



# EICV5

Integrated Household Living Conditions Survey (Enquête Intégrale sur les Conditions de Vie des Ménages)

-2016/2017 - EICV5\_Thematic Report

## **Utilities and Amenities**

December 2018









The EICV5\_Utilities and Amenities Thematic Report is produced by the National Institute of Statistics of Rwanda (NISR). Additional information about the EICV5\_Utilities and Amenities Thematic Report may be obtained from NISR: P.O. Box 6139, Kigali, Rwanda; E-mail: info@statistics.gov.rw; Website: http://www.statistics.gov.rw ISBN: 978-99977-43-38-1 Recommended citation: National Institute of Statistics of Rwanda (NISR), EICV5\_Utilities and Amenities Thematic Report, December 2018

#### Acknowledgement

The Fifth Integrated Household Living Conditions Survey (EICV5) was conducted from October 2016 to October 2017, and is designed to provide accurate and up-to-date information that are useful to government, analysts, and the public as they seek to monitor and evaluate efforts to reduce poverty.

The NISR now conducts EICV surveys every three years, and this has been made possible by strong collaboration and support from our stakeholders, who are as interested as we are in supporting evidence-based decision making, and planning processes that are grounded on reliable and valid statistics.

We sincerely appreciate the support given by the Government of Rwanda for the development of statistics in the country, and are grateful for the help that we continue to receive from all government institutions.

We are most grateful to our development partners for the support that they have given for the collection and development of statistics in Rwanda, and especially for EICV5. They include UK Aid, the European Union, the World Bank, and the UN partners in the country.

The measurement and analysis of poverty and living standards is an exercise that requires considerable tecnical skills. We would like to thank NISR technical and management team for their work - from the planning and implementation of EICV5 through the analysis and publication of the results. We further appreciate the valuable technical support provided by the international experts. The generation and use of complex survey data can only be achieved through teamwork.

Yusuf Murangwa

Director General, NI

#### Important technical notes for data users

The EICV5 has three main components: cross-sectional sample of households, VUP Panel Survey receiving VUP benefits and EICV5 Panel Survey.

The EICV5 cross-sectional survey is designed to represent the current household-based population of Rwanda. The NISR national master sampling frame was used for selecting the sample villages in each district. This master sample was based on the 2012 Rwanda Census frame. The villages were selected from the Master Sample, stratified by district. Within each district the sample villages were selected systematically with probability proportional to size (PPS), where the measure of size was based on the number of households in each village from the 2012 Census frame. Within each district the villages in the master sampling frame were not explicitly stratified by urban and rural areas. However, the frame of villages within each district was ordered by urban and rural codes, and the systematic selection of the sample villages (with PPS) provides an implicit stratification of the Master Sample by urban and rural areas within each district, with a proportional allocation of the sample villages to each stratum.

Similar to the EICV4 cross-sectional survey methodology, a nationally-representative sample of clusters was assigned for the EICV5 data collection each cycle out 10 cycles, so that the sample is geographically representative over time. This process ensured that the final distribution of the sample clusters to cycles and sub-cycles was geographically representative within each district.

The objectives of the EICV5 Panel Survey are to measure the trends in key socioeconomic indicators over time for a nationally representative panel of households. The baseline survey was EICV3, and in EICV4 the panel households which moved or split were tracked and interviewed at their new location. The Panel Survey includes the panel households that remained in the original sample villages, and the split households that were tracked in EICV4. Any panel households that moved or split from this initial sample of panel households in EICV5 were also tracked. However, the additional tracking will be limited to following the original eligible members (13 years or older in EICV3, with relationship being: Household Head, Spouse of household head, son/daughter of household head, or step child/adopted child of household head) of the EICV3 panel households.

The main objective of the VUP Panel Survey is to provide longitudinal data for a nationally-representative panel of households that received VUP benefits at the time of the EICV4, in order to obtain reliable estimates of trends in the socioeconomic indicators for these households. The VUP Survey conducted with EICV4 was based on a sample of 2,460 households selected from the VUP administrative frame using a stratified two-stage sample design. However, only the sample households indicated that they were receiving VUP benefits at the time of the EICV4 survey were considered to be the sample for the VUP Panel Survey.

If the entire household moved or an eligible member moved, it was necessary to identify their new address so that they can be tracked there. The eligibility criteria for household members to be tracked and the tracking procedures are similar to those used for the EICV5 Panel Survey.

Regarding data collection, the NISR collected the data for the EICV5 cross-sectional, VUP panel and EICV5 panel surveys using computer-assisted personal interviewing (CAPI) with computer tablets for the first time using the same questionnaire, including the listing operation.

#### **Rounding of estimates**

Estimates presented in the tables are shown rounded to one decimal place. To improve readability, estimates referred to in the interpretation of results have been rounded to the nearest integer, except for the discussion of relatively small percentages. Moreover, estimates of total population or total number of households are shown in tables expressed in '000's. Due to the rounding, the sum of subpopulation totals (e.g. Provinces or age groups) can be minimally different from the total population estimated at national level.

#### **Consumption quintiles**

The results are presented by quintile. Quintiles are developed by sorting the sample of households by annual consumption values, and then dividing the population into five equal shares. The 20% of individuals with the highest annual consumption are allocated to quintile 5, and the 20% of individuals with the lowest levels of annual consumption are allocated to quintile 1. The poorest households and their members are found in quintile 1 and the richest are found in quintile 5.

Consumption is used as a proxy for income, as is usual when estimating poverty. Quintiles are a relative measure of individuals' consumption in comparison to the rest of the population during a specific period.

#### **Executive summary**

#### Background to the EICV5 and the EICV series

This report presents and discusses detailed results from the EICV5 and compares them with EICV4 in the areas of water and sanitation, energy, housing, transport and ICT facilities. The EICV5 survey, conducted over a period of 12 months between October 2016 and October 2017, is the most complex survey since the series started. In this survey, the use of traditional paper and pencil techniques has been replaced by the use of computer assisted personal interviewing techniques so as to improve the speed of delivery and quality of the data. For the first time, Computer-Assisted Personal Interviewing (CAPI) technique was used as the method of data collection for the survey (EICV). The EICV5 has three main components: cross-sectional sample of households, VUP Panel Survey receiving VUP benefits and EICV5 Panel Survey.

The EICV5 cross-sectional survey is designed to represent the current household-based population of Rwanda. The NISR national master sampling frame was used for selecting the sample villages in each district. This master sample was based on the 2012 Rwanda Census frame. Similar to the EICV4 cross-sectional survey methodology, a nationally-representative sample of clusters was assigned for the EICV5 data collection each cycle out 10 cycles, so that the sample is geographically representative over time. This process ensured that the final distribution of the sample clusters to cycles and subcycles was geographically representative within each district.

The objectives of the EICV5 Panel Survey are to measure the trends in key socioeconomic indicators over time for a nationally representative panel of households. The baseline survey was EICV3, and in EICV4 the panel households which moved or split were tracked and interviewed at their new location. The main objective of the VUP Panel Survey is to provide longitudinal data for a nationally-representative panel of households that received VUP benefits at the time of the EICV4, in order to obtain reliable estimates of trends in the socioeconomic indicators for these households.

In this report, the majority of tables provide results both for EICV4 and EICV5, and highlight developments over time, as well as discussing different patterns across the provinces in Rwanda and in urban and rural areas. Emphasis has been placed on including disaggregated results for men and women and male- and female-headed households to explore gender-related aspects in key social and economic characteristics of persons and households in Rwanda, and other disaggregation, such as age group, type of habitat, etc, where necessary. Districts tables have been also provided in annex.

#### Water and sanitation

EICV5 shows the progress observed in the use of improved drinking water source (87% compared to 85% in EICV4) over the period of three years at national level. Usage rates are higher in urban areas (96%) compared to rural areas (85%). At national level, 27% of households are within 0–4 minutes walking distance of an improved drinking water source while 61% of households are within 0–14 minutes walking distance one-way). The percentage of households having access to improved sanitation increased from 83% in 2013-14 to 86% in 2016-17. Considerable improvement is notable across quintiles as well.

#### **Energy**

The survey provides also information about the main source of energy for households lighting and cooking, types of cooking stoves and cooking stove installation place. Moreover, it provides information on energy using multi-tier framework approach. In urban areas, the majority (65%) of households use charcoal as cooking fuel. In rural areas, firewood remains the most used type of cooking fuels, (93%). The traditional stove is the most commonly used cooking stove (53%) by the households followed by charcoal or fire stove with 16%. EICV5 shows also that, 53% of the households set up their stoves in a separate dwelling. 20% of the households install their stoves outdoor and 5% in the same dwelling in a sleeping area.

At national level, use of electricity for home lighting has increased since 2013-14 from 20% to 27% in 2016-17. The highest percentage of households using electricity for home lighting is found in Kigali City (78%). In other provinces the percentage of households using electricity for home lighting ranges between 14% and 22%. The survey does not provide only information on energy using binary metric approach but also using Multi-Tier Framework approach (MTF), where 35% of the households have access to electricity countrywide according to MTF.

#### **Housing**

The EICV5 results show an increase of ten percentage points for households living in Imidugudu from 49% in 2013-14 to 59% in 2016-17. Single house dwelling has decreased from 90% in 2013-14 to 89% in 2016-17. This type of dwelling is more common in rural (96%) areas than in urban areas (59%) and especially in the Northern Province (97.5%) in 2016-17.

EICV also provides information on construction materials used for roofs, walls and floors in Rwanda. The use of metal sheets as roofing material has become more common across the country, with a rate of 67% at national level in 2016-17 compared to 61% in 2013-14. This increase is also observed in the lowest quintile from 56% in 2013-14 to 57% in 2016-17.

The majority of households countrywide use mud bricks as wall construction materials (35%), while those using tree trunks with mud have decreased in rural areas from 33% in 2013-14 to 27.5% in 2016-17. The percentage of households that use mud bricks covered with cement has increased notably from 24% in 2013-14 to 30% in 2016-17 at national level. Beaten earth is the most commonly used flooring material in Rwandan dwellings. However, it has decreased from 74% in EICV4 to 68% in EICV5. The percentage of dwellings with cement as flooring material has increased from 21% in 2013-14 to 26% in 2016-17. In urban areas 64.5% of households have cement as flooring material compared to only 17% of households in rural areas.

Furthermore, the survey presents data on households with rain water management system. Results show that 14.5% of households in Rwanda have a way of managing rain water. Compost heap and thrown in bushes/fields remain the method that households widely use for rubbish disposal (42.5% and 46.5% respectively in EICV5). Regarding access to basic services and infrastructures, the data show that the mean walking time to services such as markets, health centres, primary and secondary schools in rural areas has reduced. For example, households in rural areas who walk 1-2 hours to a health centre reduced from 37% in 2013-14 to 35% in 2016-17, while those who walk 0-30 minutes to a health centre increased from 18% in 2013-14 to 22% in 2016-17.

#### **Transport**

The survey provides information on the distance to transport infrastructure, usage and perception of change in quality in the last 12 months. It also provides information on household ownership of transportation assets such as vehicles, bicycles and motorcycles.

The percentage of households accessing all-weather roads regularly or often has increased by two percentage points from 96% in 2013-14 to 98% in 2016-17at national level. The majority of rural households in Rwanda walk to an all-weather road in less than 20 minutes. The mean distance (in meter) to an all-weather road is (329 meters) at national level in 2016-17; 68% of the households are within 200 metres and 84% are within 500 metres. Considering the threshold of two kilometers, accessibility to all-weather roads is very high to households in all regions. In urban areas, 100% of households are within 2 km to an all-weather road and 97% in rural areas.

At national level, 79% of households are satisfied with their nearest all-weather road, which shows an increase of user satisfaction level of two percentage points compared to 77% in 2013-14. On the perceptions of changes in quality of all-weather road, 35% of respondent households think it has improved and 60% feel that the quality of all-weather roads has remained the same. The usage rate of public transport stages, in 2016-17 stands at 77% in urban areas compared to 51% in rural areas. 18% and 65.5% of rural and urban households respectively walk less than 20 minutes to a public

transport stage. Majority of private vehicle (not for commercial) owners fall within the richest quintile in both surveys. In urban areas, 1% of households own a motorcycle and 5% own a car in 2016-17. Ownership of bicycle is much higher in rural areas (14%) compared to urban areas (9%) in EICV5.

#### **ICT**

This report provides data on access to ICT devices and services (like mobile phones, computer, etc) among households. Household ownership of ICT devices has increased significantly between EICV4 and EICV5. 67% of households own at least one mobile phone, 74% own a radio, 10% own a TV set and 3% own a computer in 2016-17. Overall, 17% of the households have access to internet at home in 2016/17, this has almost doubled at the national level from 9% of the households since the last survey in 2013/14.

38% households in urban areas have internet access compared to 12% in rural areas. Mobile phones are the most common used modes of accessing internet at home (96%) followed by modems (4%) in 2016-2017. Households not owning an ICT device may still use public ICT services such as public internet service facilities and public phones. Only 1% of households use public internet facilities in Rwanda (regularly and often). The highest usage rate is found in Kigali City (2.5%) compared to other provinces; this continuous reduction in the use of public internet facilities might be explained by the increased use of private internet sources observed from the data. The user satisfaction level is very high across the country among the households using public internet services. 91% of households are satisfied with their nearest internet services in 2016-17.

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#### List of abbreviations

AU : African Union

CAPI : Computer Assisted Personal Interviewing

EAC : East African Community

EDPRS: Economic Development and Poverty Reduction Strategy

Integrated Household Living Conditions Survey (Enquête Intégrale sur les Conditions

EICV : de Vie des Ménages)

HH : Household

ICT : Information and Communications Technology

MTF : Multi-Tier Framework

NISR : National Institute of Statistics of Rwanda RPHC : Rwanda Population and Housing Census

SDGs : Sustainable Development Goals

SHS : Solar Home System

VUP : Vision 2020 Umurenge Program

WPI : Water Poverty Index

SPI : Sanitation Poverty Index

WaSH PI: Water, Sanitation and Hygiene Poverty Index

#### **Chapter 1: Introduction**

In line with Rwanda's long term development aspirations as embodied in Rwanda Vision 2020 and Vision 2050, the first National Strategy for Transformation (NST1 2017-2024) mainstreams a system of monitoring and evaluation at national, provincial, district and sectoral levels of the government's socio-economic performance. The overall aim of National Strategy for Transformation and vision 2050 is to increase Rwanda's Economic growth, with the specific objective of speeding up Rwanda's progress towards an upper middle income country by 2035.

The evidence collected through the EICV5 fieldwork carried out by the NISR between October 2016 and October 2017 provided key inputs into the evaluation of development programmes such as Vision 2020, First National Strategy for Transformation, Sustainable Development Goals, Vision 2050, AU Agenda and EAC Vision 2050.

This report is one of six different thematic reports namely: Youth, Economic Activity, Utilities and amenities, Education, Environment and Natural Resources and Gender, which will play a key role in the final evaluation of EDPRS2 and evaluation of the National Strategy for Transformation.

Utilities and amenities Thematic report focuses on water, sanitation, energy, transport and ICT facilities sectors. This report also explores a wealth of evidence collected through the EICV5. The report further makes use of the fact that the sample sizes of the fourth and fifth rounds of EICV are sufficient to provide estimates that are reliable at the district level.

Following some short methodological notes in the following section, chapter 2 and 3 of this report discuss access to water, sanitation and main source of energy for households lighting and cooking across the population of Rwanda.

Chapter 4 describes the housing characteristics in Rwanda. Chapter 5 provides information on transport infrastructure. Finally, chapter 6 presents data on access to ICT devices and services among households.

For the first time, in EICV5, additional new information is included in chapter three. The new information relates to energy using Multi-Tier Framework approach (MTF), types of cooking stoves used by households and place where the cooking stove is installed. Also, a new approach for monitoring drinking-water and sanitation services using WaSH Poverty Index was added, and it is briefly summarized in annex C. The annexes provide district-level estimates for selected key indicators as well as confidence intervals.

#### **Chapter 2: Water and sanitation**

This chapter provides information on access to water and sanitation across the population of Rwanda using data from both surveys (EICV5 and EICV4). Concerning access to water the main focus is on access to improved drinking water, distance to improved water source and user satisfaction with improved water source. The estimates presented in this section measure also the progress or changes between 2013-14 and 2016-17.

#### 2.1. Drinking water

Figure 2.1 and Table 2.1 show the percentage of households whose main source of water is an improved source. The international definition of an improved water source includes: protected springs, public standpipes, water piped into dwelling/yard, boreholes, protected wells and rain water collection. Here the increase between 2013-14 and 2016-17 at national level amounts to 3 percentage points reaching 87%. The corresponding increase for urban and rural respectively has been found to be 6 and 2 reaching 96% and 85%.

At provincial level, Kigali City ranks first with the highest percentage of households (96%) using improved water sources. It is worth noting that the Kigali city has the largest increase in use of improved water sources by 11% points between 2013-14 and 2016-17 compared to all other provinces. The higher percentage of households in Kigali rely on piped into dwelling /yard (34%) and public stand pipes (46%) for their water.

