and owned television	59.9	26.1	31.2
	Proportion of households with atlaest a member with hearing difficulty and owned computer	14.4	1.3	3.2
	Proportion of households with atlaest a member with hearing difficulty and used mobile telephone for financial transactions	91.3	81.5	83.0
Uptake of ICTs by households that received social assistance by ICTs	Proportion of households receiving social assistance and using mobile telephone for financial transactions	86.7	94.4	83.7
	Proportion of households receiving social assistance that owned mobile phone	90.5	96.3	88.0
	Proportion of households receiving social assistance that registered to mobile money	89.9	97.0	86.9
Uptake of ICTs by Households that had a member who smoked inside the house	Proportion of household smoked inside the house and owned a mobile telephone	87.1	87.9	86.7
	Proportion of households that smoked inside the house and owned a television	34.5	52.3	27.9
	Proportion of households that smoked inside the house and used internet (atleast one member of the households used internet in the 12 months preceding the survey)	24.3	36.3	20.8
COVID-19 by ICTs	Proportion of households tested and vaccinated against COVID - 19 and owned a mobile telephone	97.0	98.3	95.4
	Proportion of household tested and vaccinated against COVID - 19 and owned a television	66.6	77.0	52.7
	Proportion of households tested and vaccinated against COVID - 19 and used internet	33.6	40.9	23.9
Health Insurance by ICTs	Proportion of households with any kind of health cover and owned radio	77.7	78.9	76.3
	Proportion of households with any kind of health cover and owned television	72.5	80.4	63.5
	Proportion of households with any kind of health cover and used the internet	36.8	45.8	26.5
Mosquito Nets by ICTs	Proportion of households that obtained mosquito nets through mass distribution and owned radio	65.2	70.9	63.7
	Proportion of households that obtained mosquito nets through mass distribution and owned television	40.5	61.7	35.2
	Proportion of households that obtained mosquito nets through mass distribution and owned mobile telephone	92.6	96.9	91.5
	Proportion of households that obtained mosquito nets through mass distribution and used internet	17.5	31.4	14.1

INDICATORS AT HOUSEHOLD LEVEL				
		National	Urban	Rural
Household Amenities by ICTs	Proportional of households with improved water sources and owned mobile phone	94.5	97.6	91.8
	Proportional of households with improved water sources and used internet	26.6	36.9	17.5
	Proportional of households practising open defecation and owned mobile phone	76.4	76.0	76.4
	Proportional of households practising open defecation and used Internet	2.5	4.0	2.5
	Proportion of households using non-clean cooking devices and owned mobile phone	95.3	98.2	93.2
	Proportion of households using non-clean cooking devices and used Internet	25.6	37.5	16.9
	Proportion of households practicing farming and owned a mobile Phone	94.1	97.9	92.7
	Proportion of households practicing farming and owned radio	67.9	76.7	64.7
	Proportion of households practicing farming and owned television	48.8	71.2	40.6
	Proportion of households practicing arming and used Internet	20.5	34.5	15.4

CHAPTER

01

Introduction

1.1 Background

There is global recognition and consensus that Information and Communication Technologies (ICTs) play a critical role in enabling advancements and progress in global economic growth and social inclusion. The role of ICTs especially broadband in accelerating the achievement of the Sustainable Development Goals (SDGs) has been anchored under the global 2030 Agenda for Sustainable Development. The SDGs that have identified ICT as an enabler, include SDG 4 (Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all), SDG 5 (Achieve gender equality and empower all women and girls), SDG 9 (Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation) and SDG 17 (Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development). ICTs have the potential to accelerate the achievement of all SDGs by providing opportunities to enhance and streamline effectiveness and efficiency of developmental activities, provide access to digitally enabled products and services, and enhance capability to measure progress toward achievement of all SDGs.

At the continental level, the African Union's Agenda 2063 on The Africa We Want is the continent's shared strategic framework for inclusive and sustainable development. The framework anticipates Africa to be on equal footing with the rest of the world on matters ICT. It also envisages an information society with an integrated e-economy where every government, business and citizen have access to reliable and affordable ICT services.

Vision 2030 is Kenya's long-term development blueprint that aims to transform the country into an industrialized middle-income economy, offering a high quality of life to all citizens. It provides several strategic interventions to promote the development of the ICT sector, including expanding broadband access, promoting e-commerce and e-government. The country has also developed several other documents to aid in implementation of this vision including but not limited to; The Kenya National Digital Master Plan, 2022-2032; Kenya Digital Economy Blueprint; The National ICT Policy Guidelines 2020; and Information, Communications and Technology Sector Plan 2023-2027. The government's Bottom-Up Economic Transformation Agenda (BETA) is geared towards economic turn-around and inclusive growth through five core pillars: Agricultural Transformation; Micro, Small and Medium Enterprises (MSME) Economy; Housing and Settlement; Healthcare; Digital Superhighway and Creative Economy. The digital superhighway is aimed at rolling out 100,000 kilometres of fibre cables, installation of Wi-Fi hotspots in 25,000 identified areas and building 1,450 digital innovation labs across the country.

This expectation underscores the importance of having timely, accurate, complete and reliable ICT statistics to monitor availability, access, use and affordability of ICT devices and services. To this end, the Communications Authority of Kenya (CA) collaborates with the Kenya National Bureau of Statistics (KNBS) to carry out National ICT Surveys and to collect ICT related data through other national surveys such as the National Census, the Kenya Integrated Household Budget Survey (KIHBS) and the Kenya Demographic and

25,000

The digital superhighway aimed at installating Wi-Fi hotspots in 25,000 identified areas and building 1,450 digital innovation labs across the country.

Health Surveys with an aim of closing the ICT data gap. Data from these surveys is key in monitoring the progress of ICT related targets as provided for in the various international, regional and national ICT policies. The 2022 KDHS is the most recent survey which includes components on ICT and therefore has been analysed with an aim of updating existing statistics on access and uptake of ICTs.

The 2022 KDHS collected data on usage of the ICT by various demographic groups with a view to understanding patterns of usage as well as establish if they utilize ICT services to inform their decisions. This is crucial for developing inclusive policies, creating equitable access, and fostering digital literacy. This report therefore aims to explore the usage of ICT in relation to demographics, providing valuable insights that can guide policymakers, educators, and technology developers.

The introduction of mobile phones in 1992 was a game changer in the communication sector as the device can accommodate several communication services such as radio, television and the Internet.

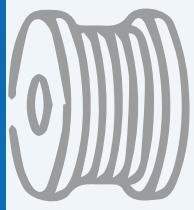
By examining how different demographic groups use ICT, the report aims to identify disparities and recommend strategies to bridge these gaps, ensuring that all segments of society benefit from technological advancements. Understanding the demographic factors that affect ICT usage in education can help educators tailor their approaches to meet the diverse needs of students. Demographic analysis of ICT usage alongside employment status, wealth quintile and various age groups is instrumental in helping governments in developing appropriate policies and strategies to address the associated disparities.

This report provides empirical evidence that can guide the development of such policies with a view to increasing ICT adoption in underserved and unserved segments of the population and promoting digital inclusion. Based on the report's findings, stakeholders can identify which groups are underutilizing educational technologies and propose interventions to improve their engagement and outcomes. Moreover, understanding demographic trends in ICT usage will help in anticipating future needs and challenges to ensure that policies remain relevant and effective.

1.2 Evolution of the ICT Sector in Kenya

The liberalization and privatization of the ICT sector that begun in 1999 has resulted to increased competitiveness, accessibility and affordability of ICTs. This has also led to inclusion of population segments that were initially excluded in mainstream communications. The introduction of mobile phones in 1992 was a game changer in the communication sector as the device can accommodate several communication services such as radio, television and the Internet. The reduction in mobile phone and SIM card prices over the years has contributed significantly to increased uptake of ICT services in the recent past. In addition, mobile calling rates have dropped significantly from as high as KES 50 per minute to the current rates between KES 2 to KES 4 per minute is a true reflection of the growth of the sector over the years. The roll out of fiber

100,000 kilometres of fibre cables,

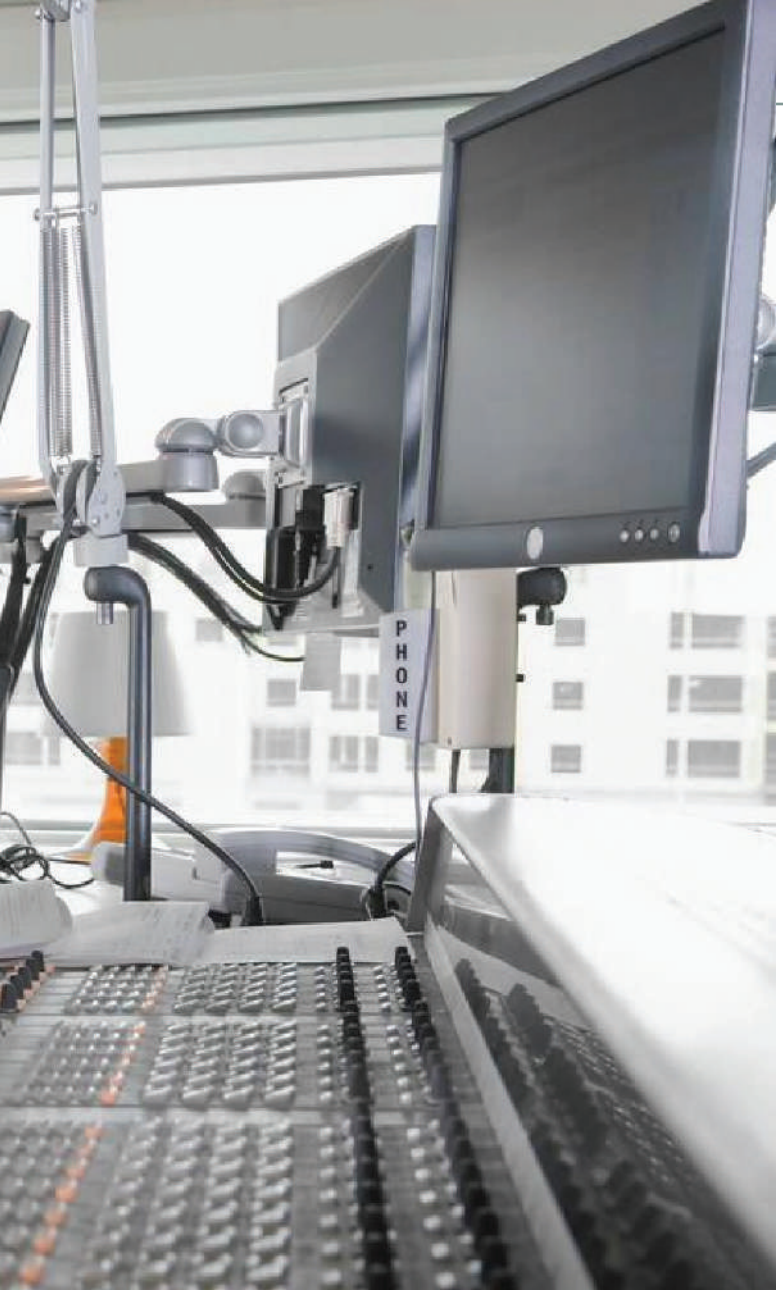


The Bottom-Up Economic Transformation Agenda (BETA) by the government of the day is geared towards economic turn-around and inclusive growth through five core pillars: Agricultural Transformation; Micro, Small and Medium Enterprises (MSME) Economy; Housing and Settlement; Healthcare; Digital Superhighway and Creative Economy. The digital superhighway is aimed at rolling out 100,000 kilometres of fibre cables, installation of Wi-Fi hotspots in 25,000 identified areas and building 1,450 digital innovation labs across the country.

optic network through the six submarine cable service providers namely, The East African Marine System (TEAMS); Eastern Africa Submarine Cable System (EASSy); Lower Indian Ocean Network (LION 2); Sea Sub-Marine Communications Limited (SEACOM); Djibouti Africa Regional Express 1 (Dare1); and Pakistan and East Africa Connecting Europe (PEACE) and launch of Starlink satellite in 2023 has played a key role in accelerating availability of internet services.

Despite numerous developments in the ICT sector, radio has remained as a key source of information in Kenya. Over the years, the country has witnessed an increase in the number of radio stations from one station soon after independence to 233 stations in 2022/23. Similarly, the analogue television signal switch off and migration to the digital television signal in 2015 has resulted to an increase in the number of television stations especially those using local languages. This has also provided the broadcasters with an opportunity to bring on board audiences initially marginalized on signal distribution and language especially in unserved and underserved areas. Since 2015, digital terrestrial television signal population coverage has expanded to 92.1 per cent in 2022/23 leading to increase in the number of television stations to 193 during the same period.

Introduction of mobile phones is one of the major developments in the telecommunication sub-sector in Kenya. It has played a key role in enhancing communication, access to information and facilitating trade and financial services. The expansion of mobile signal coverage and the launch of more advanced mobile technologies such as 4G and 5G has facilitated increased access to faster and better-quality mobile



services especially mobile broadband. The overall mobile network population coverage stood at 98.0 per cent in 2022/23 with 97.0 per cent covered by 4G. Mobile penetration was at 131.1 subscriptions per 100 inhabitants and mobile money penetration at 75.1 per cent during the same period.

The Internet has experienced tremendous growth in the last 20 years. It has become an important tool for communication, business and commerce, innovation and research, and provision of government services in addition to informing, educating and entertaining the public. However, this evolution has presented a number of challenges including cybersecurity, privacy breaches, new competition and changing business models. The expansion of fiber optic and mobile networks especially 4G and 5G has played a major role in accelerating access and use of internet services with over 90 per cent of users accessing internet through mobile phones. By 2022/23 Kenya had 51.0 million internet subscriptions of which 71.6 per cent were on broadband.

1.3 Rationale for the ICT Report

Over the past few decades, Information and Communication Technology (ICT) has undergone significant and swift transformations, driving changes in how societies function, communicate, and operate. This transformation has not only revolutionized industries and created new forms of social interactions but has also shifted paradigms in areas such as agriculture, education, healthcare, governance, and economic development. From the ubiquity of mobile phones to the expansive reach of the internet, the digital tools and platforms emerging from the ICT sector have become deeply embedded in daily routines, making them essential utilities in modern life.

Given the pervasiveness of ICT, there is a compelling need for an accurate understanding of its adoption across different societal segments. For policymakers, understanding ICT penetration and usage patterns is crucial. It aids in the formulation of informed policies, ensuring that digital infrastructure development is equitable and that the benefits of ICT reach all members of society, irrespective of their socioeconomic status or geographic location. Additionally, for stakeholders in various sectors of the economy, understanding ICT trends is crucial for informing strategies, optimizing outreach, and driving digital innovation tailored to their specific needs.

Appropriate application of ICT has resulted in enhancement of productivity, literally in all fields including education, health, trade, banking, agriculture, transport, governance and security. Effectively, ICT has played a pivotal role in reduction of poverty as well as improvement of health and environmental conditions globally. Despite ICTs becoming an integral part of life, not all segments of population are able to access and use ICTs in equal measure. Some segments of the population face more challenges in accessing or using these technologies than others. Research points to the existence of discrepancies in access and use of the ICTs

across different countries. Moreover, the digital divide is evident even within a country and is manifested through characteristics such as age, sex, wealth, education and residence.

The inclusion of ICTs in the 2022 Kenya Demographic and Health Survey (KDHS) was in recognition of the role that demographic factors play in the use of ICTs in the population. Moreover, the survey aimed at collecting data that would be used to establish relations between ICTs usage and types of decisions by various demographic groups. For instance, to establish if there were variations in use of ICTs by females of different education levels in seeking information on fertility and mortality.

In this context, the 2022 KDHS stands out as a significant dataset, providing comprehensive insights into various facets of the population, including their interaction with digital tools and platforms. The 2022 KDHS dataset allows for a detailed analysis of ICT-related behaviors and patterns, presenting a holistic view of digital adoption. This is particularly noteworthy when we consider that the most recent substantial dataset available prior to this, focusing on similar ICT indicators, was the 2019 Kenya Population and Housing Census (KPHC). Given the fast-paced nature of the digital world, even a gap of a few years can lead to substantial shifts in ICT behaviors and trends, emphasizing the importance of the 2022 KDHS in providing updated, relevant, and actionable insights.

1.4 Objective of the report

The report aims to bridge the existing information void and present an up-to-date, comprehensive perspective on ownership of ICT devices as well as uptake of ICT services for individuals aged 15 - 49 based on 2022 KDHS. It also seeks to provide the current perspective on digital behaviours, identifying trends and factors that might influence ICT adoption and usage in this age bracket. In addition, the report compares these findings with the 2019 KPHC data, 2015/16 KIHBS and 2014 KDHS wherever possible. The data is disaggregated by county, residence, gender, age, wealth quintiles, education, occupation, marital status, employment, and religion for individual-level indicators. For household-level indicators, the data is disaggregated by county, residence, and wealth quintiles. This detailed breakdown helps discern patterns and disparities that might be obscured in a broader analysis. The specific objectives of this report are:

- Identification of disparities of usage of ICTs by individuals of different demographics.
- Identification of disparities of ownership of ICT devices by individuals and households.
- A comparative analysis of the 2022 KDHS findings with the 2019 KPHC, 2015/16 KIHBS and 2014 KDHS highlighting key differences and emerging trends.

1.5 Data and Methodology

1.5.1 Overview of the 2022 KDHS

The preparation of this report relied heavily on the 2022 KDHS, which was the seventh such survey to be conducted in Kenya. The KDHS is primarily meant to update the sociodemographic, nutrition and health indicators and address emerging data gaps pertaining to the population in general. The results of the survey were also meant to meet the requirements for monitoring the Sustainable Development Goals (SDGs) for Kenya, as well as indicators relevant for monitoring national and sub-national development agendas such as the Kenya Vision 2030, Medium Term Plans (MTPs), and County Integrated Development Plans (CIDPs). Since ICTs play a critical role in the realization of health and demographic outcomes, questions related to ownership of ICT equipment and utilization of ICT services were included in the survey.

The 2022 KDHS sample was drawn from the Kenya Household Master Sample Frame (K-HMSF). It was designed to provide estimates at the national level, for rural and urban areas and for some indicators, at the county level. Data was collected at both the household and individual levels to ensure comprehensive coverage

of relevant indicators. The survey covered 42,022 households spread across 1,692 clusters. Interviews were conducted only in pre-selected clusters and households; no replacement of the pre-selected units was allowed during the survey data collection stages. A total of 32,156 women and 13,699 men aged 15 -49 were interviewed.

Data collection was done using Computer Assisted Personal Interviews (CAPI) that entails administering the survey questionnaire using electronic gadgets (tablets/smartphones) and transmitting the responses to a central server. There were several levels of supervision during data collection, as part of quality assurance. In addition, an interactive dashboard was used for monitoring the data as the collection continued.

1.5.2 Data Analysis and Presentation

Data analysis for this report was conducted using various statistical applications and tools, including STATA, SPSS, and MS Excel. The process entailed identification of ICT indicators, development of a tabulation plan and further cleaning of the 2022 KDHS datasets. Comparative analysis with the 2019 KPHC, 2014 KDHS and 2015/16 KIHBS was done to present the changes over time and confront the results with past surveys. The analysis focused on the ownership and use of ICT devices and services, examining their relationship with various demographic and health indicators through cross-tabulation. To the extent possible, disaggregation by sex was done to show the gender disparities in ownership of ICT devices and usage of ICT services. Analysis was done for national and county levels as well as on the basis of residence (rural/urban) and the wealth quintile of the household. Presentation of the results was in the form of tables and charts, accompanied by highlights and key messages emanating from the analysis.

CHAPTER

02

ICT in Relation to Demographic and Social Characteristics

The 2022 KDHS contained data on key ICT indicators such as ownership of mobile phone and smartphone, usage of radio, TV and internet and newspaper readership among males and females aged 15-49 years. This chapter provides an analysis of ICT ownership and usage in the context of demographic and social characteristics at the individual level. These characteristics include: place of residence, counties, age groups, education levels, employment status, wealth quintile, and marital status. The chapter discusses the sources of information on family planning through ICTs and shows the relationship between ICT usage and Gender-Based Violence (GBV).

Section 2.1: Ownership and Use of ICTs

2.1.1 Mobile Phone and Smartphone Ownership by Place of Residence

Nationally, the proportion of mobile phone ownership among male and female population was 80.4 per cent and 77.5 per cent, respectively. Nine out of ten individuals owned a mobile phone in urban areas whereas seven out ten individuals in rural areas owned a mobile phone. On the other hand, the proportion of smartphone ownership nationwide was 49.1 per cent for males and 42.7 per cent for females. The proportion of male population who owned smartphone in rural areas (35.3%) was about a half that of their urban areas counterpart (70.2%). About three out of ten women in rural areas owned a smartphone, as shown in Figure 2.1.

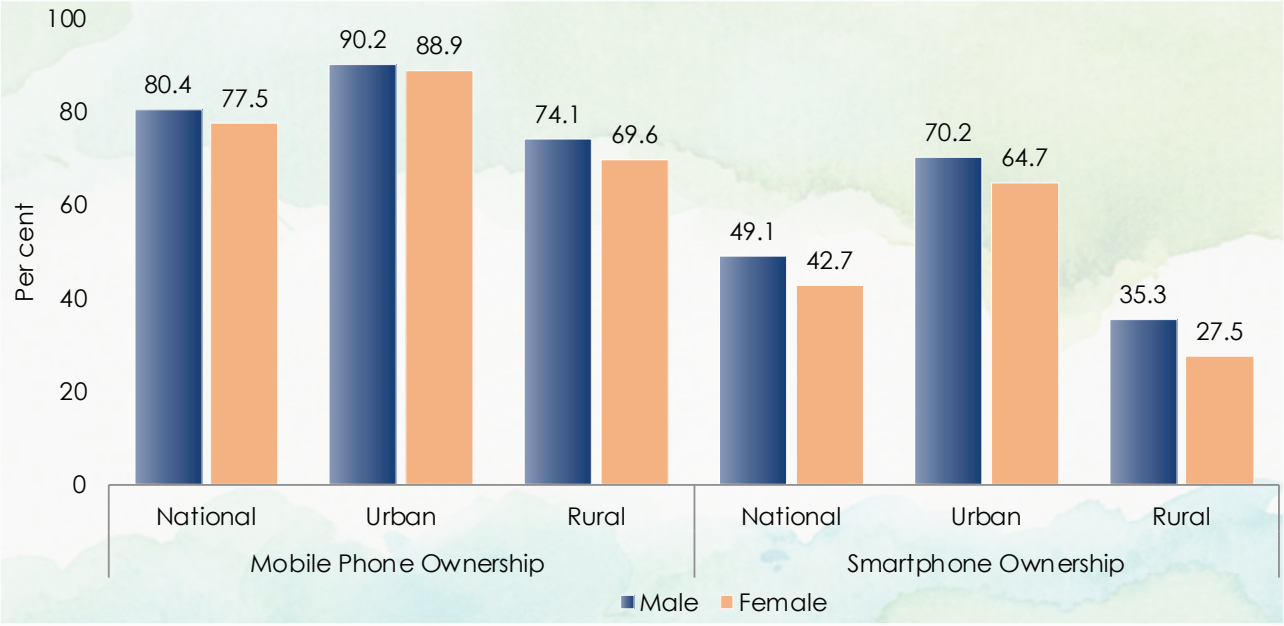


Figure 2.1: Proportion of that owned Mobile Phone and Smartphone by Place of Residence

As shown in Figure 2.2, ownership of mobile phone increased from 70.4 per cent in 2019 to 80.4 per cent in 2022 among males while that of females increased from 69.2 per cent in 2019 to 77.5 percent 2022.

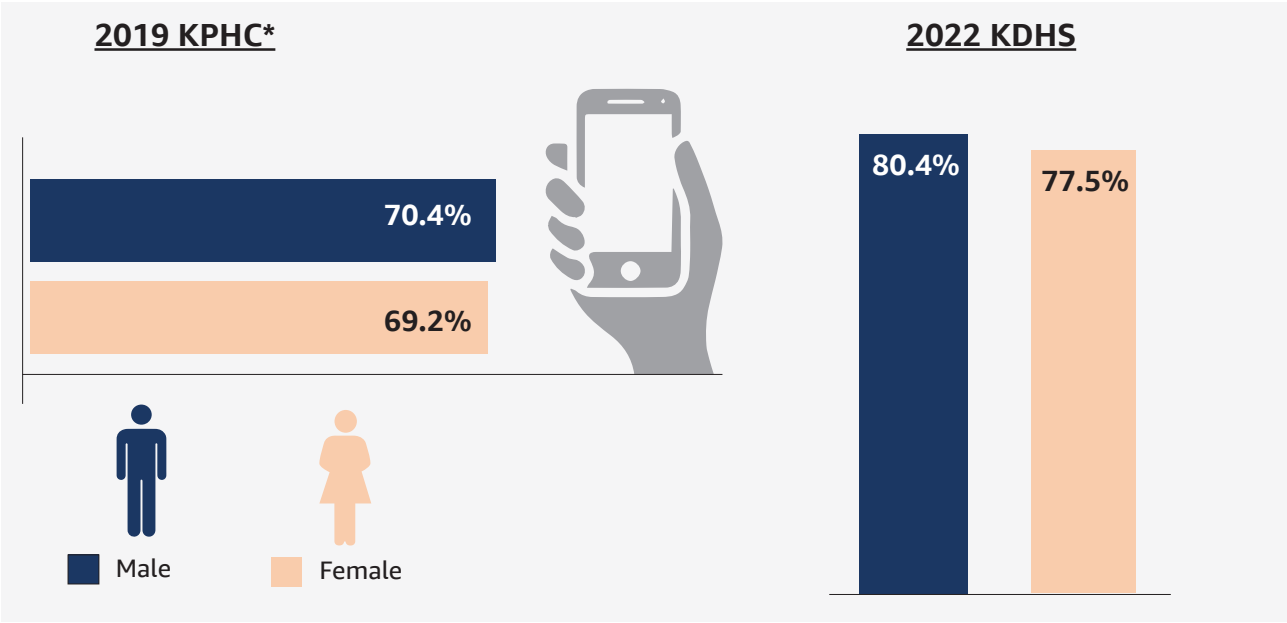


Figure 2.2: Proportion of Individuals that owned Mobile Phone (2019 KPHC , 2022 KDHS)

**Proportion of male and female population age 15-49 that owned mobile phone in the last 3 months*

2.1.2 Mobile Phone and Smartphone Ownership by Age Group

The proportion of mobile phone ownership among male population was highest in age group 25-34 years (93.1%), and lowest in age group 15-24 years (63.7%) as shown in Figure 2.3. Among female population, mobile phone ownership was highest in age group 35-44 years (90.3%) and lowest in age group 15-24 years (57.4%). The age group 25-34 years had the highest proportion of smartphone ownership compared to other age groups for both male and female population. Smartphone ownership was highest among males across all age groups compared to their female counterparts.

90.3%

Among female population, mobile phone ownership was highest in age group 35-44 years (90.3%) and lowest in age group 15-24 years (57.4%).

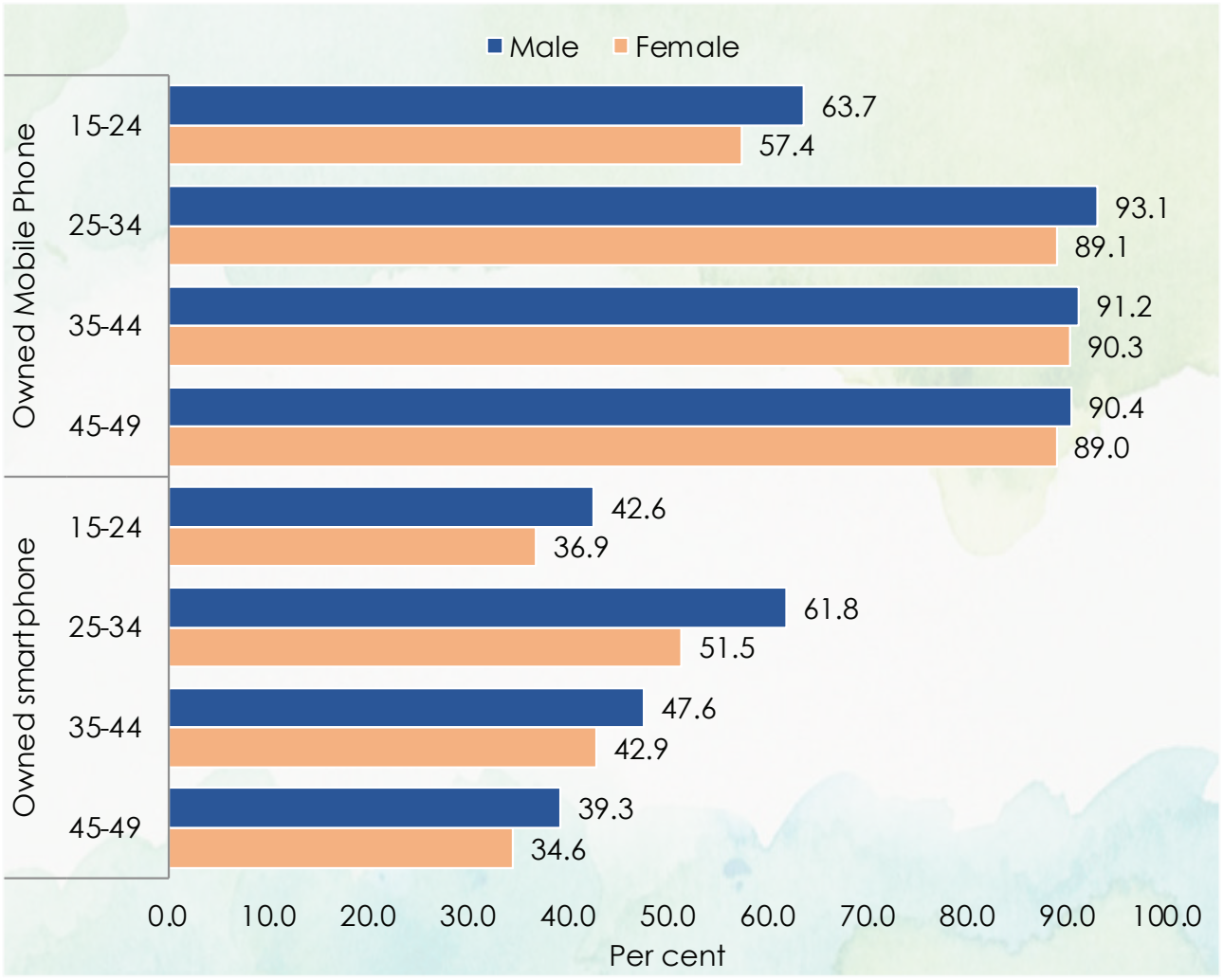


Figure 2.3: Proportion of individuals that owned Mobile Phone and Smartphone by Age groups

2.1.3 Mobile Phone and Smartphone Ownership by Level of Education

Overall, mobile phone ownership exceeded 60.0 per cent in both male and female population as shown in Figure 2.4. Ownership of mobile phone and smartphone was highest among individuals with higher than secondary education level with 99.0 per cent and 98.8 per cent of male and female population, respectively. For individuals with no education, 14.2 per cent of male population and 10.1 per cent female population that owned smartphone. Smartphone ownership appears to increase as the level of education

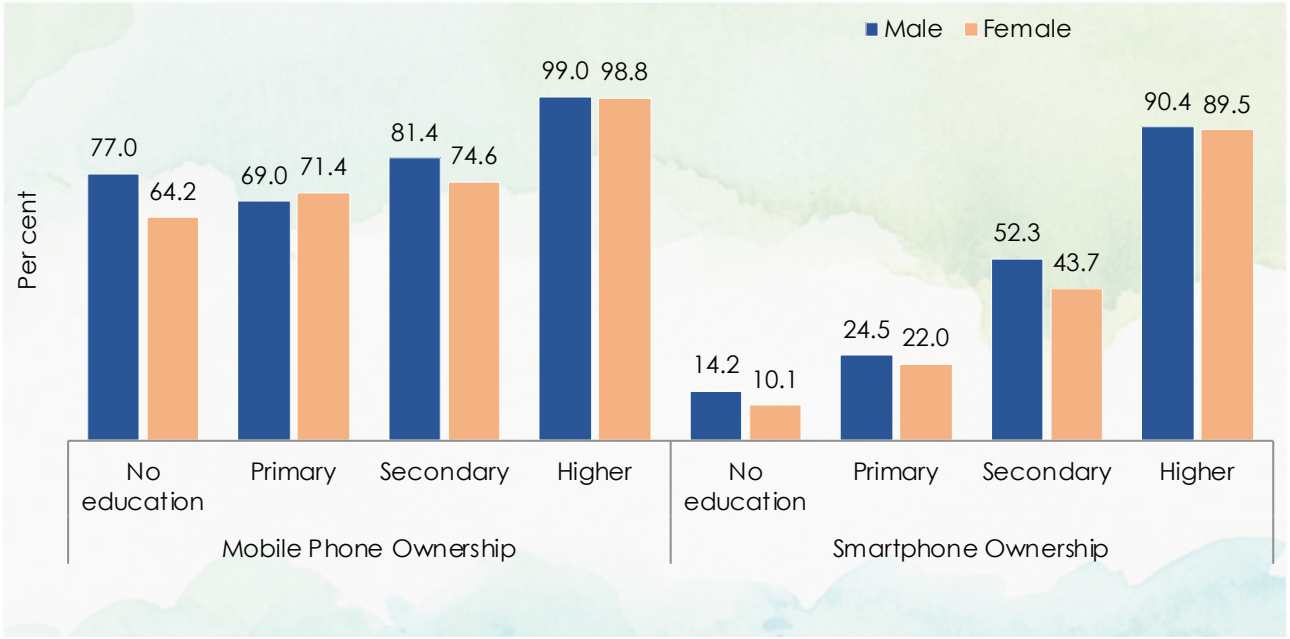


Figure 2.4: Proportion of Individuals that owned Mobile Phone and Smartphone by Educational Level

2.1.4 Mobile Phone and Smartphone Ownership by Employment Status

The highest proportion of male and female population who owned a mobile phone or a smart phone device reported to have been currently employed. Female population recorded the highest proportion for mobile phone ownership across all categories.

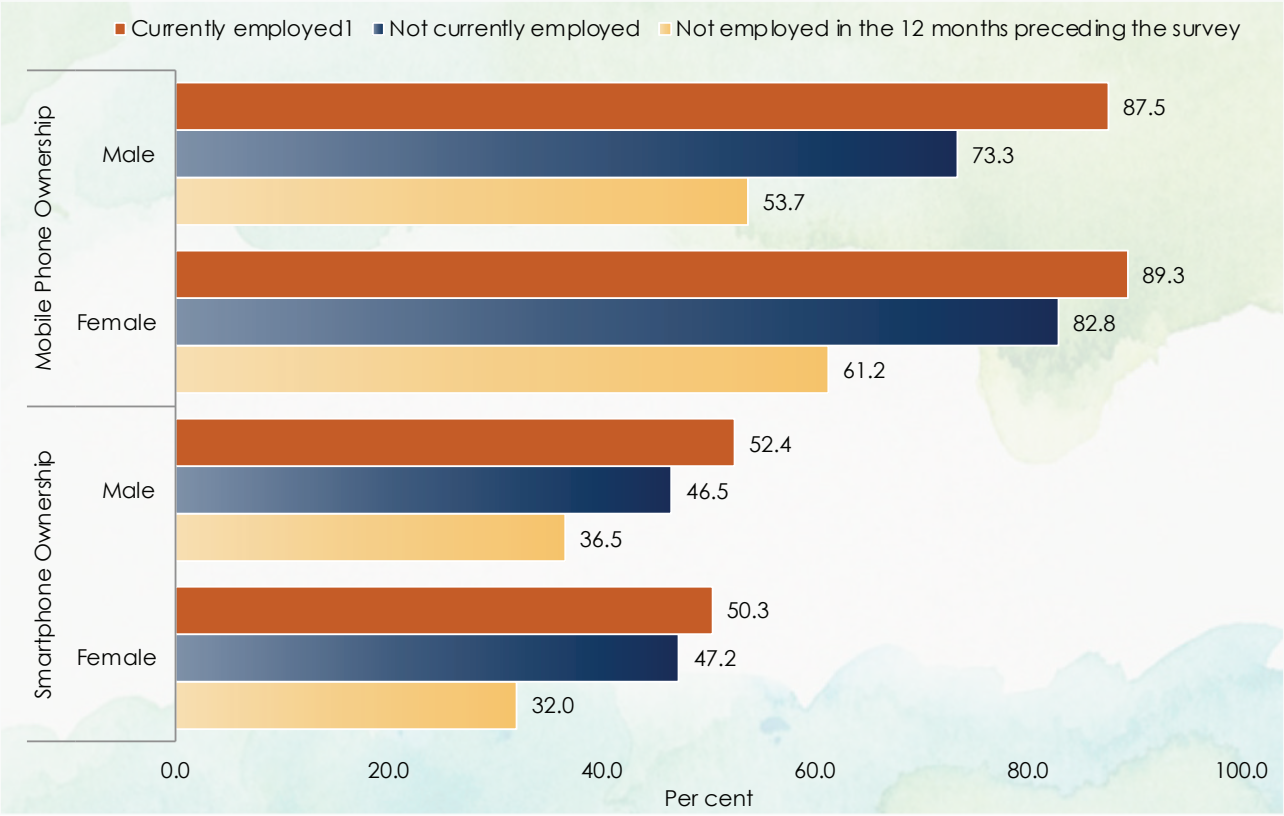


Figure 2.5: Proportion of Individuals that Owned Mobile Phone and Smartphone by Employment Status

"Currently employed" is defined as having been engaged in an economic activity in the last 7 days. Includes persons who did not work in the last 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

2.1.5 Mobile Phone and Smartphone Ownership by Wealth Quintile

As shown in Figure 2.6, mobile phone ownership was highest in richest wealth quintile for both male population (94.0%) and female population (93.6%). Mobile phone ownership in all wealth quintile was more than 50.0 per cent for both male and female population. However, smartphone ownership among the poorest, poorer, and middle populations was less than 50.0 per cent.

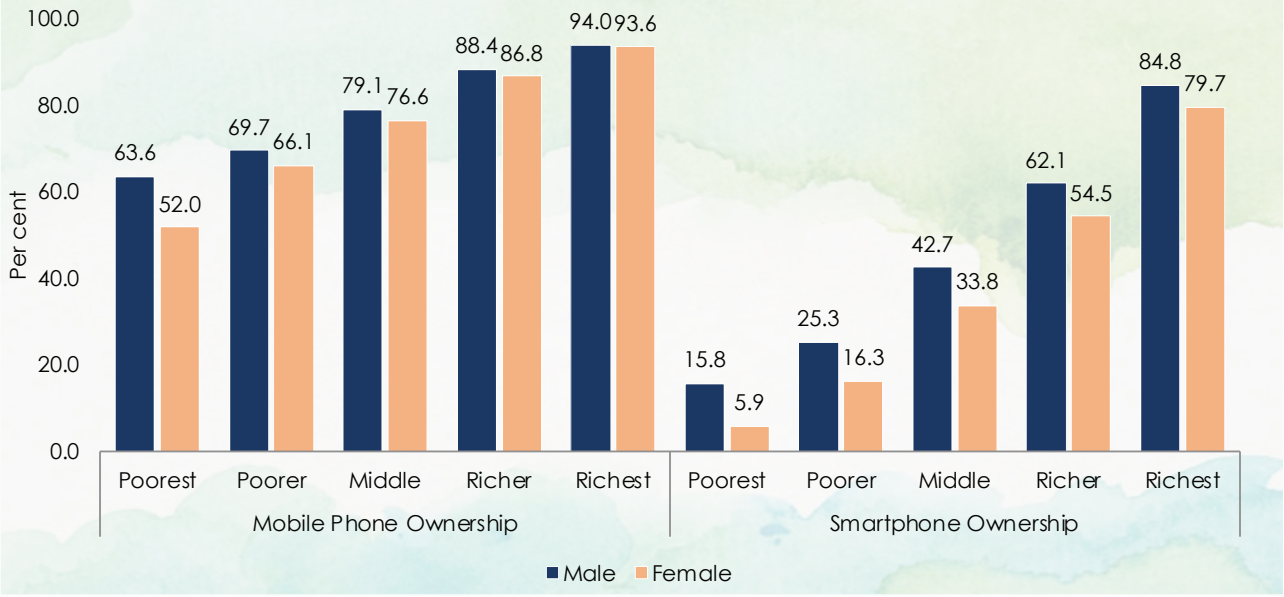


Figure 2.6: Proportion of individuals that owned Mobile Phone and Smartphone by Wealth Quintile

2.1.6 Mobile Phone and Smartphone Ownership by Marital Status

The proportions of male population age 15-49 currently living with partner and those currently married recorded the highest mobile phone ownership at 95.0 per cent and 94.9 per cent, respectively as shown in Table 2.1. On the other hand, mobile phone ownership was highest among female population who reported separated (91.3%) and divorced (91.1%). Smartphone ownership was highest among both male and female population living with partner at 56.6 per cent and 47.3 per cent, respectively.

Table 2.1: Proportion of Individuals that owned Mobile Phone and Smartphone by Marital Status

Marital Status	Owned Mobile Phone		Owned Smartphone	
	Male	Female	Male	Female
Never in Union	67.2	57.4	46.0	41.6
Married	94.9	86.5	54.2	42.9
Living with Partner	95.0	85.6	56.6	47.3
Widowed	87.2	88.0	32.2	29.5
Divorced	74.2	91.1	32.7	45.8
Separated	76.0	91.3	34.7	46.2
Total 15-49	80.4	77.5	49.1	42.7

2.1.7 Mobile Phone and Smartphone Ownership by County

Figure 2.7 shows the top five and bottom five counties for males and females that owned mobile phone. Nationally, about eight out of ten individuals owned mobile phone as shown in Figure 2.7. Nairobi City county recorded the highest proportion of population that owned mobile phone for both male (94.6%) and female (92.0%) population. In contrast, mobile phone ownership for Kakamega and Turkana counties had the lowest proportion at 64.9 per cent for male and 49.9 per cent for female population.