By contrast the Eastern Province ranks fifth with the least percentage in two rounds of the survey (81% in EICV4 and 83% in EICV5) using improved water sources. On the other side, the Northern Province experienced a decline in the percentage of households using an improved drinking water source from 91% in EICV4 to 87.5% in EICV5; it shows a decrease about three percentage points, as for the remaining three provinces all have experienced a modest increase of about two percentage points between 2013-14 and 2016-17.

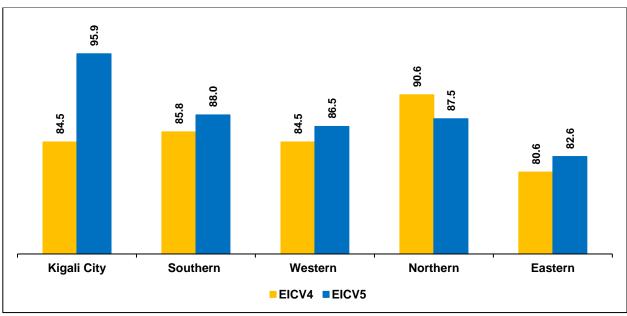


Figure 2.1: Change in households with improved drinking water source (Percentage)

Source: EICV4 & EICV5. Base population: all households.

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A similar improvement can be observed at quintile level whereby the percentage of households using improved water sources increased by at least 1percentage point in the lowest quintile compared to three percentage points increase in the highest quintile.

The use of improved water source may be related to type of habitat since, households living in Imidugudu are mostly using improved water sources, the increase in the prevalence of improved water sources between 2013-14 and 2016-17 amounts to approximately two percentage points from 85% to 87%. By contrast, households living in other types of habitat such as isolated rural housing have the poorest access to improved water sources (81%) without any significant change over the indicated three-year period. The results show a very small difference in the use of improved water source between households headed by males and those headed by females in both surveys.

Table 2.1: Main drinking water source/ access to improved drinking water, by province, urban/rural, quintile, habitat, disability status and sex of head of HH

				Impr	oved drinkin	g water sou	rce		Uni	mproved/other	drinking wate	er source			
EICV5		% use improved	Protected spring	Public standpipe	Piped into dwelling /yard	Borehole	Protected well	Rain water	Surface water	Unprotected spring	Unprotected well	Tank truck	Other	Total	Nber of HHs (in 000s)
All Rwanda		87.4	38.3	35.4	9.4	3.0	1.2	0.1	4.4	6.5	0.5	0.1	1.0	100	2,708
	Kigali City	95.9	12.6	46.3	34.0	1.0	1.9	0.0	1.2	1.5	0.1	0.3	0.9	100	410
	Southern	88.0	57.9	21.5	4.4	2	2.1	0.0	2.2	7.8	1.0	0.0	1.1	100	626
Province	Western	86.5	44.3	35.2	5.6	0.6	0.6	0.3	1.9	10.7	0.3	0.0	0.6	100	574
	Northern	87.5	44.9	35.9	5.7	0.1	0.9	0.0	2.3	8.9	0.5	0.0	0.8	100	422
	Eastern	82.6	26.6	41.4	4.7	9.0	0.9	0.1	11.7	3.2	0.6	0.3	1.6	100	677
Urban/	Urban	95.8	10.5	41.5	39.2	2.5	2.0	0.0	1.0	1.1	0.2	0.3	1.7	100	524
rural	Rural	85.4	45.0	33.9	2.3	3.1	1.1	0.1	5.2	7.8	0.6	0.1	0.9	100	2,184
	Q1	82.0	47.1	29.9	0.2	3.3	1.4	0.1	6.8	10.1	0.6	0.0	0.5	100	433
	Q2	84.7	46.3	32.5	1.0	3.7	1.0	0.1	4.8	8.6	0.6	0.0	1.2	100	481
Quintile	Q3	87.3	44.7	35.9	1.5	3.7	1.4	0.1	4.5	6.6	0.7	0.0	0.8	100	528
	Q4	87.4	39.0	39.1	4.8	3	1.3	0.1	4.8	6.1	0.4	0.1	1.2	100	573
	Q5	92.8	21.8	37.2	30.8	1.8	1.1	0.1	2.1	3	0.4	0.4	1.3	100	694
	Umudugudu	86.9	39.1	38.0	5.1	3.6	1.0	0.1	4.9	6.3	0.6	0.2	1.1	100	1,595
	Unplanned clustered rural housing	87.1	46.2	31.5	3.3	3.9	2.0	0.1	4.8	6.4	0.9	0.0	0.8	100	177
Type of	Isolated rural housing	80.9	56.8	19.3	0.7	2.8	1.1	0.1	5.8	12.3	0.5	0.1	0.5	100	455
habitat	Unplanned urban housing	95.2	16.4	46.3	28.9	1.1	2.4	0.0	1.2	1.6	0.3	0.2	1.6	100	385
	Small settlement	91.4	39.4	39.9	10.7	0.0	0.0	1.5	3.3	4.6	0.0	0.0	0.7	100	20
	Modern planned area	99.0	2.6	29.3	66.5	0.0	0.6	0.0	0.0	1.0	0.0	0.0	0.0	100	77
Disability	without disability	87.6	37.5	35.9	9.9	3.1	1.2	0.1	4.3	6.4	0.6	0.2	1.1	100	2,316
status	with disability	86.6	43.2	32.5	6.9	2.4	1.6	0.0	5.0	7.2	0.4	0.0	1.0	100	392
Sex of head	Male	87.7	37.4	35.6	10.1	3.1	1.4	0.1	4.1	6.4	0.6	0.2	1	100	2,031
of HH	Female	86.6	41.1	34.6	7.3	2.6	0.9	0.1	5.2	6.7	0.4	0.0	1.1	100	677

Source: EICV5. Base population: all households.

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	EICV4		Impro	ved drinking	water source	Unimproved/other drinking water source						Nber of HHs (in			
	Licvi	improved	Protected spring	Public standpipe	Piped into dwelling/ yard	Borehole	Protecte d well	Rain water	Surface water	Unprot ected spring	Unprotec ted well	Tank truck	Other	Total	000s)
All Rwanda		84.8	38.3	34.0	8.1	3.2	0.9	0.2	5.3	6.7	0.9	0.1	2.3	100	2,493
	Kigali City	84.5	10.1	35.6	36.8	1.3	0.7	0.0	0.9	2.8	0.2	0.5	11.1	100	295
	Southern	85.8	58.8	20.5	4.3	0.8	1.4	0.0	3.5	8.7	1.2	0.0	0.8	100	597
Province	Western	84.5	43.5	33.7	4.8	1.4	0.6	0.6	3.3	10.9	0.4	0.0	0.9	100	559
	Northern	90.6	50.3	36.0	3.3	0.4	0.7	0.1	3.1	5.5	0.4	0.0	0.3	100	394
	Eastern	80.6	20.6	44.8	4.4	9.6	0.9	0.3	12.0	3.8	1.5	0.0	2.1	100	647
Urban/	Urban	90.0	6.7	42.6	39.4	0.6	0.5	0.2	0.2	0.9	0.1	0.3	8.5	100	426
rural	Rural	83.7	44.8	32.3	1.7	3.7	1.0	0.2	6.3	7.9	1.0	0.0	1.0	100	2,067
	Q1	81.2	47.0	29.3	0.4	3.2	1.2	0.2	7.3	8.8	1.5	0.1	1.1	100	421
	Q2	81.7	44.4	32.5	0.8	3.3	0.5	0.2	7.0	9.1	0.9	0.0	1.3	100	458
Quintile	Q3	84.0	43.1	34.4	1.5	4.0	0.8	0.2	5.3	7.9	1.2	0.1	1.7	100	489
Quintile	Q4	85.8	39.0	37.5	5.1	2.9	1.1	0.2	5.0	6.0	0.6	0.0	2.7	100	532
	Q5	89.4	22.9	35.2	27.5	2.7	8.0	0.3	2.9	3.2	0.4	0.2	4.0	100	593
	Umudugudu	85.2	38.4	38.4	3.2	4.5	0.6	0.1	6.3	5.9	1.0	0.0	1.5	100	1,227
	Unplanned clustered rural housing	84.5	36.3	38.4	3.3	4.2	1.8	0.4	7.1	6.3	0.9	0.0	1.2	100	216
Type of	Isolated rural housing	81.4	57.6	20.1	0.7	1.8	1.1	0.1	5.7	11.9	0.9	0.0	0.1	100	637
habitat	Unplanned urban housing	86.6	9.2	36.0	39.7	1.1	0.6	0.1	0.7	1.3	0.2	0.5	10.8	100	318
	Small settlement	96.5	11.4	73.6	2.9	1.6	2.4	4.7	0.8	1.5	0.9	0.3	0.0	100	55
habitat	Modern planned area	98.3	6.7	28.5	61.6	0.0	0.4	1.0	0.0	0.0	0.0	0.0	1.7	100	40
Disability	without disability	85.0	37.7	34.2	8.7	3.3	0.9	0.2	5.2	6.5	0.8	0.1	2.4	100	2,100
status	with disability	83.9	41.9	32.9	5.1	2.9	0.9	0.2	5.6	7.9	1.0	0.0	1.6	100	394
Sex of head	Male	84.4	37.2	34.5	8.5	3.2	0.8	0.2	5.4	6.8	0.9	0.1	2.4	100	1,857
of HH	Female	85.9	41.7	32.7	7.0	3.2	1.0	0.3	5.0	6.4	0.7	0.0	2.1	100	636

Source: EICV4. Base population: all households.

The data displayed in Table 2.2 reveal similar trends at population level; where 87% of the population use an improved drinking water source in 2016/17 compared to 85% in 2013/14. This shows an increase of two percentage points during that period.

Table 2.2: Percentage of the population with improved drinking water source, by province, urban/rural, quintile, habitat, disability status and sex of head of HH

		EICV	/4	EICV	/5
		Total improved water source	Total Pop. (000s)	Total improved water source	Total Pop. (000s)
All Rwanda		85.0	11,432	87.2	11,893
	Kigali City	86.0	1,319	95.5	1,631
	Southern	85.3	2,655	87.8	2,739
Province	Western	85.0	2,646	86.7	2,685
	Northern	90.6	1,803	87.7	1,841
	Eastern	80.9	3,009	82.1	2,998
Urban/ rural	Urban	90.8	1,973	96.0	2,194
Ulball/ Tulal	Rural	83.7	9,459	85.2	9,699
	Q1	81.3	2,256	82.4	2,343
	Q2	82.0	2,252	Total (000s)   Water source   11,432   87.2   11,89     1,319	2,345
Quintile	Q3	84.6	2,258		2,346
	Q4	85.7	2,271	87.2	2,356
	Q5	90.9	2,395	93.2	2,503
Disability status of	without disability	85.0	10,981	87.2	11,453
НН	with disability	84.1	451	86.1	441
Sex of head of HH	Male	84.7	9,107	87.4	9,588
Sex of flead of fift	Female	86.1	2,325	86.1	2,305

Source: EICV4 and EICV5.

Table 2.3 shows the mean distance to the nearest main improved water source. At national level, 25% of households are within 0-200 meters of an improved water source compared to 24% in EICV4. This includes households with water piped into the yard/dwelling and those who access improved water sources within 200m. Forty-two percent of households are within 0-500 metres of an improved water source. The data shows that households in rural area have to walk long distance travel to arrive at an improved drinking water source, with 16% of households living within 0-200 metres and 34% living within 0-500 metres. By contrast, the households in urban area, are such that, 60% of the households are within 0-200 metres and 72% within 0-500 metres to an improved drinking water source.

Table 2.3: Distance to improved water source, by province, urban/rural, consumption quintile, habitat, disability status and sex of head of HH

EICV5		Mean distance to the nearest		Dista	ance to nea	arest impr	oved wate	r source (n	netres)			Total Nber of
		improved water source (m)	Water piped into dwelling /yard	0-200 m	201- 500m	501- 1000 m	1001- 2000 m	2001+ m	using unimproved Source	Missing info <sup>1</sup>	Total	HHs (000s)
All Rwanda		504.9	9.4	15.8	17.1	14.9	6.4	1.5	12.6	22.2	100	2,708
	Kigali City	231.9	34.0	24.7	14.9	6.3	3.2	1.1	4.1	11.8	100	410
	Southern	596.4	4.5	12.7	17.4	21.6	6.9	1.5	12.1	23.4	100	626
Province	Western	517.7	5.6	17.2	20.9	16.9	7.2	1.0	13.5	17.7	100	574
	Northern	559.9	5.7	17.1	20.4	18.8	6.6	1.9	12.5	17.1	100	422
	Eastern	614.8	4.7	11.3	12.9	9.9	7.3	1.9	17.5	34.4	100	677
Urban/rural	Urban	147.6	39.2	26.3	13.3	5.4	1.4	0.0	4.2	10.1	100	524
Orban/rurai	Rural	626.7	2.3	13.3	18.0	17.2	7.7	1.9	14.6	25.1	100	2,184
	Q1	645.6	0.2	11.7	16.7	16.9	7.5	1.3	18	27.7	100	433
	Q2	626.1	1.0	14.3	17.7	17.6	6.7	2.2	15.3	25.1	100	481
Quintile	Q3	581.3	1.5	15.6	19.7	17.0	7.3	1.4	12.7	24.7	100	528
	Q4	566.2	4.8	16.2	18.4	15.5	7.4	1.9	12.6	23.1	100	573
	Q5	293.3	30.8	19.3	13.9	9.7	4.1	1.0	7.2	14.1	100	694
	Umudugudu	568.2	5.1	14.5	17.1	16.0	7.0	1.5	13.1	25.6	100	1595
	Unplanned clustered rural housing	568.5	3.4	16.5	18.0	16.1	7.3	2.1	13.0	23.7	100	177
Type of	Isolated rural housing	647.8	0.7	12.4	19.3	19.3	7.5	1.9	19.2	19.8	100	455
habitat	Unplanned urban housing	260.3	28.9	25.1	15.6	7.3	3.6	1.1	4.8	13.7	100	385
	Small settlement	444.4	10.7	17.4	15.7	12.6	8.4	0.0	8.6	26.6	100	20
	Modern planned area	82.5	66.6	16.0	10.3	1.6	1.3	0.0	1.0	3.1	100	77
Disability	without disability	497.6	9.9	16	17.1	14.9	6.2	1.5	12.4	22	100	2316
status	with disability	549.5	6.9	14.9	17.3	15.1	7.7	1.3	13.4	23.2	100	392
Sex of head	Male	505.9	10.1	15.6	17.2	14.9	6.6	1.7	12.3	21.7	100	2031
of HH	Female	501.6	7.3	16.6	16.8	15	6.1	1.1	13.4	23.7	100	677

Source: EICV5. Base population: all households.

 $^{1}$  The 'missing information' column presents households where the main source of drinking water is improved but not reported as the nearest.

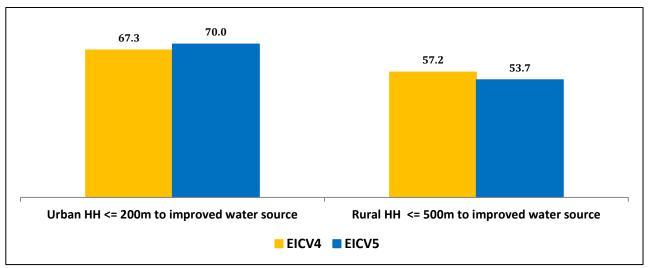
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EICV4		Mean distance to		Dista	nce to ne	arest impro	oved water	source (me	tres)			Total Nber of
		improved water source (m)	Water piped into dwelling /yard	0-200m	201- 500 m	501-1,000 m	1001- 2,000 m	2001+ m	using unimproved Source	Missing info	Total	HHs (000s)
All Rwanda		530.1	8.1	16.0	18.6	14.9	6.9	0.7	15.2	19.5	100	2,493
	Kigali City	228.2	36.9	15.6	11.5	6.5	2.9	0.1	15.5	11.1	100	295
	Southern	636.2	4.3	12.1	20.0	18.8	9.0	0.6	14.2	21.1	100	597
Province	Western	526.1	4.8	20.5	22.7	15.3	6.7	1.1	15.5	13.5	100	559
	Northern	604.3	3.3	19.4	20.5	22.1	8.8	1.0	9.4	15.7	100	394
	Eastern	542.5	4.4	13.9	15.9	10.6	5.8	0.6	19.4	29.4	100	647
Urban/rural	Urban	155.2	39.4	20.5	12.2	6.3	0.3	0.0	10.0	11.4	100	426
Orban/rurai	Rural	627.3	1.7	15.1	19.9	16.7	8.3	0.9	16.3	21.2	100	2,067
	Q1	645.3	0.4	14.0	20.1	17.8	8.1	0.8	18.8	20.1	100	421
	Q2	616.9	0.8	15.1	20.1	16.3	7.6	0.7	18.3	21.1	100	458
Quintile	Q3	611.3	1.5	15.6	20.0	16.4	7.3	0.7	16.0	22.4	100	489
	Q4	556.2	5.1	17.4	19.4	15.2	7.5	0.7	14.2	20.5	100	532
	Q5	333.8	27.5	17.3	14.5	10.3	4.6	0.6	10.6	14.6	100	593
	Umudugudu	578.2	3.2	16.0	19.3	15.2	7.3	0.7	14.8	23.5	100	1,227
	Unplanned clustered rural housing	580.2	3.3	17.7	19.0	13.3	7.2	1.2	15.5	22.8	100	216
Type of	Isolated rural housing	684.2	0.7	12.6	21.3	20.5	9.6	0.9	18.7	15.8	100	637
habitat	Unplanned urban housing	159.6	39.7	18.0	10.9	5.2	0.9	0.0	13.4	11.9	100	318
	Small settlement	428.6	2.9	39.4	18.6	14.8	4.5	1.7	3.5	14.6	100	55
	Modern planned area	120.5	61.6	13.5	10.4	5.5	0.5	0.0	1.7	6.9	100	40
Disability	without disability	521.5	8.7	16.0	18.5	14.8	6.7	0.7	15.1	19.6	100	2,100
status	with disability	576.2	5.1	16.0	19.1	15.8	8.2	0.6	16.1	19.1	100	394
Sex of head	Male	520.3	8.5	16.2	18.2	15.0	6.6	0.7	15.6	19.3	100	1,857
of HH	Female	558.4	7.0	15.6	19.7	14.9	7.8	0.7	14.1	20.2	100	636

Source: EICV4. Base population: all households.

The data reveal that in urban area, 70% of households access an improved water source within 200m in 2016/17, compared to 67% in 2013/14; whereas in rural areas, 54% of household access an improved water source within 500 m compared to 57% in 2013/14 as shown in Figure 2.2.

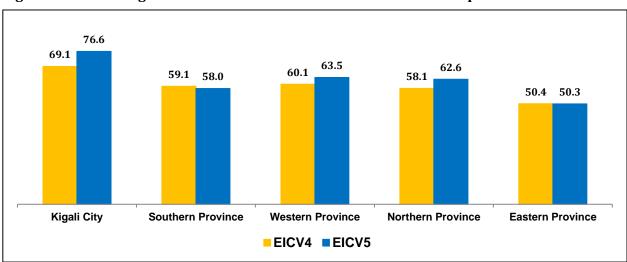
Figure 2.2: Percentage of HHs using an improved water source that is within 200m in urban and 500m in rural



Source: EICV4 and EICV5.

The data displayed in Table 2.4 show that at national level, 61% of households walk for less than 15 minutes to access improved drinking water sources in 2016-17 compared to 58% in 2013-14. Another important finding to note is that the percentage of households that walk for more than 15 minutes to improved water sources decreased from 21% in 2013/14 to 19% in 2016/17. The distribution at provincial level is shown in Figure 2.3.

Figure 2.3: Percentage of HHs that walk less than 15 minutes to an improved water source



Source: EICV4 and EICV5. Base population: all households.

Table 2.4: Time to improved water source, by province, urban/rural, consumption quintile, habitat, disability status and sex of head of HH

		Manus bissas ba		Tir	ne to in	nprove	d water	source	(Minu	ites)			Tatal Nilsan
EICV5		Mean time to improved water source (Min.)	Water piped dwelling /yard	into	0-4 min	5-14 min	15-29 min		60+ min	No improved Source	Frequency of use not Known	Total	Total Nber of HHs (000s)
All Rwanda		9.6		9.4	17.7	33.6	13.8	5.7	0.0	12.6	7.1	100	2,708
	Kigali City	6.3		34.0	19.4	23.2	8.2	2.6	0.0	4.1	8.5	100	410
	Southern	10.6		4.4	15.3	38.2	18.4	6.4	0.0	12.0	5.3	100	626
Province	Western	8.8		5.6	21.1	36.7	14.0	4.0	0.0	13.5	5.0	100	574
	Northern	10.1		5.7	17.5	39.4	13.1	6.4	0.0	12.5	5.4	100	422
	Eastern	11.1		4.7	16.3	29.3	13.4	8.0	0.0	17.4	11.0	100	677
Urban/	Urban	6.0		39.2	17.9	23.6	8.2	2.2	0.0	4.2	4.6	100	524
rural	Rural	10.5		2.3	17.7	36.0	15.2	6.5	0.0	14.6	7.8	100	2,184
	Q1	10.7		0.2	15.6	35.7	15.9	6.0	0.0	18.0	8.6	100	433
	Q2	10.7		1.0	17.2	36.7	15.3	7.1	0.0	15.3	7.3	100	481
Quintile	Q3	10.2		1.5	18.0	39.0	15.5	6.3	0.0	12.7	7.1	100	528
	Q4	10.0		4.8	19.3	35.3	14.9	6.4	0.0	12.6	6.7	100	573
	Q5	7.4		30.8	18.0	24.6	9.4	3.5	0.0	7.2	6.5	100	694
	Umudugudu	10.0		5.1	18.8	35.1	13.9	6.1	0.0	13.1	7.8	100	1,595
	Unplanned clustered rural housing	10.0		3.3	19.4	35.0	16.2	6.1	0.0	12.9	6.9	100	177
Type of	Isolated rural housing	11.3		0.7	12.9	38.1	18.2	6.9	0.0	19.1	4.0	100	455
habitat	Unplanned urban housing	7.0		28.9	19.6	25.4	9.3	3.4	0.0	4.8	8.6	100	385
	Small settlement	8.7		10.7	23.8	31.5	14.0	5.8	0.0	8.6	5.7	100	20
	Modern planned area	2.9		66.5	10.6	13.9	3.0	0.0	0.0	1.0	5.0	100	77
Disability	without disability	9.6		9.9	17.8	33.5	13.7	5.7	0.0	12.4	7.0	100	2,316
status	with disability	10.0		6.9	17.2	34.2	14.6	5.8	0.0	13.4	7.8	100	392
Sex of head	Male	9.6		10.1	17.3	33.6	13.9	5.8	0.0	12.3	7.0	100	2,031
of HH	Female	9.6		7.3	18.9	33.6	13.8	5.5	0.0	13.4	7.5	100	677

Source: EICV5. Base population: all households.

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EICV4		Mean time to		Time to	impro	ved wat	ter sourc	e (Min	(Minutes)			Tatal Nilsan of
		improved water source (Min.)	Water piped into dwelling/yard	0-4 min	5-14 min	15-29 min	30-59 min	60+ min	No improved Source	Frequency of use not Known	Total	Total Nber of HHs (000s)
All Rwanda		10.9	8.1	17.0	32.9	14.8	6.6	1.3	15.2	4.2	100	2,493
	Kigali City	8.1	36.9	12.6	19.6	6.6	4.0	1.2	15.5	3.7	100	295
	Southern	10.8	4.3	17.8	37.0	16.9	5.9	0.8	14.2	3.1	100	597
Province	Western	10.4	4.8	18.8	36.6	13.3	5.7	1.0	15.5	4.4	100	559
	Northern	12.5	3.3	15.5	39.3	21.0	7.8	1.8	9.4	2.0	100	394
Urban/ rural	Eastern	12.7	4.4	17.7	28.2	13.9	8.3	1.6	19.4	6.5	100	647
Urban/	Urban	5.3	39.4	18.2	21.2	5.4	1.4	0.0	10.0	4.4	100	426
rural	Rural	12.2	1.7	16.8	35.3	16.7	7.6	1.5	16.3	4.1	100	2,067
	Q1	12.3	0.4	14.3	37.6	16.4	7.7	1.4	18.8	3.5	100	421
	Q2	12.1	0.8	17.5	33.8	16.1	7.9	1.4	18.3	4.2	100	458
Quintile	Q3	11.9	1.5	17.2	36.3	16.1	7.5	1.4	16.0	4.0	100	489
	Q4	11.2	5.1	18.4	34.1	16.0	6.2	1.2	14.2	4.8	100	532
	Q5	8.9	27.5	17.2	25.0	10.3	4.2	1.0	10.6	4.2	100	593
	Umudugudu	11.6	3.2	19.8	33.7	14.6	7.7	1.3	14.8	4.9	100	1,227
	Unplanned clustered rural housing	11.2	3.3	17.6	34.8	17.4	6.3	1.0	15.5	4.0	100	216
Type of	Isolated rural housing	13.0	0.7	12.0	38.0	19.4	7.0	1.8	18.7	2.5	100	637
habitat	Unplanned urban housing	6.1	39.7	14.7	19.9	5.2	2.3	0.4	13.4	4.4	100	318
	Small settlement	8.9	2.9	28.3	35.5	17.2	4.3	0.2	3.5	8.0	100	55
	Modern planned area	5.3	61.6	13.1	17.4	4.7	0.6	0.0	1.7	1.0	100	40
Disability	without disability	11.1	8.7	17.0	32.7	14.6	6.5	1.1	15.1	4.3	100	2,100
status	with disability	11.9	5.1	17.1	34.1	15.4	7.0	1.9	16.1	3.4	100	394
Sex of	Male	11.2	8.5	17.1	32.5	14.5	6.5	1.2	15.6	4.0	100	1857
head of HH	Female	11.4	7.0	16.7	34.1	15.6	6.7	1.3	14.1	4.5	100	636

Source: EICV4. Base population: all households.

The findings detailed in Table 2.5 highlight the main reasons of not using the nearest drinking water sources. The prominent reason relates to non functioning water sources (45%) followed by expensive water (21%). Across provinces, the Eastern province has the highest level of non functioning drinking water sources (60%), while water is viewed as expensive in the Southern Province (32%).

Table 2.5: Percentage of HHs not using the nearest drinking water source and main reason, by province, urban/rural, consumption quintile, habitat, disability status and sex of head of HH

EICV5		% not using drinking water		for not using	Total	Nber of HHs (in				
	EICVS	declared as nearest source	Too expensive	Not safe	Difficult terrain	Too far	Does not function	Other	Total	000s)
All Rwanda		14.2	21.5	3.5	3.2	21.0	45.4	5.5	100	385
	Kigali City	6.3	20.8	7.1	2.2	26.4	42.2	1.3	100	26
	Southern	11.1	32.2	5.7	2.7	21.8	32.9	4.6	100	70
Province	Western	12.0	20.4	5.9	6.0	29.5	33.1	5.1	100	69
	Northern	13.3	19.5	2.8	6.5	24.4	35.6	11.2	100	56
	Eastern	24.2	18.1	1.2	1.2	15.2	59.6	4.7	100	164
Urban/rural	Urban	5.3	27.4	7.3	2.3	20.6	35.1	7.3	100	28
Ul Dall/Tul al	Rural	16.3	21.0	3.2	3.3	21.1	46.2	5.3	100	357
	Q1	20.5	29.2	2.6	3.6	23.2	36.2	5.2	100	89
Ouintile	Q2	17.0	24.5	3.1	2.4	23.5	41.4	4.9	100	82
Quintile	Q3	15.0	23.4	2.0	3.5	18.2	47.9	5.0	100	79
	Q4	13.4	14.7	3.4	4.4	22.1	49.5	5.9	100	77
	Q5	8.4	11.6	7.3	1.7	16.8	55.9	6.7	100	58
	Umudugudu	16.6	22.8	3.1	2.4	16.8	49.0	5.9	100	265
I	Unplanned clustered rural housing	13.7	25.0	2.8	5.0	15.3	45.0	7.0	100	24
Type of	Isolated rural housing	14.2	15.0	4.0	5.9	37.6	33.0	4.4	100	65
habitat	Unplanned urban housing	7.3	17.2	7.1	3.3	26.2	43.7	2.4	100	28
	Small settlement	7.1	18.7	0.0	0.0	60.6	9.6	11.2	100	1
	Modern planned area	1.8	82.5	0.0	0.0	17.5	0.0	0.0	100	1
Disability	without disability	13.8	20.3	3.3	3.4	20.8	46.9	5.3	100	320
status of HH	with disability	16.4	27.1	4.4	2.3	22.1	37.4	6.6	100	64
Sex of head	Male	13.7	19.9	3.7	3.1	23.1	45.2	5.0	100	279
of HH	Female	15.6	25.5	2.8	3.4	15.6	45.8	6.9	100	105

Source: EICV5. Base population: all households not using drinking water source declares as nearest source.

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		% not using drinking	Reasons	for not using d	lrinking wa	ter declared	as nearest s	ource		Nber of HHs
	EICV4	water declared as nearest source	Too expensive	Not safe	Difficult terrain	Too far	Does not function	Other	Total  100 100 100 100 100 100 100 100 100 1	(in 000s)
All Rwanda		16.6	16.4	2.8	3.2	37.0	37.6	3.0	100	415
	Kigali City	9.0	9.9	8.6	4.6	40.2	34.7	2.1	100	27
	Southern	14.8	19.1	2.7	4.4	57.8	12.5	3.6	100	88
Province	Western	17.3	9.6	4.4	5.0	50.7	28.0	2.3	100	97
	Northern	9.9	28.9	1.9	3.0	38.5	24.5	3.3	100	39
	Eastern	25.3	17.0	1.3	1.4	16.8	60.4	3.2	100	164
Urban/rural	Urban	9.0	15.1	5.6	5.4	40.1	28.4	5.5	100	38
UI Dall/I ul al	Rural	18.2	16.5	2.6	3.0	36.6	38.6	2.8	100	376
	Q1	19.5	26.0	1.7	2.1	33.2	34.6	2.4	100	82
	Q2	19.3	18.5	3.3	3.6	41.7	31.9	1.0	100	88
Quintile	Q3	17.7	16.4	3.4	3.3	35.8	37.7	3.5	100	87
	Q4	16.9	10.9	2.8	3.6	36.6	42.5	3.6	100	90
	Q5	11.4	9.2	2.9	3.4	37.2	42.3	4.9	100	68
	Umudugudu	19.0	18.7	2.2	1.7	28.2	46.4	2.8	100	233
	Unplanned clustered rural housing	16.9	13.3	2.5	5.3	32.3	42.9	3.7	100	37
Type of	Isolated rural housing	16.6	13.1	3.1	5.8	57.9	18.3	1.7	100	105
habitat	Unplanned urban housing	10.5	13.0	7.0	3.7	39.5	32.3	4.5	100	33
	Small settlement	9.8	17.2	0.0	0.0	25.1	32.1	25.5	100	5
	Modern planned area	2.7	33.6	0.0	0.0	34.3	32.0	0.0	100	1
Disability	without disability	16.5	16.2	2.6	3.1	36.9	38.0	3.2	100	347
status	with disability	17.3	17.0	3.9	4.0	37.4	36.0	1.9	100	68
Sex of head	Male	16.6	14.7	3.0	3.3	37.9	38.3	2.8	100	308
of HH	Female	16.8	21.2	2.4	3.1	34.3	35.6	3.5	100	107

Source: EICV4. Base population: all households not using drinking water source declares as nearest source.

Table 2.6 presents the levels of user satisfaction with the main water source used by the households; the data reveal an overall decrease in user satisfaction level of two percentage points from 55% in 2013/14 to 53% in 2016/17. At provincial level, only Kigali City shows a significant increase in the satisfaction with the service on drinking water sources of ten percentage points from 44% to 54% over the same period. However, in other provinces a significant decrease is observed as shown in Table 2.6. The notable increase in satisfaction over time has occurred in urban areas from 51% to 53% while in rural areas a significant decrease in satisfaction from 56% to 53% is observed. Concerning the perceived change of service quality, the results reveal that majority of households report that the quality of water services remained the same over the last 12 months.

Table 2.6: User satisfaction with main drinking water source and perceptions of changes in quality over the last 12 months, by province, urban/rural, consumption quintile, habitat, disability status and sex of head of HH

		Satis	faction		Service	Quality (	change , last	12 months		Total Nber of HHs (000s)
	EICV5	Satisfied	Not satisfied	Total	Declining	Same	Improving	Don't know	Total	
All Rwanda		52.8	47.2	100	8.3	54.9	17.3	19.5	100	2,708
	Kigali City	53.7	46.3	100	2.6	50.5	17.1	29.8	100	410
	Southern	53.0	47.0	47.0         100         10.8         59.3         17.3         12.6	100	626				
Province	Western	54.7	45.3	100	10.5	58.2	17.0	14.2	100	574
	Northern	61.6	38.4	100	6.3	61.2	16.2	16.2	100	422
	Eastern	44.9	55.1	100	8.9	46.7	18.2	26.2	100	677
Urban/rural	Urban	53.1	46.9	100	5.8	49.0	16.4	28.7	100	524
Of Dall/Tural	Rural	52.7	47.3	100	8.9	56.3	17.5	17.3	100	2,184
	Q1	49.9	50.1	100	8.3	56.8	15.7	19.2	100	433
	Q2	53.4	46.6	100	9.2	57.6	16.8	16.4	100	481
Quintile	Q3	55.1	44.9	100	9.1	58.2	18.2	14.5	100	528
	Q4	54.8	45.2	100	8.9	56.1	18.9	16.1	100	573
	Q5	50.7	49.3	100	6.6	48.4	16.6	28.4	100	694
	Umudugudu	52.1	47.9	100	9.1	54.6	17.7	18.6	100	1,595
	Unplanned clustered rural housing	52.1	47.9	100	11.5	57.6	16.2	14.7	100	177
Type of	Isolated rural housing	54.4	45.6	100	9.4	60.4	16.0	14.1	100	455
habitat	Unplanned urban housing	53.8	46.2	100	3.7	51.0	17.1	28.2	100	385
	Small settlement	56.7	43.3	100	8.1	56.0	22.2	13.7	100	20
	Modern planned area	52.8	47.2	100	1.9	42.0	17.5	38.6	100	77
Disability	without disability	53	47	100	8	55.1	17.4	19.4	100	2316
status	with disability	51.6	48.4	100	9.9	53.5	16.7	19.9	100	392
	Piped into dwelling	24.3	75.7	100	1	20.1	9.7	69.3	100	21
	Piped into yard	39.3	60.7	100	1.8	31.0	12.3	55.0	100	235
	Public standpipe	76.8	23.2	100	6.1	60.6	27.9	5.3	100	677
	Borehole	53.8	46.2	100	7.7	52.7	28.5	11.1	100	63
	Protected well	47.4	52.6	100	3.3	60.0	17.7	19.0	100	35
Main drinking	Unprotected well	30.9	69.1	100	13.1	51.1	6.7	29.1	100	31
water source	Protected spring	58.0	42.0	100	9,6	63.7	16.1	10.6	100	1,026
	Unprotected spring	21.2	78.8	100	13.5	46.3	7.1	33.1	100	211
	Rain water	51.0	49.0	100	8.2	58.1	15.5	18.2	100	13
	Tanker truck	34.8	65.2	100	4.9	69.7	0.0	25.5	100	3
	Surface water (river or lake)	26.4	73.6	100	11.0	43.1	9.9	36.0	100	372
	Other	27.8	72.2	100	3.4	37.7	9.6	49.2	100	22

EICV5 Base population: All Households.