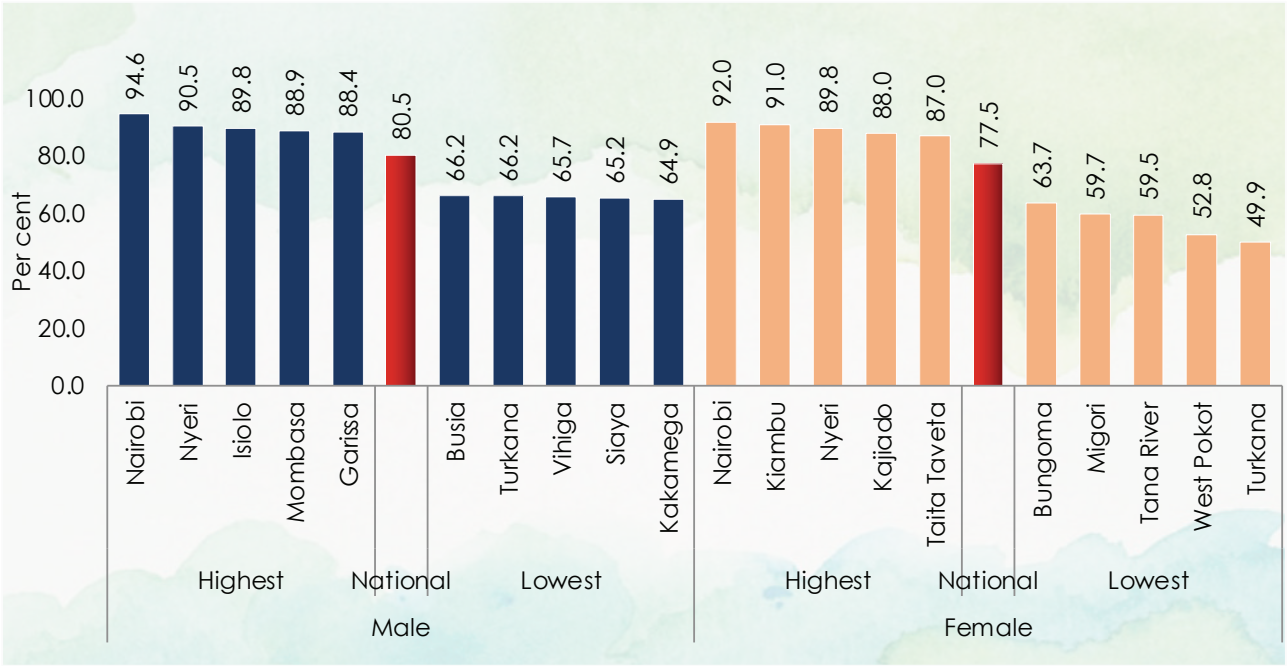


Figure 2.7: Proportion of Individuals that owned Mobile Phone by County

Figure 2.8 provides information on the top five and bottom five counties for males and females that owned smartphones. Nationally, the proportion of male and female population that owned smartphone was 49.1 per cent and 42.7 per cent, respectively. Nairobi City county recorded the highest proportion of both male and female population that owned mobile phone and smartphone. On the other hand, Turkana county had the lowest proportion of males and females with smartphone ownership.

Nairobi City county recorded the highest proportion of both male and female population that owned mobile phone and smartphone. On the other hand, Turkana county had the lowest proportion of males and females with smartphone ownership.

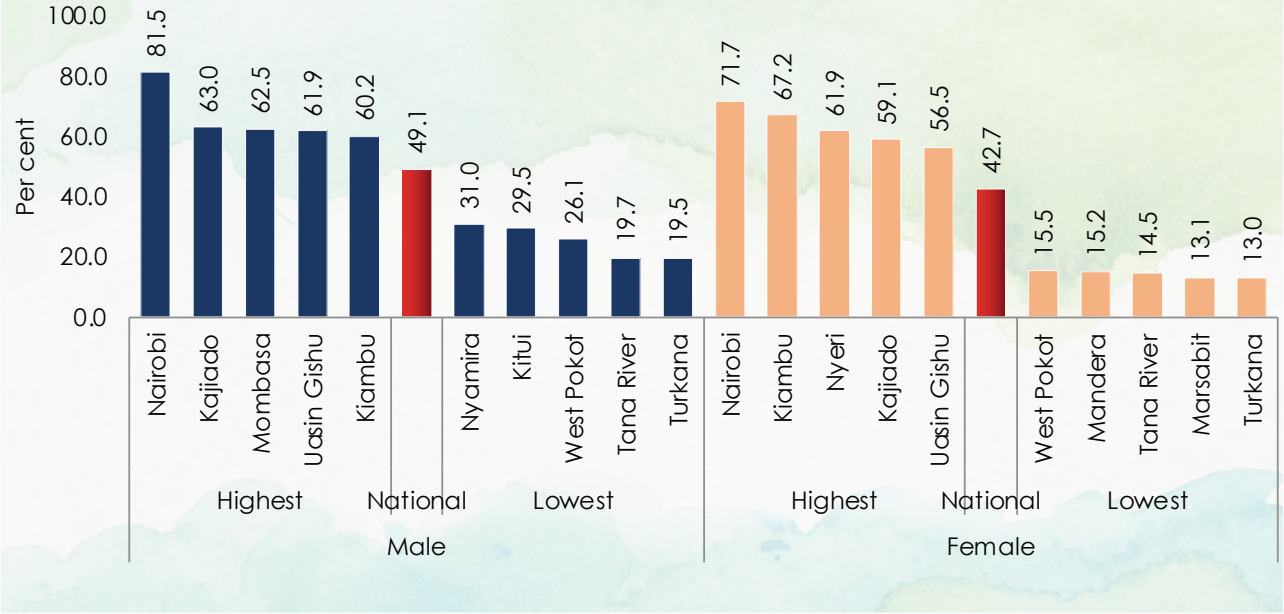


Figure 2.8:Proportion of individuals that owned Smartphone by County

Section 2.2: Usage of ICT Services

This section provides information on individuals who used ICTs at least once a week and less than once a week by residence, age group, level of education, employment of status, wealth quintile and marital status.

2.2.1 Usage of ICT Services by Place of Residence

Nationally, 39.0 per cent of males reported to read a newspaper compared to 20.1 per cent of their female counterparts as shown in Figure 9. Radio listenership was higher in rural areas (males - 89.6%, females - 77.8%) compared to urban areas (males - 83.8%, females - 73.6%). The proportion of individuals who watched TV was higher in urban areas (male – 88.5%, female – 82.6%) than in rural areas (male – 74.9%, female – 54.5%). Internet usage was higher among urban males (80.0%) compared to urban females (67.1%).

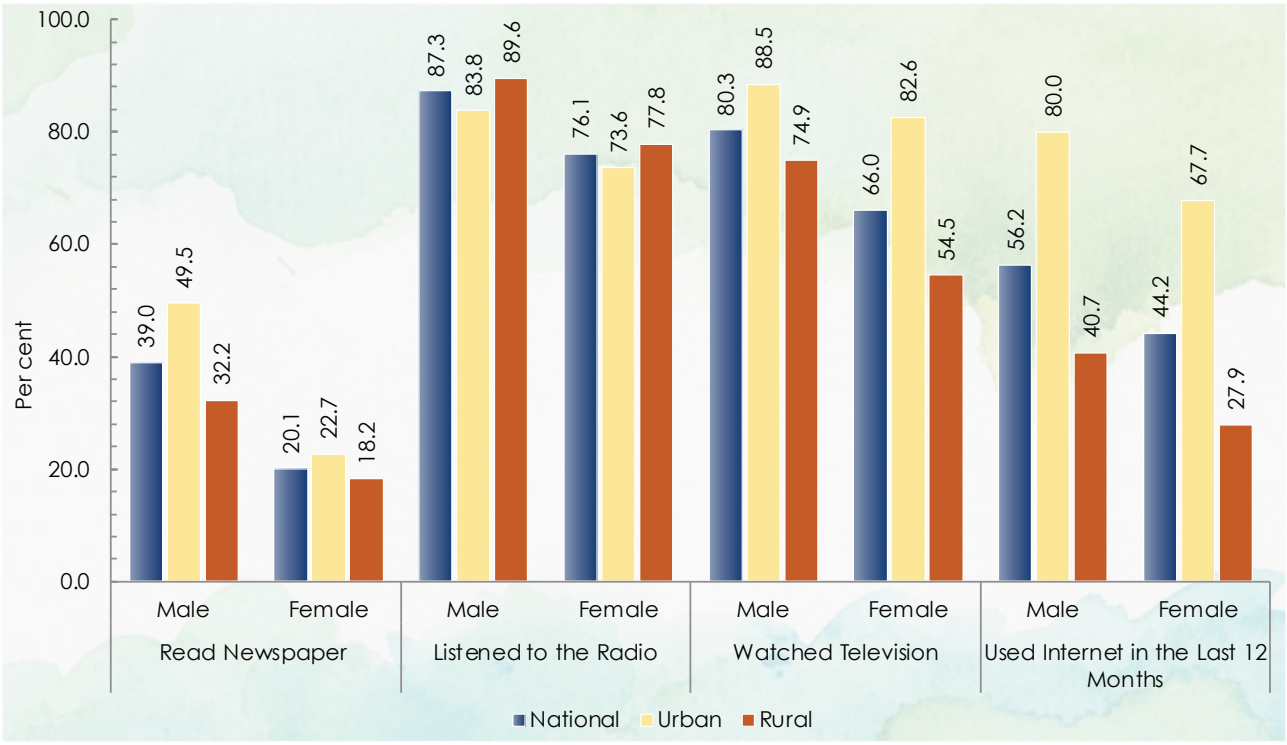


Figure 2.9: Proportion of individual that used ICT Services by Residence

A comparative analysis between the 2014 KDHS and 2022 KDHS indicates that the proportion of the male population aged 15-49 years that read a newspaper or magazine decreased from 62.8 per cent in the 2014 to 39.0 per cent in the 2022 as shown in Figure 2.10. Similarly, for the female population, the proportion decreased from 38.6 per cent in 2014 to 20.1 per cent in 2022.

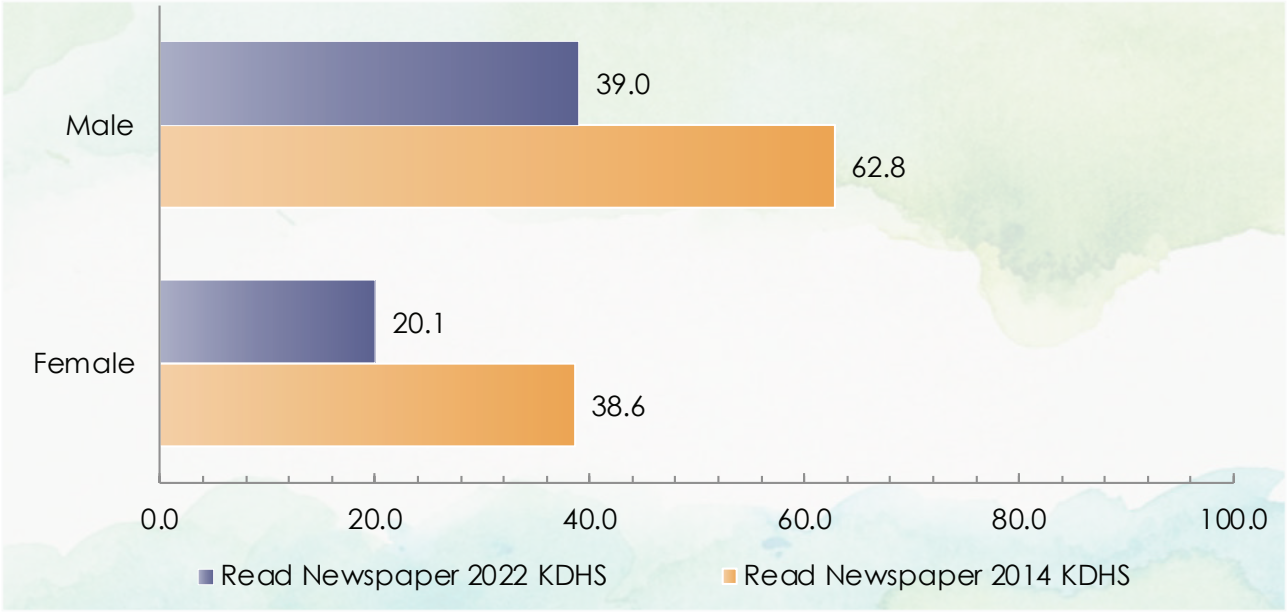


Figure 2.10: Proportion of individuals that read a newspaper, 2014 KDHS and 2022 KDHS

Figure 2.11 shows a comparative analysis of radio listenership and TV viewership for both males and females between 2014 and 2022. The two surveys revealed that radio listenership and TV viewership was higher in males than in females. Radio listenership among the female population decreased from 82.9 per cent in 2014 to 76.1 per cent in 2022. On the other hand, TV viewership among the male and female population increased between the reference period. The increase in TV viewership was attributed to improved access to electricity, increased ownership of TV sets, availability of a variety of content and expansion of Digital Terrestrial Television (DTT) coverage.

Increase in TV viewership attributed to improved access to electricity, increased ownership of TV sets, availability of a variety of content and expansion of DTT coverage.

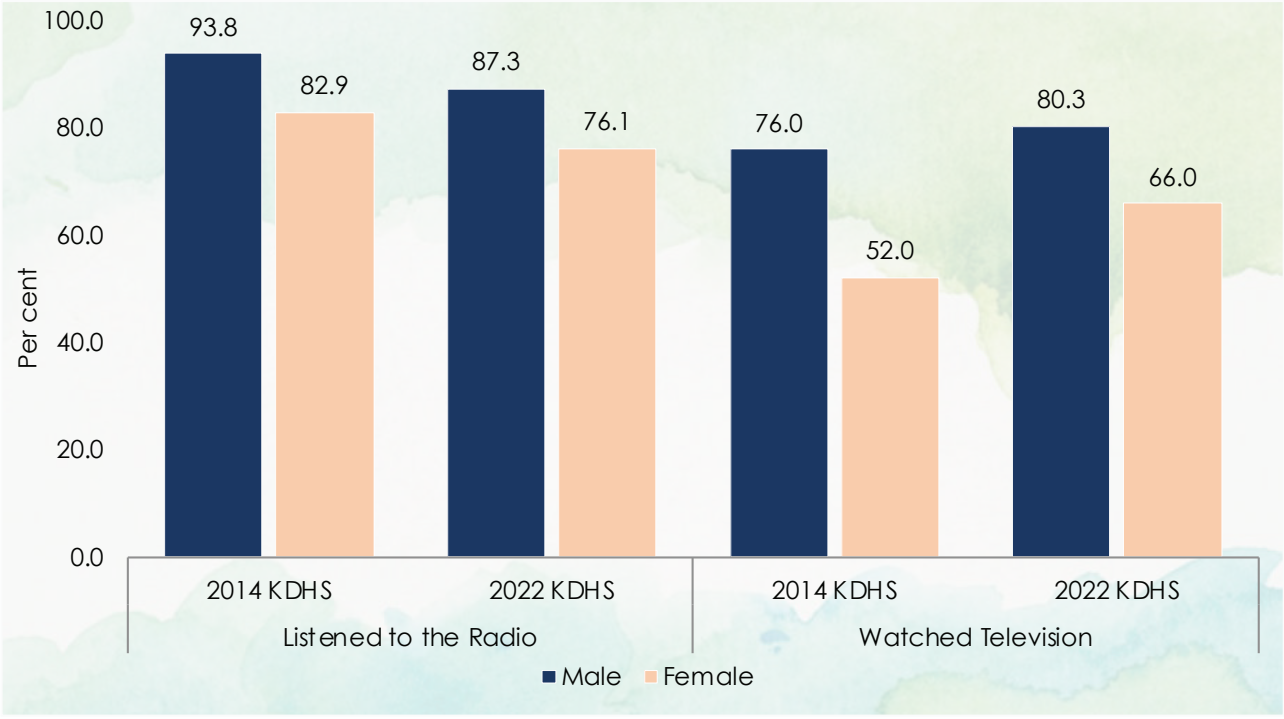
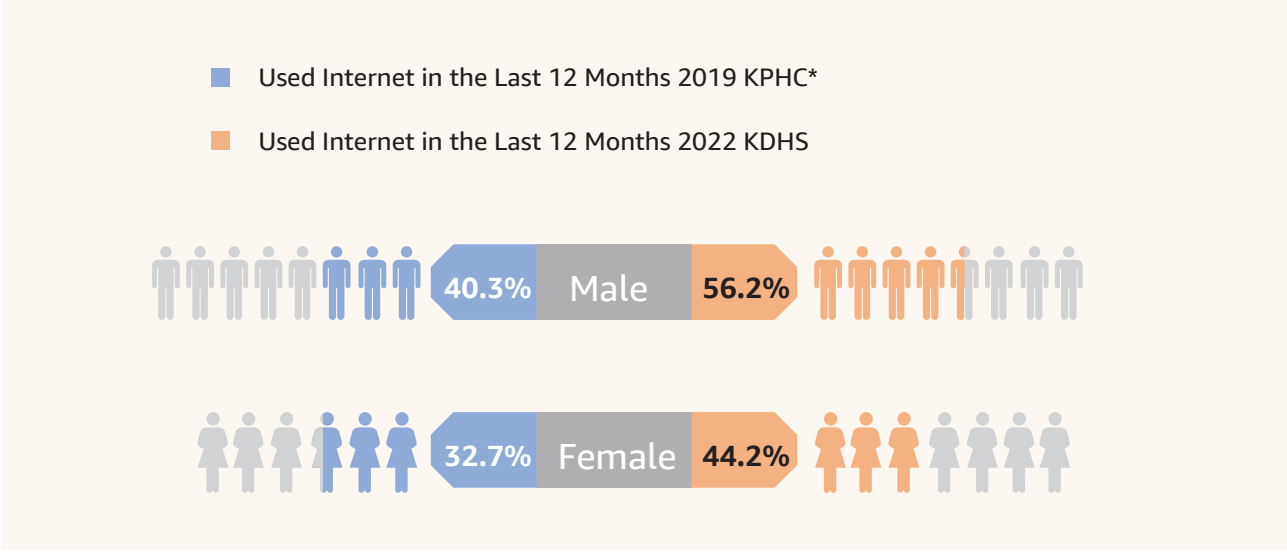


Figure 2.11: Proportion of individuals who listened to the Radio and TV Viewership, 2014 KDHS and 2022 KDHS

As shown in Figure 2.12, in both 2019 KPHC and 2022 KDHS, internet usage for males was higher than that of females. Internet usage among the females was still low despite increasing by 11.5 percentage points from 32.7 per cent in the 2019 to 44.2 per cent in the 2022.



** Proportion of male and female population age 15 - 49 that used internet for the last 3 months*

Figure 2.12: Proportion of individuals that used internet, 2019 KPHC and 2022 KDHS

2.2.2 Usage of ICT Services by Age Group.

Newspaper or magazine readership was the highest among males aged 35-44 at 43.1 per cent while that of their females counterpart was highest among age 15-24 at 22.2 per cent as shown in Table 2.2. Radio listenership was highest across all age groups for both males and females. Television viewership had the highest proportions among males and females age 25-34 at 82.8 per cent and 69.6 per cent, respectively. Similarly, the proportion of population using internet was highest among age group 25-34 for males (70.1%) and females (52.5%).

Table 2.2: Proportion of Individuals who Used ICT Services by Age Group

Age Group	Read Newspaper		Listened to the Radio		Watched Television		Used Internet in the Last 12 Months	
	Male	Female	Male	Female	Male	Female	Male	Female
15-24	33.5	22.2	84.6	74.2	78.0	64.7	52.6	43.9
25-34	42.7	18.3	88.2	77.0	82.8	69.6	70.1	52.5
35-44	43.1	19.2	89.7	77.3	80.7	65.0	50.3	37.9
45-49	42.4	19.8	91.0	77.6	81.1	60.1	38.8	30.2

2.2.3 Usage of ICT Services by Level of Education.

Newspaper readership, television viewership and internet usage was highest among males and females with higher education level. On the contrary, radio listenership was highest among males and females with secondary level of education. Internet usage was highest among the population with higher education level with 95.0 per cent of males and 92.4 per cent of females that used internet in the last 12 months as shown in Figure 2.13. The proportion of males and females that read a newspaper or magazine for population with no education was 0.5 and 0.2 per cent, respectively.

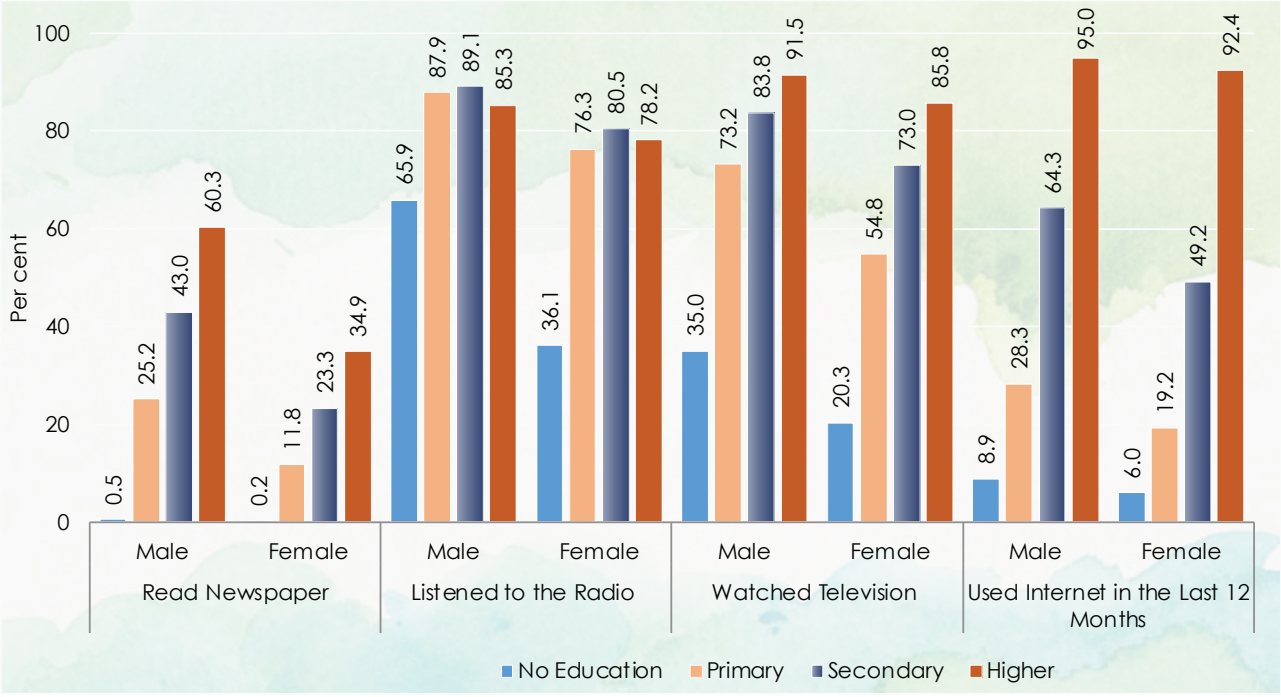
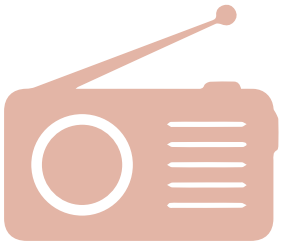


Figure 2.13: Proportion of Individuals that Used ICT Services by Education Level

2.2.4 Usage of ICT Services by Employment Status

Usage of ICT services among males and females was highest for individuals who reported to be employed at the time of survey. Among females who were not employed at the time of the survey, listenership to radio stood at 80.8 per cent compared to those who were employed (79.9%) as shown in Figure 2.14. Similarly, the usage of internet among females who were not employed at the time of the survey was 52.5 per cent compared to females who were employed at the time of survey at 49.7 per cent.



80.8%

Among females who were not employed at the time of the survey, listenership to radio stood at 80.8 per cent compared to those who were employed (79.9%)

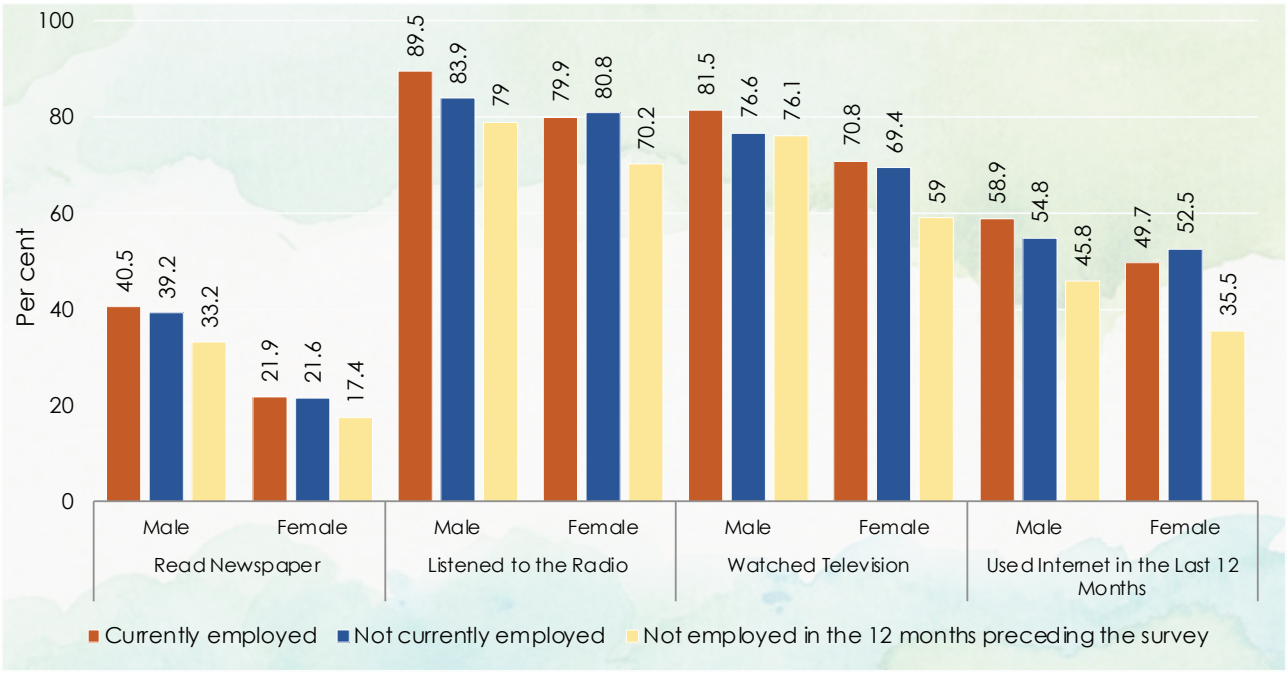


Figure 2.14: Proportion of Individuals who used ICT Services by Employment Status

[1]"Currently employed" is defined as having been engaged in an economic activity in the last 7 days. Includes persons who did not work in the last 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

2.2.5 Usage of ICT Services by Wealth Quintile

Generally, there were disparities in newspaper readership, radio listenership, TV viewership and internet usage among males and females across all the wealth quintiles. Television viewership for the richest quintile was highest at 94.5 per cent in males and 94.7 per cent in females as shown in Table 2.3. The results showed that internet usage increased with increase in wealth. Among males, 21.3 per cent reported to have used the Internet in the last 12 months compared to 6.2 per cent of females in the poorest wealth quintile. On the other hand, 90.5 per cent of males and 82.8 per cent of females in richest quintile had used internet in the last 12 months.

Table 2.3: Proportion of Individuals who used ICT Services by Wealth Quintile

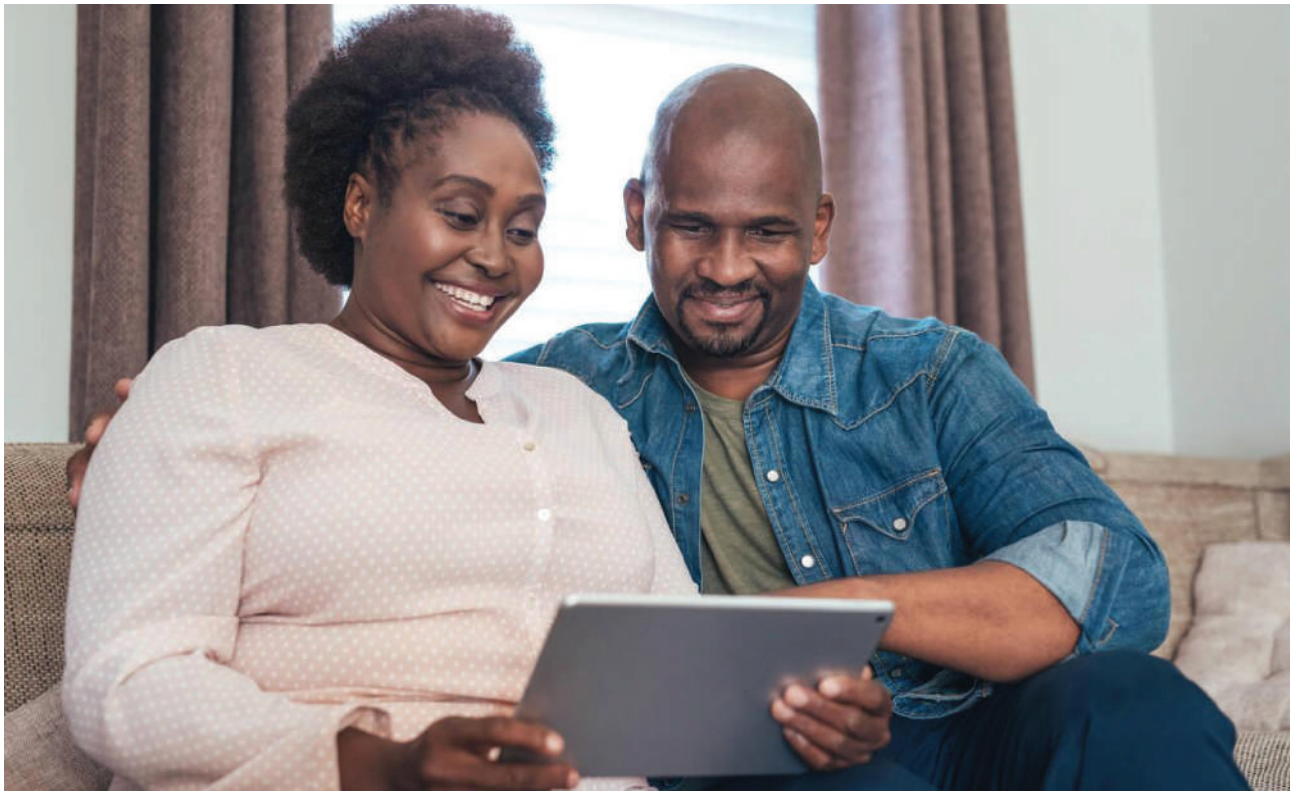
Wealth Quintile	Read Newspaper		Listened to the Radio		Watched Television		Used Internet in the Last 12 Months	
	Male	Female	Male	Female	Male	Female	Male	Female
Poorest	20.2	9.8	82.8	58.7	52.7	19.8	21.3	6.2
Poorer	30.2	16.3	90.2	81.4	70.6	41.1	30.5	17.2
Middle	37.2	20.2	91.1	82.2	82.4	69.2	48.6	34.3
Richer	44.3	20.4	88.2	78.1	90.5	82.4	73.9	56.3
Richest	55.9	28.6	83.3	76.7	94.5	94.7	90.5	82.8

2.2.6 Usage of ICT Services by Marital Status

Table 2.4 shows that radio listenership among males who were widowed at the time of survey was the highest at 98.5 per cent. The highest proportion of females who listened to radio were currently living with their partners (79.3 %). The results also showed that there was higher use of internet by married men (58.9%) or men living with partners (62.8%) compared to their female counterparts. Among divorced women (42.4%) or separated women (47.9%) there was a higher use of internet compared to their male counterparts at 37.8 and 45.5 per cent, respectively.

Table 2.4: Proportion of Individuals who used ICT Services by Marital Status

Marital Status	Read Newspaper		Listened to the Radio		Watched Television		Used internet in the Last 12 Months	
	Male	Female	Male	Female	Male	Female	Male	Female
Never in Union	35.0	25.6	84.2	74.1	79.2	68.9	55.1	47.8
Married	43.9	18.1	90.3	78.0	82.2	64.6	58.9	42.0
Living with Partner	38.1	15.4	86.8	79.3	81.7	68.0	62.8	46.1
Widowed	39.1	12.2	98.5	72.3	72.9	47.5	21.2	26.8
Divorced	22.4	11.9	84.4	59.8	65.8	60.8	37.8	42.4
Separated	39.6	18.4	90.9	73.6	76.9	68.1	45.5	47.9
Total 15-49	39.0	20.1	87.3	76.1	80.3	66.0	56.2	44.2



Section 2.3: Usage of ICT Services by County

2.3.1 Newspaper or Magazine Readership by County

Figure 2.15 presents the top five and bottom five counties for males and females that read newspaper or magazine. Nationally, females that read newspaper or magazine was about a half of the proportion of males that read newspaper or magazine as shown in Figure 2.15. At the county level, Uasin Gishu recorded the highest proportion of males reading newspaper or magazine at 71.9 per cent, while Marsabit county had the lowest newspaper readership at 4.7 per cent. The proportion of females reading newspaper or magazine in Murang'a was the highest at 38.8 per cent, with Mandera county recording the lowest at 0.9 per cent.

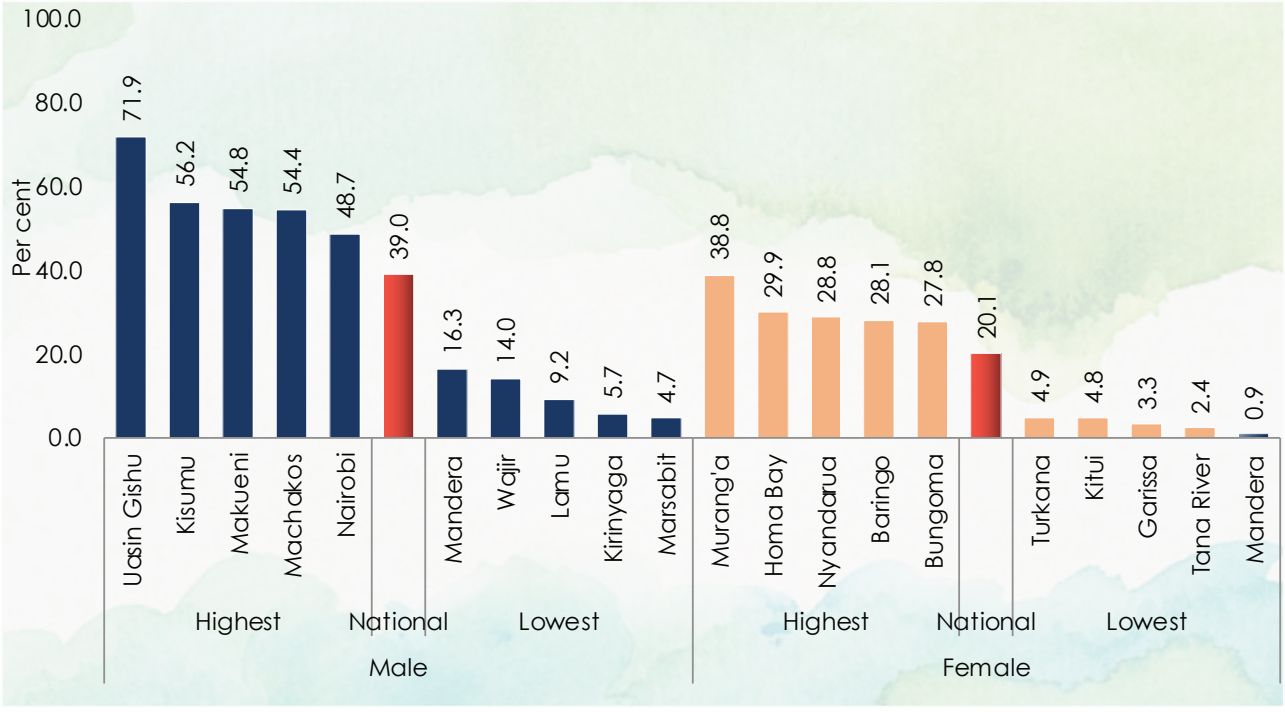


Figure 2.15: Proportion of Individuals that read Newspaper/Magazine by County

2.3.2 Radio Listenership by County

Nationally, about 9 out of 10 men and 8 out of 10 women listened to radio as shown in Figure 16. Analysis by county showed that radio listenership was higher among males compared to females. Machakos county had the highest proportion of males that listened to radio (99.5%) whereas the lowest proportion was reported in Mandera county at 34.8 per cent. Among females Bomet county had the highest proportion at 91.1 per cent compared to Mandera county that reported the lowest proportion at 5.5 per cent. Figure 16 shows the top five and bottom five counties for males and females who listened to radio.

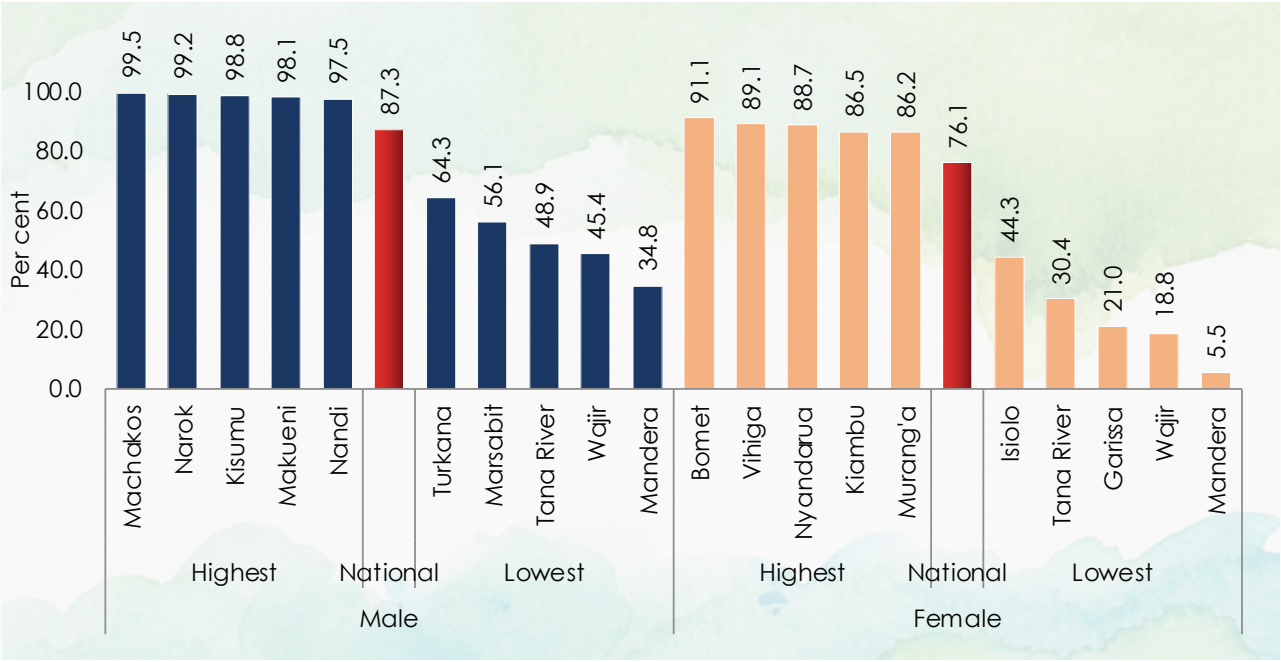


Figure 2.16: Proportion of Individuals who listened to Radio

2.3.3 Television Viewership by County

Uasin Gishu county recorded the highest proportion of males that watched TV (98.2%) whereas Kiambu county reported the highest proportion of females watching TV at 90.5 per cent as shown in Figure 2.17. Turkana, Tana River, Wajir and Mandera counties recorded the smallest proportion of both males and females watching TV. Figure 2.17 presents the top five and bottom five counties for males and females that viewed TV.

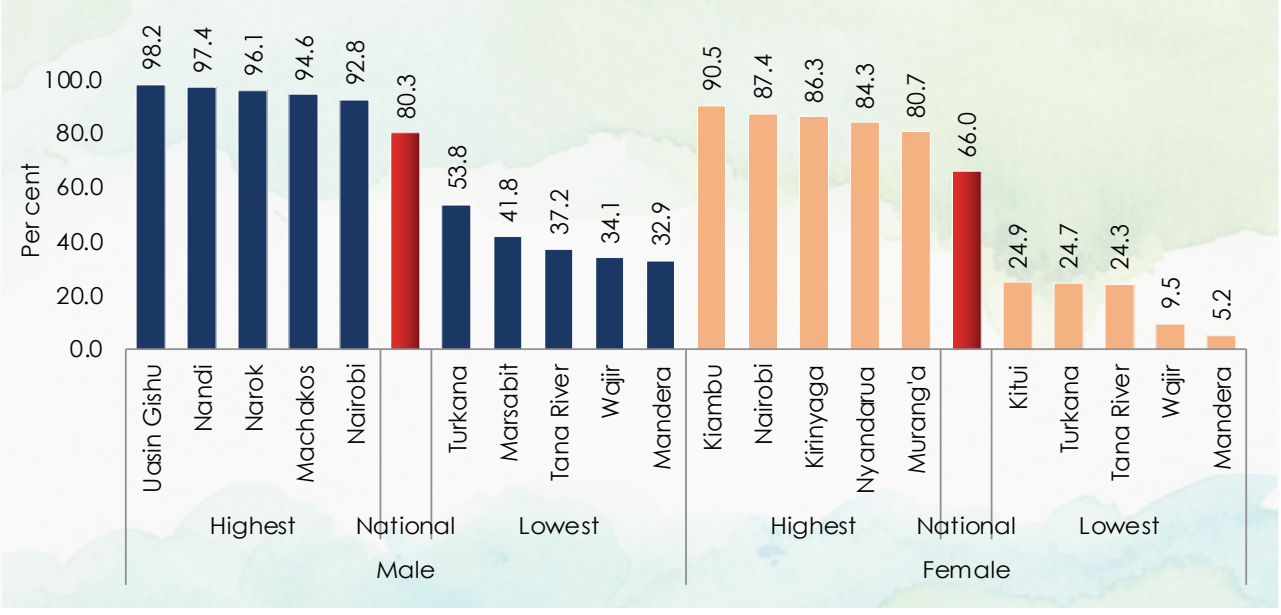


Figure 2.17: Proportion of Individuals that viewed TV by County

2.3.4 Usage of Internet by County

Figure 2.18 provides information on the top five and bottom five counties for males and females that used internet in the 12 months preceding the survey. Nationally, the proportion of males and females that used internet was 56.2 and 44.2 per cent, respectively as shown in Figure 2.18. Nairobi City county had the highest proportion of males and females that used internet at 89.7 and 76.4 per cent, respectively. Kiambu and Uasin Gishu counties were among top five counties for males and females that used internet whereas Mandera, Tana River and Turkana counties were among bottom five counties that used internet.