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EICV4		Satisfa	ction	Total	Service Q	uality cha	lity change , last 12 months			Total Nber of
	All Rwanda		Not satisfied	Total	Declining	Same	Improving	Don't know	Total	HHs (000s)
All Rwanda		55.3	44.8	100	9.3	53.7	18.9	18.1	100	2,493
	Kigali City	44.1	55.9	100	6.1	50.8	10.5	32.7	100	295
	Southern	57.6	42.4	100	9.8	57.3	18.1	14.7	100	597
Province	Western	56.9	43.1	100	10.9	49.7	21.7	17.7	100	559
	Northern	65.5	34.5	100	7.3	60.2	24.5	8.1	100	394
	Eastern	50.5	49.5	100	10.0	51.4	17.7	21.0	100	647
Hrban /rural	Urban	50.8	49.2	100	5.1	45.1	15.7	34.1	100	426
Orban/rurai	Rural	56.2	43.8	100	10.1	55.5	19.6	14.8	100	2,067
Quintile	Q1	56.5	43.5	100	9.6	56.4	18.9	15.2	100	421
	Q2	56.1	43.9	100	8.9	55.5	20.0	15.7	100	458
Quintile	Q3	57.8	42.2	100	10.5	55.3	20.1	14.2	100	489
Province  Urban/rural  Quintile  Type of habitat  Disability status  Main drinking water source	Q4	57.3	42.7	100	9.3	53.8	20.8	16.2	100	532
	Q5	49.8	50.2	100	8.3	49.3	15.5	26.9	100	593
	Umudugudu	56.1	43.9	100	10.3	54.3	19.6	15.8	100	1,227
	Unplanned clustered rural housing	50.1	49.9	100	9.7	54.3	20.3	15.7	100	216
Type of	Isolated rural housing	58.9	41.1	100	9.6	57.3	19.5	13.7	100	637
habitat	Unplanned urban housing	48.3	51.7	100	4.9	47.2	13.4	34.6	100	318
	Small settlement	69.5	30.5	100	7.0	49.6	31.5	11.9	100	55
	Modern planned area	35.8	64.2	100	7.7	34.6	7.6	50.1	100	40
Disability	without disability	55.0	45.0	100	9.3	53.7	18.6	18.4	100	2,100
status	with disability	56.7	43.3	100	9.1	53.9	20.3	16.6	100	394
	Piped into dwelling	24.9	75.1	100	3.0	24.4	1.4	71.2	100	11
	Piped into yard	34.0	66.0	100	2.2	30.8	8.5	58.6	100	192
	Public standpipe	78.2	21.8	100	7.4	53.3	34.7	4.6	100	646
Province  Urban/rural  Quintile  Type of habitat  Disability status  Main drinking water source	Borehole	52.4	47.6	100	12.9	66.3	15.0	5.9	100	58
	Protected well	61.9	38.1	100	12.9	62.5	20.5	4.1	100	22
Main drinking	Unprotected well	27.9	72.2	100	9.6	55.5	7.4	27.5	100	35
water source	Protected spring	64.2	35.8	100	10.9	66.5	17.7	4.9	100	913
	Unprotected spring	19.7	80.3	100	9.9	37.6	6.2	46.3	100	207
	Rain water	37.6	62.4	100	10.4	49.8	10.8	29.1	100	16
Province  Province  N  E  Urban/rural  Quintile  Quintile  Quintile  Urban/rural  Quintile  Quin	Tanker truck	23.9	76.1	100	0.0	27.5	20.6	51.9	100	3
	Surface water (river or lake)	28.8	71.2	100	11.7	44.1	9.2	35.1	100	335
	Other	37.0	63.0	100	6.8	37.7	13.5	42.1	100	54

EICV4 Base population: All Households.

#### 2.2. Sanitation

The results presented in Table 2.7 provide information on the access of households to improved sanitation. At national level, the percentage of households with access to improved sanitation has increased from 83% in 2013-14 to 86% in 2016-17.

Households in all provinces have shown improvements in the provision of improved sanitation over the past three years. Households in Kigali City present the highest percentage with access to improved sanitation (94%), while households in the Southern province present the lowest percentage (75%) with access to improved sanitation. However, the Southern Province had the largest increase in households with access to improved sanitation by five percentage points from 70% in 2013-14 to 75% between 2013-14 and 2016-17 compared to all other provinces. In addition, the analysis provides information on whether a household shares the toilet with individuals from other households. At national level, the percentage of households that use an improved sanitation that is not shared with other households has increased by three percentage points from 63% in 2013-14 to 66% in 2016-17. The disaggregation by urban/rural reveals that households using an improved sanitation that is not shared with other households is generally larger in rural areas (71%) compared to urban areas (45%).

Table 2.7: Percentage of households using improved sanitation, by type of sanitation used, according to province, urban/rural, consumption quintile, habitat, disability status and sex of head of HH

		0/ 2200		Impro	ved sanitation	Unimprov	ed sani	itation		Nhor of IIIIa
	EICV5	improved	% use improved type, not shared with other HH	Flush toilet	Pit latrine with solid slab	Pit latrine without slab	Other	No toilet facility	Total	Nber of HHs (in 000s)
All Rwanda		86.2	66.2	1.9	84.3	9.8	0.2	3.8	100	2,708
	Kigali City	94.5	41.7	9.3	85.2	3.6	0.0	1.9	100	410
	Southern	Shared with other HH   toilet   solid slab   without slab   Shared with other HH   toilet   solid slab   without slab   Shared with other HH   toilet   Shared with other toilet	100	626						
Province	Western	88.1	70.6	0.8	87.3	7.1	0.7	4.1	100	574
	Northern	86.5	76.9	0.7	85.7	10.0	0.2	3.4	100	422
	Eastern	90.0	75.2	0.2	89.8	6.5	0.0	3.5	100	677
Huban / munal	Urban	93.6	45	9.2	84.4	4.3	0.1	2.1	100	524
Orbani/ rurai	Rural	84.4	71.3	0.1	84.3	11.2	0.2	4.2	100	2,184
	Q1	76.3	64.1	0.0	76.3	16.8	0.2	6.7	100	433
	Q2	81.0	66.6	0.0	81.0	14.4	0.3	No   toilet   facility	481	
Quintile	Q3	85.9	69.5	0.0	85.9	9.8	0.2	4.0	100	528
	Q4	88.5	70.3	0.0	88.5	7.9	0.1	3.5	100	573
	Q5	94.2	61.4	7.3	86.9	3.9	0.2	1.7	100	694
	Umudugudu	87.4	73.7	0.7	86.8	8.7	0.1	3.8	100	1,595
Province Urban/ rural	Unplanned clustered rural housing	82.4	63.2	0.2	82.2	13.0	0.1	4.6	100	177
Type of	Isolated rural housing	74.7	64.8	0.0	74.6	19.0	0.7	5.6	100	455
habitat	Unplanned urban housing	94.0	40.2	4.0	90.0	3.9	0.0	2.1	100	385
	Small settlement	85.8	67.1	5.3	80.5	7.5	0.0	6.8	100	20
	Modern planned area	97.7	56.7	30.1	67.6	2.3	0.0	0.0	100	77

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				Impro	ved sanitation	Unimprov	ed sani		Nber of HHs	
	EICV5	% use improved	% use improved type, not shared with other HH		Pit latrine with solid slab	Pit latrine without slab	Other	No toilet facility	Total	(in 000s)
Disability	without disability	86.1	65.5	2	84.2	9.9	0.2	3.8	100	2316
status	with disability	86.5	70.5	1.4	85.0	9.6	0.2	3.7	100	392
Sex of head of	Male	88	68.6	2.0	86.0	9	0.1	2.8	100	2031
НН	Female	80.6	59.1	1.5	79.1	12.4	0.3	6.8	100	677

		0/		Impro	oved sanitation	Unimprov	ed sanit	ation		NI 6 IIII -
	EICV4	% use improved	% use improved type, not shared with other HH	Flush toilet	Pit latrine with solid slab	Pit latrine without slab	Other	No toilet facility	Total	Nber of HHs (in 000s)
All Rwanda		83.4	63.5	1.8	81.6	13.5	0.0	3.2	100	2,493
	Kigali City	93.2	42.2	8.5	84.7	5.8	0.0	1.0	100	295
	Southern	69.5	56.0	1.1	68.4	26.0	0.0	4.5	100	597
Province	Western	85.4	68.1	1.1	84.3	9.6	0.1	4.9	100	559
	Northern	85.9	74.7	0.8	85.1	11.1	0.0	3.0	100	394
	Eastern	88.4	69.4	0.6	87.8	10.3	0.0	1.4	100	647
Urban/rural	Urban	93.5	47.2	8.6	84.9	5.3	0.0	1.2	100	426
Of Dail/Tural	Rural	81.3	66.9	0.4	80.9	15.1	0.0	3.6	100	2,067
	Q1	73.6	59.3	0.0	73.5	20.5	0.0	5.9	100	421
	Q2	77.1	62.4	0.3	76.8	19.0	0.1	3.8	100	458
Quintile	Q3	83.0	66.5	0.1	82.9	13.6	0.0	3.4	100	489
	Q4	85.5	66.8	0.5	85.1	12.5	0.0	2.0	100	532
	Q5	93.5	61.9	6.7	86.8	5.0	0.0	1.5	100	593
	Umudugudu	85.0	69.6	0.4	84.6	11.9	0.0	3.1	100	1,227
	Unplanned clustered rural housing	72.1	52.2	0.1	72.1	23.1	0.0	4.8	100	216
Type of	Isolated rural housing	78.2	67.5	0.3	77.8	17.9	0.1	3.9	100	637
habitat	Unplanned urban housing	92.9	40.0	7.5	85.5	6.6	0.0	0.5	100	318
	Small settlement	86.9	59.8	3.0	83.9	7.3	0.0	5.8	100	55
	Modern planned area	95.9	66.2	29.3	66.7	3.2	0.0	0.9	100	40
Disability	without disability	83.9	63.0	1.9	82.1	13.0	0.0	3.1	100	2,100
status	with disability	80.3	66.2	1.4	78.9	16.0	0.0	3.7	100	394
Sex of head	Male	85.7	66.3	1.9	83.8	12.1	0.0	2.2	100	1,857
of HH	Female	76.6	55.3	1.5	75.0	17.4	0.0	6.0	100	636

Source: EICV4. Base population: all households.

## Chapter 3. Energy

This chapter provides information about the main source of energy for households lighting and cooking, types of cooking stoves, cooking stove installation place and use of chimney, hood/other exhaust system while using the stove across the population of Rwanda using data from both surveys (EICV4 and EICV5). In addition, the survey does not provide only information on energy using binary metric approach but also using Multi-Tier Framework approach. It highlits also the progress made between 2013-14 and 2016-17.

#### 3.1. Fuel use

This section provides information on the main fuel that Rwandan households use for home lighting. The findings in table 3.1 show that the households using electricity for home lighting have increased by seven percentage points at the national level from 20% in 2013-14 to 27% in 2016-17. The increased use of electricity as a source of home lighting is observed across all provinces. Access to electricity is exceptionally very high in the households living in Kigali City where it has risen from 73% in 2013-14 to 78 % in 2016-17.

Despite the increase in the use of electricity, use of solar Panel as a source of home lighting has also shown a significant increase of five percentage points from 2% in 2013-14 to 7% in 2016-17. At national level, batteries<sup>2</sup> remain the most common source of home lighting in both surveys, this has shown an increase of six percentage points from 44% in 2013-14 to 50% in 2016-17.

<sup>&</sup>lt;sup>2</sup>For EICV5, the batteries that are reported as source of home lighting include: Non-rechargeable batteries or bulb, rechargeable batteries, torch and phone. Detailed information distinguishing between rechargeable and non-rechargeable batteries is shown in the annex Table A.6.

Table 3.1: Primary fuel used for lighting, by province, urban/rural, consumption quintile, habitat, disability status and sex of head of HH

				Main	source o	f lighting					Nber of HHs
	EICV5	Electricity distributor	Oil Lamp	Firewood	Candle	Lantern	Batteries	Solar panel	Other	Total	(in 000s)
All Rwanda		27.1	1.4	3.7	6.1	3.5	50.1	7.3	0.6	100	2708
	Kigali City	78.4	0.8	0.4	10.5	1.5	7.42	0.9	0.1	100	410
	Southern	14.4	1.4	5.7	4.7	3.3	61.6	8.3	0.5	100	626
Province	Western	21.6	2.0	6.9	6.1	1.7	50.8	10.1	8.0	100	574
	Northern	18.0	0.7	4.0	7.0	1.4	62.9	4.8	1.2	100	422
	Eastern	18.1	1.8	0.9	4.3	7.9	56.8	9.6	0.6	100	677
Urban/rural	Urban	75.6	1.5	0.5	9.4	2.4	9.8	0.6	0.2	100	524
Of Dail/Tural	Rural	15.5	1.4	4.4	5.4	3.8	59.8	9.0	0.7	100	2184
	Q1	5.1	1.6	9.8	6.9	4.2	67.5	3.9	1.0	100	433
	Q2	9.8	1.6	4.7	6.8	4.0	65.9	6.6	0.6	100	481
Quintile	Q3	16.3	1.7	3.1	6.4	4.5	59.3	8.2	0.5	100	528
	Q4	26.0	1.7	2.0	6.3	3.8	48.9	10.5	0.9	100	573
	Q5	61.9	0.8	1.0	4.9	1.9	22.3	6.7	0.4	100	694
	Umudugudu	19.5	1.6	3.8	5.2	4.2	56.2	8.8	0.7	100	1595
	Unplanned clustered rural housing	20.0	1.7	4.1	7.9	2.2	57.9	5.6	0.7	100	177
Type of habitat	Isolated rural housing	5.7	1.4	6.4	3.9	3.4	68.9	9.5	0.9	100	455
Type of Habitat	Unplanned urban housing	73.3	1.1	0.4	12.7	2.3	8.9	1.2	0.2	100	385
	Small settlement	32.6	0.7	4.0	5.8	2.3	48.1	5.5	1.0	100	20
	Modern planned area	96.1	0.0	0.0	1.6	0.3	2.1	0.0	0.0	100	77
Disability	without disability	27.8	1.4	3.3	6.4	3.3	49.7	7.4	0.6	100	2316
status	with disability	22.7	1.4	6.2	4.8	4.8	52.8	6.7	0.7	100	392
Sex of head of	Male	29.4	1.5	2.5	6.0	3.3	48.6	8.3	0.5	100	2031
НН	Female	20.3	1.4	7.1	6.6	4.4	54.7	4.5	1.0	100	677

				Mai	n source o	flighting					Nber of HHs
	EICV4		Oil Lamp	Firewood	Candle	Lantern	Batteries	Solar panel	Other	Total	(in 000s)
All Rwanda		19.8	5.0	5.5	7.4	13.1	44.2	1.7	3.2	100	2,493
	Kigali City	73.3	2.2	0.3	10.9	2.2	9.5	0.2	1.5	100	295
	Southern	9.3	5.5	8.1	4.2	16.3	52.7	2.1	1.8	100	597
Province	Western	14.7	7.2	10.6	7.4	7.8	46.7	3	2.8	100	559
	Northern	10.4	3.5	5.8	9.7	5.8	54.8	1.4	8.5	100	394
	Eastern	15.3	5.0	1.0	7.3	24.4	43.5	1.0	2.5	100	647
Urban/	Urban	71.8	3.6	0.7	9	6.7	6.9	0.4	0.9	100	426
rural	Rural	9.1	5.3	6.5	7	14.5	51.9	2	3.7	100	2,067
Quintile	Q1	2.9	2.7	13.8	7.3	12.3	56.7	0.9	3.5	100	421

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	Q2	5.9	4.3	7.7	6.6	15.5	54.8	1.2	3.9	100	458
	Q3	9.5	5.8	4.8	7.4	15.8	51.6	1.8	3.2	100	489
	Q4	17.8	6.7	3.3	7.9	15.4	43.3	2.1	3.5	100	532
	Q5	52.9	5.1	0.6	7.5	7.8	21.7	2.2	2.3	100	593
	Umudugudu	12.1	5.3	5.2	7.2	16.3	48.5	2.1	3.3	100	1,227
	Unplanned clustered rural housing	19.9	6.0	4.3	7.9	15.1	43.7	0.8	2.5	100	216
Tyme of hebitet	Isolated rural housing	3.4	5.3	9.3	5.3	10.8	59.5	2.1	4.3	100	637
Type of habitat	Unplanned urban housing	75.4	3.2	0.7	9.9	4.9	4.0	0.4	1.5	100	318
	Small settlement	16.6	3.6	7.2	19.3	14.4	36.0	0.0	2.9	100	55
	Modern planned area	79.8	2.4	0.5	7.8	5.8	2.6	0.5	0.9	100	40
Disability	without disability	21.0	5.0	4.7	7.6	13.0	43.8	1.7	3.3	100	2,100
status	with disability	13.8	5.5	10.3	6.2	13.7	46.1	1.8	2.7	100	394
Sex of head of	Male	21.1	5.1	4.0	7.4	12.6	44.8	1.9	3.1	100	1,857
НН	Female	16.2	4.7	10.0	7.3	14.6	42.3	1.1	3.7	100	636

Another interesting finding to note is the significant decrease of ten percentage points in the use of lantern as the main source of home lighting from 13% in EICV4 to 3.5% in EICV5. Figure 3.1 shows that electricity use is high in the richest consumption quintile with 62%, compared to the lowest quintile with 5% in 2016-17.