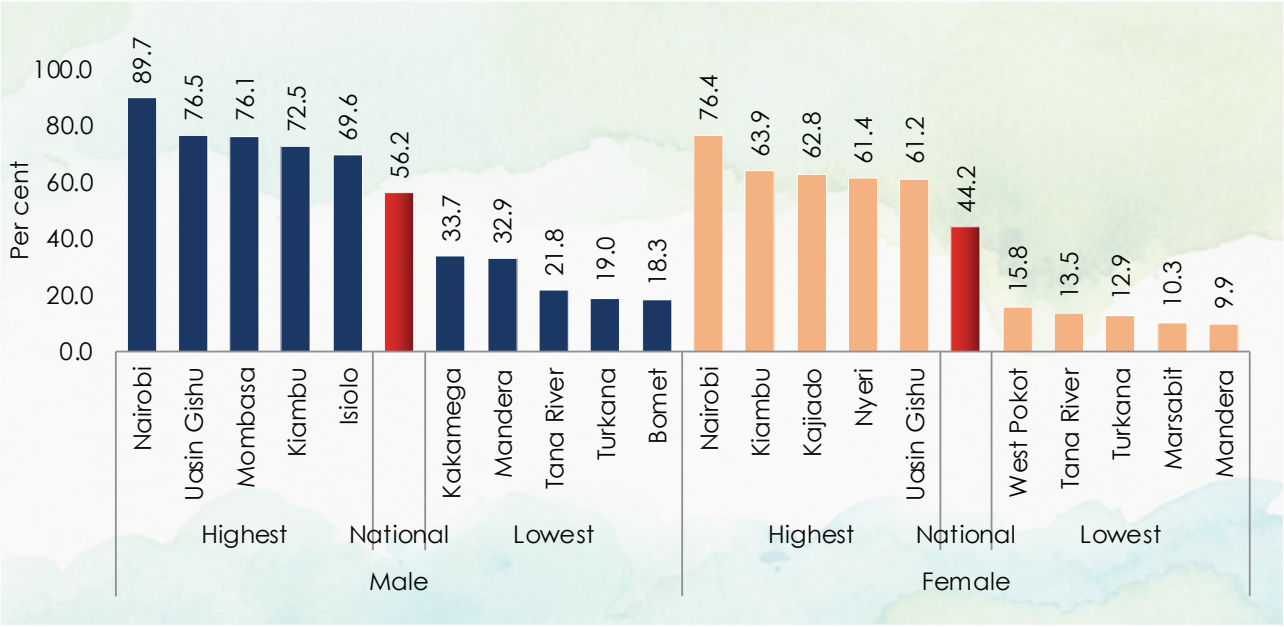


Figure 2.18: Proportion of Individuals that used Internet in the Last 12 Months by County

Section 2.4: ICT Use by Frequency

2.4.1 Frequency of Radio Listenership by Age Group and Residence

Radio is an important medium for information and entertainment, particularly in rural areas and among older age groups as shown in Figure 2.19. Nationally, the percentage of males that listened to the radio at least once a week was 71.1 per cent while that of females was 62.2 per cent. In urban areas, the frequency was 63.0 per cent of males and 61.1 per cent of females. Listenership in rural areas, 76.5 per cent of males and 62.9 per cent of females listened to the radio at least once a week. Analysis by age group showed that those between 35-44 had the highest regular listenership among males (77.3%), while the 25-34 age group had the highest among females (64.2%) as shown in Figure 20.

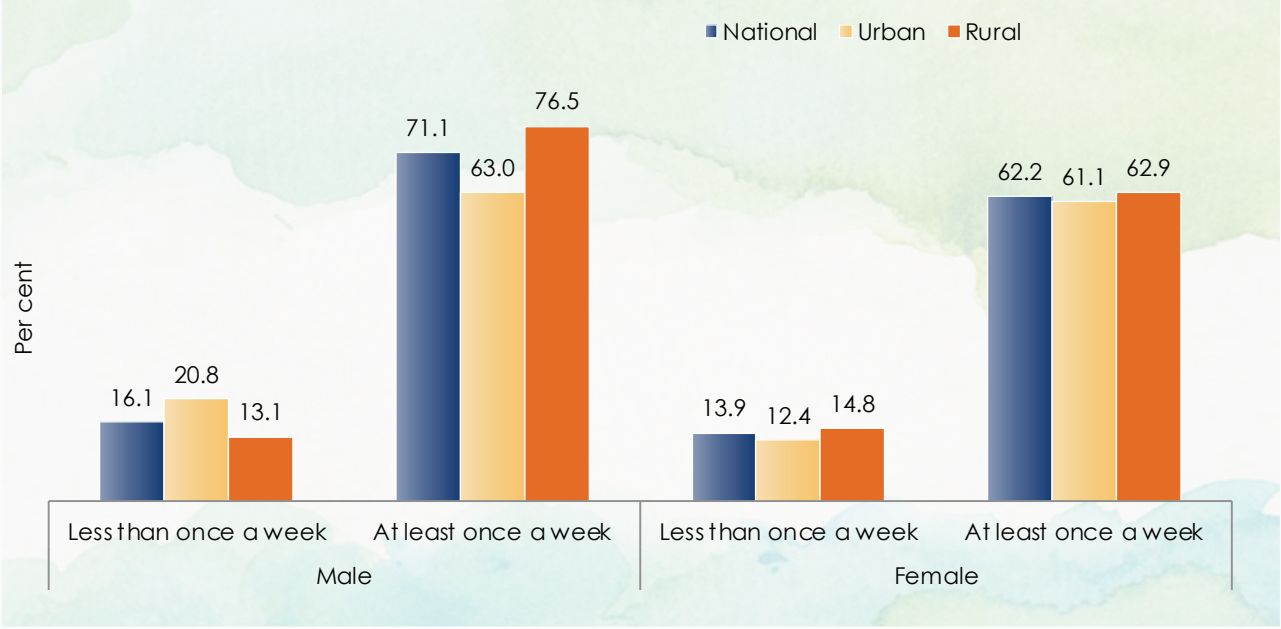


Figure 2.19: Proportion of Individuals who listened to the radio by frequency

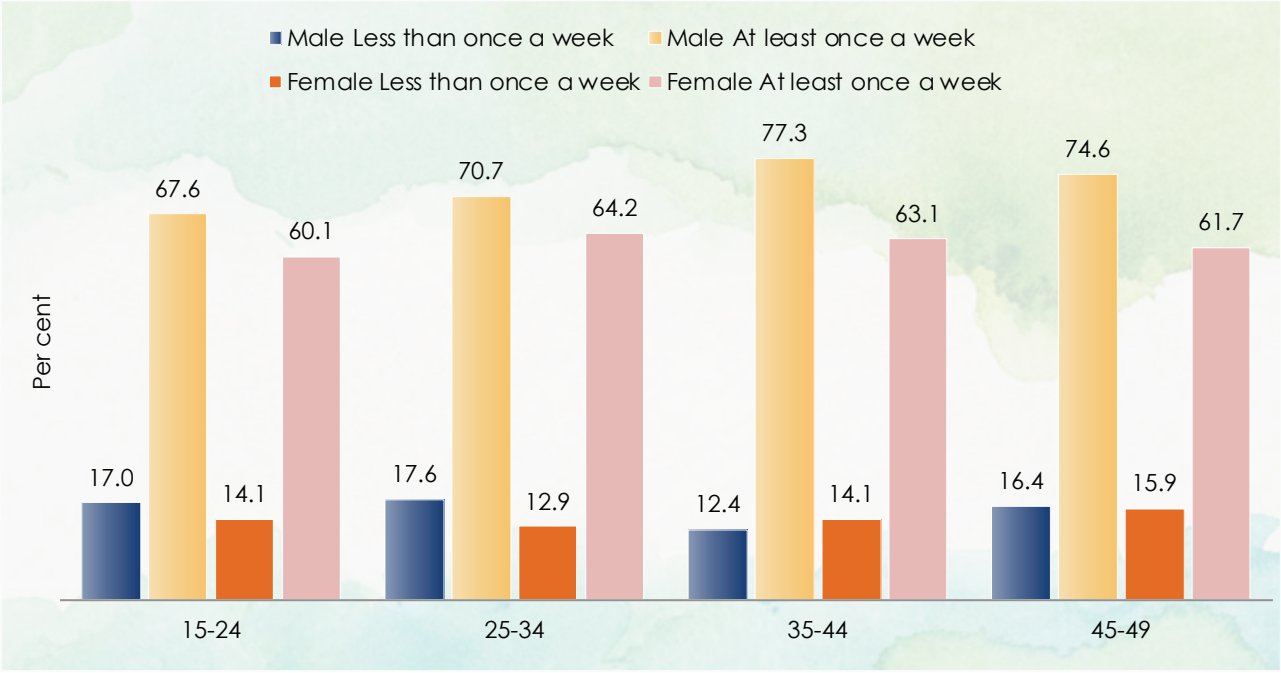


Figure 2.20: Proportion of Individuals who listened to the radio by frequency and age

Frequency of Radio Listenership by Wealth Quintile

Listening to the radio is a prevalent activity among both males and females across various wealth quintiles, with notable differences in frequency. The results showed that radio listenership was less frequent in males and females in the wealthy quintiles compared to the middle and the poor quintiles as shown in Figure 2.21. Among males in the poorest quintile, 65.4 per cent listened to the radio at least once a week, compared to 44.3 per cent of females in the same quintiles. For the middle wealth quintile, the highest proportion of males who listened to radio at least once a week was 78.8 per cent while that of females was 67.3 per cent. Similarly, the proportion of males in the richest quintile was 63.8 per cent, while that of females was 64.7 per cent.

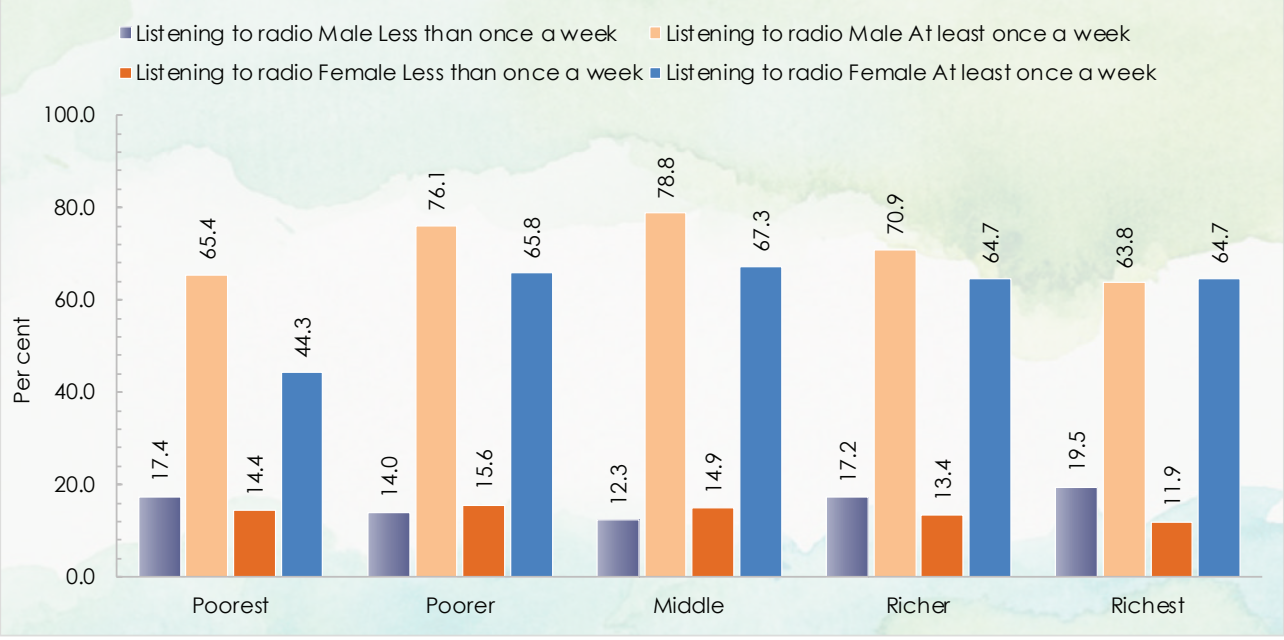


Figure 2.21: Proportion of Individuals that listened to the radio by frequency & wealth quintile

2.4.2 Television Viewership by Frequency

Television remains an important source of information and entertainment, with differences in viewing habits across demographics. The survey results showed that television was frequently watched in urban areas and among younger adults, highlighting the urban-rural divide. Nationally, 59.6 per cent of males and 55.2 per cent of females watched television at least once a week as shown in Figure 2.22. Urban areas had higher regular viewership, with 71.6 per cent of males and 74.1 per cent of females that watched TV at least once a week. In rural areas, 51.7 per cent of males and 42.1 per cent of females watched television at least once a week. Among different age groups, males aged 25-34 had the highest regular viewership at 63.4 per cent, while females in the same age group had a high proportion of 59.7 per cent as shown in Figure 2.23.

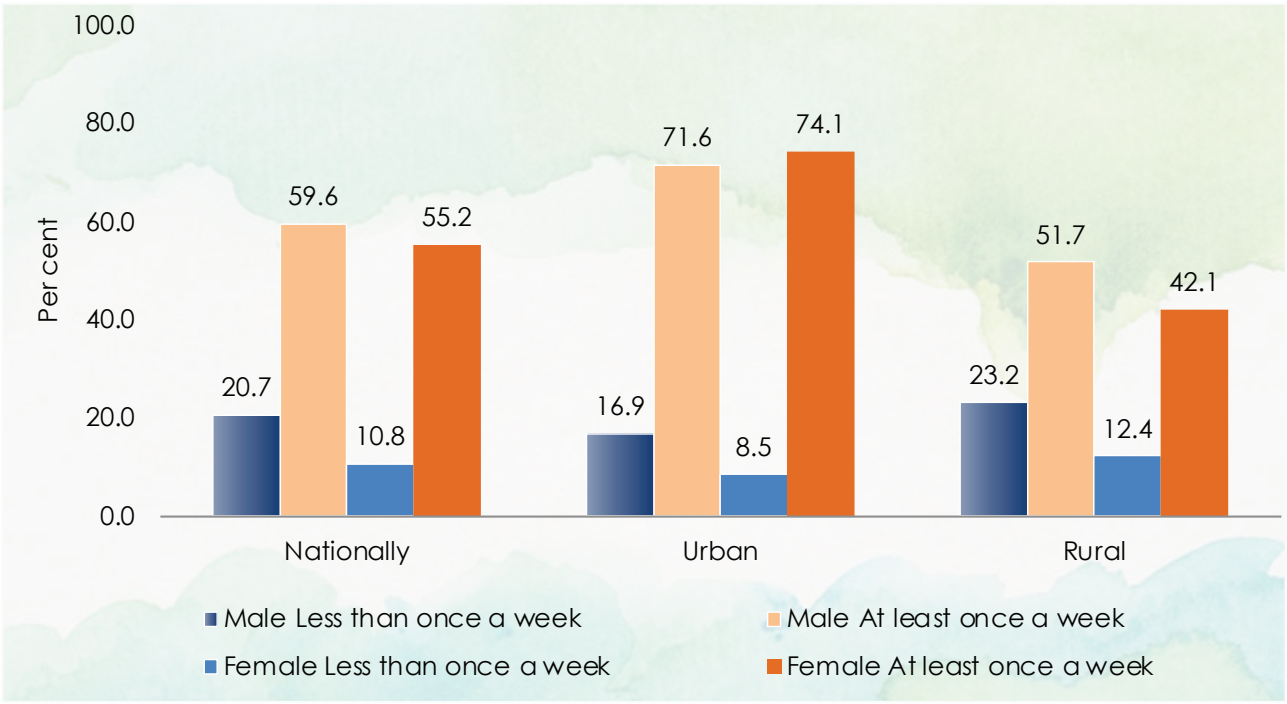


Figure 2.22: Proportion of Individuals watching television by frequency

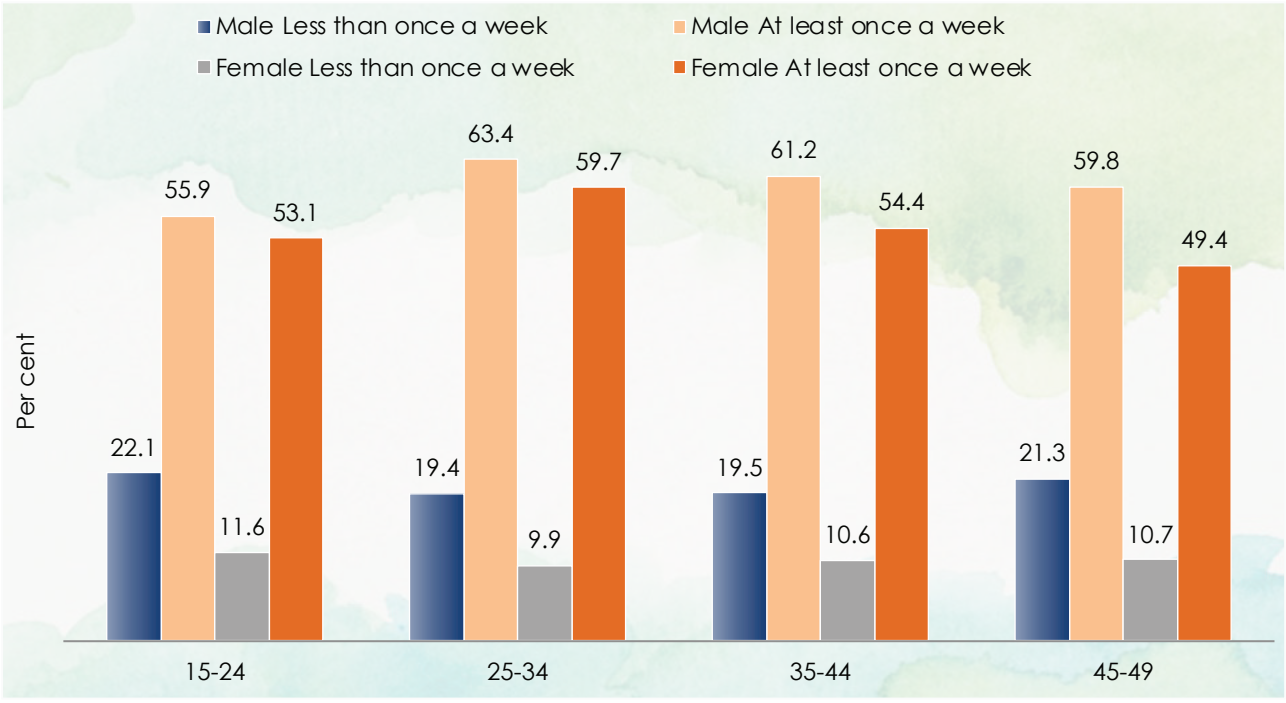


Figure 2.23: Proportion of Individuals watching television by frequency and age

Television viewing habits vary across different wealth quintiles with those in rich quintiles more likely to watch TV than those in poor quintiles. In the poorest quintile, 24.1 per cent of males and 10.1 per cent of females watched television at least once a week as shown in Figure 2.24. In the richest quintile, 85.4 per cent of males and 89.2 per cent of females watched television at least once a week. For the middle quintile, the proportion of males that watched TV at least once week was 60.2 per cent compared to 54.7 per cent for females.

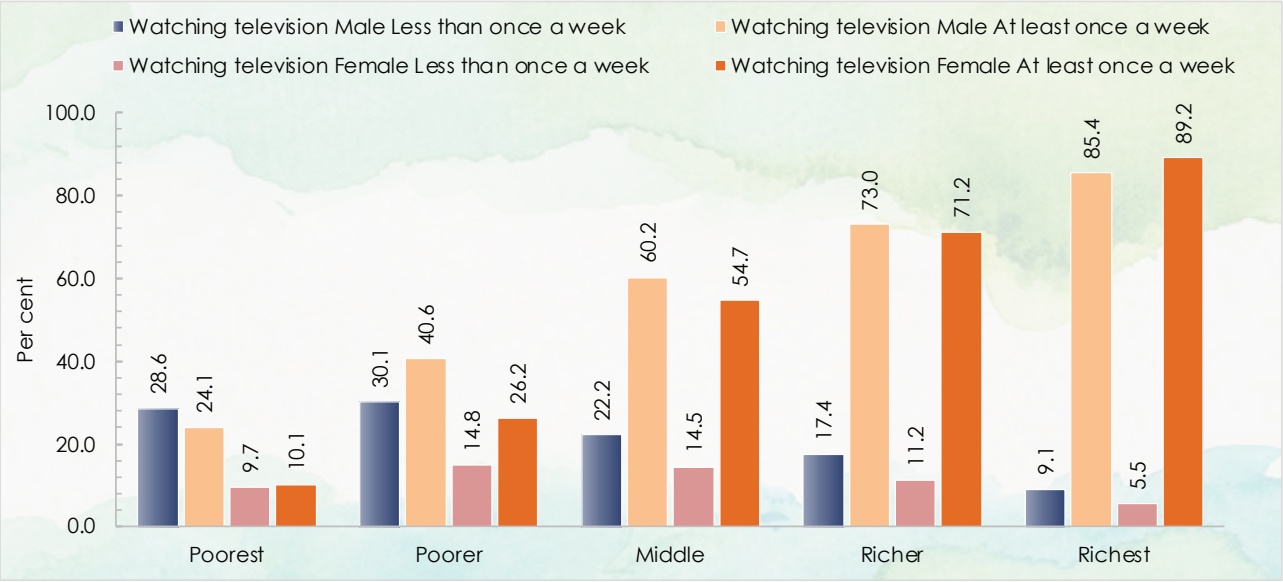


Figure 2.24: Proportion of Individuals that watched television by frequency and wealth quintile

2.4.3 Usage of Internet by Frequency

The internet is a crucial tool for information, communication, and access to services. Nationally, 68.7 per cent of males and 63.5 per cent of females who used internet almost every day as shown in Figure 2.25. In urban areas, 77.0 per cent of males and 69.8 per cent among females used internet almost every day. Conversely, in the rural areas, the proportions of males and females who used internet almost everyday were 58.0 and 53.1 per cent, respectively. The data highlights a clear urban-rural divide in internet usage, with urban residents who used the Internet almost every day at about 73.4 per cent compared to 55.6 per cent of rural residence. Additionally, the proportion of females who used internet at least once a week was relatively higher (23.2%) than that of males (19.3%).

The data highlights a clear urban-rural divide in internet usage, with urban residents who used the Internet almost every day at about 73.4 per cent compared to 55.6 per cent of rural residence.

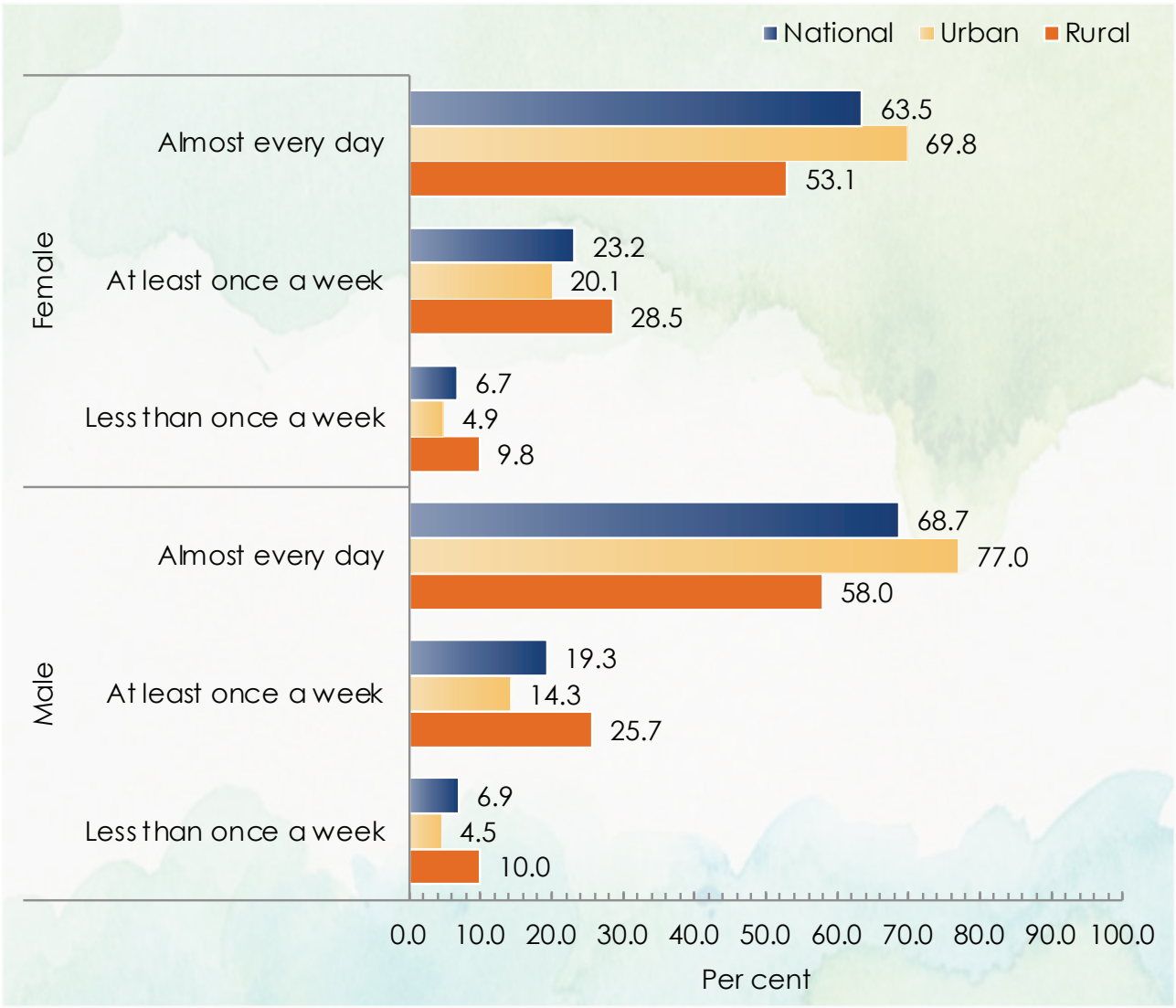


Figure 2.25: Proportion of Individuals that used internet by frequency

Generally, there were no notable differences in internet usage across the various age groups. The proportion of males aged 25-34 who used internet almost every day was 73.9 per cent, the highest rate of daily usage across all age groups as shown in Figure 2.26. Similarly, females in the same age group that used internet almost everyday stood at 65.4 per cent. The proportion of individuals aged 15-24 who used internet almost everyday was 63.3 per cent for males and 62.6 per cent among females. Similarly, those aged 45-49, 68.9 per cent of males and 60.7 per cent of females used internet almost everyday.

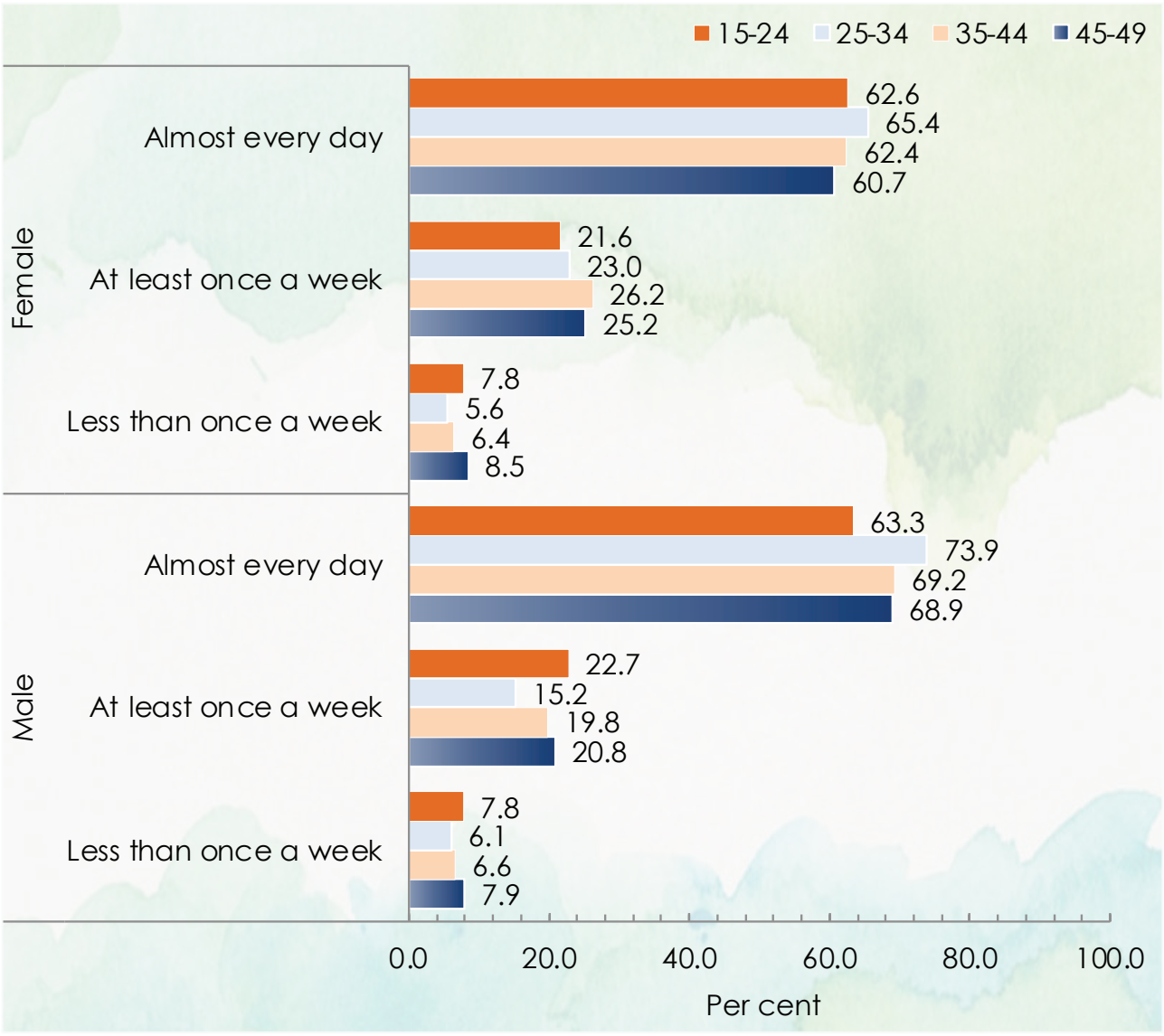


Figure 2.26: Proportion of Individuals that used internet by frequency & age

The frequency of internet usage varied across different wealth quintiles. As shown in Figure 2.27, the richest quintile, 86.3 per cent of males and 76.6 per cent of females used the internet almost every day. In contrast, in the poorest quintile, the proportion for males was 40.4 per cent while that of females was 29.7 per cent. For individuals in middle and richer quintiles, the proportion of males who used internet almost everyday, was 57.2 and 67.0 per cent, while that of females was 47.8 and 58.7 per cent, respectively.

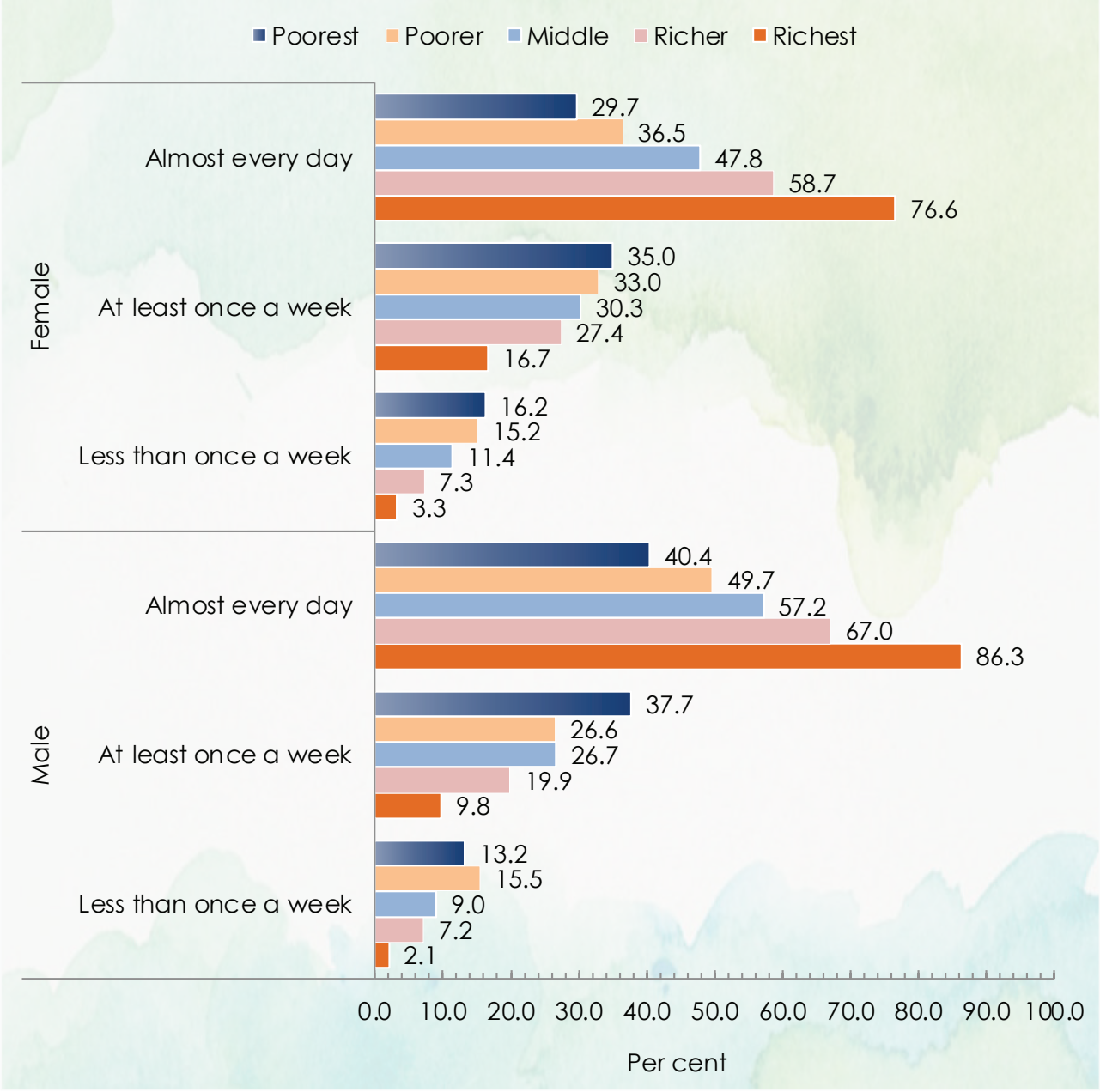


Figure 2.27: Proportion of Individuals that used internet by frequency & wealth quintile

Section 2.5: Sources of Information on Family Planning

Information Communication Technologies (ICTs) have become one of the key tools for enhancing access to information across all spheres of life. The 2022 KDHS survey aimed to establish the proportion of the population that had obtained information on family planning through radio, television, mobile phones, social media and other internet platforms.

2.5.1 Access to Family Planning Information

The proportions of males and females that accessed family planning information through ICTs is shown in Table 2.5. Generally, access to information on family planning through ICTs was higher among males as compared to their female counterparts. Notably, radio was the most used ICT service for accessing family planning information with the proportion of males using it reported at 68.5 per cent and that of females at 30.7 per cent. Mobile phone messaging was the least used ICT service for accessing family planning information at 14.6 per cent for males and 7.2 per cent for females, followed by the Internet at 38.5 per cent for males and 15.9 per cent for females.

Males and females within the age group 25-34 years reported the highest access to family planning information through television, mobile phone messaging, social media platforms and the Internet. Notably, access to family planning information by both rural and urban residents was mainly through radio, with rural population reporting higher access through radio as compared to urban population.

Access to family planning information through social media among urban males (58.3%) and females (24.6%) was more than double that of males (28.2%) and females (10.8%) in rural areas. A similar observation was made among those who accessed the same information through the Internet, with the proportion of males in urban areas was 56.6 per cent and females 24.6 per cent while males in rural areas was at 26.7 per cent and females 9.9 per cent.

Table 2.5: Proportion of Individuals by Source of Family Planning Information

		Radio		Television		Mobile Phone		Social Media		Internet	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Age groups	15-24	57.8	26.4	45.6	23.1	10.2	6.2	35.2	16.8	32.3	15.5
	25-34	75.3	33.3	62.6	28.9	20.7	8.9	53.0	20.4	52.5	19.5
	35-44	76.7	32.8	60.6	26.4	14.6	7.1	36.3	14.2	35.5	13.6
	45-49	76.3	33.7	58.8	23.6	14.8	5.9	26.5	9.3	26.4	9.4
Type of place of residence	Urban	68.4	29.7	64.9	32.6	21.8	8.4	58.3	25.4	56.6	24.6
	Rural	68.6	31.4	48.4	21.0	10.0	6.4	28.2	10.8	26.7	9.9
Total 15-49		**68.5**	**30.7**	**54.9**	**25.7**	**14.6**	**7.2**	**40.0**	**16.8**	**38.5**	**15.9**

2.5.2 Accessing Family Planning Information through ICTs by County

Figure 2.28 provides information on the top five and bottom five counties for males who accessed family planning information through ICT services. At the county level, Machakos county had the highest proportion of males that accessed family planning information through radio at 96.5 per cent, followed by Kericho (93.0%) and Kirinyaga (92.1%). Mandera county reported the least proportion of males (15.5%) that accessed family planning information through Radio, followed by Wajir and Turkana counties at 18.6 and 35.4 per cent, respectively.

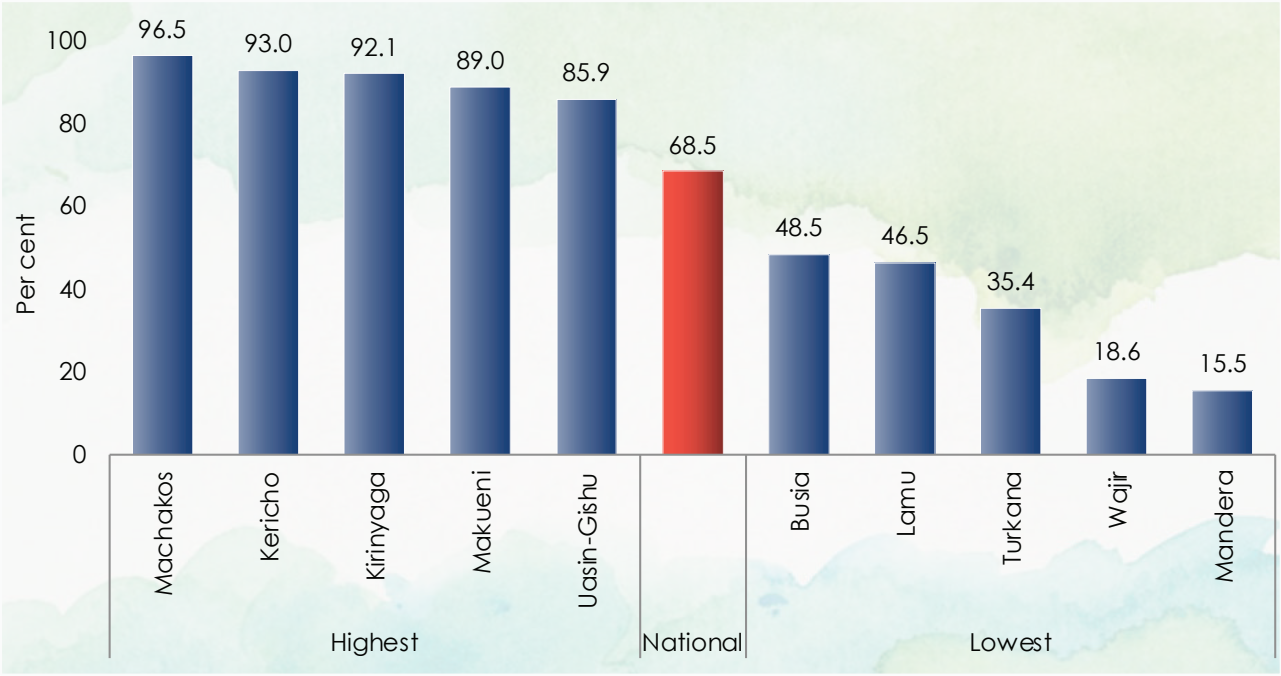


Figure 2.28: Highest and lowest Proportion of Male that accessed family planning information through radio by County

Siaya county led in access to information on family planning through radio among females at 40.7 per cent followed by Kericho (40.0%) and Narok (39.2%) counties. Mandera county had the least access to information on family planning through radio among females at 2.3 per cen. Figure 2.29 provides information on the top five and bottom five counties for females who accessed family planning information through ICT services.

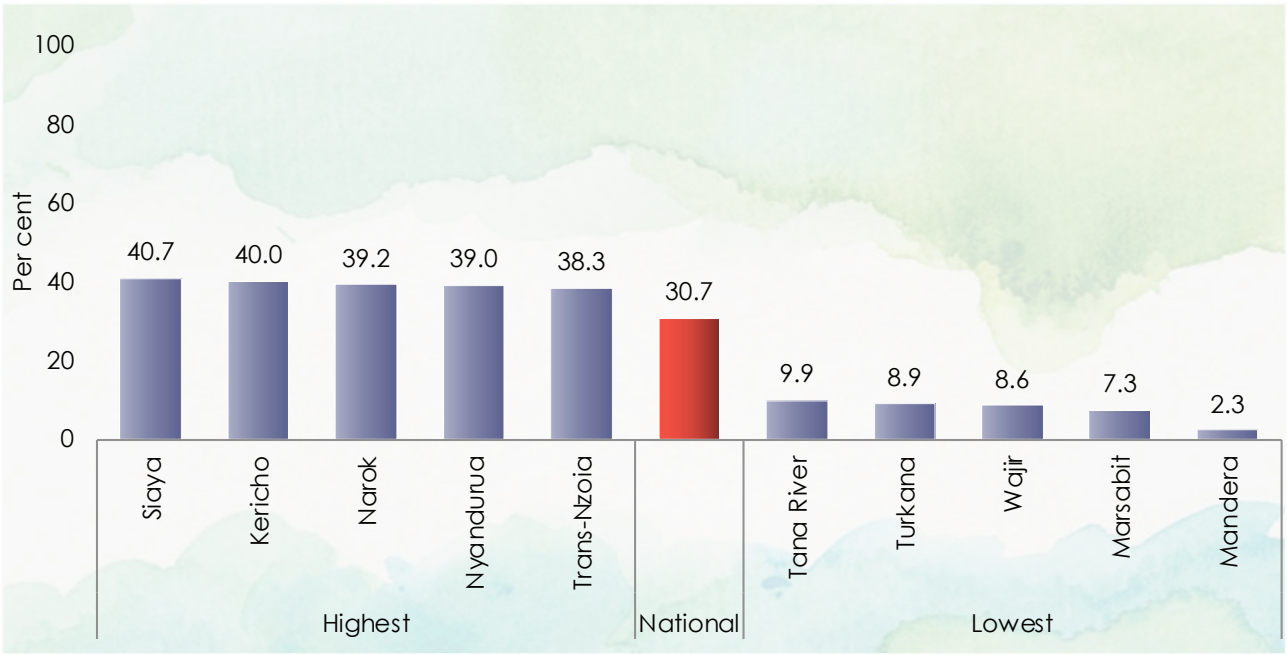


Figure 2.29: Highest and Lowest Proportion of Female that accessed family planning information through radio by County

Access to family planning information through Radio, Television, Mobile phone, social media platforms and the internet in general was higher among males in comparison to their female counterparts. However, there were some exceptions where access to this information through Mobile phones was higher among females than males. Figure 2.30 shows the 13 counties where access to family planning information through Mobile phones was higher among females than males.

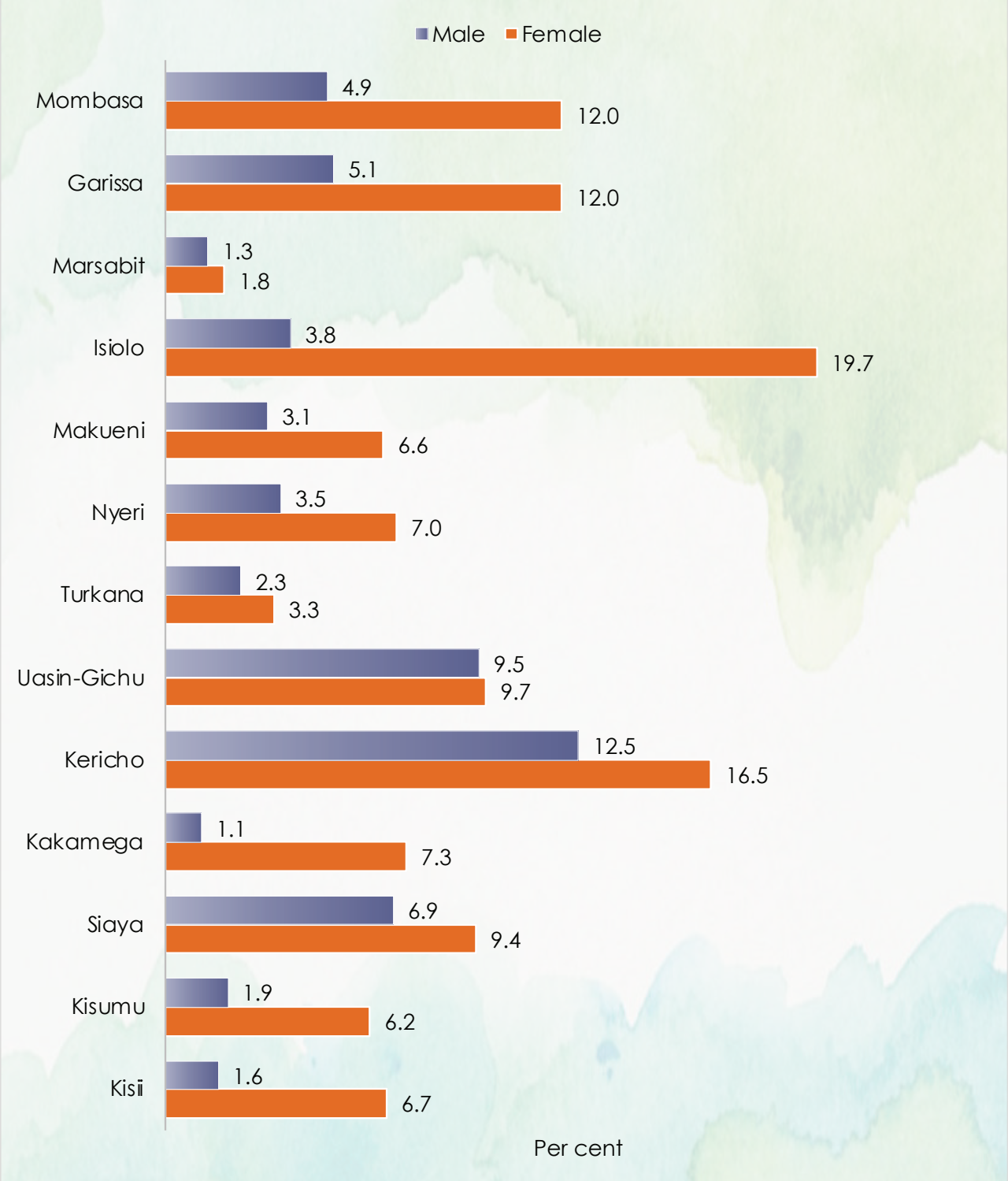


Figure 2.30: Counties with more Females than Males Accessing Family Planning Information through Mobile Phones

2.5.3 Access to Family Planning Information through ICTs, 2014 and 2022 KDHS

Percentage of females aged 15-49 living in urban areas who heard family planning message on radio declined from 80.0 per cent in 2014 to 56.9 per cent in 2022, and those in rural areas dropped from 71.0 per cent to 60.4 per cent as shown in Table 2.6. Similarly, the proportion of those in urban areas who accessed this information through Television was 62.4 per cent in 2022 down from 71.2 per cent in 2014. On the other hand the proportion of the rural population increased from 28.7 per cent to 40.5 per cent in 2022.

Table 2.6: Comparison of females aged 15-49 who heard or saw family planning message

	2014 KDHS			2022 KDHS		
Residence	**Radio**	**Television**	**Number of Females**	**Radio**	**Television**	**Number of Females**
Urban	80.0	71.2	5,929	56.9	62.4	6,850
Rural	71.0	28.7	8,696	60.4	40.5	9,866
National	**74.6**	**46.0**	**14,625**	**59.0**	**49.5**	**16,716**

The proportion of males who received family planning information through Radio and Television declined from 82.3 per cent and 58.0 per cent respectively in 2014 to 68.5 per cent and 54.9 per cent in 2022 as shown in Table 2.7.

Table 2.7: Comparison of Proportion of males who received family planning information

	2014 KDHS			2022 KDHS		
Residence	**Radio**	**Television**	**Number of Males**	**Radio**	**Television**	**Number of Males**
Urban	85.9	76.9	5,300	68.4	64.9	5,382
Rural	79.5	43.1	6,762	68.6	48.4	8,270
National	**82.3**	**58.0**	**12,062**	**68.5**	**54.9**	**13,652**

Section 2.6: Gender Based Violence (GBV) in Relation to ICTs

This section provides information of those who experienced any form of Gender-Based Violence (GBV) in the 12 months preceding the survey and use of various Information and Communication Technology (ICT) services. Gender-based violence is any act of violence that results in physical, sexual, economic, psychological harm, or suffering to women, girls, men, and boys, as well as threats of such acts, coercion, or the arbitrary deprivation of liberty.

Table 2.8 provides details on individuals who experienced any form of GBV in relation to ownership of mobile phones and usage of ICT services. Nationally, 36.5 per cent of males who experienced any form of GBV and read newspapers or magazines compared to 19.0 per cent of females. The proportion of males (44.5%) in urban areas who read newspapers or magazines was about twice that of females (21.9%). Similarly, the proportion among males was 30.3 per cent while that of females was 17.2 per cent in rural areas.

The proportion of males and females who experienced

any form of GBV and reported to have watched TV nationally was 77.2 and 65.2 per cent, respectively. A higher proportion of males in urban areas (84.0%) watched television compared to their female counterparts (81.1%). In rural areas, 71.9 per cent of males watched television compared to 55.6 per cent among female who experienced GBV.

Nationally, internet use in the 12 months preceding the survey was higher among males (61.0%) who experienced GBV compared to females (40.9%). In urban areas, a higher proportion of males (82.6%) used the Internet compared to females (63.5%). A similar observation was made in the rural areas with utilization of internet at 44.3 per cent and 27.2 per cent among males and females, respectively.

Nationally, mobile phone ownership among the proportion of males and females that experienced any form of GBV was 87.2 and 81.0 per cent, respectively. In urban areas, mobile phone ownership was 93.1 and 90.8 per cent among males and females, respectively, while in rural areas it was 82.6 per cent and 75.0 per cent, respectively.

Gender-based violence is any act of violence that results in physical, sexual, economic, psychological harm, or suffering to women, girls, men, and boys, as well as threats of such acts, coercion, or the arbitrary deprivation of liberty.

Table 2.8: Proportion of Males and Females that Experienced Any Form of GBV by ICTs

		Read Newspaper		Listened to the Radio		Watched Television		Used Internet in the Last 12 Months		Owned Mobile Phone		Owned Smartphone	
		Female (%)	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)
National	15-49	19.0	36.5	78.7	88.5	65.2	77.2	40.9	61.0	81.0	87.2	39.2	51.9
Type of Place of Residence	Urban	21.9	44.5	75.7	85.8	81.1	84.0	63.5	82.6	90.8	93.1	59.1	72.1
	Rural	17.2	30.3	80.6	90.6	55.6	71.9	27.2	44.3	75.0	82.6	27.1	36.3
Age Groups	15-24	21.1	31.2	78.3	90.5	67.0	79.4	46.8	72.3	63.6	79.9	37.0	58.7
	25-34	16.1	36.7	78.8	87.1	66.3	74.8	45.1	69.2	87.2	90.8	45.0	58.6
	35-44	19.7	41.1	79.8	87.6	63.3	78.3	34.3	47.5	88.0	88.5	36.6	43.5
	45-49	21.4	36.8	76.8	91.1	61.3	76.1	27.2	39.4	89.0	90.8	31.8	33.8
Highest Education Level	No education	0.5	0.0	44.2	86.3	22.6	52.9	3.5	7.5	60.9	79.1	8.6	9.1
	Primary	10.9	23.8	79.5	90.4	55.4	72.5	18.7	36.4	76.7	79.9	21.0	28.2
	Secondary	23.1	45.5	82.0	91.0	73.4	84.7	49.0	71.6	81.0	89.3	43.1	59.2
	Higher	37.1	48.3	80.1	80.4	86.1	75.0	93.7	95.0	98.4	98.3	88.5	89.6
Wealth Index Combined	Poorest	9.4	20.1	65.2	80.4	23.0	53.4	6.3	21.7	55.3	70.7	6.0	16.1
	Poorer	16.6	26.8	83.0	92.0	41.5	68.4	16.3	31.1	73.5	77.4	16.2	24.9
	Middle	18.1	38.7	82.8	93.0	69.7	79.5	34.2	56.7	82.5	86.8	32.8	51.7
	Richer	19.0	43.3	80.2	93.0	83.1	88.3	55.8	81.3	89.5	94.5	52.3	62.8
	Richest	29.3	45.6	79.7	80.9	94.9	84.8	79.2	93.0	96.4	98.3	76.7	87.1

CHAPTER

03

Household Characteristics and Information and Communication Technologies

This chapter explores the relationships between household characteristics and the ownership of ICT devices and internet usage presented based on place of residence, counties, and wealth quintiles. Sections within the chapter delve into the impact of electricity connectivity, household headship, household composition, disabilities, and health insurance.

Section 3.1: Ownership of ICT Devices and Use of Internet

The 2022 KDHS dataset contained data on ownership of ICTs including radio, television, fixed-line telephone, computer, DVD player, Cassette/CD player, mobile phone and use of internet. The analysis showed that there remains a digital divide between urban and rural communities regarding ownership of ICT devices and internet usage.

3.1.1 Ownership of ICT Devices and Use of Internet by Residence

Nationally, at household level ownership of mobile phone (93.5%) was the most common among the ICT devices followed by radio at 65.8 per cent as shown in Figure 3.1. At least 50.1 per cent of the households had a television, and 10.7 per cent had a computer. Fixed-line telephones are nearly obsolete, with just 2.0 per cent ownership. Urban households had 97.4 per cent mobile phone ownership, 71.2 per cent owning radio, and 67.6 per cent having television. On the other hand, ownership of ICT devices by households in the rural areas stood at 90.9 per cent for mobile phone, 62.1 per cent radio, and 38.2 per cent television. Computers were more common in urban areas at 20.6 per cent, compared to 4.1 per cent in rural areas, highlighting a digital divide. Internet usage also varied widely, with 36.1 per cent of at least one member of an urban household using the Internet compared to 15.4 per cent in rural areas.

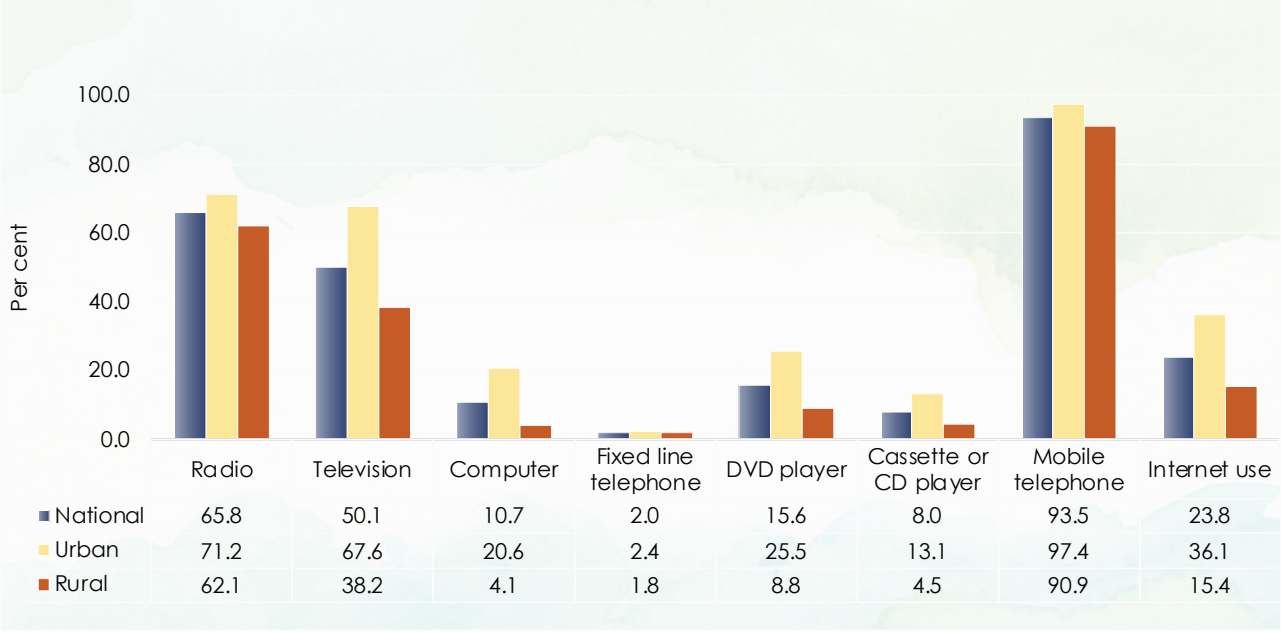
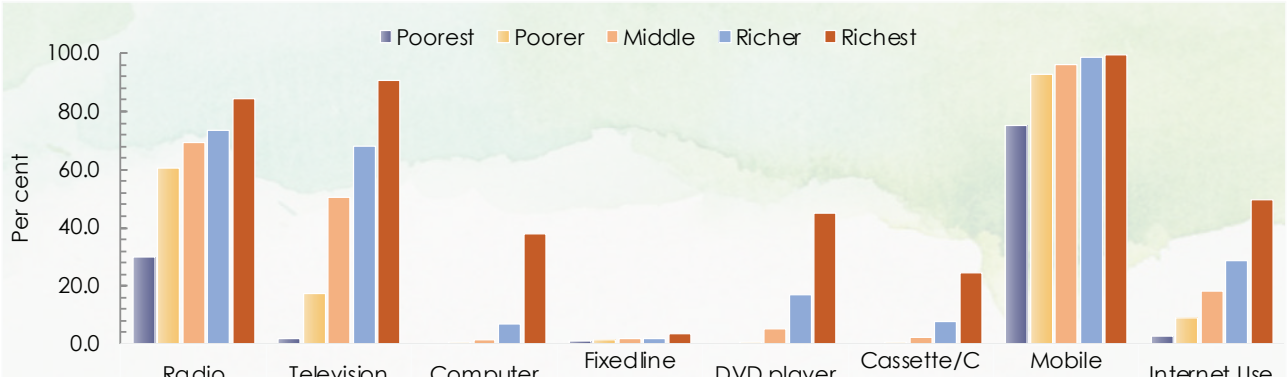


Figure 3.1: Proportion of Households that owned ICT devices and used internet by residence

3.1.2 Ownership of ICT Devices and Use of Internet by Wealth Quintile

Analysis by wealth quintile revealed disparity in ICT device ownership and internet usage by at least one member of the household. Those in the richest quintile predominantly own ICT devices and use the internet, while those in the poorest quintile are the least likely to own such devices and use the internet, as shown in Figure 3.2. Among households in the richest quintile, 84.5 per cent owned radios, 90.6 per cent had televisions, 38.0 per cent owned computers, and 49.6 per cent used the internet. ON the other hand, households in the poorest quintile, 29.8 per cent owned a radio, 1.9 per cent had a television, 0.2 per cent had a computer, and 2.8 per cent used the internet.



	Radio	Television	Computer	Fixedline telephone	DVD player	Cassette/CD player	Mobile Phone	Internet Use
Poorest	29.8	1.9	0.2	0.9	0.3	0.2	75.3	2.8
Poorer	60.4	17.4	0.5	1.5	0.8	0.5	92.9	9.0
Middle	69.4	50.6	1.3	1.8	5.1	2.2	96.3	18.1
Richer	73.6	67.9	7.1	1.7	16.9	7.7	98.4	28.8
Richest	84.5	90.6	38.0	3.7	45.1	24.4	99.5	49.6

Figure 3.2: Proportion of Households that owned ICT devices and used Internet by Wealth Quintile

3.1.3 Household ICT Device Ownership and Internet Usage, 2014 & 2022 KDHS and 2019 KPHC

A comparative analysis between 2014 & 2022 KDHS and 2019 KPHC revealed variances in ICT device uptake across the years. Nationally, radio ownership increased from 62.7 per cent in 2014 to 65.8 per cent in 2022 as shown in Table 3.1. Television ownership increased from 27.4 per cent in 2014 to 38.8 per cent in 2019, and 50.1 per cent in 2022. The uptake of computers remained low at 10.7 per cent in 2022 from 8.8 per cent in 2019.

Table 3.1: Proportion of Households that owned ICTs devices (2014, 2019, 2022)

ICT Devices	2014 KDHS			2019 Census			2022 KDHS		
	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural
Mobile telephone	81.6	91.1	75.8	90.4	96.2	86.7	93.5	97.4	90.9
Radio	62.7	69.6	58.5	+	+	+	65.8	71.2	62.1
Television	27.4	45.6	16.1	38.8	60.6	25.1	50.1	67.6	38.2
Computer	..	..	..	8.8	18.0	3.0	10.7	20.6	4.1
DVD player	16.9	31.8	7.8	..	..	..	15.6	25.5	8.8
Cassette or CD player	9.3	16.2	5.0	..	..	..	8.0	13.1	4.5

.. Data not available

+ 2019 KPHC data not comparable with DHS data

Section 3.2: Households connected to electricity by Ownership of ICT Devices and Internet Usage

This section examines the relationship between electricity connectivity and the ownership of ICT devices, as well as internet usage, in households. It explores how access to electricity influences the adoption of technology and digital services. By analyzing these patterns, the aim is to understand the impact of electricity access on ICT device ownership and internet use, highlighting differences between households with and without electricity. This analysis provides insights into the role of electricity in bridging the digital divide and enhancing access to ICT resources.

This section examines the relationship between electricity connectivity and the ownership of ICT devices, as well as internet usage, in households.

3.2.1 Connectivity to Electricity Versus ICT Device Ownership and Internet usage

Connection to electricity is a key driver for uptake of ICTs as evident from the analysis where households with reliable source of power reported high ownership of radio, TV, computer and internet usage as compared to those without power. Nationally, 97.6 per cent of households with electricity owned mobile phones, 70.9 per cent and 74.0 per cent owned TV, 17.6 per cent owned computer and radio, respectively as presented in Figure 3.3. The proportion of households without electricity reported 88.0 per cent mobile phone ownership, 21.6 per cent owned TV, 1.4 per cent owned computer and 54.5 per cent owned radio. Households with connected to electricity (33.5%) reported high internet usage compared to those not connected to electricity (10.4%).

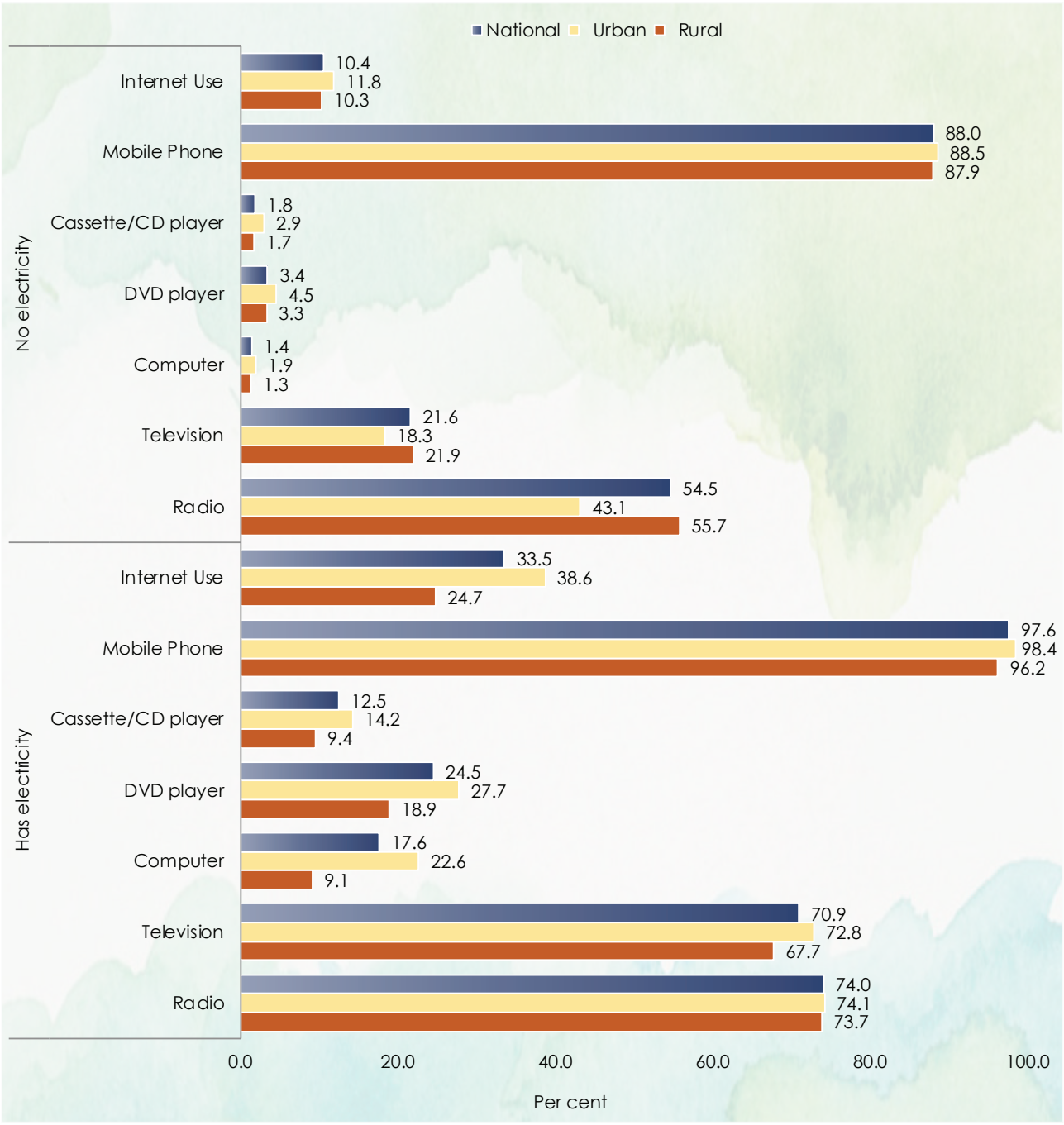


Figure 3.3: Proportion of Households with electricity connectivity by Ownership of ICT devices and internet usage

3.2.2 Connectivity to Electricity Versus ICT Device Ownership and Internet usage, 2015/16 KIHBS, 2022 KDHS

The analysis showed there was significant increases in uptake of TV and mobile phone between 2016 and 2022. Nationally, television ownership rose from 66.6 per cent in 2016 to 70.9 per cent in 2022 while mobile phone ownership increased from 74.2 per cent in 2016 to 97.6 per cent in 2022 as shown in Figure 3.4.

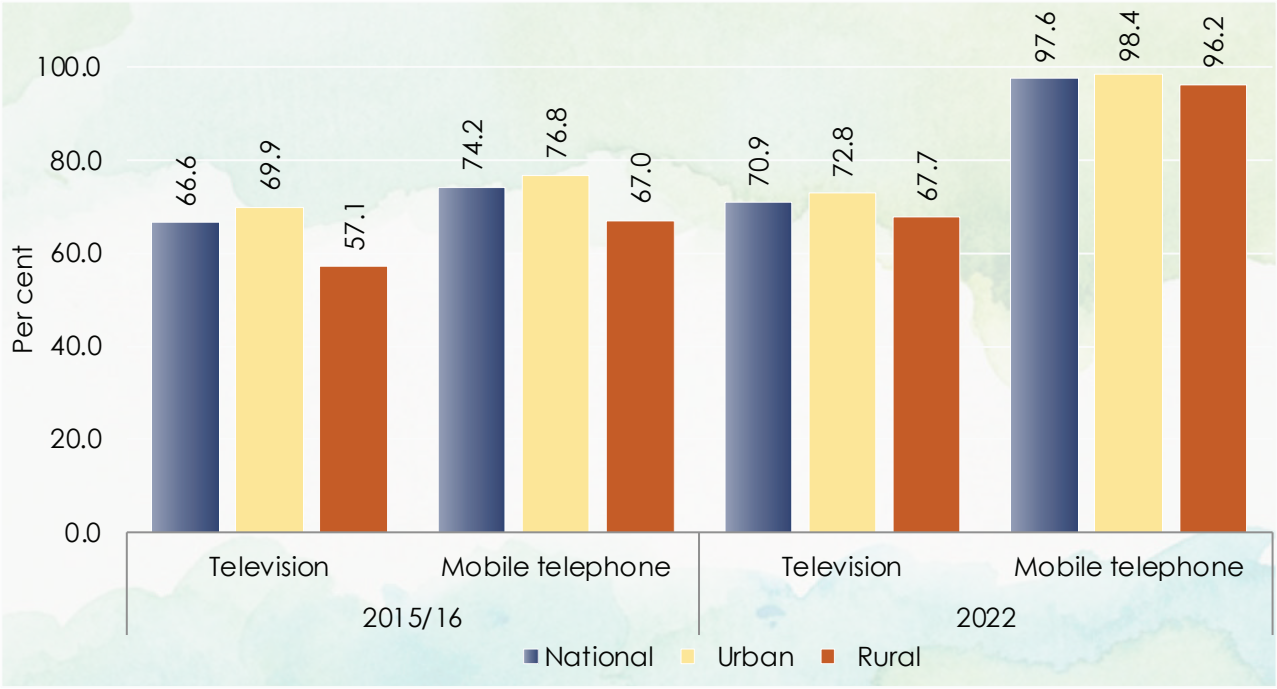


Figure 3.4: Proportion of households with electricity by ownership of ICT devices (2015/16, 2022)

Section 3.3: Household Composition in relation to Uptake of ICTs

In this section, households are categorized into two groups: those with children aged 15 years and below, and those without children aged 15 years and below. The analysis aims to highlight the difference between the proportions of the two categories of household in relation to ownership of ICT devices and internet use.

3.3.1 Household Composition by Type of ICT Devices Owned and Internet Usage

As shown in Figure 3.5, there were notable disparities in ownership of ICT devices between the two categories of households. Nationally, households with children under 15 years had a higher mobile phone ownership (94.6%) compared to those without (91.6%). Television ownership was also higher in households with children (53.4%) compared to those without (44.3%).

In urban areas, households with children under 15 years had higher ownership of ICT devices compared to households without children except for ownership of computers. In rural areas, households with children under 15 years had slightly higher ownership of radios and mobile phones compared to those without children. However, television ownership was slightly higher in households with children compared to those without. Computer ownership was low in both categories of household, with 3.4 per cent in households with children and 5.5 per cent in those without. Internet usage was higher in households with children (42.6 %) compared to those without (34.8%).

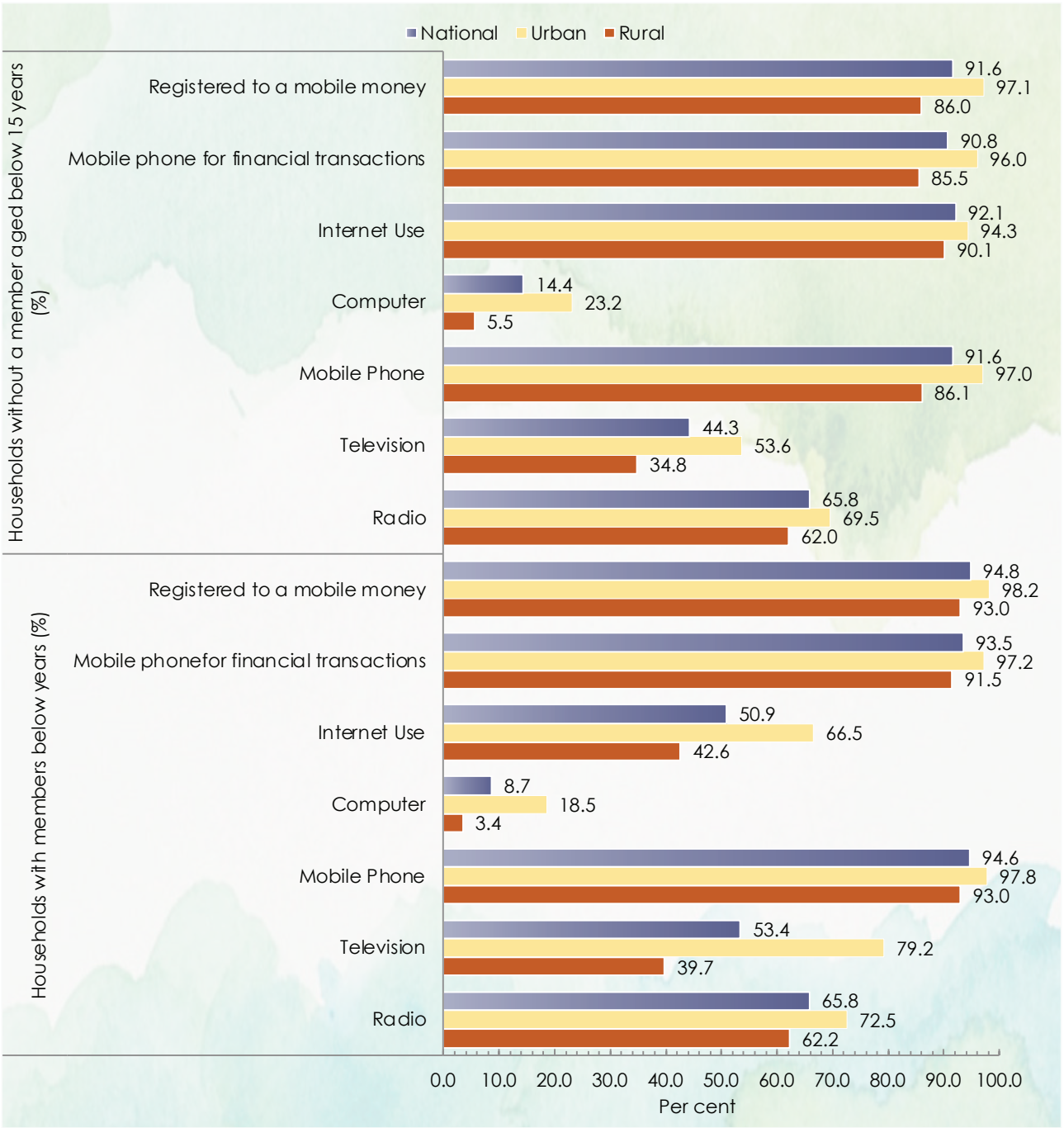


Figure 3.5: Proportion of Households with children under 15 years and those without in Relation to Usage of Internet and ICT Device Ownership

3.3.2 Household Composition versus uptake of ICTs (2014, 2022 KDHS)

Nationally, there was increase in mobile phone ownership for households with members below 15 years from 90.5 per cent in 2014 to 94.6 per cent in 2022 as shown in Figure 3.6. On the other hand, households without members below 15 years and owned mobile phone rose from 90.2 per cent in 2014 to 91.6 per cent in 2022 as shown in Figure 3.7.

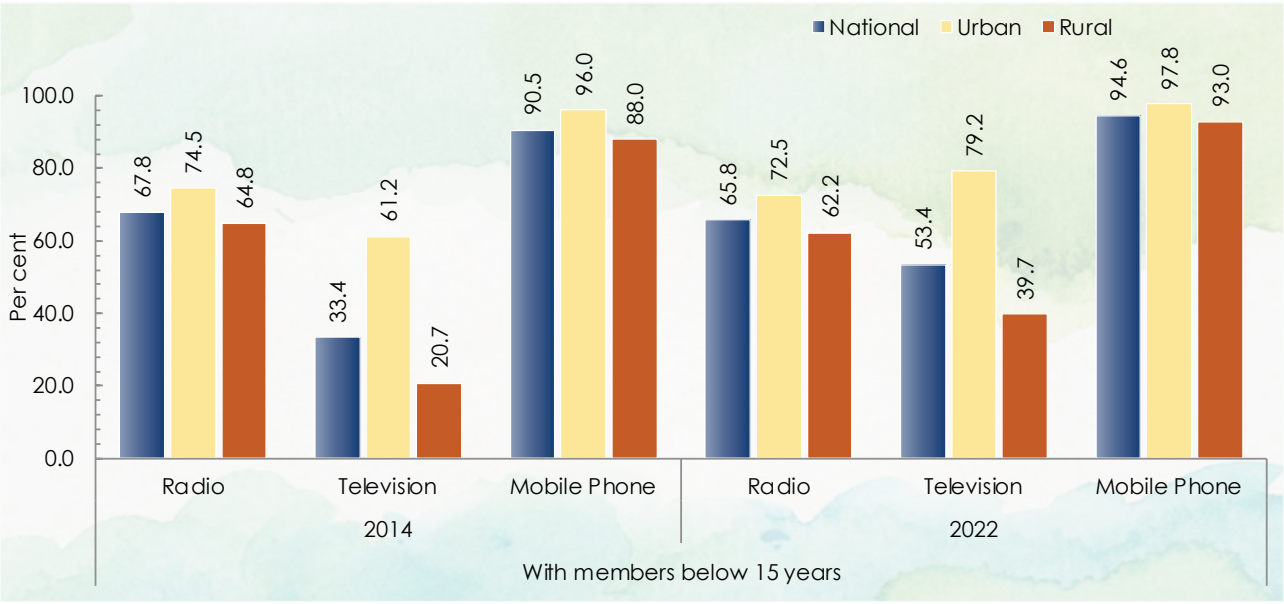


Figure 3.6: Proportion of household with members below 15 years and Ownership of ICT devices (2014, 2022)

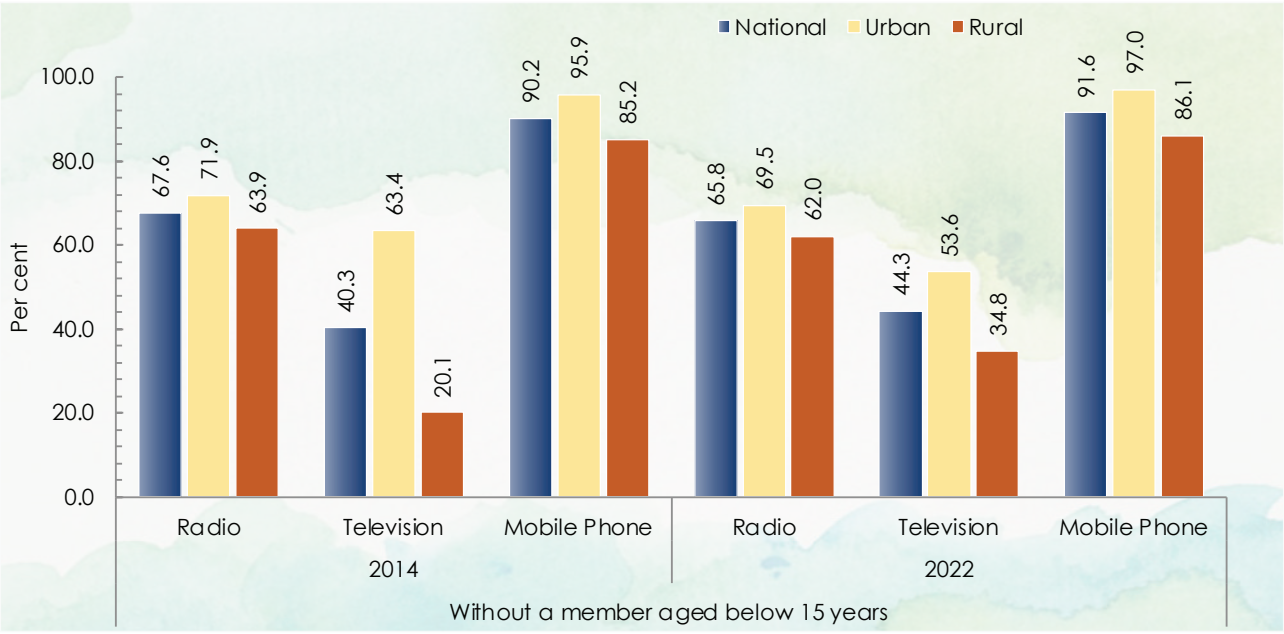


Figure 3.7: Proportion of household without members below 15 years and Ownership of ICT devices (2014, 2022 KDHS)

Section 3.4: Household Headship in Relation to Ownership of ICT Devices

Ownership of ICT devices and use of ICT services by household headship is crucial for understanding the disparities between the female and male headed households. Male-headed households had higher ownership of ICT devices compared to the female-headed households with disparities more pronounced in rural areas as shown in Figure 3.8. However, mobile phone ownership was almost universal at 94.6 per cent for male-headed and 91.3 per cent for female-headed households.