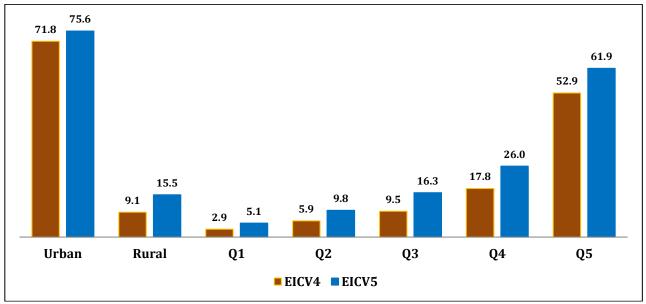


Figure 3. 1: Changes in household access to electricity (Percentage)

Source: EICV4 and EICV5.

Table 3.2 provides information on primary sources of fuel used for cooking. Use of firewood for cooking has declined slightly in the last 3 years. However, at national level, firewood remains the most widely used cooking fuel with 80% in EICV5 descending from 83% in EICV4, followed by charcoal (17% in EICV5 and 15% in EICV4). In urban areas, the majority of households use charcoal as a main source of cooking fuel (65%), in contrast to rural areas where firewood remains the most commonly used cooking fuel by 93% of the households in 2016-17.

Although the level of the usage of gas or biogas is very low (1% in EICV5 and 0.2% in EICV4), the increase over three-year period is tangible. The slight improvement in the use of Gas or Biogas as a source of cooking fuel is observed almost across all provinces, except in Kigali City where, a significant increase of five percentage points has been observed from 1% in 2013/14 to 6% in 2016/17.

 $Table \ 3.2: Primary \ fuel \ used \ for \ cooking, \ by \ province, \ urban/rural, \ consumption \ quintile, \ habitat, \ disability \ status \ and \ sex \ of \ head \ of \ HH$ 

	EICUE		M	lain type of cookin	g fuel		Total	Nber of HHs (in	
	EICV5	Firewood	Charcoal	Crop waste	Gas or Biogas	Other	Total	000s)	
All Rwanda		79.9	17.4	0.6	1.1	0.9	100	2,708	
	Kigali City	22.4	68.1	0	6.2	3.3	100	410	
	Southern	92.6	6.5	0.2	0.2	0.5	100	626	
Province	Western	87.2	12.2	0	0.1	0.4	100	574	
	Northern	91.7	7.3	0.4	0.3	0.3	100	422	
	Eastern	89.3	7.6	2.1	0.3	0.8	100	677	
Huban /munal	Urban	26.3	65.1	0.1	5	3.4	100	524	
Urban/rural	Rural	92.7	6.0	0.8	0.2	0.3	100	2,184	
	Q1	97.4	1.3	1.1	0.0	0.1	100	433	
	Q2	95.2	3.7	0.8	0.0	0.2	100	481	
Quintile	Q3	91.0	8.0	0.7	0.0	0.3	100	528	
	Q4	85.3	13.9	0.5	0.1	0.3	100	573	
	Q5	45.4	47.0	0.3	4.4	3.0	100	694	
	Umudugudu	89.9	8.4	0.9	0.3	0.5	100	1,595	
	Unplanned clustered rural housing	87.4	11.6	0.3	0.0	0.7	100	177	
Type of habitat	Isolated rural housing	97.9	1.4	0.6	0.0	0.1	100	455	
Type of Habitat	Unplanned urban housing	28.3	64.1	0.0	4.0	3.6	100	385	
	Small settlement	82.8	10.8	0.0	6.4	0.0	100	20	
	Modern planned area	5.4	79.8	0.0	11.0	3.8	100	77	
Disability status	without disability	78.7	18.3	0.6	1.3	1.1	100	2316	
Disability Status	with disability	86.7	12.0	0.9	0.2	0.2	100	392	
Sex of head of HH	Male	78.3	18.9	0.6	1.2	1.1	100	2031	
Sex of fiedd of HH	Female	84.7	13.0	0.8	0.9	0.6	100	677	

	EICV4		I	Total	Nber of HHs (in			
		Firewood	Charcoal	Crop waste	Gas or Biogas	Other		000s)
All Rwanda		83.3	15.2	0.8	0.2	0.6	100	2,493
	Kigali City	25.6	70.8	0.3	1.0	2.4	100	295
	Southern	92.6	5.8	1.2	0.1	0.3	100	597
Province	Western	88.3	11.1	0.1	0.1	0.4	100	559
	Northern	94.4	5.1	0.1	0.1	0.3	100	394
	Eastern	89.9	8.1	1.5	0.0	0.5	100	647
Huban /munal	Urban	29.3	67.4	0.3	0.7	2.3	100	426
Urban/rural	Rural	94.4	4.4	0.9	0.1	0.3	100	2,067
	Q1	96.3	1.9	1.7	0.0	0.1	100	421
Quintile	Q2	94.9	3.9	1.0	0.1	0.2	100	458
	Q3	92.9	6.3	0.6	0.1	0.1	100	489

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	EICV4		ı		Total	Nber of HHs (in		
		Firewood	Charcoal	Crop waste	Gas or Biogas	Other		000s)
	Q4		13.3	0.6	0.0	0.2	100	532
	Q5	54.8	42.3	0.2	0.5	2.1	100	593
	Umudugudu	92.9	5.8	1.0	0.0	0.3	100	1,227
	Unplanned clustered rural housing	85.8	12.6	1.3	0.2	0.2	100	216
Type of habitat	Isolated rural housing	97.9	1.3	0.5	0.0	0.3	100	637
Type of flabitat	Unplanned urban housing	22.6	73.7	0.3	0.9	2.7	100	318
	Small settlement	83.1	16.1	0.0	0.3	0.6	100	55
	Modern planned area	25.9	70.7	0.0	1.0	2.4	100	40
Diaghility status	without disability	82.1	16.5	0.7	0.2	0.6	100	2,100
Disability status	with disability	89.7	8.3	1.3	0.1	0.7	100	394
Cov of bood of IIII	Male	82.2	16.2	0.6	0.2	0.7	100	1,857
Sex of head of HH	Female	86.3	12.2	1.1	0.1	0.3	100	636

# 3.2. Cooking stove and stove installation place

This section provides detailed information about the mainly used cooking stove. Over all, the traditional stove (Three stones) is the most commonly used cooking stove by the households in Rwanda, where almost one out of two households uses the traditional stove (53%) in 2016-17 as show in Table 3.3. The charcoal or fire stove is the second commonly used cooking stove (16%), followed by efficient cookstove with 13.5% of the households. At provincial level, Western Province has the highest percentage of households using efficient cookstove (17%). In contrast, Kigali City has the highest percentage of households using charcoal/fire stove (62%) followed by the Western Province with (9%). Analysis also reveals that, in urban households, manufactured and efficient cookstove are mostly used (19.5%) compared to households in rural areas (14%).

Table 3.3: Distribution (%) of households by type of cooking stove, by province, urban/rural, consumption quintile, and sex of head of HH

				Type of coo	oking stove				Total Nber
Е	ICV5	Three stone	Self- Built Stove	Manufact- ured Stove	Charcoal/ fire stove	Efficient cookstove	Other	Total	
All Rwanda		53.2	14.8	1.3	16.2	13.5	1.0	100	2708
	Kigali City	20.2	1.7	6.5	61.7	7.0	3.0	100	410
	Southern	64.3	12.9	0.2	7.9	14.3	0.4	100	626
Province	Western	60.3	12.4	0.5	9.3	17.1	0.4	100	574
	Northern	70.8	12.5	0.3	6.8	9.0	0.5	100	422
	Eastern	45.9	28.0	0.5	8.2	16.4	1.0	100	677
Urban/rural	Urban	18.0	3.5	5.5	56.1	14.0	3.0	100	524
Orban/rurai	Rural	61.6	17.5	0.3	6.7	13.4	0.5	100	2184
	Q1	73.6	13.4	0.2	2.0	10.6	0.3	100	433
	Q2	67.4	15.1	0.2	4.9	12.2	0.3	100	481
Quintile	Q3	60.8	17.9	0.0	8.7	12.1	0.4	100	528
	Q4	53.0	18.5	0.1	14.1	13.9	0.5	100	573
	Q5	25.0	10.2	4.7	40.5	16.9	2.7	100	694
	Umudugudu	56.1	19.8	0.4	8.3	14.8	0.6	100	1595
	Unplanned clustered rural housing	59.6	16.7	0.3	9.5	13.1	0.8	100	177
Type of	Isolated rural housing	73.2	9.9	0.0	3.4	13.3	0.2	100	455
habitat	Unplanned urban housing	23.4	1.9	4.5	58.8	8.3	3.1	100	385
	Small settlement	64.9	7.4	7.3	8.5	11.8	0.0	100	20
	Modern planned area	5.0	3.2	11.5	62.3	14.7	3.3	100	77
Sex of head	Male	51.5	15.2	1.4	17.3	13.5	1.1	100	2031
of HH	Female	58.3	13.6	1.0	13.0	13.5	0.6	100	677

Source: EICV5. Base population: all households.

Table 3.4 shows that, at national level, the majority of the households set up their stoves in a separate dwelling with 53% in 2016-17. The data also illustrate that, 20% of the households install their stoves outdoor and 5% in the same dwelling, in a sleeping area. The Southern and Western Provinces have the highest percentage of households cooking in the same dwelling in a sleeping area with 9.5% and 8% respectively; while the Estern Province has the least percentage (only 1%). The percentage of households cooking in a separate dwelling is much higher in rural areas (57%) than in urban areas (39%). However, the percentage of rural households cooking in dwelling in a sleeping area is slightly higher (5%) compared to urban areas (4%).

Table 3.4: Distribution (%) of households by cooking stove installation place, by province, urban/rural, consumption quintile, and sex of head of HH

			Cooking	stove install	ation place				m . 1
EIG	CV5	In dwelling, not in sleeping area	In dwelling, in a sleeping area	In a separate Dwelling	In a veranda	veranda Outdoors Ot		Total	Total Nber of HHs (000s)
All Rwanda	a	19.5	5.0	53.4	1.3	20.1	0.7	100	2708
	Kigali City	11.6	2.3	34.7	4.0	44.9	2.6	100	410
	Southern	31.8	9.5	51.8	0.4	6.2	0.4	100	626
Province	Western	32.6	8.2	51.8	0.4	6.7	0.4	100	574
	Northern	16.7	2.6	63.9	1.3	15.3	0.2	100	422
	Eastern	3.7	1.2	61.0	1.2	32.2	0.6	100	677
Urban/	Urban	15.9	4.2	39.3	3.5	34.5	2.6	100	524
rural	Rural	20.4	5.1	56.8	0.7	16.6	0.3	100	2184
	Q1	26.3	9.9	41.1	0.5	22.1	0.0	100	433
	Q2	23.8	6.1	48.9	0.8	20.2	0.1	100	481
Quintile	Q3	20.8	4.2	55.3	0.8	18.9	0.1	100	528
	Q4	15.3	3.9	61.3	1.2	18.1	0.3	100	573
	Q5	14.9	2.6	56.2	2.4	21.3	2.5	100	694
	Umudugu du	19.0	4.6	58.2	0.9	17.0	0.4	100	1595
	Unplanne d clustered rural housing	22.7	7.5	54.0	0.7	14.3	0.8	100	177
Type of habitat	Isolated rural housing	25.4	7.5	54.6	0.6	11.9	0.1	100	455
	Unplanne d urban housing	13.7	3.2	33.3	3.2	44.1	2.5	100	385
	Small settlement	39.6	9.6	45.4	0.0	5.3	0.0	100	20
	Modern planned area	12.1	0.8	48.4	5.6	29.8	3.3	100	77
Sex of	Male	18.3	4.4	55.1	1.3	20.0	0.9	100	2031
head of HH	Female	23.2	6.7	48.3	1.2	20.5	0.2	100	677

Table 3.5 provides information on the use of chimney or other exhaust system while using stove for households cooking inside the dwellings that are more exposed to emissions affecting indoor air pollution resulting from the use of solid fuels. At national level, only 3% of the households cooking inside the dwellings use chimney or hood while using the stove in 2016-17. The highest usage is found in the households in Eastern Province with 7%, followed by Kigali City with 6% and the least usage is observed in Western Province with 0.4%. The data reveal also that, 5% of urban and 3% of rural households cooking inside the dwellings use chimney while using the stove. Among female and male headed households, the usage of chimney is almost distributed equally (3%).

Table 3.5: Distribution (%) of households using chimney, hood/other exhaust system while using stove, by province, urban/rural, consumption quintile, and sex of head of HH

	EICV5	hood or	sing chin other ex n while u stove	khaust	Total Nber of HHs not cooking in a veranda or outdoors (000s)
		Yes	No	Total	
All Rwanda		3.0	97.0	100	2,130
	Kigali City	5.9	94.1	100	210
	Southern	2.1	97.9	100	585
Province	Western	0.4	99.6	100	533
	Northern	1.5	98.5	100	352
	Eastern	7.1	92.9	100	450
Huban (munal	Urban	5.1	94.9	100	325
Urban/rural	Rural	2.6	97.4	100	1805
	Q1	0.5	99.5	100	335
	Q2	1.5	98.5	100	380
Quintile	Q3	2.2	97.8	100	424
	Q4	3.5	96.5	100	462
	Q5	5.9	94.1	100	529
	Umudugudu	3.4	96.6	100	1,310
	Unplanned clustered rural housing	0.2	99.8	100	151
Type of habitat	Isolated rural housing	1.2	98.8	100	398
	Unplanned urban housing	2.0	98.0	100	203
	Small settlement	6.8	93.2	100	19
	Modern planned area	19.3	80.7	100	50
C	Male	3.1	96.9	100	1599
Sex of head of HH Female		2.7	97.3	100	530

Source: EICV5. Base population: all households not cooking in a veranda or outdoors.

#### 3.3. Multi-Tier Framework

This section provides information on energy using Multi-Tier Framework (MTF). Access to electricity has typically been measured by considering whether a household has a connection to the grid (By asking if a household use electricity for home lighting [Yes/No]). These binary metrics, although convenient, fail to capture the multi-dimensional nature of energy access. For instance, multiple sources of energy delivered through a range of diverse technologies, across grid-based and off-grid systems need to be captured. The performance of the energy supply provided by these technologies vary in terms of quantity, quality, duration, reliability, affordability, convenience, etc.

The Multi-Tier Framework resolves the limitations of binary metrics by replacing these categories with tiers of energy supply performance, ranging from Tier 0 to Tier 5. Based on the combination of multiple attributes of energy supply, higher tiers feature progressively higher performance. Energy access is thus defined as the ability to obtain energy that is adequate, available when needed, reliable, of good quality, affordable, legal, convenient, health and safe. The following table on definition of tiers provides a picture of the service tiers for household electricity access.