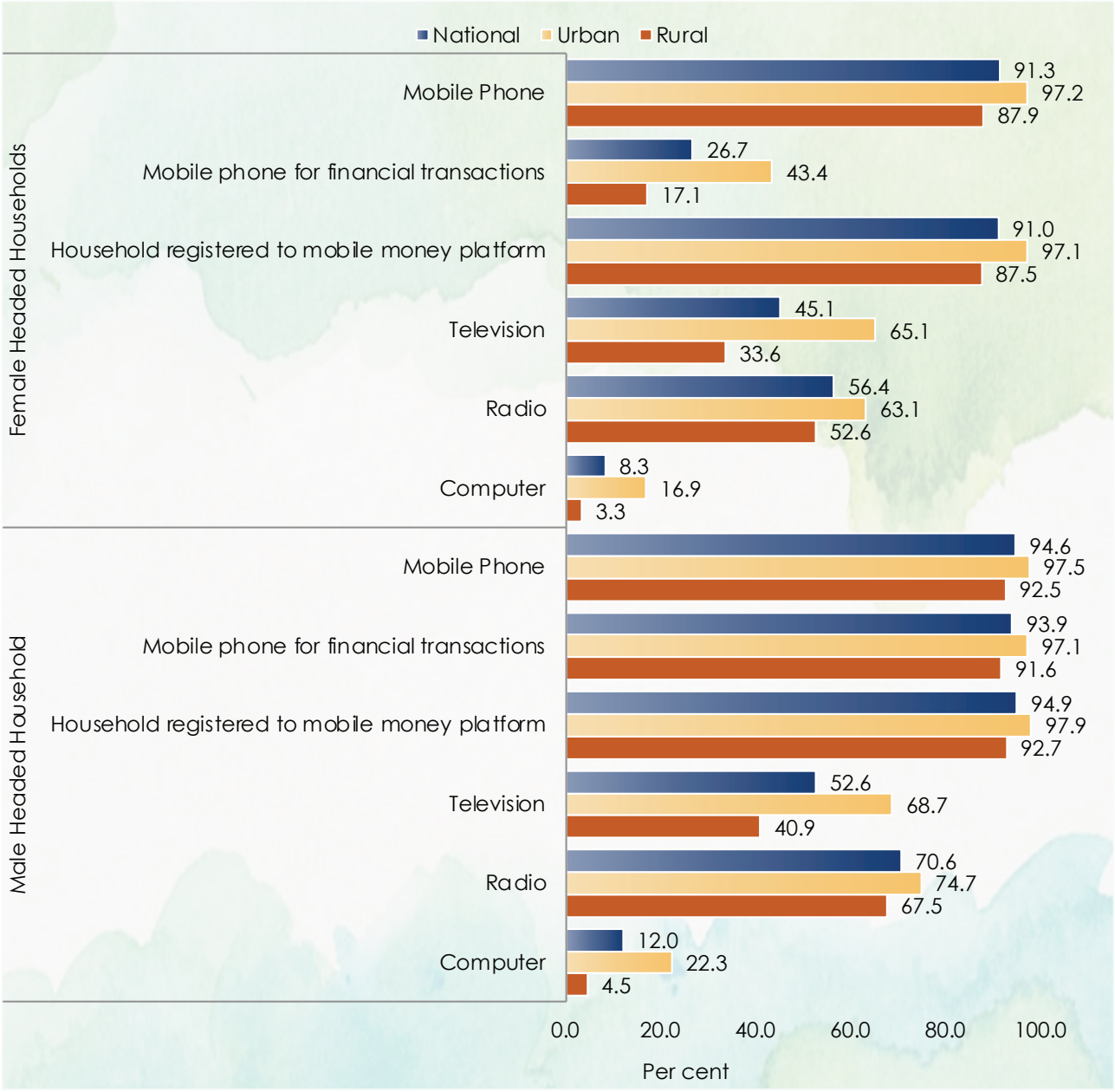


Figure 3.8: Proportion of households owning ICT devices by type of household headship

3.4.1 Household Headship and Ownership of ICT Devices, 2014 KDHS and 2022 KDHS

A comparison between the 2014 KDHS and 2022 KDHS highlights disparities in ICT ownership between male-headed and female-headed households. Ownership of mobile phone and TV increased in 2022 compared to 2014. Ownership of radio by rural households increased while that of urban households declined resulting to an overall decline nationally as shown in Figure 3.9.

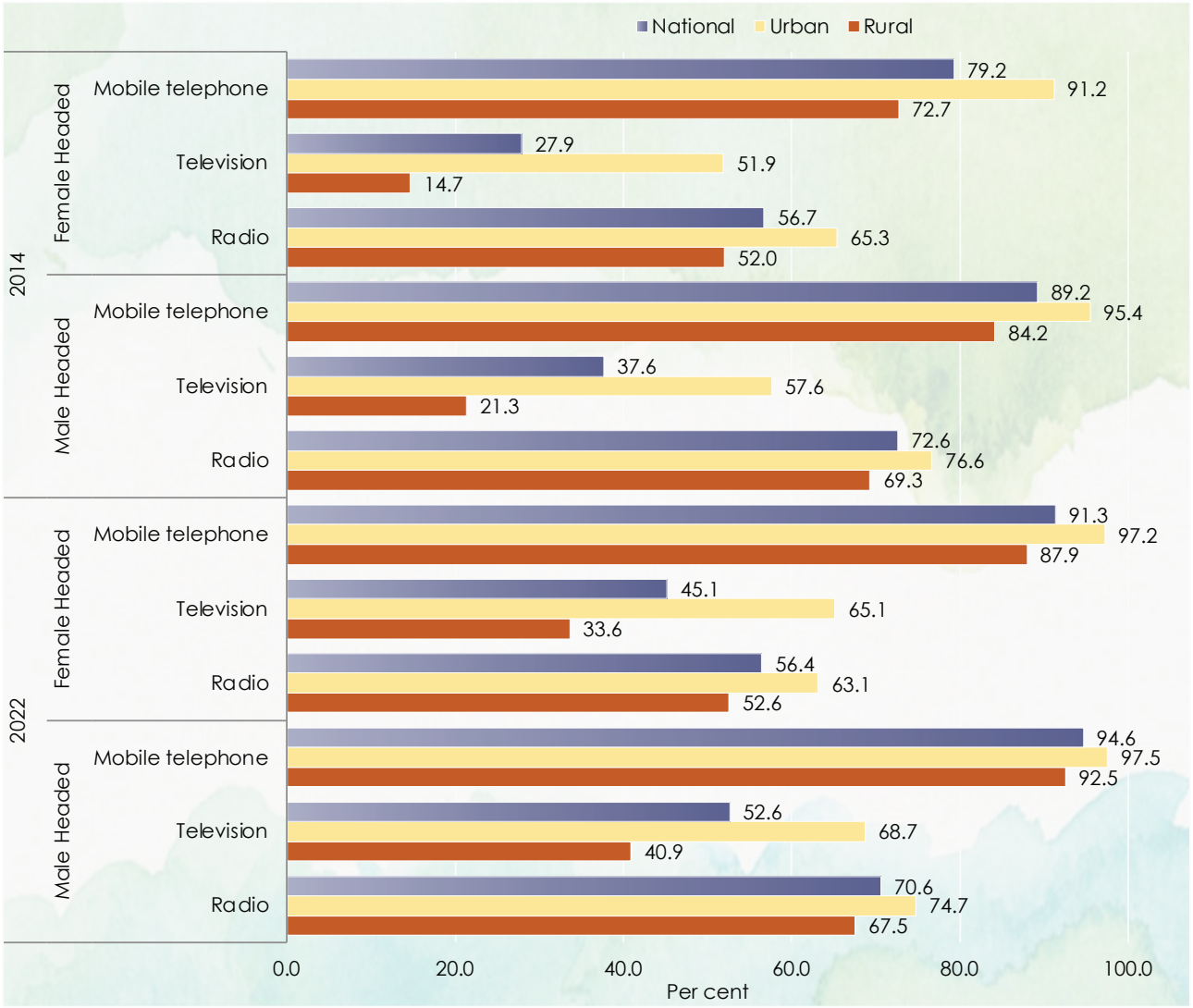


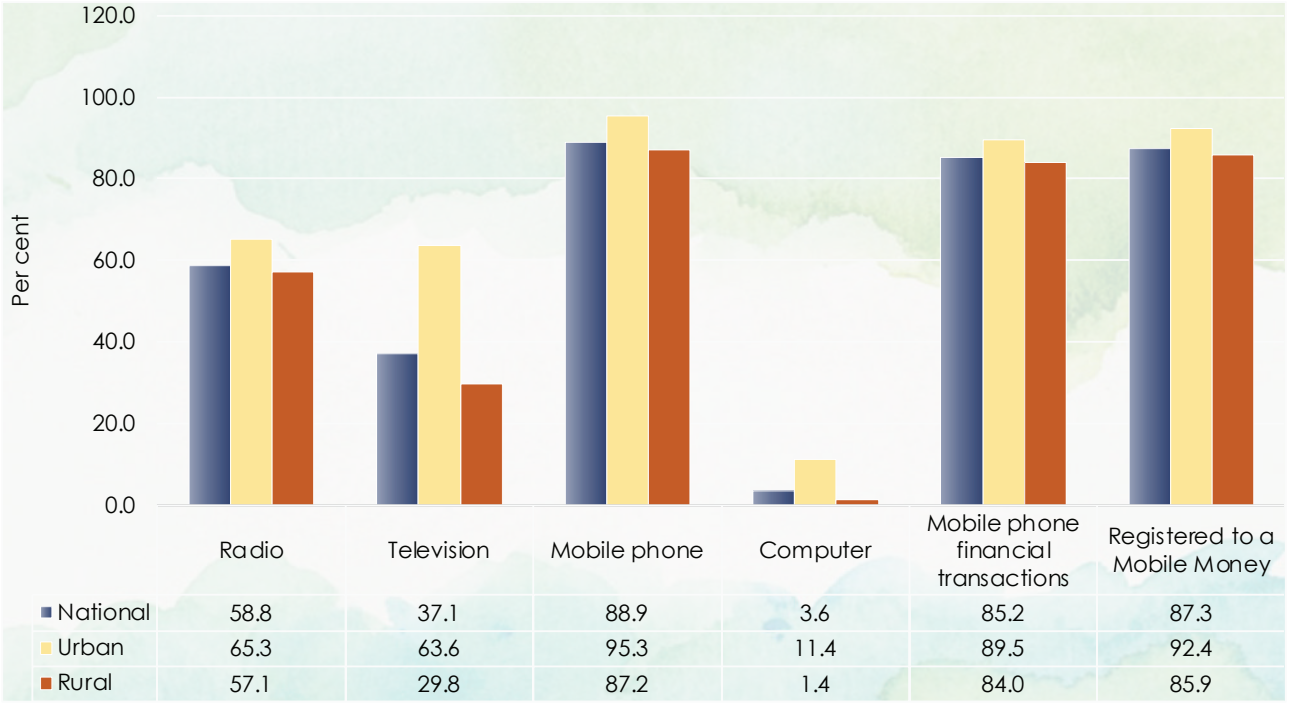
Figure 3.9: Proportion of household headship by ownership of ICT devices (2014, 2022 KDHS)

Section 3.5: Disability and Ownership of ICT Devices and Internet Use

This section focuses on ownership of ICT devices and internet usage by households that reported having at least one member with visual and hearing difficulties. The aim is to understand the uptake of ICTs by people living with visual and hearing difficulties.

3.5.1 Visual Difficulties and Ownership of ICT Devices

The survey showed that 2.8 per cent of the households reported having at least a member with visual difficulty. The data showed that there was a higher proportion of households with at least one member with visual difficulty that owned ICT devices in urban areas than in rural areas, as shown in Figure 3.10. Nationally, the proportion of households with a member with visual difficulty that owned mobile phone and had registered for mobile money were 88.9 and 87.3 per cent, respectively.

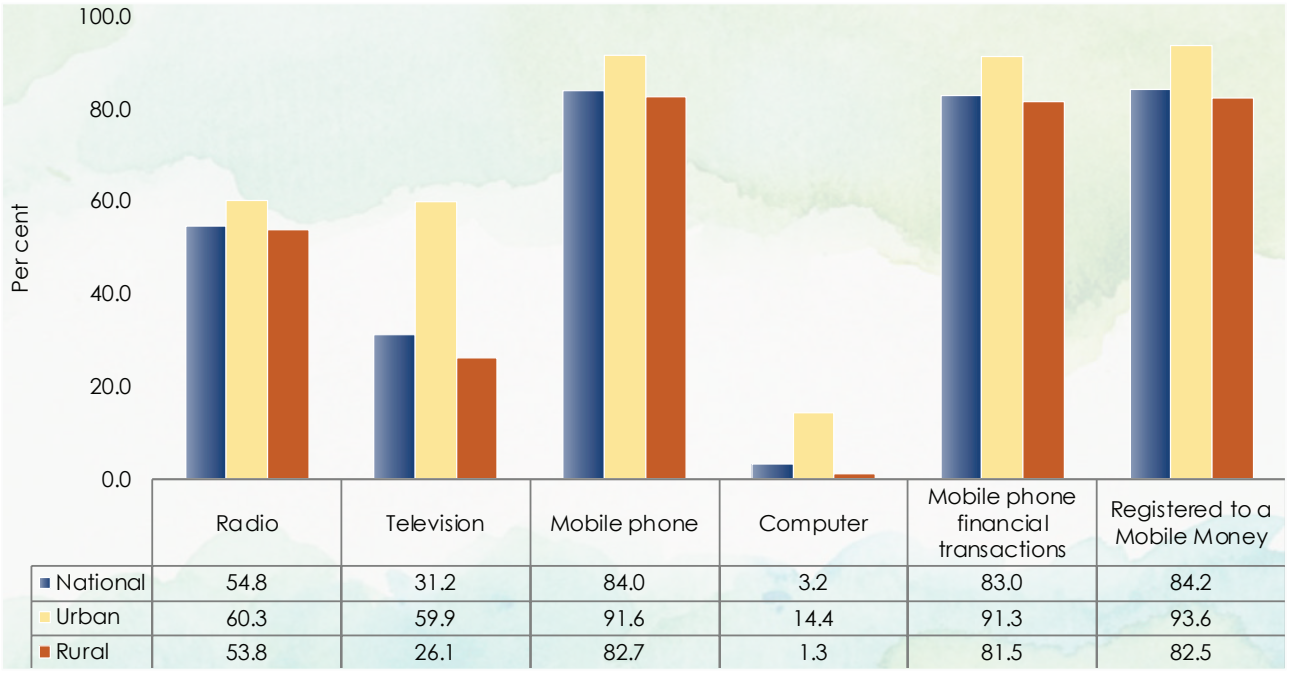


	Radio	Television	Mobile phone	Computer	Mobile phone financial transactions	Registered to a Mobile Money
National	58.8	37.1	88.9	3.6	85.2	87.3
Urban	65.3	63.6	95.3	11.4	89.5	92.4
Rural	57.1	29.8	87.2	1.4	84.0	85.9

Figure 3.10: Proportion of households with at least a member with visual difficulty by ownership of ICT device and mobile money

3.5.2 Hearing Difficulties and Ownership of ICT Devices

Overall, 1.2 per cent of the households had at least a member with hearing difficulty. The survey revealed that 93.6 and 82.5 per cent of urban and rural households, respectively, with at least a member with hearing difficulty had registered for mobile money as presented in Figure 3.11. The findings shows that ownership of television and computer among households with at least one member with hearing difficulty varied significantly between rural and urban areas. The proportion of households with at least a member with hearing difficulty and had a television was 59.9 and 14.4 per cent, respectively, in urban and rural areas. Similarly, the proportion of households with at least a member with hearing difficulty and had a computer were 14.4 and 1.3 per cent in urban and rural areas, respectively



	Radio	Television	Mobile phone	Computer	Mobile phone financial transactions	Registered to a Mobile Money
National	54.8	31.2	84.0	3.2	83.0	84.2
Urban	60.3	59.9	91.6	14.4	91.3	93.6
Rural	53.8	26.1	82.7	1.3	81.5	82.5

Figure 3.11: Proportion of households with at least a member with hearing difficulty by ownership of ICT device and mobile money

Section 3.6: Health Insurance and Ownership of ICT Devices and Internet Use

This section presents data on health insurance coverage in relation to ownership of ICT devices and internet usage. The objective of this analysis is to provide insights that can help in identifying potential disparities between ICTs and health insurance coverage.

3.6.1 Health Insurance and Type of ICT Devices Owned and Internet Use

Information and communication technologies help insurers to automate their processes, thereby enhancing efficiency in provision of the various insurance services. For example, the advent of virtual smart cards that relies on ICTs made it possible for patients to access health services without a physical card.

The survey revealed that 36.3 per cent of the households had at least a member with any form of health insurance including National Hospital Insurance Fund (NHIF). The data indicated that for both households with and without any form of health cover, mobile phones was the common ICT device owned as shown in Figure 3.12. Nationally, the proportion of households with any kind of health cover and had mobile telephone was 98.2 per cent whereas the proportion of households without any kind of cover and owned a mobile telephone was 91.1 per cent. The data revealed a significant disparity with the proportion of household with a health cover and owned a television at 80.4 per cent and 63.5 per cent in urban and rural areas, respectively. Similarly, the proportion of households without a health cover and owning a television was 56.6 per cent in urban areas and 28.1 per cent in rural areas. Households with and without health coverage and used internet stood at 36.8 and 15.8 per cent, respectively.

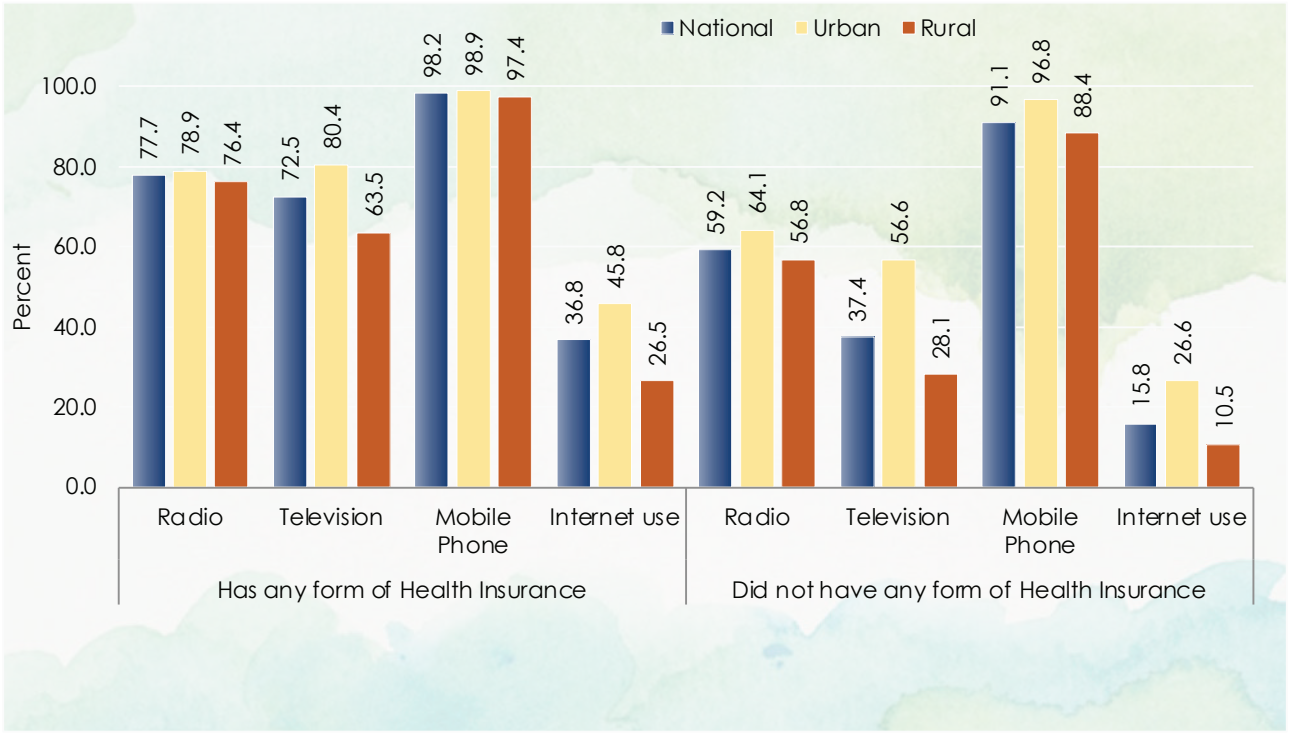


Figure 3.12: Proportion of household with health cover by ownership of ICT device and internet use

The survey showed that the proportion of households without any form of insurance cover who owned a radio, television, mobile telephone and used internet increased from the poorest wealth quintile to the richest wealth quintile as shown in Figure 3.13.

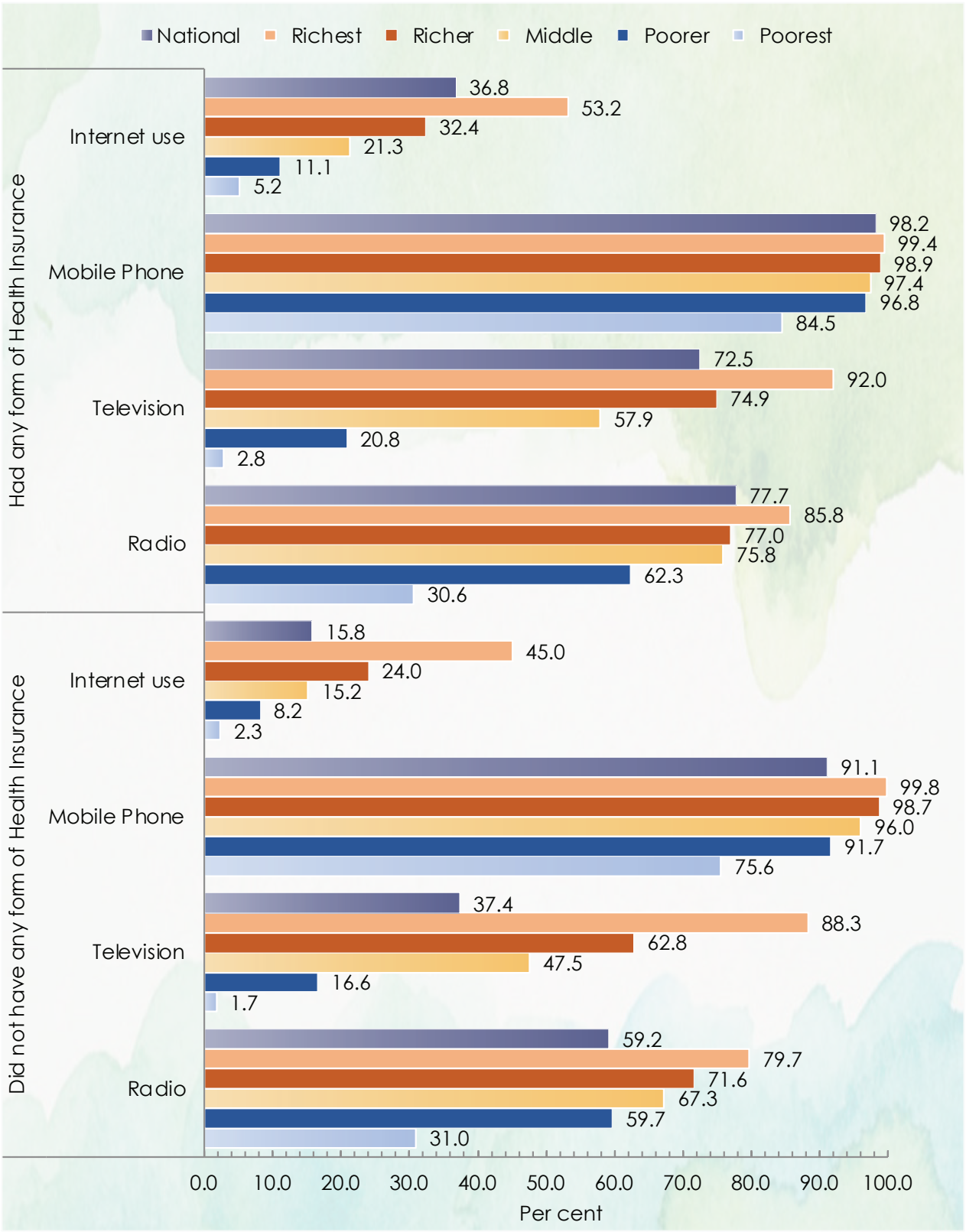
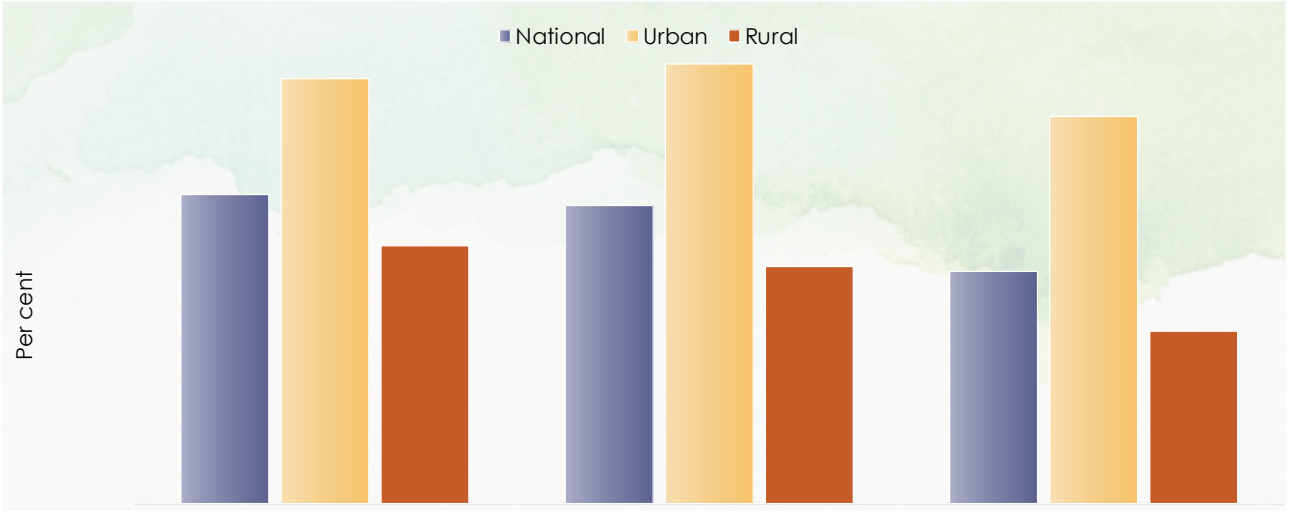


Figure 3.13: Proportion of households without any form of health cover by ownership of ICT device & internet Use by wealth quintile

Section 3.7: Social Assistance versus Uptake of ICTs

3.7.1 Social Assistance by uptake of ICTs

ICTs have been utilized to provide social support to vulnerable members of the society by governments and non-state actors such as the disbursement of funds to the targeted beneficiaries. The 2022 KDHS collected data on households receiving social support as well as the ownership of ICT devices and usage of internet. Figure 3.14 presents the proportion of households that received social supports by ownership of ICT device and internet usage. The results indicated that the proportion of households that received social assistance and owned mobile phone was 96.3 per cent in urban and 88.0 per cent in rural areas. similarly, the proportion of households that received social assistance and registered for mobile money was 97.0 and 86.9 per cent, respectively, in urban and rural areas. Moreover, the proportion of households that received social assistance and utilized mobile phones for financial transactions was 94.4 and 83.7 per cent, respectively, in urban and rural areas.



	Mobile telephone	Registered to mobile money	Used mobile telephone for financial transactions
National	90.5	89.9	86.7
Urban	96.3	97.0	94.4
Rural	88.0	86.9	83.7

Figure 3.14: Proportion of households that received social assistance by ownership of ICT devices and internet use

The top five counties in relation to households that received social assistance and owned mobile phone were Nairobi City (98.8%), Mandera (98.1%), Garissa (97.9%), Uasin Gishu (97.6%), and Mombasa (97.2%) as shown in Figure 59. Conversely, West Pokot County had the lowest proportion of households that received social assistance and owned mobile phone, at 65.0 per cent.

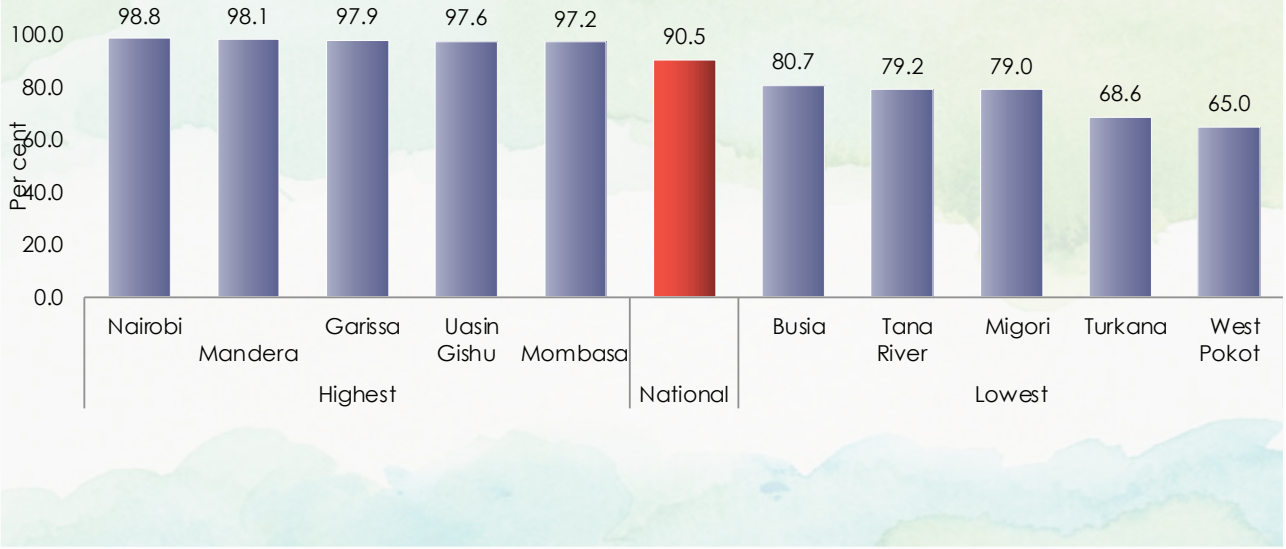


Figure 3.15: Proportion of people that received social assistance and owned mobile phone by county

The top five counties with households that received social assistance and registered for mobile money mirrored the ranking of counties with households that received social assistance and owned mobile phone, except for Lamu county (97.5%) as presented in Figure 3.16. West Pokot county (64.6%) had the lowest proportion of households that received social assistance and registered for mobile money followed by Turkana (65.2%) and Meru (78.2%) counties.

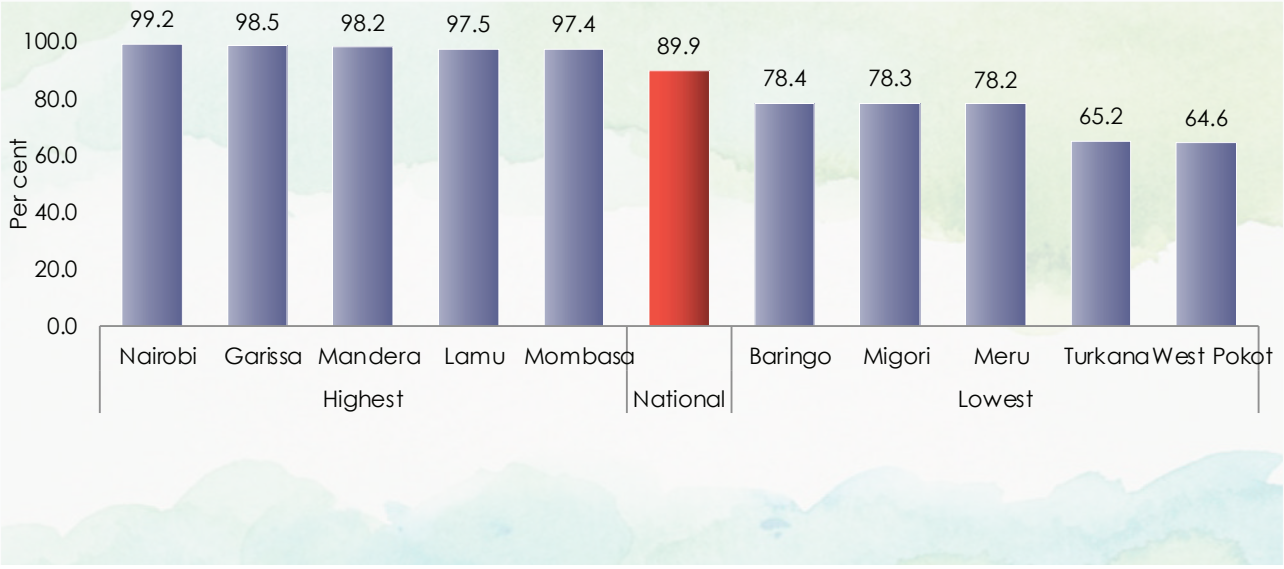


Figure 3.16: Proportion of households that received social assistance and registered for mobile money by county

The proportion of households that received social assistance and used mobile phone for financial transaction was highest in Nairobi City county (98.9%) and lowest in Turkana county (39.8%) as presented in Figure 3.17.

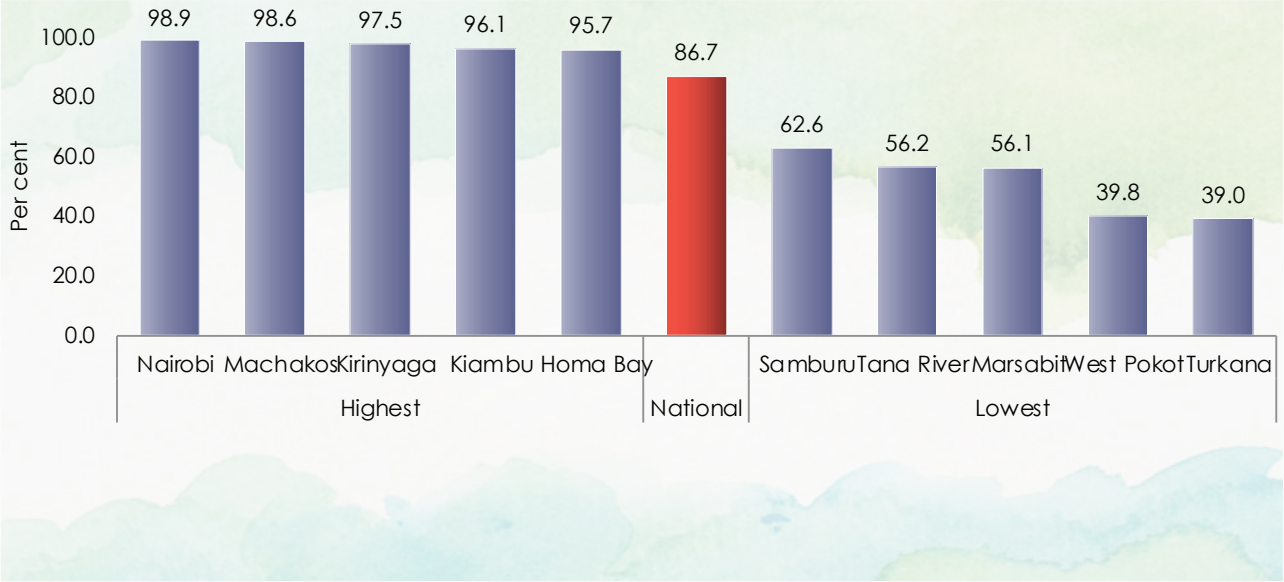


Figure 3.17: Proportion of household that received social assistance and used mobile phone for financial transaction by county

3.7.2 Social Assistance Versus Mobile Phone Ownership, (2014, 2022 KDHS)

The proportion of households that received social assistance and owned mobile phone has been increasing both in urban and rural areas as indicated in Figure 3.18. In urban areas, the proportion increased from 86.9 per cent in 2014 to 96.3 per cent in 2022. Similarly, the proportion of households in rural areas rose from 63.4 per cent in 2014 to 88.0 per cent in 2022.

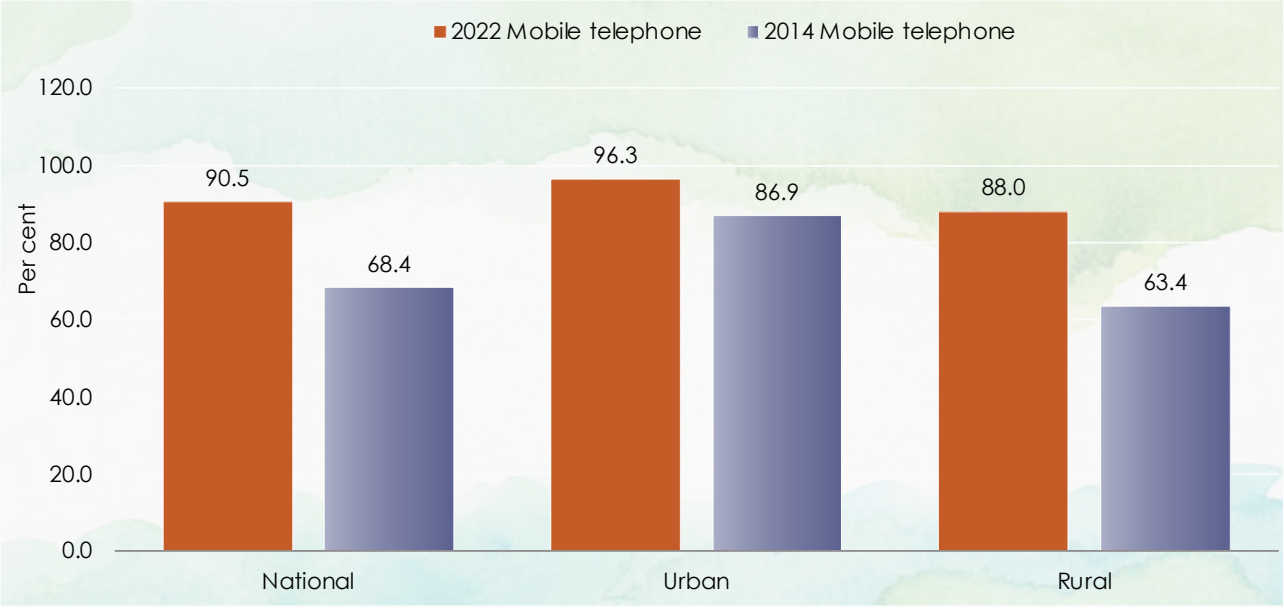


Figure 3.18: Proportion of household that received social assistance and owned mobile phone, 2014 and 2022 KDHS


VACCINATION PASSPORT
COVID - 19
CERTIFICATE OF VACCINATION
APPROVED

Section 3.8: COVID-19 Testing and Vaccination Versus Uptake of ICTs

This section examines the households with at least a member who received COVID-19 vaccinations and underwent testing, focusing on their ownership of ICT devices and internet usage. The aim is to understand how access to technology may influence the rates of vaccination and testing. Nationally, the proportion that was tested and vaccinated against COVID-19 and owned mobile phone was 97.0 per cent while the proportion that was neither tested nor vaccinated stood at 92.5 per cent as shown in Figure 3.19. In urban areas, the proportion that was tested and vaccinated and owned TV and used internet were 77.0 and 40.9 per cent, respectively compared to 52.7 and 23.9 per cent, respectively in rural areas.

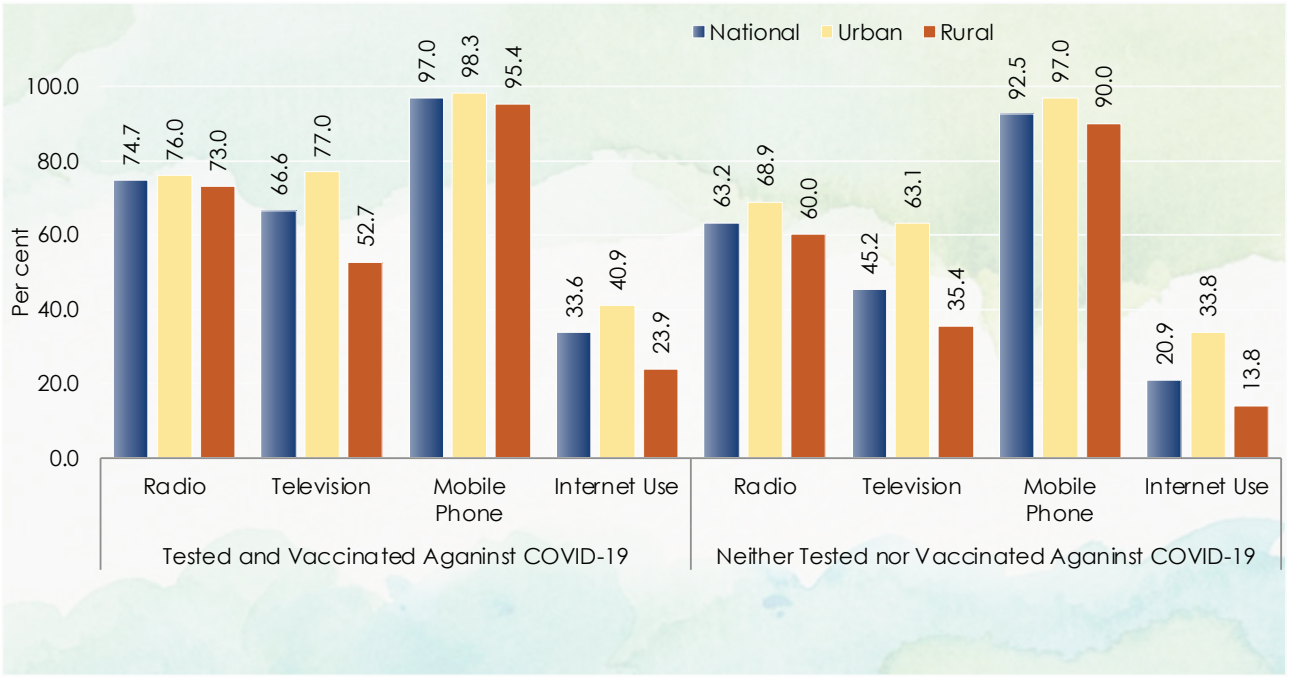


Figure 3.19: COVID – 19 testing and vaccination status versus uptake of ICTs

Section 3.9: Mass Distribution of Mosquito Nets Versus Uptake of ICTs

This section explores the distribution of mosquito nets to households through mass distribution campaigns and uptake of ICTs. The aim is to understand how uptake of ICTs may influence the effectiveness and reach of public health interventions like mosquito net distribution. The results, as illustrated in Figure 3.20, indicated that households that received nets through mass distribution campaign recorded high ownership of mobile phone (92.6%) followed by radio (65.2%), TV (40.5%) and usage of internet (17.5%).