#### Tier definitions for household electricity access

TIER LEVEL	DEFINITIONS
Tier-0:	No electricity is available in the household or it is available for less than four hours per day (or less than one hour every evening). Households use various coping mechanisms such as using candles, kerosene lamps or dry-cell battery powered devices (flash light or radio).
Tier-1:	At least four hours of electricity per day is available in the household (including at least one hour in the evening) and the capacity of the supply is sufficient to power task lighting and phone charging or radio, as needed during that time. Typically, any source from solar lighting systems, solar home system, mini-grid or grid may deliver such level of access.
Tier-2:	At least four hours of electricity per day is available in the household (including at least two hours in the evening) and the capacity of the supply is sufficient to power multiple lights, a television or a fan, as needed during that time. Such capacity typically ranges from 50 to 200 watts. Typically, any source from rechargeable battery or solar home system, to mini-grid and grid may deliver such level of access.
Tier-3:	At least eight hours of electricity per day is available in the household (including at least three hours in the evening) and the capacity of the supply is sufficient to power low power appliances such as air cooler, food processor, rice cooker or refrigerator, as needed during that time. Any source from diesel generator, to mini-grid and grid may deliver such level of access.
Tier-4:	At least 16 hours of electricity per day is available in the household (including all four hours during 6-10pm in the evening) and the capacity of the supply is sufficient to power medium power appliances, such as washing machine, water pump, hair dryer, toaster, iron or microwave. Such capacity typically exceeds 2,000 watts. The household should not suffer from frequent and long unscheduled interruptions (Not more than 14 unscheduled interruptions per week), and should not face any risk of electrocution due to poor installation or maintenance. In addition, the household should not suffer from voltage issues and should have a legal connection to the grid. Typically, any source from diesel generator, to mini-grid and grid may deliver such level of access.
Tier-5:	At least 23 hours of electricity per day is available in the household (including all four hours during 6-10pm in the evening) and the capacity of the supply is sufficient to power high and/or continuous power appliances, such as air conditioning or space heating. Grid is the most likely source to deliver such level of access.

Source: Rwanda Energy Access Diagnostic Report Based on Multi-Tier Framework, 2017.

The findings from classic binary<sup>3</sup> approach reveal that, 27% of the households in Rwanda have electricity connected to the grid in 2016-17 as shown in Figure 3.2. However, information presented in Figure 3.3 shows that MTF approach rises this percentage by eight percentage points from 27% to 35%. This is mostly due to the inclusion of off-grid solutions like solar lighting systems and solar home systems.

<sup>&</sup>lt;sup>3</sup> The classical binary approach only takes into account to whether a household is connected to the grid.

72.9
27.1
NON-GRID
GRID

Figure 3.2: Percentage of households with access to electricity connected to grid according to binary metric

The data also show that, majority of the households in Rwanda (65%) are in Tier-0 level as a result of lack of grid connectivity. 8% of the households are classified in Tier-1, 13% in Tier-3 and 9% in Tier-5. Households in rural areas present the highest percentage in Tier-0 level (61%) while Households in Urban areas display the least percentage in Tier-0 level (5%); this illustrates that electrification rate is still very low in rural areas. At the higher tier levels, distribution of households in urban and rural areas show a small difference (6.5% and 6% in Tier-3; 2% in Tier-4 in both regions; 5% and 3% in Tier-5 respectively).

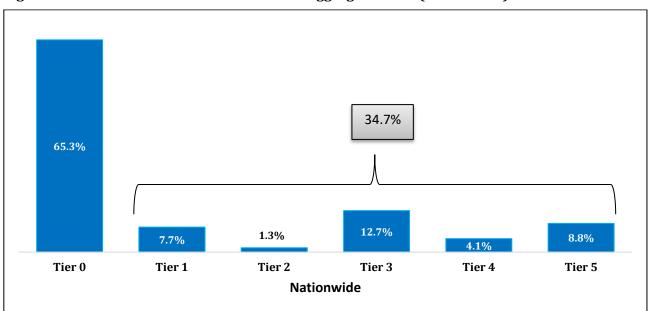


Figure 3.3: Distribution of households across aggregated Tier (Nationwide)

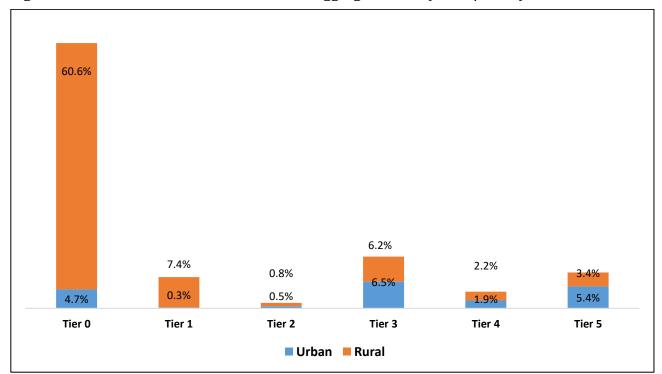


Figure 3.4: Distribution of households across aggregated Tier (Urban/Rural)

## 3.3.1. Main attributes for the MTF Analysis

Like it has been discussed previously, the MTF approach consists of a combination of different attributes to determine the rate of electricity access in the country. Those attributes are the following: Capacity, Availability of electricity (Daytime and Evening duration), Reliability, Quality, Legality and Health and safety.

## i. Capacity

The capacity is measured as a combination of the source of electricity and capacity, which is measured as proxy by the type of appliances that household are able to use including the ability to charge mobile phone. The results presented in Figure 3.5 describe the source of electricity mainly used by households in 2016-17. Overall, 65% of the households do not have any form of electricity, 27% are connected to the grid, 4% use solar lantern and 3% use solar home system. The data also show that, the percentage of households that are connected to mini-grid or using generators is still very low (less than 0.5%).

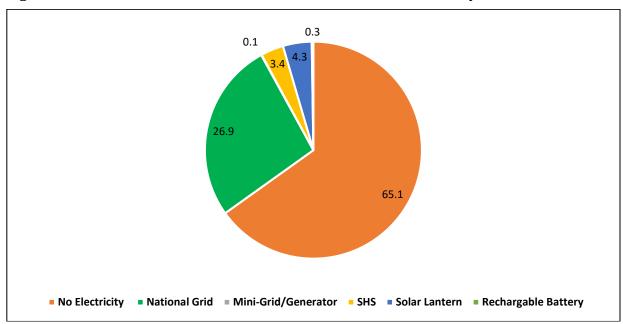


Figure 3.5: Distribution of households across the sources of electricity at national level

It is important to note that, a household may be able to use lower tier appliances and still have a higher tier for capacity (Grid connected households). This classifies a household immediately in Tier-2 for appliance usage, to avoid that the usage of appliances and ability to power them is mostly applicable for off-grid solutions. The Table below summarizes the classification of Tiers for household appliances and appliances are categorized by the capacity or power.

Tier classification for household appliances

Appliance Level TIER-0		TIER-1	TIER-2	TIER-3	TIER-4	TIER-5
Type of Appliances			TV,	Refrigerator/ Freezer	Microwave & Laundry machine	Cooker

Source: EICV5.

Concerning use of appliances, Figure 3.6 shows that, the majority of the households in Rwanda (83%) use Tier-1 level appliances (Radio & Mobile phone); This indicates that most of the grid connected households only use the basic appliances that can be simply powered by a small solar lighting system. 12% of the households own Tier-2 level appliances such as TV and Computer while 4% use Tier-5 level appliances (cooker).

83.3 Appl Tier1 Appl Tier2 Appl Tier3 Appl Tier4 Appl Tier5

Figure 3.6: Distribution of appliances across Tiers at national level

Figure 3.7 and Figure 3.8 present data of the final capacity tier resulting from a combination of source of electricity and appliances used by households at national and provincial levels respectively. The highest percentage of the households in the country is in Tier-0 (65%), this is due to the fact that, most of the households do not have any access to electricity or use solar lanterns with service levels below Tier-1. 7% of the households are in Tier-1 and 27% are grid connected (Tier-5 level). At province level, Kigali city has the least percentage of household (3%) in capacity Tier-0 and the highest percentage (12%) in capacity Tier-5 compared to all other provinces; this reveals that, grid connected households and high power capacity appliances are predominant in urban areas.

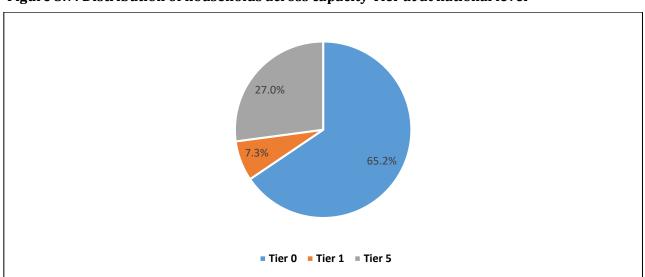


Figure 3.7: Distribution of households across capacity Tier at at national level

17.9% 17.7% 4.4% 12.0% 11.9% 4.5% 4.5% 3.1% 3.3% 2.8% 1.9%2.3% 2.3%  $0.1\%0.1\%0.0\%0.1\%0.2\% \qquad 0.0\%0.0\%0.0\%0.0\%0.0\%$ Tier 0 Tier 1 Tier 2 Tier 3 Tier 5 ■ Kigali ■ Southern ■ Western ■ Northern Eastern

Figure 3.8: Distribution of households across capacity Tier by province

### ii. Availability of Electricity (Daytime and Evening duration)

The availability of electricity is calculated based on how many hours of electricity are available each day and night. The day time duration is measured by considering the availability of electricity supply from the main source of electricity for a period of 24 hours, while evening duration is measured by considering the availability of electricity supply from the main source between 6:00 pm to 10:00 pm each evening. Tables below explain the classification of Tiers for availability of electricity during day and evening time.

Tier classification for availability of electricity (during 24 hours)

		TIER-0	TIER-1	TIER-2	TIER-3	TIER-4	TIER-5
DAY TO DURATION	'IME		Less than 4Hours	Minimum 4Hours	Minimum 8Hours	Minimum 16Hours	Minimum 23Hours

Figure 3.9 and Figure 3.10 show data on availability of electricity during daytime (24hours) at National and Urban/Rural levels respectively. The majority of households that have access to electricity get more than 23 hours of electricity supply (86%). Analysis also indicates that 13% of the households with electricity can access it between 16 and 22 hours a day. Around 2% of the households with electricity have less than 16 hours of electricity and it is important to note that, none of the households with electricity that has access to electricity for less than 4 hours a day. 47% of the households having electricity in urban and 39% in rural areas get more than 23 hours of electricity supply all day.

85.6%

\*\*Tier 0 \*\* Tier 2 \*\* Tier 3 \*\* Tier 4 \*\* Tier 5

Figure 3.9: Distribution of households across duration Tier-day time at national level

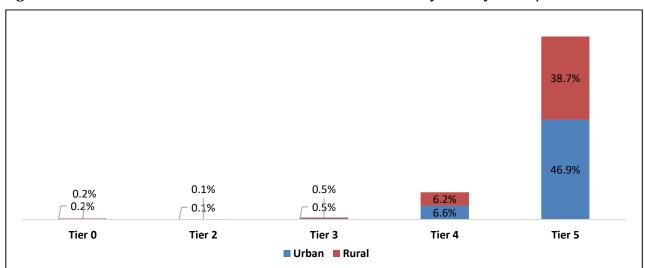


Figure 3.10: Distribution of households across duration Tier-day time by urban/rural

Tier Classification for availability of electricity during evening time

TIER-1	TIER-2	TIER-3	TIER-4	TIER-5
Minimum 1Hour	Minimum 2Hours	Minimum 3Hours	Minimum 4Hours	Minimum 4Hours
	Minimum	Minimum Minimum	Minimum Minimum Minimum	Minimum Minimum Minimum

Figure 3.11 and Figure 3.12 show data on availability of electricity in the evening time at national and urban/rural levels respectively. 60% of the households that have access to electricity get a maximum of 4 hours of electricity supply between 6:00pm-10:00pm. The analysis also illustrates that 35% of the households with electricity get a minimum of 3 hours at night. However, 2% of the households have less than 2 hours of electricity over the same period. 33% of the households having electricity in urban and 27% in rural areas get more than 3 hours of electricity supply between 6:00pm-10:00pm.

35%
60%
Tier 1 Tier 2 Tier 3 Tier 5

Figure 3.11: Distribution of households across duration Tier-Evening at national level

Source: EICV5.

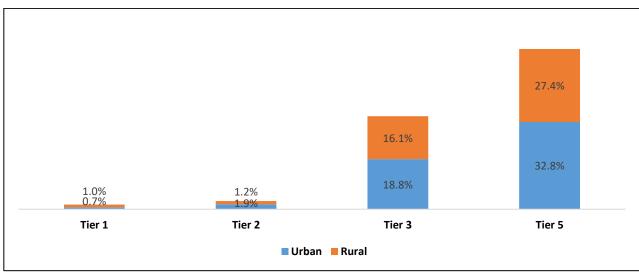


Figure 3.12: Distribution of households across duration Tier-Evening by urban/rural

Source: EICV5.

## iii. Reliability

The reliability of electricity supply for a household with some form of electricity is determined by the number of disruptions to the electricity supply and total duration of these disruptions. Table below indicates the classification of Tiers for reliability of electricity used in the households.

#### Tier Classification for reliability of electricity

	TIER-0	TIER-1	TIER-2	TIER-3	TIER-4	TIER-5		
RELIABILITY	More than per week	_	s/blackouts	S	Maximum of 14 outages/blackouts per week			

Figure 3.13 and Figure 3.14 provide information on reliability of electricity at National and urban/rural levels for households with some form of electricity. Overall, the majority of households (79%) have Tier-5 level of reliability (less than 4 outages per week and total duration of outages are less than 2 hours). 18.5% of the households are at Tier-4 level (less than 15 outages per week). Only 3% of the households have electricity reliability less than Tier-4 level (More than 14 outages per week). 45% of the households in Urban and 34% in rural areas are at Tier-5 level (less than 4 blackouts per week and total duration of blackouts are less than 2 hours).

78.7%

Tier 3 Tier 4 Tier 5

Figure 3.13: Distribution of households across reliability Tier at national level

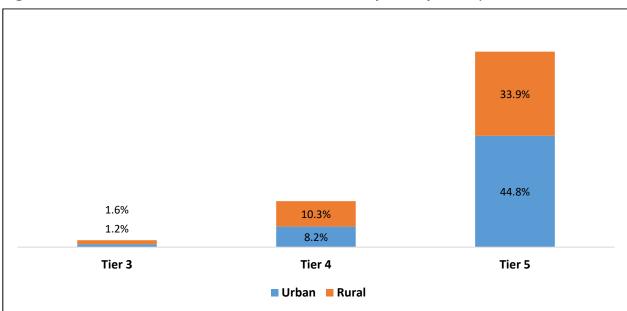


Figure 3.14: Distribution of households across reliability Tier by urban/rural

Source: EICV5.

### iv. Quality

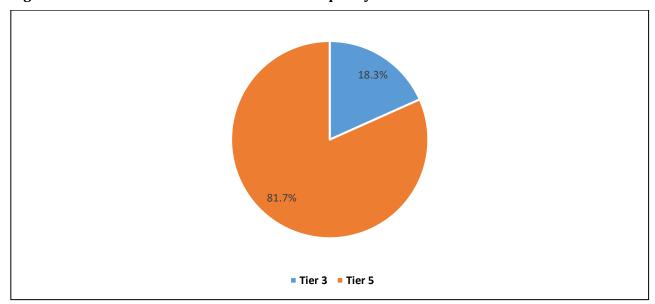
The quality of electricity services is determined by the fluctuations (going up and down) of voltage in electricity supply and damage of appliances encountered by households while using electricity. Table below describes the classification of Tiers for quality of electricity for grid connected households.

#### Tier Classification for quality of electricity

	TIER-0	TIER-1	TIER	-2	TIER	2-3	TIER-4	TIER-5
QUALITY	Voltage desired a	problems ppliances	affect	the	use	of	Voltage problems do no desired appliances.	t affect the use of

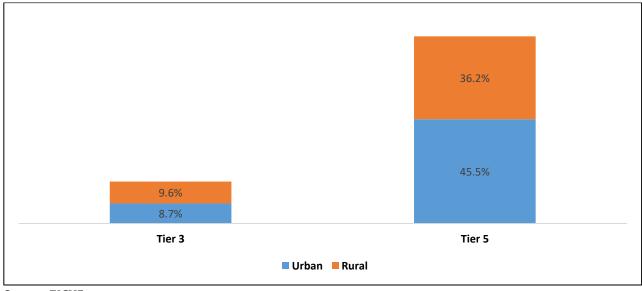
Figure 3.15 and Figure 3.16 provide information on quality of electricity at national and urban/rural levels for grid connected households. The majority of households in Rwanda (82%) are not affected by the voltage problems while using the desired appliances (Tier-5 level). 18% of the households report to have damage of their appliances due to voltage problems. 45.5% of the households in urban and 36% in rural areas are not affected by the voltage problems while using the desired appliances.

Figure 3.15: Distribution of households across quality Tier at national level



Source: EICV5.

Figure 3.16: Distribution of households across quality Tier by urban/rural



## v. Legality

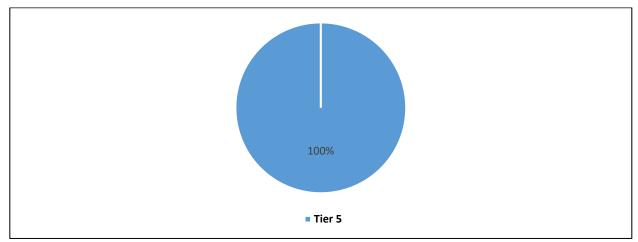
The legality of electricity usage is determined by considering whether grid connected households pay electricity bills to the utility companies or other authorized representatives (legal usage of electricity). The table below displays the classification of Tiers for Legality of Electricity connection.