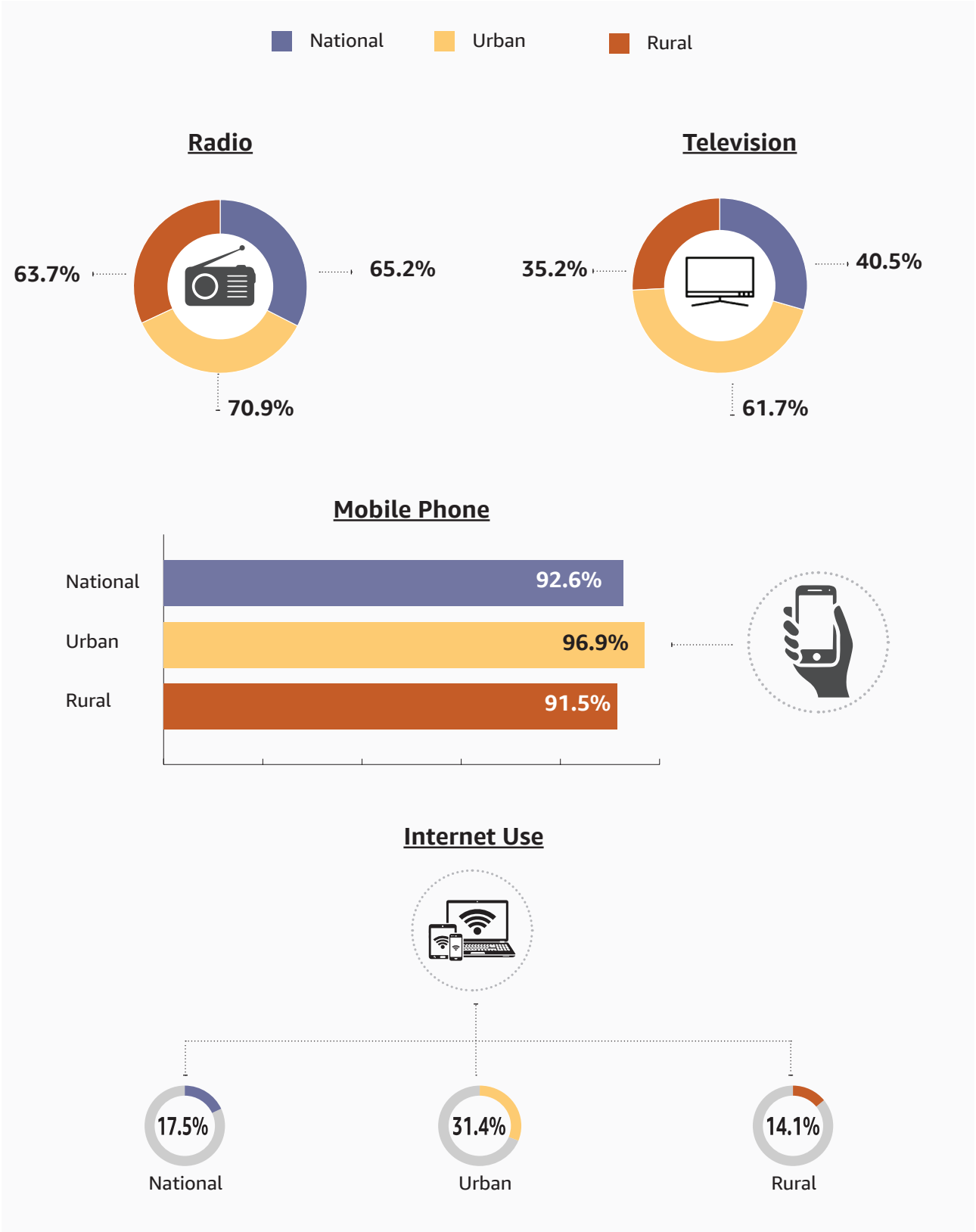


Figure 3.20: Proportion of households that received mosquito nets by Uptake of ICTs

Section 3.10: Smoking Habits Versus Uptake of ICTs

This section examines the number of households with at least a member who smoked and their ownership of ICT devices and internet usage. The aim is to identify any patterns between smoking behaviour whether it was done indoors and outdoors and uptake of ICTs. This analysis provides useful information on how smoking habits intersect with technology use, offering potential implications for public health strategies and interventions. The results showed that households with at least one member who smoked inside or outside the house had the highest ownership of mobile phone while usage of internet was the least used ICTs as shown in Figure 3.21.

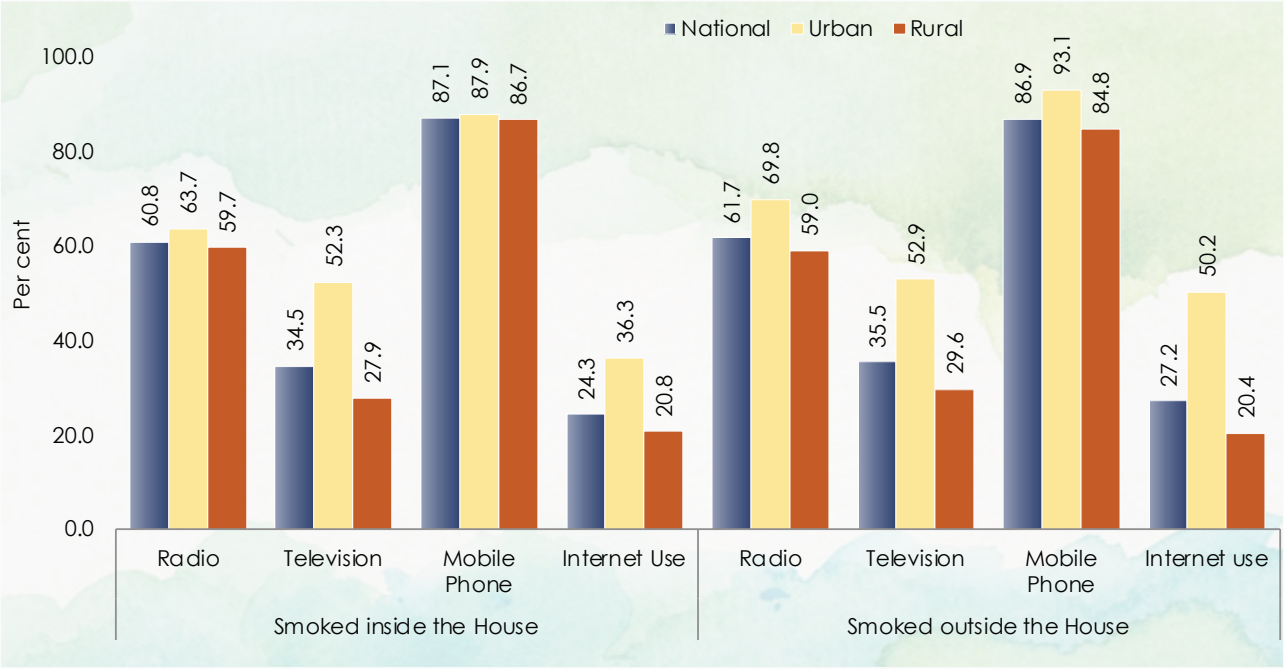


Figure 3.21: proportion of households with at least one member who smoked and uptake of ICTs

Section 3.11. Sources and Treatment of Drinking Water Versus Uptake of ICTs

This section examines the sources and treatment of drinking water and uptake of ICTs. The aim is to understand how access to technology may influence safe water practices. Figure 3.22 shows that households with improved water sources had higher ICT ownership and internet usage nationally, and in both urban and rural areas. For households with unimproved water sources in the rural areas, 58.0 per cent owned radios, 26.9 per cent owned televisions, 88.0 per cent owned mobile phones, and 12.5 per cent used internet.

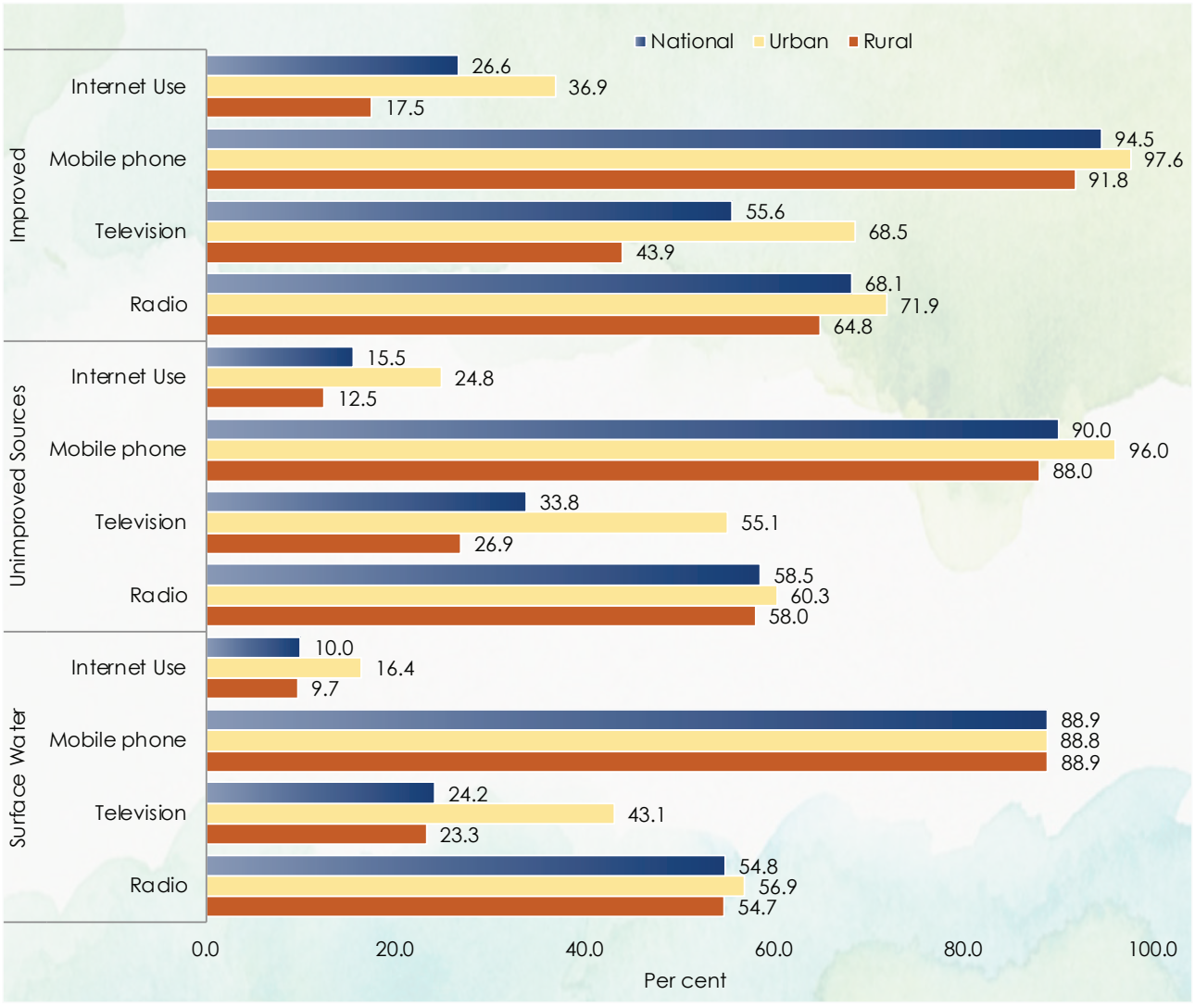
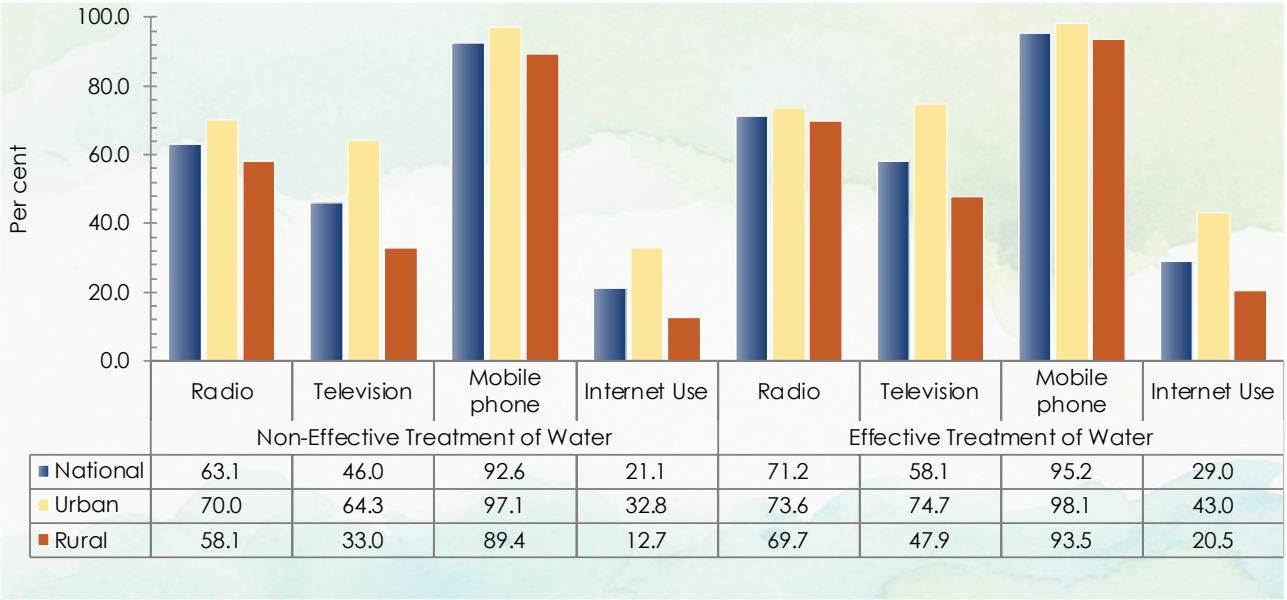


Figure 3.22: Proportion of Households that accessed different types of drinking water sources and owned ICTs device and used internet

Figure 3.23 shows that households that utilized effective water treatment practices had high ICT access, with 92.6 per cent owned mobile phone and 21.2 per cent used internet. Conversely, households using non-effective treatment methods displayed lower ICT usage. Urban households using non-effective water treatment methods showed relatively higher ICT access compared to rural households, with 70.0 per cent owning radios, 64.3 per cent owning televisions, 97.1 per cent owning mobile phones, and 32.8 per cent using the internet.



	Non-Effective Treatment of Water				Effective Treatment of Water			
	Radio	Television	Mobile phone	Internet Use	Radio	Television	Mobile phone	Internet Use
National	63.1	46.0	92.6	21.1	71.2	58.1	95.2	29.0
Urban	70.0	64.3	97.1	32.8	73.6	74.7	98.1	43.0
Rural	58.1	33.0	89.4	12.7	69.7	47.9	93.5	20.5

Figure 3.23: Proportion of Households by Water Treatment Practices and Uptake of ICTs

Section 3.12: Sanitation Versus Uptake of ICTs

This section examines sanitation facilities and uptake of ICTs. The aim is to understand how access to technology may influence safe sanitation practices. As shown in Figure 3.24, households with improved sanitation facilities had the highest ICT device ownership and internet usage while households practicing open defecation had lowest nationally. Among urban households practicing open defecation, 24.0 per cent owned radios, 11.0 per cent owned televisions, 76.0 per cent had mobile phones, and 4.0 per cent used internet. Households in rural areas practicing open defecation show higher ownership rates of radios (31.2%) and mobile phones (76.4%) while maintaining low TV ownership (5.0%) and internet usage (2.5%).

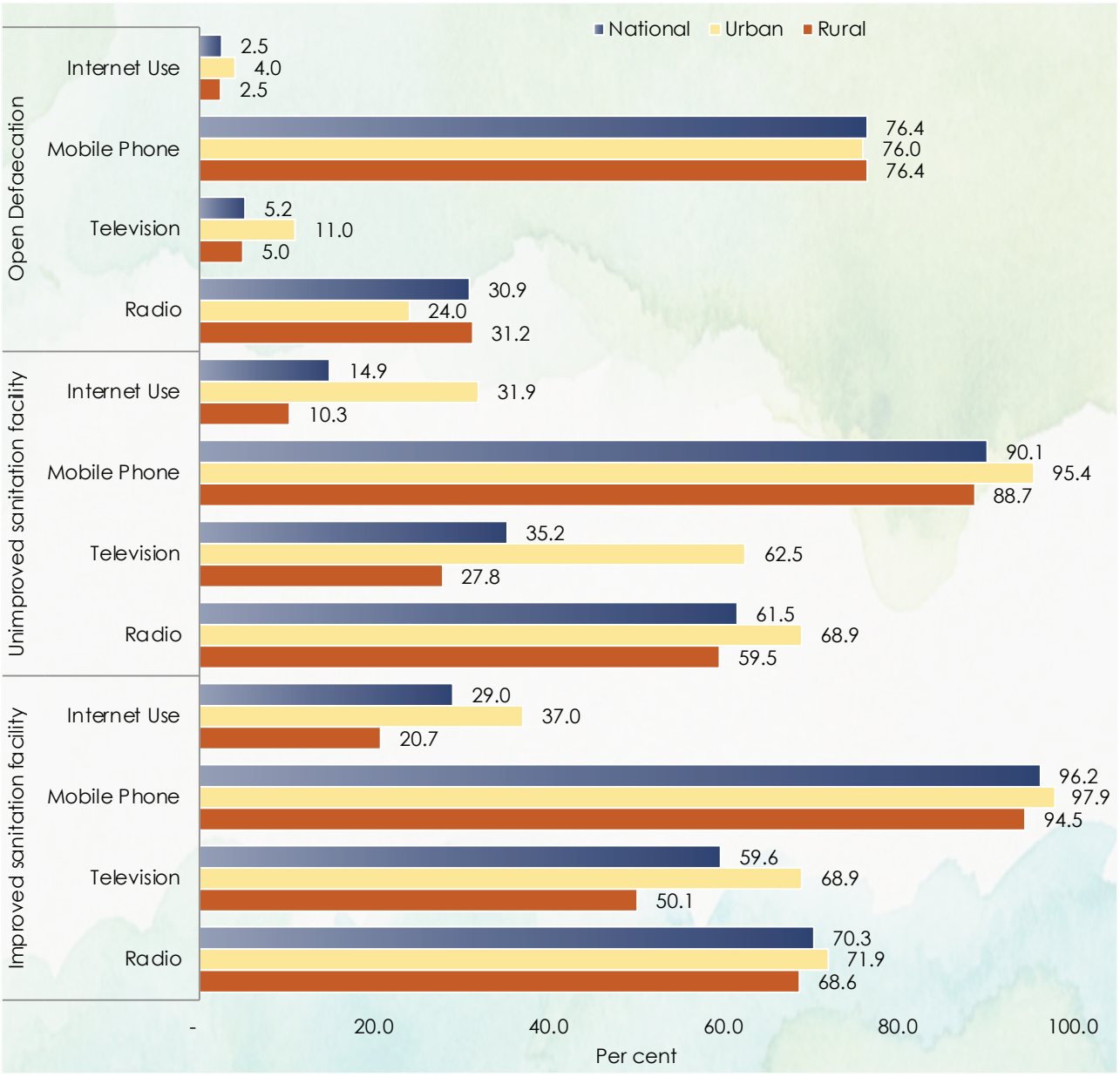


Figure 3.24: Proportion of Households with Access to Sanitation Facilities and uptake of ICTs

Section 3.13: Non-Clean Cooking Devices and Uptake of ICTs

This section examines non-clean cooking devices and uptake of ICTs. The aim is to understand how access to technology may influence adoption of clean cooking to reduce the prevalence of diseases associated with indoor air pollution caused by non-clean cooking devices. As shown in Figure 3.25, households using non-clean cooking devices had high ICT ownership, with 95.3 per cent owning mobile phone and 68.9 per cent owning radio nationally.

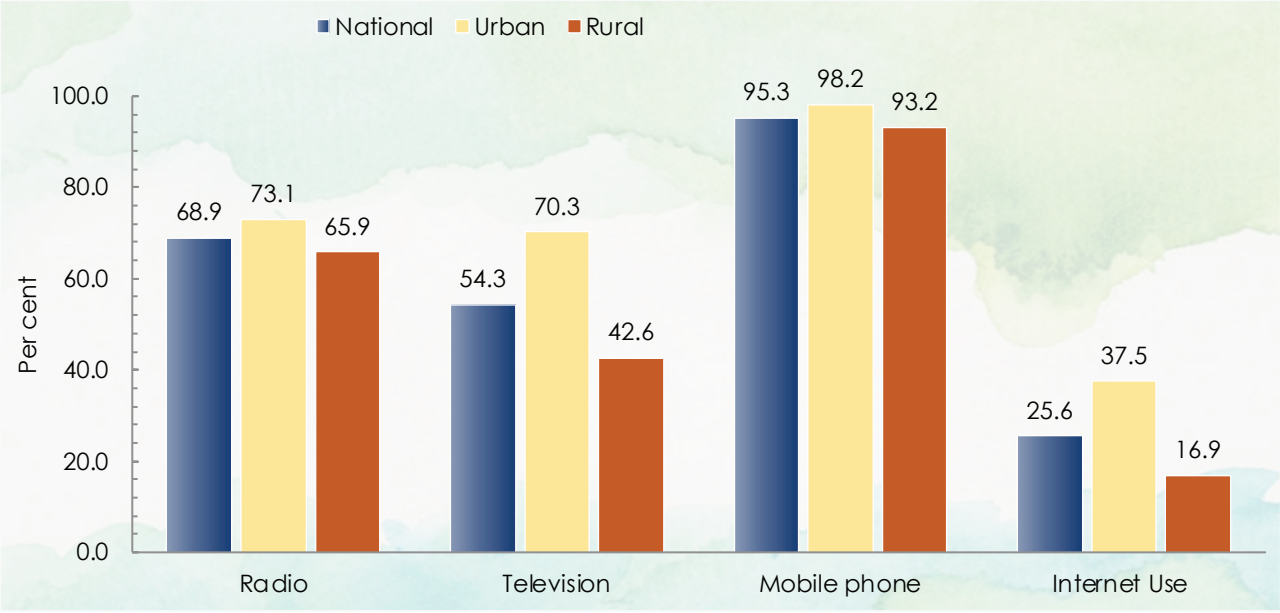


Figure 3.25: Proportion of Households using non clean Cooking Devices and Uptake of ICTs

Section 3.14: Farming Practices versus Uptake of ICTs

This section examines farming practices and uptake of ICTs. The aim is to understand how farmers use ICTs to transform agriculture to increase access to information, enhance productivity and streamline supply chains. Figure 3.26 showed disparities in ICT device ownership and internet usage among Kenyan farming households. Nationally, 94.1 per cent of farming households owned mobile phone and 20.5 per cent used internet. The proportion of farming households that owned TV was 71.2 per cent in urban areas compared to 40.6 per cent of their rural counterparts.

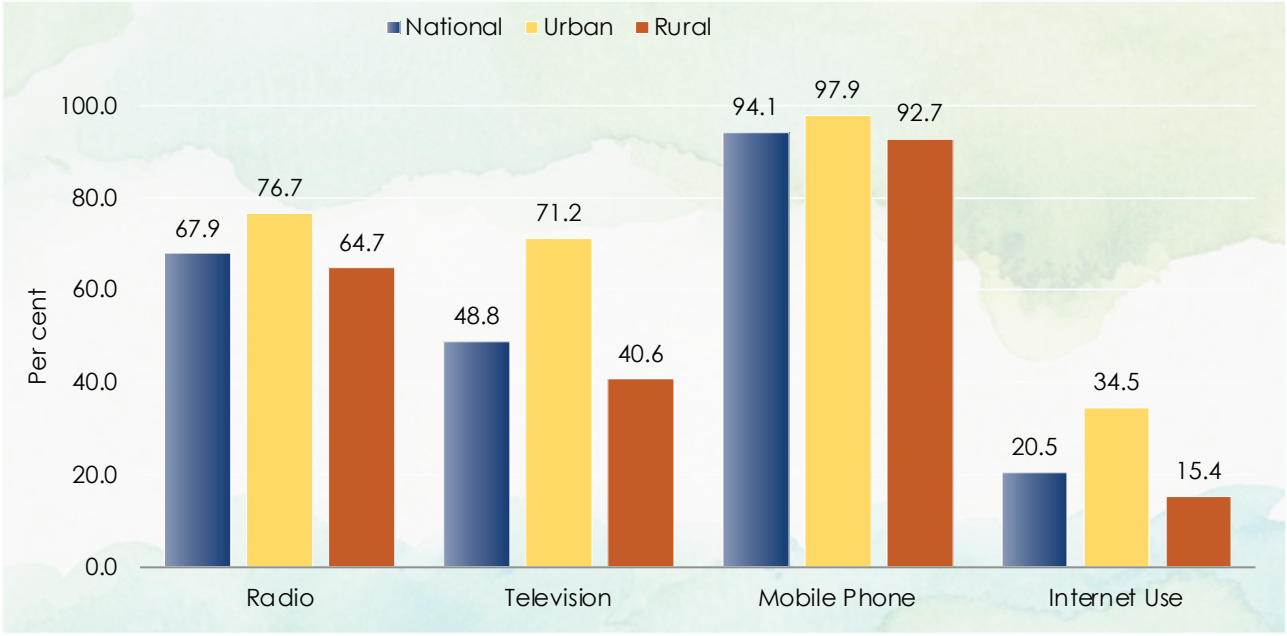


Figure 3.26: Proportion of Households that Practiced Farming by Uptake of ICTs

Wealth disparities were also evident, with the richest farming households having the highest ICT access while the poorest farming households recorded the lowest uptake of ICTs as shown in Figure 3.27.

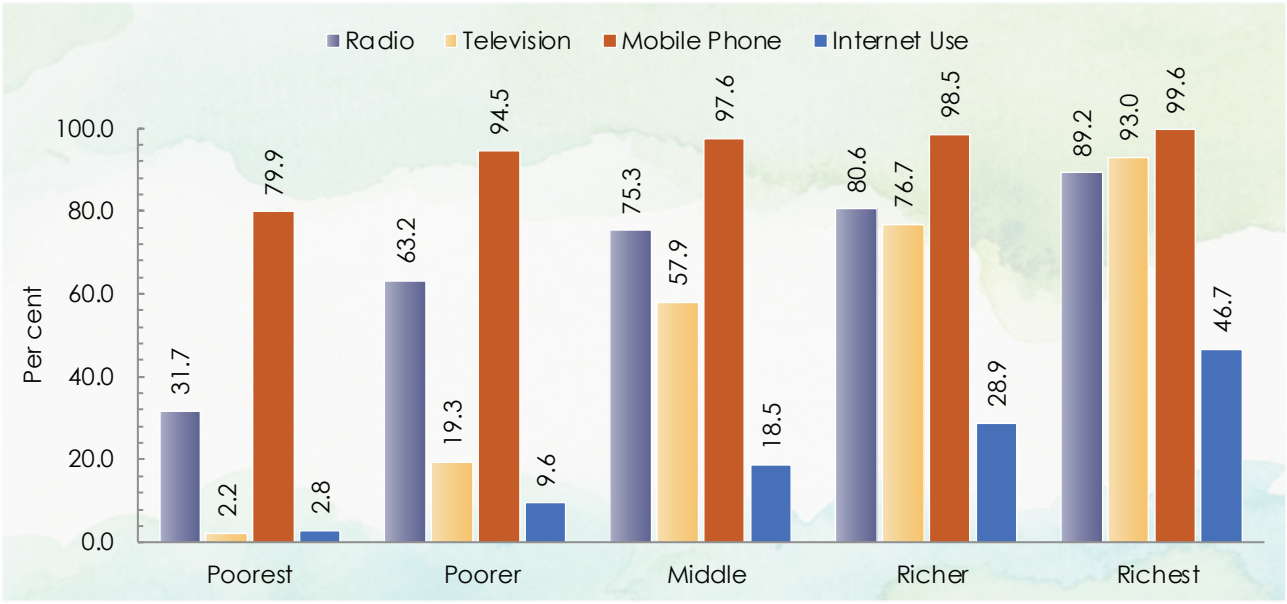


Figure 3.27: Proportion of Households that Practiced Farming by Uptake of ICTs and Wealth Quintile

CHAPTER

04

CONCLUSION

Overall, uptake of ICT devices and usage of internet was high among males than females, and the disparity was even wider among males and females in rural areas. Nationally, the gap in mobile phone ownership between males and females increased between 2019 and 2022. It was also observed that radio listenership for both males and females declined between 2014 and 2022 whereas television viewership increased over the same period. Increase in the latter maybe attributed to improved access to electricity, increased ownership of TV sets as evident in household data, availability of a variety of content and expansion of Digital Terrestrial Television (DTT) coverage over the last eight years.

The findings at the individual level showed that ownership of mobile phones and smartphones, usage of TV and internet, and newspaper readership was higher in urban areas compared to rural areas. However, radio listenership was higher in rural compared to urban areas.

Generally, uptake of ICTs was highest among age 25-34 compared to other age groups. Radio listenership was highest among the age group 45-49 whereas newspaper readership was highest among age group 35-44 for males and age group 15-24 for females.

The results of the analysis indicated that ownership of ICT devices and usage of internet at individual level generally increased with increase in the level of education and wealth quintiles perhaps because individuals at higher wealth quintiles are more likely to afford ICTs as compared to those in lower quintiles.

Radio listenership and TV viewership by both males and females was lowest amongst the marginalized counties. Further, newspaper readership and internet usage among females was also lowest in the same counties. However, a different observation was made for newspaper readership and internet usage by males at county level with counties like Lamu, Kirinyaga, Kakamega and Bomet appearing among the bottom five counties.

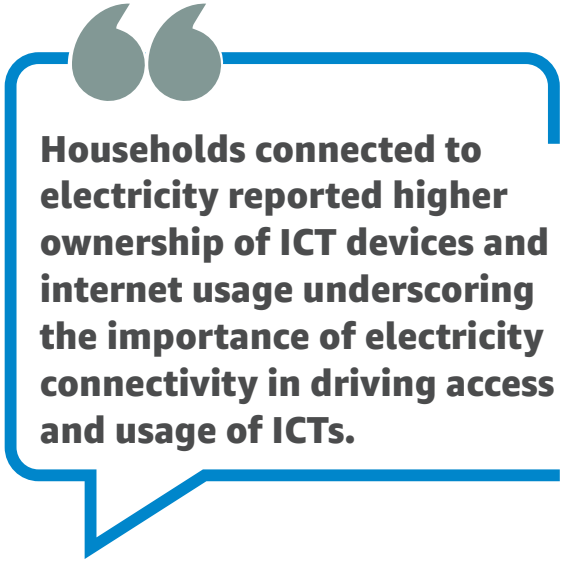
Analysis on ownership of mobile phones, radio, TV, computers, DVD players and cassettes/CD, and internet usage at the household level showed high uptake in urban compared to rural areas. Similarly, the uptake also increased with increase in wealth quintiles.

Households connected to electricity reported higher ownership of ICT devices and internet usage underscoring the importance of electricity connectivity in driving access and usage of ICTs. Urban areas were more connected to electricity compared to rural areas where uptake of ICTs was also lower.

There was higher ownership of ICT devices and usage of internet among male-headed households compared to those headed by their female counterparts.

Ownership of mobile phones and TV increased between 2014 and 2022 whereas ownership of radio, DVD players and cassettes/CD declined during the same period.

Addressing the disparities between males and females, urban and rural, and across counties, wealth quintiles and education levels in regard to ownership of ICT devices and usage of internet is vital for achieving the digital transformation agenda.



ANNEXE TABLES

Part A: Individual characteristics and uptake of ICT's

Annex 1. Proportion of Male Population by Usage of ICT Services and Ownership of ICT Devices, KDHS 2022

		Reads Newspaper	Listens to the Radio	Watches Television	Used internet in the last 12 months	Owns a mobile phone	Owns a smartphone	Number of men
		percent	percent	percent	percent	percent	percent	Count
Agegroups	15-24	33.5	84.6	78.0	52.6	63.7	42.6	5,579
	25-34	42.7	88.2	82.8	70.1	93.1	61.8	4,055
	35-44	43.1	89.7	80.7	50.3	91.2	47.6	2,909
	45-49	42.4	91.0	81.1	38.8	90.4	39.3	1,109
Type of place of residence	Urban	49.5	83.8	88.5	80.0	90.2	70.2	5,382
	Rural	32.2	89.6	74.9	40.7	74.1	35.3	8,270
Educational level	No education	0.5	65.9	35.0	8.9	77.0	14.2	369
	Primary	25.2	87.9	73.2	28.3	69.0	24.5	4,894
	Secondary	43.0	89.1	83.8	64.3	81.4	52.3	5,592
	Higher	60.3	85.3	91.5	95.0	99.0	90.4	2,797
Wealth index combined	Poorest	20.2	82.8	52.7	21.3	63.6	15.8	2,062
	Poorer	30.2	90.2	70.6	30.5	69.7	25.3	2,584
	Middle	37.2	91.1	82.4	48.6	79.1	42.7	2,754
	Richer	44.3	88.2	90.5	73.9	88.4	62.1	3,325
	Richest	55.9	83.3	94.5	90.5	94.0	84.8	2,927
Religion	Catholic	40.3	87.5	80.5	58.8	83.3	50.3	2,946
	Protestant	42.5	90.9	82.1	55.5	79.8	49.5	4,994
	Evangelical churches	40.1	88.0	84.7	58.6	79.6	51.2	2,514
	African instituted churches	37.3	87.3	81.9	57.7	78.5	47.6	1,181
	Orthodox	39.5	86.2	80.3	39.1	62.3	41.3	25
	Islam	28.4	69.3	67.3	53.8	80.1	46.2	987
	Hindu	83.0	84.0	98.5	96.8	99.3	99.3	34
	Traditionists	17.0	72.9	73.0	46.8	72.2	38.4	40
	No religion/ atheists	27.5	87.1	68.2	41.8	77.8	39.0	607
	Other	24.5	81.1	71.0	52.2	84.6	46.9	324
Employment status	Currently employed	40.5	89.5	81.5	58.9	87.5	52.4	10,527
	Not currently employed	39.2	83.9	76.6	54.8	73.3	46.5	467
	Not employed in the 12 months preceding the survey	33.2	79.0	76.1	45.8	53.7	36.5	2,658

		Reads Newspaper	Listens to the Radio	Watches Television	Used internet in the last 12 months	Owns a mobile phone	Owns a smartphone	Number of men
		percent	percent	percent	percent	percent	percent	Count
Occupation	Legislators, Administrators and Managers	50.8	88.4	86.4	77.7	97.1	70.8	537
	Professionals	60.2	82.4	90.0	94.1	97.9	88.9	495
	Technicians and Associate Professionals	58.4	88.7	87.7	88.5	98.1	83.7	773
	Secretarial, Clerical Services and Related Workers	56.7	92.9	95.9	86.3	97.1	82.9	126
	Service Workers, Shop and Market Sales Workers	51.1	87.5	87.5	77.1	95.5	71.0	1,157
	Skilled Farm, Fishery, Wildlife and Related Workers	31.2	91.0	74.8	40.5	79.6	32.2	2,034
	Craft and Related Trades Workers	37.9	93.3	83.3	57.7	90.0	50.9	1,260
	Plant and Machine Operators and Assemblers	41.8	91.6	86.8	60.8	91.1	53.4	1,230
	Elementary Occupations	31.1	89.0	74.9	41.9	77.4	35.8	2,974
	Missing	51.4	78.0	84.7	84.2	94.7	79.2	408
	Total 15-49	39.0	87.3	80.3	56.2	80.4	49.1	13,652

[1]*"Currently employed" is defined as having done work in the last 7 days. Includes persons who did not work in the last 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason*

Annex 2. Proportion of Female Population by Usage of ICT Services and Ownership of ICT Devices, KDHS 2022

		Reads Newspaper	Listens to the Radio	Watches Television	Used internet in the last 12 months	Owns a mobile phone	Owns a smartphone	Number of men
		percent	percent	percent	percent	percent	percent	Count
Agegroups	15-24	22.2	74.2	64.7	43.9	57.4	36.9	12,026
	25-34	18.3	77.0	69.6	52.5	89.1	51.5	10,217
	35-44	19.2	77.3	65.0	37.9	90.3	42.9	7,395
	45-49	19.8	77.6	60.1	30.2	89.0	34.6	2,518
Type of place of residence	Urban	22.7	73.6	82.6	67.7	88.9	64.7	13,143
	Rural	18.2	77.8	54.5	27.9	69.6	27.5	19,013
Highest educational level	No education	0.2	36.1	20.3	6.0	64.2	10.1	1,770
	Primary	11.8	76.3	54.8	19.2	71.4	22.0	11,687
	Secondary	23.3	80.5	73.0	49.2	74.6	43.7	12,550
	Higher	34.9	78.2	85.8	92.4	98.8	89.5	6,150
Wealth index combined	Poorest	9.8	58.7	19.8	6.2	52.0	5.9	5,019
	Poorer	16.3	81.4	41.1	17.2	66.1	16.3	5,698
	Middle	20.2	82.2	69.2	34.3	76.6	33.8	6,069
	Richer	20.4	78.1	82.4	56.3	86.8	54.5	7,139
	Richest	28.6	76.7	94.7	82.8	93.6	79.7	8,231
Religion	Catholic	22.0	78.5	67.8	48.9	78.8	46.7	5,978
	Protestant	22.5	80.0	69.4	47.7	79.7	46.2	11,776
	Evangelical churches	19.1	79.4	65.9	40.4	75.5	38.1	7,885
	African instituted churches	18.6	80.2	63.0	36.2	75.3	35.3	2,790
	Orthodox	30.7	74.2	83.9	54.9	77.5	56.5	132
	Islam	10.8	39.1	51.0	37.3	73.7	39.1	2,275
	Hindu	58.5	83.1	84.7	97.3	100.0	98.1	54
	Traditionists	5.2	62.6	34.9	12.3	47.1	5.7	50
	No religion/ atheists	10.6	62.3	56.4	40.5	71.7	35.2	344
	Other	13.0	64.8	58.1	40.0	77.0	42.0	873

		Reads Newspaper	Listens to the Radio	Watches Television	Used internet in the last 12 months	Owns a mobile phone	Owns a smartphone	Number of men
		percent	percent	percent	percent	percent	percent	Count
Employment status	Currently employed1	21.9	79.9	70.8	49.7	89.3	50.3	16,846
	Not currently employed	21.6	80.8	69.4	52.5	82.8	47.2	2,367
	Not employed in the 12 months preceding the survey	17.4	70.2	59.0	35.5	61.2	32.0	12,943
Occupation	Legislators, Administrators and Managers	21.6	78.8	77.4	61.2	94.2	63.9	1,972
	Professionals	34.9	78.6	77.8	70.9	94.5	69.5	1,100
	Technicians and Associate Professionals	38.3	83.6	85.6	89.1	98.8	85.5	1,605
	Secretarial, Clerical Services and Related Workers	36.9	81.9	85.0	89.6	97.7	85.2	405
	Service Workers, Shop and Market Sales Workers	22.4	81.3	78.9	64.5	93.7	62.0	4,078
	Skilled Farm, Fishery, Wildlife and Related Workers	16.1	82.4	54.9	19.4	77.0	22.2	4,235
	Craft and Related Trades Workers	20.2	79.1	58.4	47.6	88.9	46.4	243
	Plant and Machine Operators and Assemblers	24.5	63.3	57.8	48.6	83.9	49.7	158
	Elementary Occupations	15.9	77.3	66.7	36.5	85.8	36.8	4,909
	Missing	32.8	76.1	83.7	78.2	95.1	74.0	508
	Total 15-49	20.1	76.1	66.0	44.2	77.5	42.7	32,156

[1]"Currently employed" is defined as having done work in the last 7 days. Includes persons who did not work in the last 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

Annex 3. Proportion of Male Population by Usage of ICT Services and Ownership of ICT Devices, KDHS 2022

Region	Reads Newspaper	Listens to the Radio	Watches Television	Used internet in the last 12 months	Owns a mobile phone	Owns a smartphone	Number of men
	percent	percent	percent	percent	percent	percent	Count
Mombasa	33.8	76.5	79.5	76.1	88.9	62.5	442
Kwale	30.3	81.7	75.7	52.2	76.2	38.4	209
Kilifi	46.4	91.9	73.9	49.0	76.8	42.4	405
Tana River	22.6	48.9	37.2	21.8	76.3	19.7	64
Lamu	9.2	84.2	86.7	60.6	84.8	41.2	41
Taita Taveta	32.3	85.7	83.2	67.3	81.7	48.6	103
Garissa	28.3	67.3	67.0	51.3	88.4	52.0	117
Wajir	14.0	45.4	34.1	51.7	78.2	50.6	63
Mandera	16.3	34.8	32.9	32.9	78.8	38.3	81
Marsabit	4.7	56.1	41.8	38.5	81.4	36.0	45
Isiolo	27.9	76.8	75.1	69.6	89.8	58.6	55
Meru	29.2	80.5	74.0	37.3	80.7	40.1	489
Tharaka-Nithi	29.1	89.9	76.0	44.4	79.5	36.7	137
Embu	21.2	89.1	69.8	44.0	83.9	42.8	176
Kitui	17.1	96.5	65.2	34.7	77.7	29.5	312
Machakos	54.4	99.5	94.6	44.7	77.1	45.1	480
Makueni	54.8	98.1	91.9	36.8	78.9	35.8	279
Nyandarua	38.7	91.8	84.8	52.2	79.7	50.9	168
Nyeri	31.7	86.1	82.2	64.4	90.5	56.1	235
Kirinyaga	5.7	91.8	92.4	62.9	87.6	60.1	191
Murang'a	22.1	86.7	69.5	54.5	81.6	44.1	297
Kiambu	39.9	82.8	80.4	72.5	86.7	60.2	911
Turkana	16.5	64.3	53.8	19.0	66.2	19.5	111
West Pokot	32.8	97.0	75.1	39.9	77.5	26.1	150