Tier Classification for legality of electricity connection

	TIER-0	TIER-1	TIER-2	TIER-3	TIER-4	TIER-5
LEGALITY	Illegal usa	ige of energ	gy source		Bill is paid to the seller, or authorized	utility, pre-paid card l representative

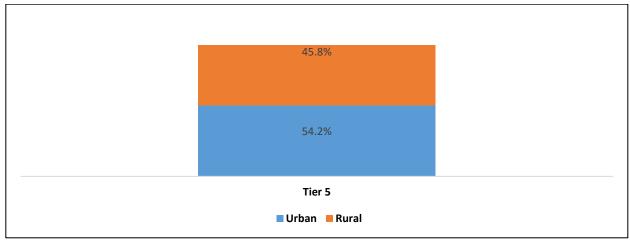
Figure 3.17 and Figure 3.18 represent information about legal usage of electricity at national and urban/rural levels for grid connected households. The data reveals that, 54% of the households in Urban and 46% in Rural areas pay electricity bills to the utility companies; this means that, 100% of grid connected households in Rwanda pay electricity bills to the utility companies or authorized representative.

Figure 3.17: Distribution of households across legality Tier at national level



Source: EICV5.

Figure 3.18: Distribution of households across legality Tier by urban/rural



### vi. Health & Safety

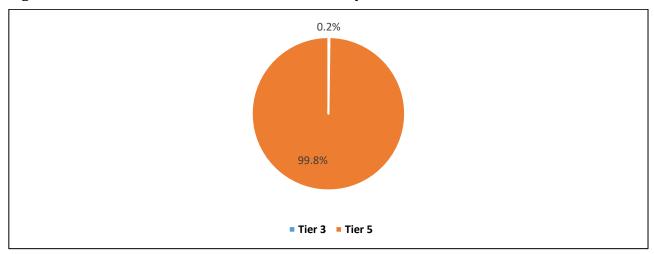
The safety of electricity supply is ensured by the absence of serious accidents (death, permanent limb or bodily injury) from electricity services encountered by any member of the grid connected households in the past. The following table shows the classification of Tiers for health and safety electricity connection.

Tier Classification for health and safety of electricity connection

	TIER-0	TIER-1	TIER-2	TIER-3	TIEF	R-4	TIER-5	
HEALTH & SAFETY	Accidents from ener	•	eption of	_			accidents risk in the fu	

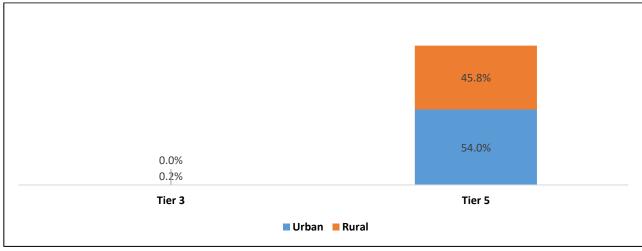
Figure 3.19 and Figure 3.20 provide information on safety of electricity at national and urban/rural levels for grid connected households. 54% of the households in urban and 45.8% in rural areas do not encounter serious accidents from electricity services. Only less than 0.5% of the households have reported some serious accident, from electricity supply nationwide.

Figure 3.19: Distribution of households across safety Tier at national level



Source: EICV5.

Figure 3.20: Distribution of households across safety Tier by urban/rural



## **Chapter 4. Housing**

This chapter provides detailed insights into the housing situation and focuses on the type of dwelling, housing physical characteristics, waste management facilities, household relocation, rent arrangements, dwelling and durables in Rwanda. The estimates presented in this chapter indicate the progress made between EICV4 and EICV5.

## 4.1. Dwelling characteristics

The data in this section show a substantial increase of households living in Imidugudu from 49% in 2013-14 to 59% in 2016-17 as detailed in Figure 4.1. It is also notable that households living in isolated rural housing reduced considerably from 26% to 17% over the same period.

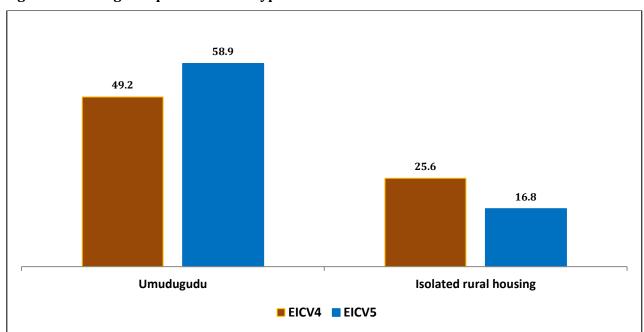


Figure 4.1: Change in specific habitat types

Source: EICV4 and EICV5. Base population: all households.

Table 4.1 shows that the Eastern Province registers the highest percentage of population living in Imidugudu settlements in both surveys (78% in 2013-14 and 87% in 2016-17). However, the Nothern Province has the highest growth rate of Twenty five percentage points in Imidugudu settlements: where 44% of the households live in umudugudu in 2013-14 compared to 69% in 2016-17, followed by the Western Province where 43% of the households live in umudugudu in 2013-14 and 59.5% in 2016-17.

Table 4.1: Types of habitat, by province, urban/rural, consumption quintile and sex of head of HH

				Туре	of habitat				Total Nber
EICV	/5	Umudugudu	Unplanned clustered rural housing	Isolated rural housing	Unplanned urban housing	settlement	Modern planned area	Total	of HHs (000s)
All Rwanda		58.9	6.5	16.8	14.2	0.7	2.8	100	2,708
	Kigali City	4.1	0.1	0.8	77.3	0.3	17.4	100	410
	Southern	56.7	8.5	28.9	4.8	0.7	0.3	100	626
Province	Western	59.5	13.0	22.1	3.1	2.3	0.0	100	574
	Northern	68.8	7.1	21.8	1.5	0.1	0.7	100	422
	Eastern	87.4	2.8	7.6	2.1	0.1	0.1	100	677
Huban /munal	Urban	24.8	5.5	2.9	52.5	0.4	13.9	100	524
Urban/rural	Rural	67.0	6.8	20.1	5.0	0.8	0.2	100	2,184
	Q1	66.8	6.8	21.4	4.2	0.6	0.1	100	433
	Q2	64.1	6.4	21.3	7.2	0.7	0.3	100	481
Quintile	Q3	64.1	7.0	18.6	8.6	0.7	1.0	100	528
	Q4	61.8	7.0	17.1	12.0	0.7	1.3	100	573
	Q5	43.9	5.7	9.2	31.4	0.9	9.0	100	694
Sex of head o	ex of head ofMale		6.5	16.4	14.8	0.7	3.1	100	2,031
НН	Female	60.1	6.7	17.9	12.5	0.8	2.1	100	677

				Type of ha	bitat				Total
EICV4		Umudugudu	clustered rural	rural	hirhan	Small settlement	Modern planned area	Total	Nber of HHs (000s)
All Rwanda		49.2	8.7	25.6	12.8	2.2	1.6	100	2,493
	Kigali City	2.7	2.2	13.4	79	0.1	2.6	100	295
	Southern	50.5	10.2	31.4	5	0.8	2	100	597
Province	Western	42.6	8.4	35.3	4.8	7.6	1.3	100	559
	Northern	43.8	8.3	42.7	2	1.3	2	100	394
	Eastern	78.3	10.7	6.8	3.2	0.3	0.8	100	647
Huban /munal	Urban	17.10	6.40	3.20	62.60	2.10	8.60	100	426
Urban/rural	Rural	55.8	9.2	30.2	2.5	2.2	0.1	100	2,067
	Q1	52.6	7.8	33.1	4.6	1.6	0.3	100	421
	Q2	53.1	8.9	30.6	5.3	1.8	0.4	100	458
Quintile	Q3	52.9	8.4	28.4	6.9	3.0	0.3	100	489
	Q4	49.6	9.6	26.1	11.5	2.3	0.9	100	532
	Q5	40.4	8.6	13.5	30.2	2.1	5.1	100	593
Sex of head o	fMale	49.2	8.8	24.9	13.2	2.3	1.6	100	1,857
НН	Female	49.2	8.3	27.4	11.7	2.0	1.5	100	636

Source: EICV4. Base population: all households.

Table 4.2 shows that, single house dwelling has decreased slightly by one percentage point since EICV4 (from 90% in 2013-14 to 89% in 2016-17) and this type of dwelling is more common in rural areas (96%) compared to urban areas (59%). The Northern Province dominates other provinces in this type of dwelling in both surveys (99%) in 2013-14 compared to (97.5%) in 2016-17.

Table 4.2: Types of dwelling, by province, urban/rural, consumption quintile, habitat and sex of head of HH

				Type of dw	elling			Nber of
	EICV5	Single house dwelling	Multiple HH dwelling	Multi-storied building with one or more HH	Group of enclosed dwellings: multiple HH	Group of enclosed dwellings: single HH	Total	HHs (in 000s)
All Rwanda		88.8	6.0	0.1	3.8	1.3	100	2,708
	Kigali City	49.5	25.6	0.5	19.3	5.1	100	410
	Southern	94.7	3.8	0.1	0.8	0.5	100	626
Province	Western	95.5	2.7	0.0	1.2	0.5	100	574
	Northern	97.5	0.7	0.0	0.9	0.8	100	422
	Eastern	96.0	2.2	0.0	1.2	0.6	100	677
Urban/	Urban	59.4	19.8	0.4	16.2	4.2	100	524
rural	Rural	95.9	2.7	0.1	0.8	0.6	100	2,184
	Q1	97.8	1.6	0.0	0.5	0.2	100	433
	Q2	95.1	3.5	0.0	1.0	0.4	100	481
Quintile	Q3	93.3	4.6	0.0	1.6	0.5	100	528
	Q4	91.2	5.7	0.1	2.4	0.6	100	573
	Q5	73.5	11.8	0.4	10.6	3.8	100	694
	Umudugudu	96.1	2.3	0.0	1.0	0.6	100	1,595
	Unplanned clustered rural housing	92.8	5.1	0.0	1.2	0.9	100	177
Type of	Isolated rural housing	98.2	1.1	0.1	0.3	0.3	100	455
habitat	Unplanned urban housing	53.8	23.2	0.3	19.6	3.2	100	385
	Small settlement	84.1	9.6	2.0	3.6	0.7	100	20
	Modern planned area	49.7	25.9	1.0	10.6	12.7	100	77
Sex of head	Male	88.7	5.8	0.1	4.0	1.5	100	2031
of HH	Female	89.2	6.7	0.1	3.3	0.7	100	677

				Type of dwo	elling			Nber of
EICV4		Single house dwelling	Multiple HH dwelling	Multi-storied building with one or more HH	Group of enclosed dwellings: multiple HH	Group of enclosed dwellings: single HH	Total	HHs (in 000s)
All Rwanda		90.4	4.6	0.1	2.7	2.2	100	2,493
	Kigali City	67.1	15.3	0.4	12.9	4.3	100	295
	Southern	89	3.6	0	1.6	5.7	100	597
Province	Western	95.7	3.3	0	0.7	0.3	100	559
	Northern	99.2	0.5	0	0.3	0.1	100	394
	Eastern	92.5	4.2	0.1	2.3	1.0	100	647
Urban/rural	Urban	71.8	13.3	0.3	10.6	3.9	100	426
UI Daii/I UI ai	Rural	94.2	2.8	0	1.1	1.9	100	2,067
Quintile	Q1	96.8	2.2	0.0	0.7	0.3	100	421

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				Type of dwo	elling			Nber of
	EICV4		Multiple HH dwelling	Multi-storied building with one or more HH	Group of enclosed dwellings: multiple HH	Group of enclosed dwellings: single HH	Total	HHs (in 000s)
	Q2	96.0	2.6	0.0	0.7	0.7	100	458
	Q3	93.9	3.0	0.0	1.5	1.6	100	489
	Q4	91.0	4.7	0.0	1.7	2.6	100	532
	Q5	78.2	9.0	0.3	7.6	4.9	100	593
	Umudugudu	94.3	2.9	0.0	1.3	1.5	100	1,227
	Unplanned clustered rural housing	89.0	5.8	0.0	1.9	3.3	100	216
Type of	Isolated rural housing	95.4	1.5	0.0	0.6	2.4	100	637
habitat	Unplanned urban housing	67.1	16.3	0.3	12.8	3.5	100	318
	Small settlement	93.1	5.5	0.5	0.3	0.6	100	55
	Modern planned area	79.6	6.5	0.5	7.6	5.9	100	40
Sex of head	Male	90.4	4.4	0.1	2.7	2.4	100	1,857
of HH	Female	90.4	5.1	0.1	2.7	1.7	100	636

Table 4.3 shows that, the average number of people per bedroom is 2.2 for the whole country; 2.1 in urban and 2.2 in rural areas in 2016-17. The data also reveal that, the percentage of households with an average of four or more people sleeping in the same bedroom has slightly reduced by 1.5 percentage points from 9% in 2013-14 to 7.5% in 2016-17. With reference to quintiles, the data show that the higher the quintile, the lower the number of people sharing the same bedroom (1.7 per bedroom in the highest and 2.8 per bedroom in the lowest).

Table 4.3: Number of persons per bedroom, by province, urban/rural, consumption quintile, habitat and sex of head of HH

		Maan na af	Average n	umber of pe	ersons per b	edroom		Nber
EIC	CV5	Mean no. of people per bedroom		2-4 Persons	4-6 Persons	6 or More Persons	Total	of HHs (in 000s)
All Rwanda		2.2	34.8	56.8	7.5	0.9	100	2,708
	Kigali City	2.1	43.7	48.0	6.9	1.4	100	410
	Southern	2.3	33.1	57.4	8.7	8.0	100	626
Province	Western	2.3	32.4	59.2	7.9	0.6	100	574
	Northern	2.1	38.7	55.8	5.0	0.5	100	422
	Eastern	2.3	30.6	60.2	7.9	1.3	100	677
Urban/rural	Urban	2.1	42.8	49.4	6.5	1.3	100	524
Of Dall/Tural	Rural	2.2	32.9	58.6	7.7	8.0	100	2,184
	Q1	2.8	12.6	69.4	15.6	2.5	100	433
	Q2	2.5	21.0	66.4	11.2	1.4	100	481
Quintile	Q3	2.3	29.3	62.0	8.0	0.7	100	528
	Q4	2.1	38.1	56.9	4.5	0.5	100	573
	Q5	1.7	59.6	38.3	2.0	0.1	100	694
	Umudugudu	2.2	33.5	58.6	7.1	8.0	100	1,595
	Unplanned clustered rural housing	2.3	32.3	57.0	9.5	1.2	100	177
Type of habitat	Isolated rural housing	2.3	31.5	58.8	8.9	0.8	100	455
	Unplanned urban housing	2.1	42.2	49.0	7.5	1.3	100	385
	Small settlement	2.1	34.7	59.8	5.5	0.0	100	20
	Modern planned area	1.9	49.0	46.5	3.7	0.8	100	77
Sex of head of HH	Male	2.3	28.5	61.9	8.5	1.1	100	2031
SEX OF HEAU OF HIT	Female	1.8	53.7	41.5	4.4	0.5	100	677

		Mean no.	Average n	umber of pe	ersons per b	edroom		Nber
EIG	CV4	of people per bedroom	Less than 2 Persons	2-4 Persons	4-6 Persons	6 or More Persons	Total	of HHs (in 000s)
All Rwanda		2.3	33.1	58.4	7.8	0.8	100	2,493
	Kigali City	2.2	36.8	54.4	8.0	0.8	100	295
	Southern	2.3	34.0	56.5	8.6	1.0	100	597
Province	Western	2.3	30.2	61.5	7.6	0.7	100	559
	Northern	2.1	37.0	57.8	5.0	0.2	100	394
	Eastern	2.3	30.7	59.6	8.8	0.9	100	647
Huban / munal	Urban	2.2	37.3	54.5	7.4	0.8	100	426
Urban/ rural	Rural	2.3	32.2	59.2	7.9	0.8	100	2,067
	Q1	2.8	15.8	67.4	14.4	2.4	100	421
	Q2	2.5	21.5	67.6	9.8	1.2	100	458
Quintile	Q3	2.3	29.2	62.1	8.3	0.5	100	489
	Q4	2.1	37.5	56.9	5.5	0.1	100	532
	Q5	1.8	53.5	43.2	3.3	0.1	100	593
	Umudugudu	2.3	32.1	59.2	8.0	0.7	100	1,227
	Unplanned clustered rural housing	2.3	30.3	59.4	9.3	1.0	100	216
Type of habitat	Isolated rural housing	2.3	32.9	59.2	7.1	0.8	100	637
	Unplanned urban housing	2.2	37.1	54.2	7.9	0.7	100	318
	Small settlement	2.4	29.2	61.6	7.7	1.4	100	55
	Modern planned area	2.0	54.0	41.3	3.9	0.8	100	40
Sex of head of HH	Male	2.4	26.3	64.0	8.9	0.9	100	1,857
JEA UI IICAU UI IIII	Female	1.9	52.9	42.0	4.6	0.5	100	636

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	Mean no.	Average n	umber of pe	ersons per b	edroom		Nber
EICV4	of people per	Less than 2	2-4	4-6	6 or More	Total	of HHs (in
	bedroom	Persons	Persons	Persons	Persons		000s)

Source: EICV4. Base population: all households.