Region	Reads Newspaper	Listens to the Radio	Watches Television	Used internet in the last 12 months	Owns a mobile phone	Owns a smartphone	Number of men
	percent	percent	percent	percent	percent	percent	Count
Samburu	27.0	86.1	79.4	52.5	83.5	44.4	51
Trans Nzoia	39.2	92.5	89.3	54.9	72.9	46.3	272
Uasin Gishu	71.9	93.3	98.2	76.5	85.3	61.9	451
Elgeyo-Marakwet	26.6	88.1	72.4	55.6	76.4	38.4	110
Nandi	38.7	97.5	97.4	47.9	80.2	42.9	265
Baringo	31.8	88.5	62.6	36.1	73.2	36.2	165
Laikipia	28.1	75.1	72.6	65.0	85.1	57.7	145
Nakuru	47.7	91.4	84.8	69.0	75.1	50.8	670
Narok	31.2	99.2	96.1	50.5	84.9	44.4	313
Kajiado	48.1	83.1	79.5	68.9	86.2	63.0	339
Kericho	37.9	93.8	72.1	46.0	81.3	37.8	330
Bomet	29.4	88.9	63.6	18.3	74.9	34.6	268
Kakamega	39.0	96.3	77.2	33.7	64.9	34.0	532
Vihiga	26.7	86.9	63.0	42.9	65.7	34.3	156
Bungoma	38.5	85.5	75.2	43.8	66.2	34.6	448
Busia	33.3	85.4	67.5	38.7	66.2	33.9	262
Siaya	45.6	84.7	69.0	41.6	65.2	34.6	227
Kisumu	56.2	98.8	83.4	45.8	77.9	33.3	345
Homa Bay	42.0	91.6	78.7	42.5	76.8	37.3	258
Migori	29.3	89.2	82.7	46.8	72.1	36.9	246
Kisii	32.9	96.0	82.6	48.4	75.8	41.5	326
Nyamira	41.0	90.1	59.3	34.3	69.2	31.0	133
Nairobi	48.7	80.8	92.8	89.7	94.6	81.5	1,777
Total 15-49	**39.0**	**87.3**	**80.3**	**56.2**	**80.4**	**49.1**	**13,652**

Annex 4. Proportion of Male Population by Usage of ICT Services and Ownership of ICT Devices, KDHS 2022

Region	Reads Newspaper	Listens to the Radio	Watches Television	Used internet in the last 12 months	Owns a mobile phone	Owns a smartphone	Number of men
	percent	percent	percent	percent	percent	percent	Count
Mombasa	19.7	61.3	76.5	54.8	83.2	52.9	947
Kwale	9.2	53.0	38.9	26.8	63.8	29.4	498
Kilifi	12.7	59.7	46.3	24.6	64.5	24.1	928
Tana River	2.4	30.4	24.3	13.5	59.5	14.5	149
Lamu	8.9	49.5	62.2	34.4	67.2	31.8	101
Taita Taveta	20.7	74.7	63.5	48.9	87.0	46.3	234
Garissa	3.3	21.0	30.8	34.0	75.4	34.7	290
Wajir	5.2	18.8	9.5	21.8	70.3	28.2	160
Mandera	0.9	5.5	5.2	9.9	76.9	15.2	206
Marsabit	11.3	52.0	50.8	10.3	73.3	13.1	129
Isiolo	14.8	44.3	52.2	31.9	79.4	40.2	137
Meru	22.2	72.5	56.6	37.0	74.1	32.5	979
Tharaka-Nithi	19.3	71.7	48.7	37.0	85.5	40.8	271
Embu	17.7	74.4	69.7	31.9	86.8	45.5	358
Kitui	4.8	69.8	24.9	23.3	73.9	25.9	735
Machakos	18.6	81.8	71.1	55.8	85.5	50.7	992
Makueni	9.1	82.3	48.9	35.9	73.2	38.9	683
Nyandarua	28.8	88.7	84.3	40.8	82.3	38.8	409
Nyeri	24.9	80.9	79.6	61.4	89.8	61.9	501
Kirinyaga	16.5	83.4	86.3	46.5	85.3	50.0	481
Murang'a	38.8	86.2	80.7	44.6	82.0	46.4	692
Kiambu	23.5	86.5	90.5	63.9	91.0	67.2	2,094
Turkana	4.9	46.1	24.7	12.9	49.9	13.0	331
West Pokot	7.9	52.2	26.9	15.8	52.8	15.5	384

Region	Reads Newspaper	Listens to the Radio	Watches Television	Used internet in the last 12 months	Owns a mobile phone	Owns a smartphone	Number of men
	percent	percent	percent	percent	percent	percent	Count
Samburu	7.9	73.1	42.3	21.2	66.5	20.4	156
Trans Nzoia	22.7	79.5	65.9	44.1	73.3	37.3	675
Uasin Gishu	25.5	78.1	80.0	61.2	85.9	56.5	983
Elgeyo-Marakwet	21.4	78.1	56.6	28.1	72.7	29.5	228
Nandi	24.6	80.7	56.7	36.4	73.9	39.3	622
Baringo	28.1	76.8	49.8	29.6	67.5	26.5	378
Laikipia	13.3	71.9	72.7	42.5	77.8	45.2	332
Nakuru	21.9	82.6	76.2	56.4	80.3	46.6	1,658
Narok	14.8	77.8	44.6	26.9	67.1	26.5	718
Kajiado	21.7	70.8	71.8	62.8	88.0	59.1	887
Kericho	25.4	82.0	71.0	32.0	76.4	33.3	729
Bomet	22.3	91.1	38.4	21.0	65.1	19.8	650
Kakamega	18.9	82.7	56.8	34.4	69.0	32.4	1,283
Vihiga	16.5	89.1	64.7	31.4	65.3	26.2	371
Bungoma	27.8	84.4	60.4	31.9	63.7	29.1	1,138
Busia	10.9	81.6	54.1	24.5	65.0	24.7	622
Siaya	12.6	86.2	57.0	31.4	70.7	28.4	537
Kisumu	21.6	85.3	80.4	32.8	71.7	32.1	771
Homa Bay	29.9	85.6	69.2	32.3	72.0	26.9	662
Migori	16.0	81.5	61.7	21.9	59.7	21.9	674
Kisii	14.7	85.1	65.1	31.5	73.6	31.2	831
Nyamira	16.8	85.7	53.5	21.2	73.5	25.1	327
Nairobi	25.5	73.5	87.4	76.4	92.0	71.7	4,235
Total 15-49	**20.1**	**76.1**	**66.0**	**44.2**	**77.5**	**42.7**	**32,156**

Annex 5. Proportion of Female Population by Frequency of Use of ICT Services, KDHS 2022

		Frequency of reading newspaper or magazine			Frequency of listening to radio			Frequency of watching television		
		Not at all	Less than once a week	at least once a week	Not at all	Less than once a week	at least once a week	Not at all	Less than once a week	at least once a week
		percent	percent	percent	percent	percent	percent	percent	percent	percent
Age groups	15-24	77.8	13.5	8.7	25.8	14.1	60.1	35.3	11.6	53.1
	25-34	81.7	10.7	7.6	23.0	12.9	64.2	30.4	9.9	59.7
	35-44	80.8	10.8	8.5	22.7	14.1	63.1	35.0	10.6	54.4
	45-49	80.2	10.9	8.9	22.4	15.9	61.7	39.9	10.7	49.4
Type of place of residence	Urban	77.3	12.3	10.4	26.4	12.4	61.1	17.4	8.5	74.1
	Rural	81.8	11.4	6.8	22.2	14.8	62.9	45.5	12.4	42.1
Highest educational level	No education	99.8	0.1	0.1	63.9	9.3	26.9	79.7	6.7	13.6
	Primary	88.2	8.7	3.1	23.7	15.6	60.6	45.2	12.3	42.5
	Secondary	76.7	14.4	9.0	19.5	13.9	66.6	27.0	10.9	62.1
	Higher	65.1	15.8	19.2	21.8	11.8	66.4	14.2	8.7	77.1
Wealth index combined	Poorest	90.2	6.8	3.0	41.3	14.4	44.3	80.2	9.7	10.1
	Poorer	83.7	11.4	4.9	18.6	15.6	65.8	58.9	14.8	26.2
	Middle	79.8	13.1	7.1	17.8	14.9	67.3	30.8	14.5	54.7
	Richer	79.6	11.9	8.5	21.9	13.4	64.7	17.6	11.2	71.2
	Richest	71.4	14.0	14.6	23.3	11.9	64.7	5.3	5.5	89.2
Religion	Catholic	78.0	12.5	9.5	21.5	13.6	64.9	32.2	10.6	57.2
	Protestant	77.5	13.0	9.4	20.0	14.6	65.4	30.6	11.1	58.3
	Evangelical churches	80.9	12.0	7.1	20.6	13.8	65.6	34.1	11.3	54.6
	African instituted churches	81.4	11.7	6.8	19.8	15.3	65.0	37.0	11.7	51.3
	Orthodox	69.3	12.8	17.9	25.8	9.2	65.1	16.1	8.3	75.6
	Islam	89.2	6.3	4.5	60.9	10.3	28.8	49.0	7.8	43.2
	Hindu	41.5	8.6	49.9	16.9	18.4	64.8	15.3	0.0	84.7
	Traditionists	94.8	4.3	0.9	37.4	18.3	44.3	65.1	25.3	9.6
	No religion/ atheists	89.4	6.0	4.5	37.7	13.3	49.0	43.6	8.4	48.0
	Other	87.0	5.4	7.6	35.2	11.2	53.7	41.9	8.5	49.6

		Frequency of reading newspaper or magazine			Frequency of listening to radio			Frequency of watching television		
		Not at all	Less than once a week	at least once a week	Not at all	Less than once a week	at least once a week	Not at all	Less than once a week	at least once a week
		percent	percent	percent	percent	percent	percent	percent	percent	percent
Employment status	Currently employed1	78.1	12.4	9.5	20.1	13.3	66.6	29.2	10.8	60.0
	Not currently employed	78.4	13.1	8.5	19.2	13.9	66.9	30.6	10.7	58.7
	Not employed in the 12 months preceding the survey	82.6	10.7	6.7	29.8	14.6	55.6	41.0	10.7	48.3
Occupation	Legislators, Administrators and Managers	78.4	12.1	9.6	21.2	12.1	66.7	22.6	10.4	67.0
	Professionals	65.1	15.3	19.6	21.4	14.1	64.5	22.2	7.9	69.8
	Technicians and Associate Professionals	61.7	17.0	21.2	16.4	11.6	72.0	14.4	8.1	77.5
	Secretarial, Clerical Services and Related Workers	63.1	20.3	16.6	18.1	10.3	71.6	15.0	9.5	75.5
	Service Workers, Shop and Market Sales Workers	77.6	12.0	10.3	18.7	13.5	67.8	21.1	10.5	68.4
	Skilled Farm, Fishery, Wildlife and Related Workers	83.9	10.5	5.6	17.6	12.8	69.5	45.1	12.4	42.5
	Craft and Related Trades Workers	79.8	12.7	7.5	20.9	14.8	64.2	41.6	12.5	45.8
	Plant and Machine Operators and Assemblers	75.5	16.3	8.2	36.7	10.2	53.1	42.2	4.3	53.4
	Elementary Occupations	84.1	11.1	4.7	22.7	14.7	62.6	33.3	11.5	55.2
	Missing	67.2	20.2	12.6	23.9	14.9	61.2	16.3	11.6	72.1
	Total 15-49	**79.9**	**11.8**	**8.3**	**23.9**	**13.9**	**62.2**	**34.0**	**10.8**	**55.2**

[1] *"Currently employed" is defined as having done work in the last 7 days. Includes persons who did not work in the last 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason*

Annex 5. Proportion of Female Population by Frequency of Use of ICT Services, KDHS 2022 Cont'd

		Use of internet					Frequency of using internet last month			
		Never	Yes, last 12 months	Yes, before last 12 months	Number of Women	Not at all	Less than once a week	At least once a week	Almost every day	Count
		percent	percent	percent	Count	percent	percent	percent	percent	
Age groups	15-24	52.9	43.9	3.2	12,026	8.0	7.8	21.6	62.6	5,281
	25-34	43.8	52.5	3.7	10,217	6.0	5.6	23.0	65.4	5,366
	35-44	59.0	37.9	3.1	7,395	4.9	6.4	26.2	62.4	2,802
	45-49	67.4	30.2	2.4	2,518	5.6	8.5	25.2	60.7	761
Type of place of residence	Urban	29.0	67.7	3.2	13,143	5.3	4.9	20.1	69.8	8,903
	Rural	68.8	27.9	3.3	19,013	8.6	9.8	28.5	53.1	5,306
Highest educational level	No education	93.5	6.0	0.5	1,770	9.8	6.3	24.1	59.8	106
	Primary	77.4	19.2	3.4	11,687	11.1	12.4	36.1	40.4	2,242
	Secondary	46.2	49.2	4.5	12,550	8.5	8.4	27.8	55.3	6,180
	Higher	6.4	92.4	1.2	6,150	2.5	2.6	13.2	81.7	5,681
Wealth index combined	Poorest	91.9	6.2	1.8	5,019	19.1	16.2	35.0	29.7	312
	Poorer	79.2	17.2	3.6	5,698	15.4	15.2	33.0	36.5	978
	Middle	61.5	34.3	4.1	6,069	10.4	11.4	30.3	47.8	2,084
	Richer	38.9	56.3	4.8	7,139	6.6	7.3	27.4	58.7	4,017
	Richest	15.3	82.8	1.9	8,231	3.4	3.3	16.7	76.6	6,818
Religion	Catholic	48.3	48.9	2.8	5,978	5.6	6.1	22.6	65.6	2,921
	Protestant	48.5	47.7	3.7	11,776	6.2	6.1	23.0	64.7	5,623
	Evangelical churches	55.9	40.4	3.7	7,885	8.4	8.4	23.4	59.8	3,186
	African instituted churches	60.9	36.2	2.9	2,790	8.1	9.6	29.1	53.2	1,011
	Orthodox	42.5	54.9	2.6	132	1.5	4.5	38.7	55.3	72
	Islam	61.2	37.3	1.5	2,275	4.1	4.5	21.9	69.6	849
	Hindu	2.7	97.3	0.0	54	0.9	0.0	0.0	99.1	53
	Traditionists	87.7	12.3	0.0	50	32.3	0.0	38.0	29.7	6
	No religion/atheists	56.9	40.5	2.5	344	6.6	11.6	14.7	67.1	139
	Other	57.7	40.0	2.3	873	5.5	2.7	19.8	72.0	349

		Use of internet					Frequency of using internet last month			
		Never	Yes, last 12 months	Yes, before last 12 months	Number of Women	Not at all	Less than once a week	At least once a week	Almost every day	Count
		percent	percent	percent	Count	percent	percent	percent	percent	
Employment status	Currently employed1	47.0	49.7	3.3	16,846	5.7	5.8	22.2	66.3	8,370
	Not currently employed	43.6	52.5	3.9	2,367	6.9	6.9	23.4	62.8	1,242
	Not employed in the 12 months preceding the survey	61.3	35.5	3.2	12,943	7.9	8.4	25.0	58.7	4,596
Occupation	Legislators, Administrators and Managers	35.9	61.2	2.9	1,972	3.5	4.2	23.9	68.4	1,208
	Professionals	27.1	70.9	2.0	1,100	4.6	3.7	18.7	73.0	780
	Technicians and Associate Professionals	9.7	89.1	1.2	1,605	2.7	2.9	16.9	77.5	1,430
	Secretarial, Clerical Services and Related Workers	9.9	89.6	0.6	405	1.2	2.0	13.8	82.9	363
	Service Workers, Shop and Market Sales Workers	31.7	64.5	3.9	4,078	5.7	5.8	24.1	64.4	2,628
	Skilled Farm, Fishery, Wildlife and Related Workers	76.8	19.4	3.8	4,235	12.6	12.8	29.0	45.6	821
	Craft and Related Trades Workers	50.3	47.6	2.1	243	4.3	1.6	25.0	69.1	115
	Plant and Machine Operators and Assemblers	47.9	48.6	3.5	158	9.2	1.8	16.1	72.9	77
	Elementary Occupations	59.3	36.5	4.1	4,909	8.6	9.0	26.1	56.3	1,793
	Missing	19.9	78.2	1.9	508	5.8	4.6	11.3	78.3	397
	Total 15-49	**52.5**	**44.2**	**3.3**	**32,156**	**6.5**	**6.7**	**23.2**	**63.5**	**14,209**

[1]"Currently employed" is defined as having done work in the last 7 days. Includes persons who did not work in the last 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason

Annex 6. Proportion of Male Population by Frequency of Use of ICT Services, KDHS 2022

		Frequency of reading newspaper or magazine			Frequency of listening to radio			Frequency of watching television		
		Not at all	Less than once a week	at least once a week	Not at all	Less than once a week	at least once a week	Not at all	Less than once a week	at least once a week
		percent	percent	percent	percent	percent	percent	percent	percent	percent
Age groups	15-24	66.5	21.3	12.2	15.4	17.0	67.6	22.0	22.1	55.9
	25-34	57.3	24.9	17.8	11.8	17.6	70.7	17.2	19.4	63.4
	35-44	56.9	22.5	20.7	10.3	12.4	77.3	19.3	19.5	61.2
	45-49	57.6	23.8	18.6	9.0	16.4	74.6	18.9	21.3	59.8
Type of place of residence	Urban	50.5	28.0	21.6	16.2	20.8	63.0	11.5	16.9	71.6
	Rural	67.8	19.5	12.7	10.4	13.1	76.5	25.1	23.2	51.7
Highest educational level	No education	99.5	0.5	0.0	34.1	17.8	48.1	65.0	15.7	19.3
	Primary	74.8	16.7	8.5	12.1	15.1	72.9	26.8	24.9	48.3
	Secondary	57.0	26.7	16.3	10.9	15.7	73.4	16.2	20.2	63.6
	Higher	39.7	28.8	31.5	14.7	18.6	66.7	8.5	14.9	76.6
Wealth index combined	Poorest	79.8	14.6	5.5	17.2	17.4	65.4	47.3	28.6	24.1
	Poorer	69.8	20.0	10.1	9.8	14.0	76.1	29.4	30.1	40.6
	Middle	62.8	23.9	13.3	8.9	12.3	78.8	17.6	22.2	60.2
	Richer	55.7	25.6	18.7	11.8	17.2	70.9	9.5	17.4	73.0
	Richest	44.1	26.9	28.9	16.7	19.5	63.8	5.5	9.1	85.4
Religion	Catholic	59.7	23.3	16.9	12.5	16.5	71.0	19.5	20.2	60.3
	Protestant	57.5	23.5	19.0	9.1	14.8	76.1	17.9	19.9	62.1
	Evangelical churches	59.9	25.1	15.0	12.0	16.0	71.9	15.3	21.4	63.2
	African instituted churches	62.7	23.2	14.1	12.7	16.9	70.5	18.1	23.3	58.6
	Orthodox	60.5	25.6	13.9	13.8	4.0	82.2	19.7	14.3	66.1
	Islam	71.6	17.7	10.8	30.7	18.8	50.4	32.7	18.8	48.5
	Hindu	17.0	48.9	34.1	16.0	51.3	32.7	1.5	14.0	84.6
	Traditionists	83.0	8.9	8.0	27.1	17.9	55.1	27.0	29.8	43.2
	No religion/ atheists	72.5	18.2	9.3	12.9	21.9	65.2	31.8	25.7	42.5
	Other	75.5	12.8	11.7	18.9	9.6	71.5	29.0	18.1	52.9

		Frequency of reading newspaper or magazine			Frequency of listening to radio			Frequency of watching television		
		Not at all	Less than once a week	at least once a week	Not at all	Less than once a week	at least once a week	Not at all	Less than once a week	at least once a week
		percent	percent	percent	percent	percent	percent	percent	percent	percent
Employment status	Currently employed1	59.5	23.2	17.3	10.5	15.5	74.0	18.5	20.0	61.5
	Not currently employed	60.8	26.9	12.3	16.1	22.3	61.6	23.4	22.2	54.4
	Not employed in the 12 months preceding the survey	66.8	20.6	12.6	21.0	17.7	61.3	23.9	23.2	52.9
Occupation	Legislators, Administrators and Managers	49.2	31.0	19.8	11.6	15.8	72.6	13.6	18.4	68.1
	Professionals	39.8	25.3	35.0	17.6	16.5	65.9	10.0	11.2	78.8
	Technicians and Associate Professionals	41.6	28.1	30.3	11.3	17.6	71.1	12.3	13.3	74.3
	Secretarial, Clerical Services and Related Workers	43.3	24.1	32.6	7.1	38.2	54.7	4.1	14.2	81.7
	Service Workers, Shop and Market Sales Workers	48.9	27.6	23.6	12.5	18.1	69.3	12.5	18.0	69.5
	Skilled Farm, Fishery, Wildlife and Related Workers	68.8	17.5	13.6	9.0	12.9	78.1	25.2	22.0	52.8
	Craft and Related Trades Workers	62.1	23.6	14.3	6.7	10.7	82.6	16.7	20.6	62.7
	Plant and Machine Operators and Assemblers	58.2	26.0	15.8	8.4	16.1	75.6	13.2	21.3	65.5
	Elementary Occupations	68.9	20.7	10.4	11.0	17.1	71.8	25.1	23.9	51.0
	Missing	48.6	30.2	21.2	22.0	16.5	61.4	15.3	10.9	73.9
	Total 15-49	**61.0**	**22.8**	**16.2**	**12.7**	**16.1**	**71.1**	**19.7**	**20.7**	**59.6**

[1]"Currently employed" is defined as having done work in the last 7 days. Includes persons who did not work in the last 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason

Annex 6. Proportion of Male Population by Frequency of Use of ICT Services, KDHS 2022 Cont'd

		Use of internet					Frequency of using internet last month			
		Never	Yes, last 12 months	Yes, before last 12 months	Number of Women	Not at all	Less than once a week	At least once a week	Almost every day	Count
		percent	percent	percent	Count	percent	percent	percent	percent	
Age groups	15-24	44.0	52.6	3.4	5,579	6.2	7.8	22.7	63.3	2,936
	25-34	26.1	70.1	3.7	4,055	4.8	6.1	15.2	73.9	2,844
	35-44	45.5	50.3	4.2	2,909	4.3	6.6	19.8	69.2	1,463
	45-49	57.7	38.8	3.6	1,109	2.4	7.9	20.8	68.9	430
Type of place of residence	Urban	17.6	80.0	2.4	5,382	4.2	4.5	14.3	77.0	4,306
	Rural	54.8	40.7	4.5	8,270	6.3	10.0	25.7	58.0	3,366
Highest educational level	No education	90.6	8.9	0.5	369	12.4	12.3	34.2	41.2	33
	Primary	67.1	28.3	4.6	4,894	10.6	12.3	29.5	47.6	1,385
	Secondary	31.2	64.3	4.4	5,592	5.7	8.4	23.8	62.1	3,599
	Higher	4.0	95.0	1.0	2,797	1.4	2.0	7.7	88.9	2,656
Wealth index combined	Poorest	74.1	21.3	4.7	2,062	8.7	13.2	37.7	40.4	438
	Poorer	64.3	30.5	5.3	2,584	8.3	15.5	26.6	49.7	787
	Middle	47.8	48.6	3.7	2,754	7.1	9.0	26.7	57.2	1,338
	Richer	22.6	73.9	3.4	3,325	5.9	7.2	19.9	67.0	2,459
	Richest	7.6	90.5	1.9	2,927	1.9	2.1	9.8	86.3	2,650
Religion	Catholic	37.5	58.8	3.8	2,946	4.5	5.4	19.9	70.2	1,731
	Protestant	41.2	55.5	3.3	4,994	4.7	7.2	17.9	70.2	2,771
	Evangelical churches	37.3	58.6	4.1	2,514	4.1	7.2	19.1	69.6	1,473
	African instituted churches	37.8	57.7	4.4	1,181	9.1	8.6	20.1	62.2	681
	Orthodox	56.5	39.1	4.4	25	0.0	0.0	8.1	91.9	10
	Islam	42.9	53.8	3.3	987	7.7	7.0	24.2	61.2	531
	Hindu	3.2	96.8	0.0	34	0.7	0.0	0.7	98.5	33
	Traditionists	50.2	46.8	3.0	40	6.0	16.8	20.1	57.2	19
	No religion/ atheists	55.2	41.8	3.0	607	4.7	9.2	19.8	66.3	253
	Other	42.5	52.2	5.3	324	4.2	6.8	22.2	66.8	169

		Use of internet					Frequency of using internet last month			
		Never	Yes, last 12 months	Yes, before last 12 months	Number of Women	Not at all	Less than once a week	At least once a week	Almost every day	Count
		percent	percent	percent	Count	percent	percent	percent	percent	
Employment status	Currently employed1	37.3	58.9	3.8	10,527	5.0	6.6	18.4	69.9	6,199
	Not currently employed	39.1	54.8	6.2	467	4.1	6.9	21.3	67.7	256
	Not employed in the 12 months preceding the survey	51.3	45.8	2.9	2,658	5.9	8.5	23.2	62.5	1,218
Occupation	Legislators, Administrators and Managers	18.3	77.7	4.0	537	2.2	2.5	15.0	80.3	417
	Professionals	5.3	94.1	0.6	495	0.9	2.3	4.1	92.7	466
	Technicians and Associate Professionals	10.1	88.5	1.4	773	2.0	2.4	11.5	84.1	684
	Secretarial, Clerical Services and Related Workers	10.4	86.3	3.3	126	1.3	2.7	5.8	90.1	109
	Service Workers, Shop and Market Sales Workers	19.7	77.1	3.1	1,157	3.0	5.1	15.4	76.5	892
	Skilled Farm, Fishery, Wildlife and Related Workers	54.2	40.5	5.3	2,034	7.4	12.9	30.8	48.9	823
	Craft and Related Trades Workers	38.3	57.7	4.0	1,260	7.4	9.8	21.0	61.9	727
	Plant and Machine Operators and Assemblers	34.5	60.8	4.6	1,230	4.7	9.6	23.6	62.0	748
	Elementary Occupations	53.9	41.9	4.3	2,974	8.1	6.9	22.3	62.7	1,244
	Missing	13.9	84.2	1.9	408	4.1	1.9	9.6	84.4	344
	Total 15-49	**40.1**	**56.2**	**3.7**	**13,652**	**5.1**	**6.9**	**19.3**	**68.7**	**7,672**

[1]"Currently employed" is defined as having done work in the last 7 days. Includes persons who did not work in the last 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason

Annex 7. Proportion of Female Population by Frequency of Use of ICT Services, KDHS 2022

County (Region)	Frequency of reading newspaper or magazine			Frequency of listening to radio			Frequency of watching television		
	Not at all	Less than once a week	At least once a week	Not at all	Less than once a week	At least once a week	Not at all	Less than once a week	At least once a week
Nyamira	83.2	7.3	9.5	14.3	15.9	69.8	46.5	10.1	43.4
Kisii	85.3	9.1	5.6	14.9	24.6	60.5	34.9	22.2	42.9
Bomet	77.7	14.8	7.5	8.9	18.6	72.6	61.6	10.3	28.1
Migori	84.0	8.7	7.3	18.5	10.4	71.0	38.3	14.4	47.3
Homa Bay	70.1	22.2	7.7	14.4	12.7	72.9	30.8	12.3	56.9
Nyandarua	71.2	22.8	6.0	11.3	16.9	71.9	15.7	14.5	69.7
Kisumu	78.4	13.4	8.2	14.7	16.7	68.6	19.6	19.5	60.9
Tana River	97.6	1.4	1.0	69.6	9.1	21.4	75.7	4.8	19.4
Turkana	95.1	4.5	0.4	53.9	18.7	27.5	75.3	7.7	17.0
Siaya	87.4	6.6	6.1	13.8	11.8	74.4	43.0	10.6	46.4
Meru	77.8	16.4	5.8	27.5	11.2	61.3	43.4	9.6	47.0
Isiolo	85.2	6.9	7.8	55.7	8.6	35.8	47.8	5.9	46.3
Tharaka-Nithi	80.7	9.5	9.8	28.3	10.0	61.7	51.3	6.8	41.8
Vihiga	83.5	13.1	3.4	10.9	21.2	67.9	35.3	23.7	40.9
Kakamega	81.1	12.6	6.3	17.3	32.4	50.3	43.2	24.2	32.6
Embu	82.3	8.2	9.5	25.6	14.8	59.6	30.3	10.2	59.5
Narok	85.2	9.1	5.8	22.2	7.6	70.2	55.4	8.8	35.7
Nandi	75.4	15.1	9.5	19.3	11.5	69.1	43.3	10.0	46.7
Samburu	92.1	5.9	1.9	26.9	27.7	45.4	57.7	16.0	26.3
Busia	89.1	7.1	3.8	18.4	7.2	74.4	45.9	8.9	45.2
Murang'a	61.2	19.1	19.7	13.8	17.3	68.9	19.3	12.2	68.5
Wajir	94.8	1.5	3.8	81.2	1.2	17.5	90.5	0.6	9.0
Machakos	81.4	12.0	6.6	18.2	13.0	68.8	28.9	9.3	61.9
Trans Nzoia	77.3	14.5	8.2	20.5	11.7	67.7	34.1	10.8	55.1

County	Frequency of reading newspaper or magazine			Frequency of listening to radio			Frequency of watching television		
	Not at all	Less than once a week	At least once a week	Not at all	Less than once a week	At least once a week	Not at all	Less than once a week	At least once a week
Nakuru	78.1	12.7	9.2	17.4	15.8	66.8	23.8	9.9	66.3
Lamu	91.1	7.1	1.9	50.5	21.1	28.4	37.8	15.6	46.6
Uasin Gishu	74.5	13.4	12.1	21.9	15.1	63.0	20.0	9.6	70.4
Elgeyo-Marakwet	78.6	15.3	6.2	21.9	9.3	68.8	43.4	13.8	42.8
Kirinyaga	83.5	13.0	3.5	16.6	20.2	63.3	13.7	13.4	72.9
Nyeri	75.1	9.7	15.2	19.1	7.0	74.0	20.4	5.2	74.4
Laikipia	86.7	10.3	3.0	28.1	17.3	54.5	27.3	8.7	64.0
Kwale	90.8	4.3	4.9	47.0	12.6	40.4	61.1	5.7	33.2
Bungoma	72.2	19.6	8.1	15.6	11.2	73.2	39.6	15.1	45.2
Baringo	71.9	19.4	8.8	23.2	14.3	62.5	50.2	10.9	38.9
Kiambu	76.5	15.0	8.5	13.5	15.0	71.6	9.5	11.5	79.1
Makueni	90.9	4.0	5.1	17.7	13.4	68.9	51.1	6.9	42.0
Kajiado	78.3	10.6	11.1	29.2	16.4	54.4	28.2	6.6	65.2
Kilifi	87.3	9.5	3.3	40.3	15.4	44.2	53.7	11.7	34.7
Garissa	96.7	1.3	2.1	79.0	12.5	8.4	69.2	12.2	18.6
Kitui	95.2	1.4	3.4	30.2	9.5	60.4	75.1	3.7	21.1
West Pokot	92.1	3.6	4.3	47.8	9.0	43.2	73.1	3.7	23.2
Taita Taveta	79.3	7.5	13.2	25.3	11.9	62.8	36.5	4.9	58.6
Marsabit	88.7	0.8	10.5	48.0	10.0	41.9	49.2	18.2	32.6
Mombasa	80.3	9.9	9.8	38.7	13.1	48.1	23.5	9.4	67.1
Nairobi	74.5	12.2	13.4	26.5	7.6	66.0	12.6	4.6	82.8
Mandera	99.1	0.5	0.4	94.5	1.5	4.0	94.8	0.9	4.3
Kericho	74.6	15.2	10.2	18.0	18.9	63.1	29.0	22.9	48.1
Total 15-49	**79.9**	**11.8**	**8.3**	**23.9**	**13.9**	**62.2**	**34.0**	**10.8**	**55.2**

Annex 7. Proportion of Female Population by Frequency of Use of ICT Services, KDHS 2022 Cont'd

County (Region)	Use of internet					Frequency of using internet last month			
	Never	Yes, last 12 months	Yes, before last 12 months	Number of Women	Not at all	Less than once a week	At least once a week	Almost every day	Count
Nyamira	74.1	21.2	4.6	327	10.2	18.2	30.2	41.4	3,236
Kisii	66.4	31.5	2.1	831	0.9	19.3	37.0	42.9	69
Bomet	77.3	21.0	1.7	650	6.8	14.1	35.5	43.7	262
Migori	75.6	21.9	2.4	674	8.1	11.9	34.1	45.9	148
Homa Bay	64.5	32.3	3.1	662	13.2	9.6	30.2	47.0	214
Nyandarua	52.9	40.8	6.3	409	10.4	12.4	29.4	47.8	253
Kisumu	63.4	32.8	3.8	771	2.8	15.5	31.9	49.9	169
Tana River	86.2	13.5	0.4	149	7.4	8.1	34.5	49.9	152
Turkana	85.9	12.9	1.2	331	5.0	13.5	31.1	50.4	363
Siaya	65.7	31.4	3.0	537	8.9	11.0	28.7	51.4	116
Meru	54.5	37.0	8.5	979	18.6	6.5	23.5	51.5	442
Isiolo	64.5	31.9	3.6	137	9.8	5.9	32.5	51.8	137
Tharaka-Nithi	57.2	37.0	5.8	271	8.0	8.7	31.3	52.1	234
Vihiga	63.0	31.4	5.6	371	5.6	13.7	27.5	53.2	556
Kakamega	63.2	34.4	2.4	1,283	10.4	9.3	26.6	53.7	193
Embu	65.0	31.9	3.1	358	4.3	12.4	29.3	54.0	935
Narok	70.3	26.9	2.7	718	10.6	7.8	26.5	55.1	141
Nandi	60.4	36.4	3.1	622	7.1	11.0	26.1	55.8	112
Samburu	77.4	21.2	1.4	156	3.6	8.9	31.2	56.3	227
Busia	73.3	24.5	2.2	622	9.0	9.1	25.2	56.7	64
Murang'a	53.4	44.6	2.0	692	2.2	11.1	28.9	57.8	602
Wajir	76.8	21.8	1.4	160	1.2	2.5	37.8	58.5	297
Machakos	40.8	55.8	3.4	992	5.5	5.5	29.9	59.0	33
Trans Nzoia	51.8	44.1	4.1	675	10.7	9.3	20.8	59.1	61

County (Region)	Use of internet					Frequency of using internet last month			
	Never	Yes, last 12 months	Yes, before last 12 months	Number of Women	Not at all	Less than once a week	At least once a week	Almost every day	Count
Nakuru	39.5	56.4	4.1	1,658	12.6	5.4	22.9	59.2	43
Lamu	63.1	34.4	2.5	101	7.9	6.4	25.7	60.0	1,337
Uasin Gishu	35.1	61.2	3.7	983	5.8	4.8	28.2	61.2	309
Elgeyo-Marakwet	67.7	28.1	4.2	228	2.3	11.6	24.8	61.3	224
Kirinyaga	49.5	46.5	4.0	481	6.1	6.1	26.5	61.3	308
Nyeri	35.9	61.4	2.7	501	6.4	7.3	24.9	61.4	167
Laikipia	56.0	42.5	1.6	332	5.9	4.0	28.3	61.8	245
Kwale	72.9	26.8	0.3	498	1.0	8.2	28.9	61.9	553
Bungoma	63.6	31.9	4.5	1,138	13.0	5.1	19.2	62.7	171
Baringo	66.2	29.6	4.2	378	2.6	6.9	26.1	64.4	114
Kiambu	31.7	63.9	4.5	2,094	6.2	6.8	21.7	65.4	100
Makueni	63.1	35.9	1.0	683	1.7	2.3	28.7	67.4	362
Kajiado	32.8	62.8	4.5	887	5.5	4.9	21.1	68.5	44
Kilifi	73.9	24.6	1.5	928	3.0	3.7	24.3	69.0	13
Garissa	65.6	34.0	0.5	290	9.6	9.5	11.3	69.6	20
Kitui	72.5	23.3	4.3	735	4.8	2.0	23.4	69.9	35
West Pokot	82.7	15.8	1.4	384	0.4	11.7	17.7	70.2	99
Taita Taveta	46.7	48.9	4.4	234	6.0	3.7	18.1	72.3	114
Marsabit	88.8	10.3	0.9	129	0.0	2.4	25.1	72.5	35
Mombasa	41.6	54.8	3.6	947	4.5	5.1	16.9	73.5	20
Nairobi	21.0	76.4	2.6	4,235	4.1	4.2	17.3	74.4	229
Mandera	89.9	9.9	0.2	206	10.8	0.0	12.6	76.7	134
Kericho	64.7	32.0	3.3	729	4.3	2.7	11.6	81.4	519
Total 15-49	**52.5**	**44.2**	**3.3**	**32,156**	**6.5**	**6.7**	**23.2**	**63.5**	**14,209**

Annex 8. Proportion of Male Population by Frequency of Use of ICT Services, KDHS 2022

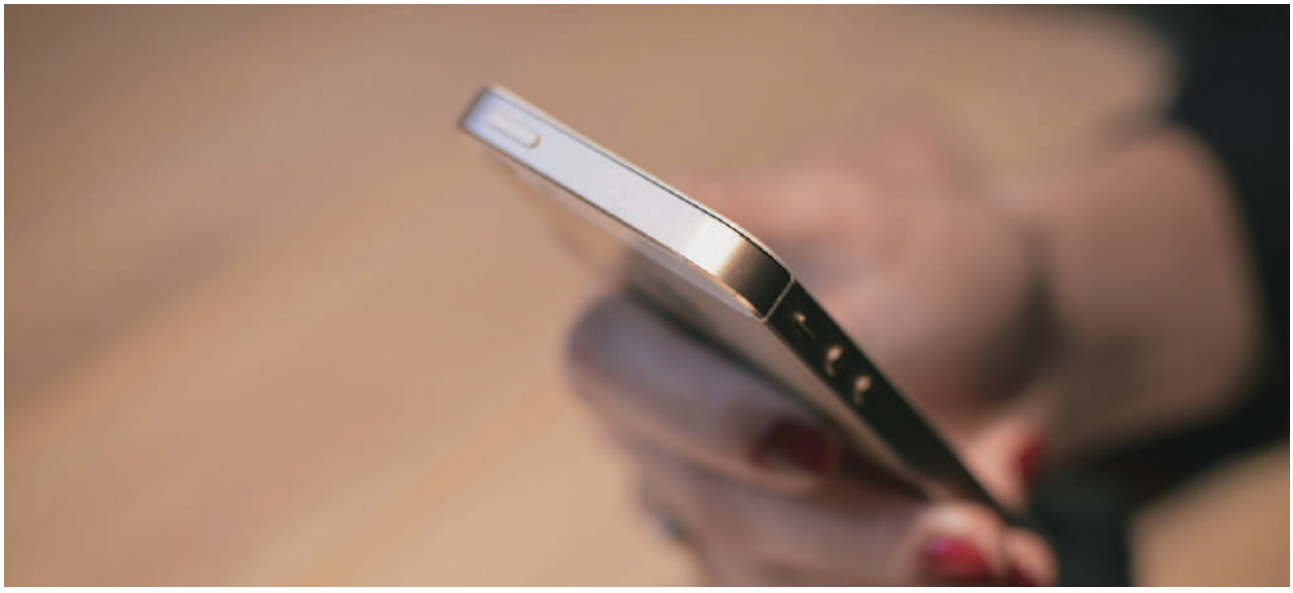
County (Region)	Frequency of reading newspaper or magazine			Frequency of listening to radio			Frequency of watching television		
	Not at all	Less than once a week	At least once a week	Not at all	Less than once a week	At least once a week	Not at all	Less than once a week	At least once a week
Nyamira	43.8	49.5	6.7	1.2	28.5	70.3	16.6	58.8	24.7
Kisii	67.2	20.3	12.4	3.0	2.0	95.0	24.9	27.9	47.3
Bomet	95.3	3.0	1.6	43.9	11.2	44.8	58.2	4.4	37.4
Migori	78.8	12.9	8.3	10.9	10.3	78.8	30.2	13.7	56.1
Homa Bay	77.4	14.6	8.0	51.1	28.5	20.3	62.8	16.9	20.3
Nyandarua	70.7	24.5	4.9	10.8	35.0	54.1	17.3	44.7	38.0
Kisumu	69.7	17.5	12.9	18.3	10.2	71.5	24.3	21.1	54.6
Tana River	83.5	9.3	7.2	35.7	33.9	30.3	46.2	27.6	26.2
Turkana	58.0	16.0	26.0	8.4	7.0	84.5	21.3	13.5	65.2
Siaya	73.0	21.8	5.2	13.9	46.5	39.6	20.6	45.4	34.0
Meru	83.7	11.5	4.8	65.2	9.7	25.0	67.1	17.5	15.4
Isiolo	61.3	13.4	25.3	8.2	8.4	83.3	15.2	9.7	75.1
Tharaka-Nithi	82.9	12.6	4.5	3.5	13.2	83.3	34.8	42.4	22.8
Vihiga	54.4	11.9	33.7	15.3	5.5	79.2	31.0	6.8	62.2
Kakamega	67.7	13.6	18.7	14.3	6.1	79.7	16.8	13.5	69.7
Embu	60.8	22.0	17.3	7.5	24.1	68.4	10.7	32.8	56.5
Narok	77.9	9.6	12.6	13.3	7.1	79.6	30.5	7.5	61.9
Nandi	45.2	50.0	4.8	1.9	9.7	88.5	8.1	44.9	47.0
Samburu	59.0	28.0	13.1	9.9	13.8	76.3	40.7	19.8	39.5
Busia	70.9	19.3	9.7	10.1	19.9	70.0	24.0	28.3	47.7
Murang'a	72.1	13.4	14.5	23.2	15.5	61.3	24.9	16.6	58.5
Wajir	68.2	16.1	15.7	11.5	6.4	82.2	37.4	15.3	47.2
Machakos	67.1	26.1	6.8	4.0	8.2	87.8	17.4	33.7	48.9
Trans Nzoia	70.8	10.7	18.5	19.5	6.3	74.2	26.0	6.2	67.8

County (Region)	Frequency of reading newspaper or magazine			Frequency of listening to radio			Frequency of watching television		
	Not at all	Less than once a week	At least once a week	Not at all	Less than once a week	At least once a week	Not at all	Less than once a week	At least once a week
Nakuru	66.7	18.5	14.8	14.6	8.7	76.7	32.5	19.4	48.1
Lamu	73.3	16.3	10.4	13.1	6.7	80.1	37.0	12.1	50.9
Uasin Gishu	73.4	24.1	2.6	11.9	13.7	74.5	27.6	20.8	51.6
Elgeyo-Marakwet	90.8	5.6	3.6	15.8	25.9	58.3	13.3	31.2	55.5
Kirinyaga	53.6	33.7	12.7	8.1	18.9	73.0	26.1	26.3	47.7
Nyeri	68.8	25.8	5.3	0.8	4.8	94.4	3.9	24.9	71.2
Laikipia	61.5	10.9	27.6	14.5	6.8	78.7	24.8	15.1	60.1
Kwale	71.9	18.4	9.8	24.9	20.3	54.8	27.4	12.7	59.9
Bungoma	66.2	17.4	16.4	23.5	18.9	57.6	20.5	21.1	58.3
Baringo	28.1	32.5	39.4	6.7	10.7	82.5	1.8	21.3	76.9
Kiambu	52.3	23.7	24.0	8.6	13.5	77.9	15.2	21.5	63.2
Makueni	62.1	21.9	15.9	6.2	25.3	68.5	27.9	29.2	42.9
Kajiado	86.0	5.8	8.2	54.6	16.2	29.2	65.9	10.2	23.9
Kilifi	60.1	22.8	17.1	17.2	8.1	74.6	19.6	8.0	72.4
Garissa	68.3	7.5	24.2	13.9	6.0	80.1	17.8	10.1	72.1
Kitui	70.6	22.3	7.1	11.1	55.9	33.0	36.4	46.8	16.8
West Pokot	71.7	23.7	4.6	32.7	25.0	42.3	33.0	31.8	35.2
Taita Taveta	94.3	0.7	5.0	8.2	1.6	90.3	7.6	0.7	91.7
Marsabit	61.3	11.8	26.9	2.5	4.0	93.6	2.6	16.9	80.5
Mombasa	51.9	24.4	23.7	16.9	10.0	73.1	20.5	20.4	59.2
Nairobi	61.0	22.1	16.9	3.7	8.0	88.3	22.8	15.1	62.1
Mandera	51.3	31.3	17.4	19.2	36.7	44.1	7.2	15.3	77.5
Kericho	45.6	40.0	14.4	0.5	4.1	95.4	5.4	19.5	75.1
Total 15-49	**61.0**	**22.8**	**16.2**	**12.7**	**16.1**	**71.1**	**19.7**	**20.7**	**59.6**

Annex 8. Proportion of Male Population by Frequency of Use of ICT Services, KDHS 2022 Contn'd

County (Region)	Use of internet					Frequency of using internet last month		
	Never	Yes, last 12 months	Yes, before last 12 months	Number of men	Not at all	Less than once a week	At least once a week	Almost every day
Nyamira	48.3	45.8	5.9	345	6.5	20.3	46.2	27.0
Kisii	54.3	39.9	5.8	150	3.6	19.3	48.7	28.5
Bomet	58.2	38.5	3.3	45	0.0	5.8	59.4	34.9
Migori	38.6	44.0	17.4	176	4.9	14.3	43.8	37.1
Homa Bay	66.2	21.8	12.1	64	7.7	11.4	43.7	37.2
Nyandarua	46.6	46.8	6.6	246	15.6	19.2	24.4	40.8
Kisumu	45.0	52.2	2.8	209	12.8	9.4	32.5	45.3
Tana River	81.0	19.0	0.0	111	1.3	6.8	46.3	45.6
Turkana	50.4	42.5	7.1	258	5.9	6.8	38.3	49.1
Siaya	43.9	52.5	3.6	51	5.1	12.0	32.2	50.7
Meru	67.1	32.9	0.0	81	0.0	14.0	34.4	51.6
Isiolo	42.6	52.2	5.2	168	9.3	4.4	34.2	52.1
Tharaka-Nithi	60.2	34.7	5.2	312	1.8	16.1	28.7	53.4
Vihiga	53.7	41.6	4.7	227	8.9	13.3	24.1	53.7
Kakamega	30.1	67.3	2.7	103	20.6	4.9	20.9	53.7
Embu	44.9	54.9	0.2	272	5.4	20.3	20.0	54.2
Narok	39.9	54.5	5.6	297	13.2	6.0	25.7	55.1
Nandi	62.6	36.8	0.6	279	3.1	11.9	29.7	55.3
Samburu	63.7	34.3	2.0	133	0.0	16.2	27.8	56.0
Busia	53.0	44.4	2.6	137	14.4	6.5	22.9	56.2
Murang'a	24.9	69.6	5.5	55	9.6	6.4	25.9	58.0
Wajir	61.1	36.1	2.8	165	6.7	2.0	32.9	58.4
Machakos	50.2	48.4	1.4	326	1.0	9.6	30.8	58.6
Trans Nzoia	53.9	37.3	8.9	489	9.8	6.7	22.6	60.9

County (Region)	Use of internet					Frequency of using internet last month		
	Never	Yes, last 12 months	Yes, before last 12 months	Number of men	Not at all	Less than once a week	At least once a week	Almost every day
Nakuru	53.2	38.7	8.1	262	9.3	10.5	19.3	60.9
Lamu	50.6	42.9	6.5	156	20.7	5.2	13.0	61.1
Uasin Gishu	42.9	55.6	1.5	110	1.0	4.9	32.0	62.2
Elgeyo-Marakwet	37.9	60.6	1.6	41	25.9	6.4	5.3	62.4
Kirinyaga	43.5	49.0	7.5	405	1.6	11.7	22.9	63.8
Nyeri	44.6	50.5	4.9	313	2.6	13.9	19.1	64.4
Laikipia	50.8	43.8	5.5	448	12.6	0.8	21.3	65.3
Kwale	30.1	65.0	4.9	145	10.1	1.5	22.3	66.1
Bungoma	22.2	76.1	1.7	442	11.5	2.6	19.3	66.6
Baringo	19.4	76.5	4.1	451	8.7	4.7	19.4	67.2
Kiambu	26.5	69.0	4.5	670	3.6	11.6	17.5	67.3
Makueni	52.1	46.0	1.9	330	0.0	13.2	18.6	68.2
Kajiado	42.2	51.7	6.1	63	2.0	9.4	20.1	68.5
Kilifi	24.2	72.5	3.3	911	1.8	9.8	19.1	69.3
Garissa	28.0	64.4	7.6	235	3.9	6.0	20.4	69.7
Kitui	81.4	18.3	0.3	268	0.0	4.1	20.6	75.3
West Pokot	48.7	51.3	0.0	117	0.0	0.0	22.3	77.7
Taita Taveta	35.2	62.9	1.9	191	1.6	0.0	19.1	79.2
Marsabit	42.7	47.9	9.4	265	2.4	6.4	11.6	79.6
Mombasa	30.2	68.9	1.0	339	1.4	1.0	15.2	82.5
Nairobi	66.3	33.7	0.0	532	0.0	5.5	9.9	84.6
Mandera	9.5	89.7	0.8	1,777	3.1	1.8	8.5	86.6
Kericho	55.0	44.7	0.3	480	0.0	0.0	3.0	97.0
Total 15-49	**40.1**	**56.2**	**3.7**	**13,652**	**5.1**	**6.9**	**19.3**	**68.7**



Part B: Households Characteristics and Uptake of ICTs

Annex 9: Proportion of Households that Owned ICT Devices and Used Internet

	N	Radio	Television	Computer	Fixed-line	DVD Player	Cassette or CD player	Mobile Phone	Used Internet
National	37,911.0	65.8	50.1	10.7	2.0	15.6	8.0	93.5	23.8
Type of place of residence									
Urban	15,277.0	71.2	67.6	20.6	2.4	25.5	13.1	97.4	36.1
Rural	22,634.0	62.1	38.2	4.1	1.8	8.8	4.5	90.9	15.4
Wealth index combined									
Poorest	6,234.8	29.8	1.9	0.2	0.9	0.3	0.2	75.3	2.8
Poorer	6,627.6	60.4	17.4	0.5	1.5	0.8	0.5	92.9	9.0
Middle	7,327.9	69.4	50.6	1.3	1.8	5.1	2.2	96.3	18.1
Richer	9,042.9	73.6	67.9	7.1	1.7	16.9	7.7	98.4	28.8
Richest	8,677.8	84.5	90.6	38.0	3.7	45.1	24.4	99.5	49.6
County									
Mombasa	1,071.0	60.8	60.9	11.1	1.9	19.1	9.0	97.1	31.1
Kwale	503.8	48.5	30.6	2.4	1.4	8.6	2.5	90.7	15.0
Kilifi	996.2	45.9	30.3	3.5	0.4	5.6	2.1	94.8	13.8
Tana River	181.5	31.9	18.7	1.8	1.0	1.3	0.6	84.7	8.1
Lamu	108.7	51.1	44.1	2.5	1.4	7.7	5.3	94.6	19.3
Taita Taveta	332.3	68.7	50.5	7.7	2.6	11.9	1.4	92.9	24.2
Garissa	269.4	28.9	29.9	4.3	0.0	2.2	0.9	97.4	19.1
Wajir	136.9	31.5	9.6	1.4	0.7	1.3	0.7	92.1	8.8
Mandera	203.5	9.4	5.1	1.1	0.8	0.6	0.2	91.2	3.6
Marsabit	170.7	23.2	21.7	1.1	1.0	1.8	0.3	76.7	4.7
Isiolo	149.7	40.0	40.1	8.9	6.7	6.3	5.2	91.4	16.2
Meru	1,372.7	53.0	38.9	6.8	1.0	14.3	6.4	87.2	16.7
Tharaka-Nithi	378.1	59.0	38.7	6.8	1.6	13.1	7.1	91.5	18.5
Embu	523.4	63.7	55.4	7.2	2.0	18.0	4.8	94.5	15.4
Kitui	897.9	63.9	24.5	3.3	0.4	8.4	3.0	93.3	13.7
Machakos	1,229.9	72.5	51.6	12.0	1.5	21.1	16.6	96.0	28.3
Makueni	774.9	65.4	34.6	4.4	0.7	13.2	5.5	93.3	20.7
Nyandarua	578.2	77.3	63.8	5.0	0.5	14.7	7.2	96.0	20.1
Nyeri	802.0	75.1	64.9	13.3	0.3	25.5	7.0	94.8	25.2

	N	Radio	Television	Computer	Fixed-line	DVD Player	Cassette or CD player	Mobile Phone	Used Internet
County									
Kirinyaga	642.0	73.8	68.6	8.5	1.9	20.7	14.8	92.2	26.2
Murang'a	1,004.4	75.1	61.0	6.4	1.2	20.3	7.9	90.5	18.8
Kiambu	2,698.9	77.7	73.8	18.5	1.4	27.5	14.0	97.4	31.6
Turkana	391.5	20.2	12.0	3.5	1.2	2.5	2.0	69.1	6.6
West Pokot	416.3	42.2	19.1	3.4	0.8	3.7	1.1	78.7	10.3
Samburu	174.9	41.5	21.9	4.7	1.0	4.9	1.8	85.9	13.8
Trans Nzoia	752.6	67.1	47.1	10.3	1.7	10.1	6.6	93.9	26.0
Uasin Gishu	1,144.9	69.5	58.1	15.6	1.8	16.7	4.6	97.0	31.7
Elgeyo-Marakwet	290.2	58.4	34.6	5.9	0.7	7.3	4.1	89.3	16.6
Nandi	732.2	62.9	38.4	4.6	12.5	5.8	3.2	92.8	18.6
Baringo	431.6	56.3	33.4	2.6	0.9	5.9	2.1	87.3	17.9
Laikipia	451.9	72.0	58.8	10.7	1.5	17.7	8.4	95.4	21.4
Nakuru	2,018.3	73.2	62.5	8.3	0.5	16.2	8.6	94.4	32.1
Narok	789.6	65.2	29.2	4.9	2.9	5.6	3.1	94.6	15.9
Kajiado	1,083.0	66.3	62.8	19.5	3.2	16.3	9.1	94.6	35.6
Kericho	747.9	69.3	45.4	6.4	1.0	6.3	4.4	93.0	18.3
Bomet	665.4	58.5	22.8	3.9	1.2	5.1	4.2	93.0	13.6
Kakamega	1,381.6	70.3	43.5	6.2	2.1	8.2	3.7	92.9	21.3
Vihiga	412.0	68.8	37.9	3.2	1.4	9.6	5.3	92.0	16.6
Bungoma	1,169.3	61.8	40.5	8.1	1.4	5.7	4.3	92.2	20.7
Busia	652.8	68.8	36.8	4.4	7.8	13.8	7.8	88.3	15.9
Siaya	703.2	80.0	38.7	3.9	1.7	7.3	2.5	89.6	17.5
Kisumu	897.4	74.3	47.3	6.5	1.5	8.1	3.1	95.8	17.3
Homa Bay	770.2	68.1	38.8	4.5	0.9	8.4	5.5	91.4	17.9
Migori	710.3	62.6	38.4	4.2	2.0	8.3	2.8	88.5	15.1
Kisii	925.4	66.2	41.0	7.4	0.4	8.9	4.3	92.2	16.3
Nyamira	423.9	64.7	38.3	3.9	1.5	11.5	4.3	92.2	10.0
Nairobi	4,748.5	72.0	73.2	28.9	4.1	33.5	19.1	98.8	39.6

Annex 10: Proportion of Households With/Without Electricity by Uptake of ICTs

	Total	Has Electricity							
	N	Radio	Televison	Computer	Fixed-line	DVD player	Cassette or CD player	Mobile Phone	Internet Use
National	21894	74.0	70.9	17.6	2.5	24.5	12.5	97.6	33.5
Type of place of residence									
Urban	13812	74.1	72.8	22.6	2.5	27.7	14.2	98.4	38.6
Rural	8082	73.7	67.7	9.1	2.4	18.9	9.4	96.2	24.7
Wealth index combined									
Poorest	176	25.9	4.1	0.0	1.3	0.0	0.0	78.2	3.1
Poorer	935	44.5	18.6	0.4	1.9	0.8	0.8	86.8	7.2
Middle	3749	63.1	51.3	0.8	1.7	4.4	1.3	94.9	16.5
Richer	8411	72.4	66.7	6.6	1.7	15.4	6.8	98.4	28.1
Richest	8623	84.5	90.6	37.8	3.7	45.0	24.4	99.5	49.6
County									
Mombasa	939	63.8	67.4	12.6	2.2	21.0	9.8	97.9	33.7
Kwale	221	62.2	54.6	4.8	1.5	17.4	5.8	95.7	25.0
Kilifi	488	57.3	54.3	6.3	0.5	9.9	3.9	98.4	24.3
Tana River	67	55.7	44.5	4.1	1.1	3.1	1.6	95.7	18.2
Lamu	58	47.3	60.9	4.6	2.3	11.4	7.2	97.8	29.6
Taita Taveta	195	74.4	71.2	11.8	2.7	18.3	2.4	96.1	31.2
Garissa	157	39.0	50.8	7.4	0.0	2.7	1.0	98.3	28.1
Wajir	36	41.8	35.3	4.7	1.6	3.1	2.1	98.1	14.9
Mandera	43	23.3	23.3	4.1	1.3	0.4	0.0	96.8	11.0
Marsabit	55	44.9	59.1	3.3	1.2	4.7	0.7	92.2	9.3
Isiolo	90	54.5	64.2	14.4	10.1	9.9	8.0	97.3	25.8
Meru	631	65.7	65.9	13.5	1.9	27.1	12.1	95.4	24.4
Tharaka-Nithi	182	72.4	62.3	13.1	2.3	23.0	13.5	94.4	28.6
Embu	281	67.9	79.4	12.6	2.6	29.3	8.4	96.4	23.7
Kitui	189	87.4	55.2	12.4	0.5	25.7	7.9	97.4	35.7
Machakos	587	79.2	75.5	23.8	2.3	38.3	28.5	98.6	43.6
Makueni	207	70.5	61.9	11.3	0.3	25.9	11.5	97.7	37.3
Nyandarua	314	79.7	76.7	8.3	0.9	21.4	10.8	98.6	27.3
Nyeri	630	79.0	74.8	16.2	0.3	30.6	8.1	98.1	30.3

	Total	Has Electricity							
	N	Radio	Televison	Computer	Fixed-line	DVD player	Cassette or CD player	Mobile Phone	Internet Use
County									
Kirinyaga	483	78.8	82.1	10.7	1.7	26.1	19.0	96.5	31.5
Murang'a	717	80.0	77.9	8.5	1.5	26.9	10.7	93.8	23.3
Kiambu	2476	79.8	78.5	20.0	1.5	29.6	14.8	98.4	33.5
Turkana	64	52.2	51.7	17.0	2.1	12.7	10.3	97.8	28.9
West Pokot	78	75.2	63.5	12.4	1.0	13.8	5.6	96.1	37.5
Samburu	49	74.1	63.7	15.2	2.6	15.1	4.7	97.9	40.1
Trans Nzoia	339	72.0	69.4	20.4	2.2	19.8	10.4	97.6	36.9
Uasin Gishu	852	71.6	65.2	20.3	1.7	20.6	5.8	98.3	34.2
Elgeyo-Marakwet	112	69.2	59.6	13.1	1.3	15.5	8.9	94.5	26.6
Nandi	375	68.1	54.4	7.9	13.7	10.9	5.8	97.8	22.2
Baringo	155	74.6	68.3	5.2	1.7	13.8	5.5	93.6	32.1
Laikipia	239	78.2	74.1	18.4	2.7	27.4	12.5	97.5	31.6
Nakuru	1443	79.4	76.5	11.3	0.7	21.3	11.2	96.8	39.6
Narok	201	70.1	51.9	11.4	2.2	13.7	6.7	97.3	29.0
Kajiado	773	74.2	77.5	26.2	3.8	20.6	12.0	96.6	44.6
Kericho	451	81.7	65.4	10.3	1.3	9.9	7.2	96.3	24.9
Bomet	224	69.4	44.6	8.5	0.6	10.3	8.2	96.5	22.6
Kakamega	494	73.8	70.4	13.4	2.1	17.7	9.5	97.3	35.1
Vihiga	179	77.4	64.5	7.2	0.8	19.3	10.8	96.7	26.7
Bungoma	363	68.2	73.7	21.1	1.3	14.2	9.2	97.0	42.3
Busia	217	79.9	68.0	11.8	7.0	30.4	16.2	95.9	30.3
Siaya	167	85.5	66.8	9.6	3.0	17.9	7.5	94.2	27.8
Kisumu	518	81.0	61.4	10.7	2.4	12.6	4.7	98.7	23.3
Homa Bay	186	78.7	68.4	17.3	1.8	25.1	13.0	97.3	35.5
Migori	176	70.5	62.1	13.4	3.1	24.6	7.7	95.9	30.6
Kisii	475	75.5	63.2	13.8	0.5	15.1	7.1	97.8	23.7
Nyamira	227	78.1	64.7	6.8	1.9	20.0	7.1	97.2	13.0
Nairobi	4488	74.1	76.1	30.3	4.3	34.6	19.8	99.0	41.0

Annex 10: Proportion of Households With/Without Electricity by Uptake of ICTs Contn'd

	Total	No Electricity							
	N	Radio	Televison	Computer	Fixed-line	DVD player	Cassette or CD player	Mobile Phone	Internet Use
National	16017	54.5	21.6	1.4	1.4	3.4	1.8	88.0	10.4
Type of place of residence									
	1465	43.1	18.3	1.9	0.9	4.5	2.9	88.5	11.8
	14552	55.7	21.9	1.3	1.5	3.3	1.7	87.9	10.3
Wealth index combined									
Poorest	6059	29.9	1.8	0.2	0.9	0.4	0.2	75.3	2.7
Poorer	5693	63.0	17.2	0.5	1.4	0.8	0.5	93.9	9.3
Middle	3579	76.0	49.9	1.9	1.9	5.9	3.2	97.8	19.8
Richer	632	89.5	83.6	13.0	2.5	36.8	19.5	99.6	37.8
Richest	55	91.8	95.2	56.8	13.3	59.3	29.8	100.0	51.8
County									
Mombasa	132	39.4	14.7	0.0	0.0	5.6	3.3	91.7	12.6
Kwale	283	37.8	11.8	0.5	1.4	1.7	0.0	86.8	7.2
Kilifi	508	34.9	7.2	0.7	0.3	1.4	0.5	91.3	3.8
Tana River	114	18.0	3.6	0.5	0.9	0.2	0.0	78.2	2.2
Lamu	50	55.6	24.7	0.0	0.2	3.3	3.0	90.8	7.4
Taita Taveta	137	60.7	21.2	1.8	2.5	2.8	0.0	88.3	14.1
Garissa	112	14.8	0.6	0.0	0.0	1.5	0.7	96.0	6.4
Wajir	100	27.7	0.2	0.2	0.4	0.6	0.3	90.0	6.5
Mandera	161	5.7	0.2	0.3	0.6	0.6	0.2	89.7	1.6
Marsabit	116	13.0	4.0	0.1	1.0	0.4	0.1	69.3	2.6
Isiolo	60	18.1	3.8	0.7	1.7	0.8	1.1	82.5	1.6
Meru	742	42.2	15.8	1.0	0.2	3.4	1.5	80.2	10.2
Tharaka-Nithi	196	46.4	16.8	1.0	0.9	3.9	1.1	88.9	9.0
Embu	243	58.9	27.7	1.0	1.3	4.9	0.7	92.3	5.8
Kitui	708	57.6	16.3	0.9	0.3	3.8	1.7	92.2	7.8
Machakos	643	66.3	29.8	1.3	0.7	5.3	5.8	93.7	14.5
Makueni	568	63.5	24.7	1.9	0.8	8.6	3.3	91.7	14.7
Nyandarua	264	74.5	48.4	1.2	0.0	6.8	2.9	93.0	11.7
Nyeri	172	60.6	29.0	2.6	0.0	6.7	3.2	82.8	6.5

	Total	No Electricity							
	N	Radio	Televison	Computer	Fixed-line	DVD player	Cassette or CD player	Mobile Phone	Internet Use
County									
Kirinyaga	159	58.5	27.5	1.6	2.3	4.2	2.2	79.2	10.1
Murang'a	287	63.0	18.7	1.0	0.5	3.7	0.9	82.0	7.7
Kiambu	223	53.9	21.0	1.6	0.0	3.3	4.9	85.3	10.3
Turkana	328	13.9	4.4	0.9	1.0	0.5	0.4	63.6	2.3
West Pokot	338	34.5	8.8	1.3	0.8	1.4	0.0	74.7	4.0
Samburu	126	28.7	5.5	0.6	0.4	0.9	0.7	81.2	3.5
Trans Nzoia	414	63.0	28.9	2.1	1.3	2.2	3.6	90.9	17.0
Uasin Gishu	293	63.6	37.6	2.2	1.8	5.1	0.8	93.2	24.4
Elgeyo-Marakwet	178	51.6	18.9	1.4	0.4	2.2	1.0	86.1	10.3
Nandi	357	57.4	21.6	1.1	11.2	0.3	0.3	87.6	14.8
Baringo	277	46.0	13.9	1.1	0.5	1.5	0.3	83.9	9.9
Laikipia	213	65.1	41.6	1.9	0.2	6.9	3.9	93.1	9.9
Nakuru	575	57.6	27.4	0.7	0.0	3.5	2.2	88.6	13.2
Narok	588	63.6	21.5	2.7	3.2	2.8	1.9	93.7	11.5
Kajiado	310	46.5	26.2	2.8	1.6	5.4	2.0	89.4	13.0
Kericho	297	50.4	14.9	0.4	0.4	0.8	0.0	87.9	8.1
Bomet	441	52.9	11.8	1.5	1.5	2.4	2.2	91.2	9.0
Kakamega	888	68.4	28.5	2.2	2.2	2.9	0.5	90.4	13.6
Vihiga	233	62.2	17.5	0.2	1.7	2.0	1.0	88.3	8.9
Bungoma	806	58.9	25.5	2.3	1.4	1.8	2.1	90.0	10.9
Busia	436	63.3	21.3	0.7	8.3	5.5	3.7	84.5	8.8
Siaya	536	78.3	29.9	2.1	1.3	4.0	0.9	88.2	14.3
Kisumu	379	65.3	28.1	0.8	0.2	2.0	0.9	91.8	9.0
Homa Bay	584	64.8	29.3	0.4	0.6	3.1	3.1	89.5	12.2
Migori	534	60.0	30.6	1.2	1.6	2.9	1.2	86.1	10.0
Kisii	451	56.4	17.6	0.8	0.2	2.3	1.3	86.3	8.5
Nyamira	197	49.1	7.6	0.5	1.0	1.7	1.0	86.5	6.5
Nairobi	261	35.4	22.7	5.8	1.1	13.9	6.9	95.0	14.8

Annex 11: Proportion of Household With/Without Any Form of Health Cover by Uptake of ICTs

	Total	Had any form of Health Insurance				Total	Did not have any form of Insurance			
	N	Radio	Television	Mobile Phone	Used Internet	N	Radio	Television	Mobile Phone	Used Internet
National	7,135.1	77.7	72.5	98.2	36.8	12,363.0	59.2	37.4	91.1	15.8
Type of place of residence										
Urban	1465	43.1	18.3	1.9	0.9	4,010.4	64.1	56.6	96.8	26.6
Rural	14552	55.7	21.9	1.3	1.5	8,352.6	56.8	28.1	88.4	10.5
Wealth index combined										
Poorest	6059	29.9	1.8	0.2	0.9	2,967.4	31.0	1.7	75.6	2.3
Poorer	5693	63.0	17.2	0.5	1.4	2,814.4	59.7	16.6	91.7	8.2
Middle	3579	76.0	49.9	1.9	1.9	2,566.5	67.3	47.5	96.0	15.2
Richer	632	89.5	83.6	13.0	2.5	2,605.3	71.6	62.8	98.7	24.0
Richest	55	91.8	95.2	56.8	13.3	1,409.4	79.7	88.3	99.8	45.0
County										
Mombasa	222.4	68.1	73.7	97.9	42.6	333.0	56.3	55.6	97.3	26.6
Kwale	57.0	63.3	60.5	98.2	29.5	201.2	42.7	22.9	86.9	11.8
Kilifi	95.7	67.9	64.9	100.0	36.8	415.7	43.0	26.3	95.3	10.9
Tana River	8.1	76.3	63.1	100.0	24.8	87.3	29.4	14.2	84.4	6.2
Lamu	23.3	50.9	59.3	96.1	26.4	32.0	48.5	33.6	90.4	18.4
Taita Taveta	54.0	72.6	76.6	98.4	34.9	118.1	63.9	43.3	88.7	18.1
Garissa	16.2	55.8	55.8	97.8	42.2	132.1	27.2	29.2	96.4	16.0
Wajir	14.2	35.6	25.0	98.8	8.3	58.9	26.7	4.7	93.6	8.0
Mandera	12.8	25.6	22.7	92.5	10.2	95.7	7.2	1.9	89.3	1.2
Marsabit	8.0	41.0	54.5	87.2	15.3	83.2	22.7	17.7	79.6	3.7
Isiolo	31.0	52.6	55.8	98.7	29.1	44.9	27.7	24.3	86.8	11.1
Meru	207.7	75.6	73.2	98.3	24.6	511.2	43.5	26.9	82.4	11.5
Tharaka-Nithi	70.4	71.2	62.2	96.5	28.0	126.5	49.3	24.0	90.3	10.3
Embu	123.6	77.3	74.7	98.0	23.6	146.5	59.0	36.6	91.7	6.1
Kitui	94.4	87.6	63.1	98.4	45.5	376.6	58.3	16.0	92.9	6.0
Machakos	255.4	82.3	72.5	99.0	39.8	385.4	67.7	32.3	94.7	20.5
Makueni	107.3	73.7	56.7	96.8	29.5	295.3	62.1	23.3	91.8	14.4
Nyandarua	131.2	79.6	79.6	98.4	26.4	165.2	75.8	52.7	94.1	18.4
Nyeri	211.3	85.5	77.4	97.2	32.9	199.1	64.2	50.9	93.8	18.4

	Total	Had any form of Health Insurance				Total	Did not have any form of Insurance			
	N	Radio	Television	Mobile Phone	Used Internet	N	Radio	Television	Mobile Phone	Used Internet
County										
Kirinyaga	144.6	82.7	88.3	97.7	34.7	191.7	62.9	54.9	85.9	20.1
Murang'a	156.7	87.1	89.7	98.4	25.7	360.2	71.6	47.5	87.1	12.8
Kiambu	717.3	84.2	80.8	99.8	42.5	657.1	71.2	65.6	96.9	16.8
Turkana	57.9	33.9	25.9	78.8	18.3	145.0	14.9	7.0	65.3	1.7
West Pokot	24.6	73.3	70.2	100.0	24.3	187.4	42.0	10.5	76.8	6.8
Samburu	18.6	80.6	68.9	98.1	39.5	70.8	32.0	11.5	83.9	5.5
Trans Nzoia	104.4	75.5	73.2	98.2	44.4	282.0	65.8	40.2	92.2	20.2
Uasin Gishu	283.3	73.8	69.5	99.2	35.1	303.1	66.9	48.9	96.5	29.9
Elgeyo-Marakwet	55.5	69.2	57.9	96.3	29.4	95.0	54.2	22.4	86.8	8.3
Nandi	114.5	65.8	53.9	98.9	25.6	264.1	62.9	30.9	89.2	13.4
Baringo	72.7	75.7	60.1	95.1	33.1	149.2	47.6	25.2	83.9	12.3
Laikipia	132.7	73.7	65.3	98.3	24.9	105.6	66.2	52.5	91.2	14.2
Nakuru	430.4	83.2	78.6	97.5	53.0	603.6	67.0	52.7	93.2	20.0
Narok	103.4	72.1	43.3	100.0	32.1	295.5	64.1	23.0	93.5	10.9
Kajiado	243.8	71.6	81.8	98.0	45.8	307.7	60.0	49.5	92.4	26.0
Kericho	197.2	78.7	57.3	96.0	25.7	190.9	58.5	26.8	87.1	8.7
Bomet	157.4	74.6	36.6	98.8	23.8	182.7	51.4	11.8	86.3	7.6
Kakamega	191.9	81.8	75.1	97.0	34.9	510.2	64.1	32.7	92.0	14.0
Vihiga	56.4	82.4	63.3	97.4	30.5	154.5	69.1	30.1	91.1	11.1
Bungoma	151.1	70.1	66.2	97.7	46.1	423.9	58.6	31.1	90.6	11.2
Busia	76.0	83.6	60.6	95.0	36.9	260.3	64.4	31.4	86.4	12.0
Siaya	60.7	87.5	71.8	98.1	31.4	298.2	80.5	34.9	86.9	14.8
Kisumu	125.9	81.1	63.4	100.0	27.6	339.8	71.8	40.5	93.4	11.5
Homa Bay	94.4	83.1	70.6	98.9	36.0	298.2	66.8	31.3	88.4	11.6
Migori	89.2	75.8	65.8	97.4	27.4	275.0	58.2	28.4	87.7	10.0
Kisii	178.0	81.3	63.4	97.9	22.3	313.0	54.8	26.1	88.7	13.5
Nyamira	59.6	84.1	63.3	97.5	16.5	155.6	59.2	26.2	89.1	7.3
Nairobi	1,292.9	79.2	84.0	99.3	44.7	1,134.7	62.7	61.3	98.8	32.0

Annex 12: Proportion of Households that Received/Did not Receive social assistance by Uptake of ICTs

	Had any form of Health Insurance				Did not have any form of Insurance			
	N	Mobile Phone	Registered to mobile money platform	Mobile phone used financial transactions	N	Mobile Phone	Registered to mobile money platform	Mobile phone used financial transactions
National	6,379.5	90.5	89.9	86.7	31,531.5	94.1	94.3	93.2
Type of place of residence								
Urban	1,927.9	96.3	97.0	94.4	13,349.1	97.6	97.8	96.8
Rural	4,451.6	88.0	86.9	83.7	18,182.4	91.6	91.8	90.6
Wealth index combined								
Poorest	1,372.1	69.3	67.5	63.6	4,862.7	77.0	76.3	73.3
Poorer	1,252.9	92.2	92.3	88.3	5,374.6	93.1	94.3	93.2
Middle	1,415.2	95.1	94.4	92.4	5,912.8	96.6	96.6	96.0
Richer	1,309.9	98.9	98.6	96.5	7,733.0	98.4	98.9	97.9
Richest	1,029.4	99.5	100.0	98.5	7,648.4	99.5	99.5	99.1
County								
Mombasa	122.4	97.2	97.4	94.2	948.5	97.1	97.8	94.4
Kwale	89.1	93.3	93.9	78.6	414.7	90.1	91.9	91.7
Kilifi	130.8	90.9	88.8	82.5	865.3	95.4	95.4	94.5
Tana River	35.4	79.2	86.9	56.2	146.1	86.0	85.3	69.1
Lamu	22.4	95.9	97.5	86.5	86.4	94.2	95.6	94.7
Taita Taveta	58.9	96.2	95.9	94.7	273.3	92.2	93.4	91.9
Garissa	34.2	97.9	98.5	86.2	235.2	97.3	97.0	95.6
Wajir	29.9	95.7	95.4	73.9	107.1	91.1	86.6	75.5
Mandera	20.8	98.1	98.2	80.4	182.8	90.4	79.1	41.0
Marsabit	51.4	82.4	84.6	56.1	119.3	74.2	74.7	50.1
Isiolo	23.0	90.4	92.2	71.8	126.8	91.6	95.1	91.8
Meru	210.2	84.5	78.2	83.8	1,162.4	87.6	88.0	88.4
Tharaka-Nithi	112.4	90.1	88.3	91.8	265.7	92.2	92.1	90.4
Embu	76.6	89.6	89.9	83.2	446.8	95.3	94.2	94.3
Kitui	142.6	86.4	90.7	87.7	755.4	94.6	95.3	92.4
Machakos	252.6	95.4	95.9	98.6	977.3	96.2	97.4	97.7
Makueni	134.7	93.2	91.3	93.0	640.2	93.3	95.5	94.9
Nyandarua	114.1	95.3	95.0	92.6	464.1	96.2	96.7	96.3
Nyeri	196.1	93.2	91.7	93.3	605.9	95.3	95.7	94.3

	Had any form of Health Insurance				Did not have any form of Insurance			
	N	Mobile Phone	Registered to mobile money platform	Mobile phone used financial transactions	N	Mobile Phone	Registered to mobile money platform	Mobile phone used financial transactions
County								
Kirinyaga	95.8	90.1	90.1	97.5	546.2	92.6	94.4	93.3
Murang'a	301.7	89.5	90.8	92.6	702.7	90.9	93.3	93.1
Kiambu	511.4	96.9	96.6	96.1	2,187.4	97.5	96.2	95.3
Turkana	240.4	68.6	65.2	39.0	151.0	70.0	65.6	64.9
West Pokot	36.5	65.0	64.6	39.8	379.8	80.0	71.6	68.9
Samburu	31.4	85.3	85.9	62.6	143.5	86.0	85.9	81.1
Trans Nzoia	115.9	94.9	95.3	81.9	636.6	93.8	95.4	95.3
Uasin Gishu	285.6	97.6	96.8	94.0	859.3	96.8	98.2	97.8
Elgeyo-Marakwet	46.8	87.6	86.5	93.3	243.4	89.7	92.5	93.0
Nandi	110.0	93.8	93.4	89.1	622.2	92.7	94.2	92.7
Baringo	75.0	82.2	78.4	66.8	356.5	88.4	88.3	87.6
Laikipia	71.1	91.3	92.8	85.7	380.8	96.2	96.0	94.5
Nakuru	172.5	90.3	89.6	92.4	1,845.8	94.8	96.5	95.0
Narok	114.5	94.2	94.8	82.5	675.1	94.7	95.0	93.8
Kajiado	128.3	92.6	91.7	87.1	954.8	94.8	94.7	93.9
Kericho	114.4	89.1	94.6	83.6	633.4	93.7	95.5	94.2
Bomet	200.4	94.0	80.3	90.3	465.0	92.5	84.6	91.0
Kakamega	181.0	88.2	87.6	94.0	1,200.7	93.6	93.4	93.0
Vihiga	75.4	90.3	92.7	91.2	336.6	92.3	93.2	91.8
Bungoma	203.7	83.9	82.9	85.3	965.6	93.9	94.3	95.1
Busia	155.0	80.7	84.0	91.0	497.8	90.6	92.8	90.2
Siaya	74.2	89.0	87.7	85.4	629.0	89.7	90.9	91.6
Kisumu	81.0	90.3	93.2	92.6	816.4	96.3	97.6	97.5
Homa Bay	230.2	85.6	85.7	95.7	540.0	93.9	93.5	94.0
Migori	128.2	79.0	78.3	78.6	582.0	90.6	88.0	86.2
Kisii	169.9	88.8	91.0	91.5	755.5	93.0	93.8	92.9
Nyamira	83.2	91.8	91.5	91.7	340.6	92.3	94.0	93.0
Nairobi	488.5	98.8	99.2	98.9	4,260.0	98.8	98.8	98.6

Annex 13: Proportion of Households that Practiced/Did not Practice Farming by Ownership of ICT Devices

	Farming Households				Total	Non-Farming Households		
	N	Radio	Television	Mobile Phone	N	Radio	Television	Mobile Phone
National	26,072.0	64.3	23.9	81.5		58.8	36.2	82.0
Type of place of residence								
Urban	7,250.0	73.5	42.2	91.7	6,664.0	65.4	49.4	90.5
Rural	18,822.0	60.8	16.8	77.6	3,694.0	46.9	12.5	66.6
Wealth index combined								
Poorest	7,265.0	29.5	0.6	53.4	1,849.0	21.5	0.5	38.9
Poorer	5,486.0	61.4	2.6	82.4	1,508.0	46.5	1.7	72.0
Middle	5,453.0	78.4	12.6	93.7	1,396.0	54.4	5.7	87.7
Richer	4,833.0	86.9	50.9	97.6	2,434.0	65.1	29.9	95.1
Richest	3,035.0	91.6	95.0	99.5	3,171.0	83.5	91.7	99.3
County								
Nairobi	530.0	77.0	65.3	98.1	710.0	73.0	71.5	97.2
Nyandarua	568.0	88.0	38.6	94.4	180.0	67.8	29.4	84.4
Nyeri	583.0	87.3	54.0	95.4	270.0	75.9	54.8	92.6
Kirinyaga	513.0	81.7	44.1	91.4	254.0	60.6	34.3	84.6
Muranga	646.0	83.3	31.6	90.2	193.0	68.9	38.9	82.9
Kiambu	462.0	84.4	55.6	93.1	372.0	80.9	64.7	92.5
Mombasa	276.0	73.8	56.4	95.6	532.0	65.3	63.0	95.3
Kwale	511.0	45.8	13.0	80.8	212.0	50.9	35.8	85.8
Kilifi	459.0	42.7	15.3	81.5	332.0	50.0	36.9	85.2
Tana River	478.0	38.9	7.1	74.6	235.0	35.7	11.9	69.8
Lamu	381.0	62.2	24.9	87.9	316.0	56.6	37.7	84.5
Taita Taveta	504.0	68.5	25.4	89.3	240.0	57.1	35.4	85.4
Marsabit	540.0	25.9	12.6	49.3	165.0	55.2	40.6	72.7
Isiolo	466.0	34.8	12.9	58.8	260.0	45.4	36.9	70.8
Meru	601.0	67.1	32.3	88.5	246.0	50.8	24.8	77.6
Tharaka	585.0	65.5	21.4	78.9	158.0	52.5	17.1	70.9
Embu	581.0	76.1	31.8	88.3	199.0	61.3	34.7	78.4
Kitui	733.0	61.4	11.6	84.3	82.0	41.5	19.5	74.4
Machakos	669.0	76.4	22.6	91.2	171.0	61.4	32.2	84.2

	Farming Households				Total	Non-Farming Households		
	N	Radio	Television	Mobile Phone	N	Radio	Television	Mobile Phone
County								
Makueni	717.0	70.7	14.5	89.8	88.0	52.3	19.3	79.5
Garissa	400.0	23.0	4.8	64.2	223.0	41.3	35.0	92.4
Wajir	424.0	33.0	8.5	57.2	164.0	50.0	25.2	82.3
Mandera	452.0	20.1	3.8	42.3	194.0	50.3	22.7	76.3
Siaya	634.0	73.0	19.0	82.2	167.0	53.9	18.0	69.5
Kisumu	590.0	80.3	33.6	89.0	212.0	72.6	45.5	88.7
Migori	652.0	64.6	15.4	79.8	167.0	61.4	18.0	74.9
Homa Bay	667.0	67.8	17.7	83.2	132.0	57.6	21.2	76.5
Kisii	620.0	70.2	29.2	86.6	225.0	53.3	24.0	76.0
Nyamira	592.0	75.9	25.9	93.1	143.0	52.4	21.0	79.0
Turkana	430.0	9.1	3.7	28.7	256.0	7.8	5.9	40.6
West Pokot	545.0	37.6	6.4	58.2	109.0	55.0	30.3	72.5
Samburu	569.0	30.6	9.7	58.5	122.0	55.7	32.8	81.1
Trans-Nzoia	555.0	69.9	27.2	87.5	247.0	57.1	23.5	77.7
Baringo	541.0	59.1	19.4	69.7	150.0	59.3	18.7	73.3
Uasin Gishu	494.0	73.5	32.6	88.7	324.0	70.7	40.7	90.7
Elgeyo Marak	560.0	71.4	20.9	80.0	163.0	52.1	15.3	68.7
Nandi	587.0	75.3	24.0	84.8	190.0	59.5	24.7	75.8
Laikipia	575.0	76.0	35.7	90.6	164.0	64.6	42.7	82.3
Nakuru	471.0	83.4	38.8	88.3	434.0	73.2	48.2	91.2
Narok	623.0	70.8	14.1	82.3	184.0	67.9	26.1	89.1
Kajiado	524.0	63.2	31.7	86.5	246.0	72.0	61.4	92.3
Kericho	573.0	71.9	21.3	83.6	155.0	54.8	18.7	82.5
Bomet	597.0	75.2	13.1	86.6	146.0	52.7	13.1	73.3
Kakamega	705.0	72.9	25.1	88.1	169.0	55.6	27.2	72.8
Vihiga	638.0	75.7	24.4	88.1	120.0	60.0	15.0	61.7
Bungoma	652.0	66.9	19.6	83.9	160.0	50.0	22.6	73.8
Busia	599.0	59.9	17.4	82.6	177.0	48.0	17.0	71.0

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