Table 4.4 shows mean floor area in square meters (m2) of households' dwellings in Rwanda. The national mean floor area of the dwelling has slightly increased by one percentage point from 39m2 in 2013-14 to 40 m2 in 2016-17. In urban areas, dwellings have a floor area of 48 m2, larger than that in rural areas (38  $\text{m}^2$ ). However, the mean floor area has decreased by one percentage point in urban areas compared to the EICV4. The floor area of dwellings for households that live in Imidugudu settlement are similarly in line with the national average in 2016-17. Although wealthier households and households in modern planned areas occupy larger spaces (51 $\text{m}^2$  and 70 $\text{m}^2$  respectively).

Table 4.4: Floor area, by province, urban/rural, consumption quintile, habitat and sex of head of HH

		Mean floor		Floor area	of dwelling	Ţ		
EI	CV5	area of dwelling (sqrm)	1- 24(m²)	25- 49(m²)	50- 74(m²)	75+(m²)	Total	Nber of HHs (in 000s)
All Rwanda		40.1	22.3	55.7	15.4	6.6	100	2,708
	Kigali City	43.6	40.7	32.2	11.6	15.6	100	410
	Southern	40	20.0	59.1	14.9	6.0	100	626
Province	Western	41.8	15.0	59.2	20.5	5.2	100	574
	Northern	39.7	16.6	63.7	14.9	4.8	100	422
	Eastern	37.0	23.1	58.7	14.1	4.1	100	677
Huban /munal	Urban	47.8	34.8	33.0	15.0	17.3	100	524
Urban/rural	Rural	38.3	19.3	61.1	15.5	4.1	100	2,184
	Q1	33.0	26.9	63.3	8.8	1.1	100	433
	Q2	34.6	23.5	63.4	11.7	1.4	100	481
Quintile	Q3	37.3	20.7	61.9	14.0	3.4	100	528
	Q4	40.0	18.6	57.3	19.4	4.7	100	573
	Q5	50.8	22.9	39.5	19.8	17.8	100	694
	Umudugudu	40.1	17.7	60.0	16.8	5.5	100	1,595
	Unplanned clustered rural housing	37.6	24.0	58.7	13.7	3.7	100	177
Type of	Isolated rural housing	36.6	20.6	62.5	14.5	2.3	100	455
habitat	Unplanned urban housing	39.1	40.8	35.4	12.1	11.8	100	385
	Small settlement	48.5	12.7	54.9	22.9	9.5	100	20
	Modern planned area	70.5	32.9	20.2	10.1	36.8	100	77
Sex of head of	Male	41.2	21.1	55.7	16.1	7.1	100	2031
НН	Female	37.0	26.1	55.6	13.2	5.1	100	677

Source: EICV5. Base population: all households.

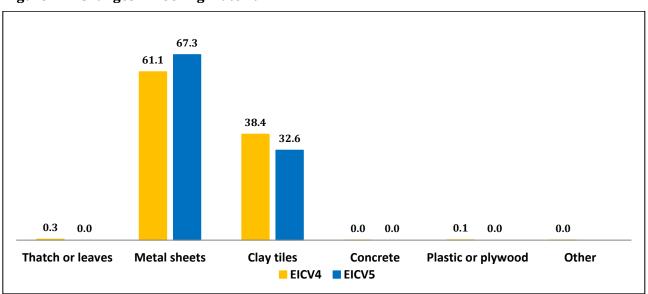
		Mean floor		Floor area	of dwelling	3		
E	ICV4	area of dwelling (sqrm)	1- 24(m²)	25- 49(m²)	50- 74(m²)	75+(m²)	Total	Nber of HHs (in 000s)
All Rwanda		38.9	21.9	58.3	14.1	5.8	100	2,493
	Kigali City	45.8	32.7	37.0	14.6	15.6	100	295
	Southern	37.8	21.7	61.6	12.6	4.1	100	597
Province	Western	41.2	17.0	59.3	17.7	6.0	100	559
	Northern	36.6	18.1	66.6	11.9	3.3	100	394
	Eastern	36.3	23.5	59.2	13.2	4.1	100	647
Urban/ rural	Urban	49.2	27.6	37.2	17.0	18.2	100	426

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	Rural	36.8	20.7	62.7	13.5	3.2	100	2,067
	Q1	30.6	32.6	60.2	6.3	0.9	100	421
	Q2	33.7	24.5	64.8	9.6	1.1	100	458
Quintile	Q3	35.5	20.7	66.0	11.6	1.8	100	489
	Q4	39.4	16.9	61.2	18.0	3.9	100	532
	Q5	51.2	17.6	43.2	21.5	17.7	100	593
	Umudugudu	38.2	19.1	61.8	14.8	4.2	100	1,227
	Unplanned clustered rural housing	37.6	22.9	57.3	15.0	4.8	100	216
Type of	Isolated rural housing	35.3	22.2	64.5	11.2	2.1	100	637
habitat	Unplanned urban housing	44.7	32.4	36.7	15.6	15.4	100	318
	Small settlement	40.6	18.1	59.9	16.5	5.5	100	55
	Modern planned area	80.0	15.4	28.3	15.6	40.7	100	40
Sex of head of	Male	40.0	20.8	57.8	14.9	6.5	100	1,857
НН	Female	35.9	24.9	60.0	11.5	3.6	100	636

The percentage of households using metal sheets has increased by six percentage points from 61% in 2013-14 and 67% in 2016-17. Figure 4.2 shows that households mostly use metal sheets as roofing materials across Rwanda compared to other types of roofing materials, followed by clay tiles.

Figure 4.2: Changes in roofing material



Source: EICV4 and EICV5. Base population: all households.

Table 4.5 shows that in Kigali City and the Eastern province almost all households use metal sheets (99% to 98% respectively). The Southern Province has the least percentage (28%) of households using metal sheets as their roofing materials, and clay tiles remain the most predominant roofing material used by 72% of the households. In urban households, metal sheets are mostly used (92%) compared to rural areas (61.5%). It is important to note that the use of metal sheets as roofing materials has also increased both in the lowest and highest quintiles from 56% to 57% and 76% to 84% respectively between 2013-14 and 2016-17.

Table 4.5: Roofing material of the dwelling, by province, urban/rural, consumption quintile, habitat and sex of head of HH

				Туре	of roofin	g material	l			
	EICV5	Thatch or leaves	Metal sheets	Local clay tiles	Concrete	Plastic or plywood	Industrial tiles	Other	Total	Nber of HHs (in 000s)
All Rwanda		0.0	67.3	32.6	0.0	0.0	0.0	0.0	100	2,708
	Kigali City	0.0	99.1	0.7	0.0	0.0	0.2	0.0	100	410
	Southern	0.0	27.6	72.2	0.0	0.1	0.0	0.1	100	626
Province	Western	0.0	51.4	48.5	0.0	0.1	0.0	0.1	100	574
	Northern	0.0	67.8	32.2	0.0	0.0	0.0	0.0	100	422
	Eastern	0.0	98.0	1.9	0.0	0.0	0.0	0.0	100	677
Urban/rural	Urban	0.0	91.6	8.1	0.0	0.0	0.2	0.0	100	524
Orban/rurai	Rural	0.0	61.5	38.4	0.0	0.0	0.0	0.1	100	2,184
	Q1	0.0	56.5	43.3	0.0	0.1	0.0	0.1	100	433
	Q2	0.0	57.4	42.5	0.0	0.0	0.0	0.1	100	481
Quintile	Q3	0.0	61.1	38.7	0.0	0.1	0.0	0.0	100	528
	Q4	0.0	69.1	30.9	0.0	0.0	0.0	0.0	100	573
	Q5	0.0	84.1	15.7	0.0	0.0	0.2	0.0	100	694
	Umudugudu	0.0	67.7	32.2	0.0	0.0	0.0	0.0	100	1,595
	Unplanned clustered rural housing	0.0	62.5	37.4	0.0	0.1	0.1	0.0	100	177
Tour o of bolitat	Isolated rural housing	0.0	39.8	59.9	0.0	0.1	0.0	0.1	100	455
Type of habitat	Unplanned urban housing	0.0	95.1	4.9	0.0	0.0	0.0	0.0	100	385
	Small settlement	0.0	55.6	44.4	0.0	0.0	0.0	0.0	100	20
	Modern planned area	0.0	97.2	2.0	0.0	0.0	8.0	0.0	100	77
Sex of head of	Male	0.0	67.6	32.3	0	0	0.0	0.0	100	2,031
НН	Female	0.0	66.4	33.4	0.0	0.0	0.1	0.1	100	677

			Ту	pe of ro	ofing ma	terial			
	EICV4	Thatch or leaves	Metal sheets	Clay tiles	Concrete	Plastic or plywood	Other	Total	Nber of HHs (in 000s)
All Rwanda		0.3	61.1	38.4	0.0	0.1	0.0	100	2,492
	Kigali City	0.2	99.1	0.6	0.1	0.1	0.0	100	294
	Southern	0.1	19.5	80.3	0.0	0.2	0.1	100	597
Province	Western	0.4	47.3	52.1	0.1	0.1	0.0	100	559
	Northern	0.3	58.3	41.4	0.0	0.0	0.0	100	394
	Eastern	0.6	95.9	3.4	0.0	0.1	0.0	100	647
Urban/rural	Urban	0.2	88.8	10.9	0.0	0.0	0.0	100	426
Of Dall/Tural	Rural	0.4	55.4	44.1	0.0	0.1	0.0	100	2,067
	Q1	0.2	55.6	43.9	0.0	0.2	0.0	100	420
	Q2	0.4	53.5	46.0	0.0	0.1	0.0	100	458
Quintile	Q3	0.4	56.1	43.4	0.0	0.0	0.1	100	489
	Q4	0.3	60.2	39.3	0.0	0.1	0.0	100	532
	Q5	0.3	75.8	23.8	0.0	0.0	0.0	100	593
	Umudugudu	0.4	63.6	35.8	0.0	0.1	0.0	100	1,227
	Unplanned clustered rural housing	0.3	58.0	41.5	0.0	0.1	0.0	100	216
Type of habitat	Isolated rural housing	0.3	38.7	60.9	0.0	0.1	0.0	100	637
	Unplanned urban housing	0.0	92.4	7.5	0.1	0.1	0.0	100	318
	Small settlement		75.8	23.6	0.0	0.0	0.0	100	55
	Modern planned area		89.2	10.6	0.0	0.0	0.3	100	39
Sex of head of	Male	0.4	61.2	38.2	0.0	0.1	0.0	100	1,857
НН	Female	0.2	60.7	39.0	0.0	0.1	0.0	100	635

Source: EICV4. Base population: all households.

Table 4.6 presents data on material used for constructing walls. Over all, the majority of the households in the country use mud bricks 35% in 2016-17, this shows a decrease of one percentage point since 2013-14. In rural areas, the use of tree trunks with mud has significantly decreased around by eight percentage points from 33% in 2013-14 to 25.5% in 2016-17 as shown in Figure 4.3. Another important finding to note is that, the percentage of households that use mud bricks covered with cement has increased by six percentage points from 24% in 2013-14 to 30% in 2016-17 at national level.

The types of wall material used vary across all provinces. In Kigali City, 60% of the households have mud bricks covered with cement as the wall material for their dwellings, this shows an increase of 6% since 2013-2014. In comparison with other Provinces, Households in the Western Province have the highest percentage (54%) of dwellings covered with mud bricks as wall construction materials, and the least percentage (20%) of mud bricks covered with cement.

Table 4.6: Wall material of the dwelling, by province, urban/rural, consumption quintile, habitat and sex of head of HH

				T	ype of wall material						Nber of HHs
	EICV5	Mud bricks	Mud bricks covered with cement	Tree trunks with mud	Tree trunks with mud and cement	Oven fired bricks	Cement bricks	Wooden Planks	Other	Total	(in 000s)
All Rwanda		35.4	30.3	23.1	6.7	2.7	0.8	0.4	0.7	100	2,708
	Kigali City	10.9	59.7	6.9	12.1	5.4	4.3	0.1	0.6	100	410
	Southern	29	27.2	34.2	7.4	1.9	0.2	0.0	0.1	100	626
Province	Western	53.6	20.2	18.4	1.8	2.7	0.1	1.8	1.5	100	574
	Northern	45.9	23.2	21.8	4.8	2.9	0.1	0.0	1.4	100	422
	Eastern	34.2	28.2	27.3	8.1	1.8	0.2	0.0	0.1	100	677
Urban/	Urban	16.8	58.4	4.5	7.7	8.3	3.5	0.2	0.6	100	524
rural	Rural	39.9	23.5	27.5	6.4	1.4	0.2	0.4	0.7	100	2,184
	Q1	49.8	11.1	34.4	3.2	0.3	0.0	0.8	0.4	100	433
	Q2	46.7	17.1	30.1	4.6	0.4	0.0	0.2	0.7	100	481
Quintile	Q3	41.7	23.5	26.7	6.6	0.7	0.0	0.3	0.6	100	528
	Q4	33.5	33.9	21.1	8.7	1.5	0.1	0.4	0.8	100	573
	Q5	15.3	53.5	9.9	8.7	8.4	3.0	0.3	8.0	100	694
	Umudugudu	36.8	27.0	26.5	6.5	2.1	0.2	0.5	0.5	100	1,595
T	Unplanned clustered rural housing	44.4	23.0	24.8	3.9	2.7	0.1	0.2	0.9	100	177
Type of habitat	Isolated rural housing	50.3	16.5	26.8	4.4	0.7	0.1	0.4	0.8	100	455
nabitat	Unplanned urban housing	13.2	57.1	8.9	12.7	4.5	2.7	0.2	0.7	100	385
	Small settlement	44.3	28.1	11.9	3.9	4.1	2.0	0.0	5.7	100	20
	Modern planned area	6.9	62.9	0.2	1.8	18.0	9.5	0.0	0.6	100	77
Sex of head	Male	35.2	31.9	21.5	6.5	3	0.9	0.4	0.6	100	2031
of HH	Female	36.0	25.3	27.7	7.2	2.0	0.5	0.4	0.9	100	677

				Т	ype of wall material						NIL CIVII-
	EICV4	Mud bricks	Mud bricks covered with cement	Tree trunks with mud	Tree trunks with mud & cement	Oven fired bricks	Cement bricks	Wooden Planks	Other	Total	Nber of HHs (in 000s)
All Rwanda	a	36.0	24.2	29.1	6.3	2.8	0.5	0.6	0.5	100	2,493
	Kigali City	8.2	54.2	12.8	15.9	5.0	3.5	0.1	0.3	100	295
	Southern	29.4	21.4	39.7	6.2	3.1	0.1	0.0	0.0	100	597
Province	Western	58.3	13.8	20.8	1.0	2.7	0.1	2.6	8.0	100	559
	Northern	44.9	15.8	30.3	4.4	2.6	0.2	0.0	1.8	100	394
	Eastern	30.3	27.0	33.1	7.7	1.7	0.2	0.0	0.1	100	647
Urban/	Urban	15.1	51.9	8.8	11.2	9.5	2.7	0.3	0.6	100	426

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				Т	ype of wall material						VI CVVV
		Mud bricks	Mud bricks covered with cement	Tree trunks with mud	Tree trunks with mud & cement	Oven fired bricks	Cement bricks	Wooden Planks	Other	Total	Nber of HHs (in 000s)
rural	Rural	40.4	18.4	33.2	5.3	1.4	0.1	0.7	0.5	100	2,067
	Q1	47.5	7.0	41.3	2.3	0.6	0.0	0.8	0.4	100	421
	Q2	45.9	12.0	37.2	3.3	0.4	0.0	0.4	8.0	100	458
Quintile	Q3	42.3	17.4	32.9	5.4	0.8	0.0	0.7	0.5	100	489
	Q4	34.2	28.0	27.6	7.8	1.7	0.1	0.4	0.3	100	532
	Q5	16.8	47.9	12.3	10.9	8.9	2.1	0.7	0.6	100	593
	Umudugudu	36.6	22.0	33.0	5.2	1.8	0.2	0.8	0.4	100	1,227
True of	Unplanned clustered rural housing	35.9	26.8	29.2	5.6	1.6	0.0	0.2	0.7	100	216
Type of habitat	Isolated rural housing	47.9	11.4	33.5	5.3	0.9	0.2	0.4	0.5	100	637
nabitat	Unplanned urban housing	11.5	56.4	8.7	13.6	6.9	2.6	0.3	0.2	100	318
	Small settlement	49.6	12.7	23.1	3.2	4.2	0.8	2.1	4.4	100	55
	Modern planned area	8.3	37.6	6.9	4.9	35.9	3.9	0.9	1.5	100	40
Sex of head	Male	35.9	25.7	27.7	6.0	3.0	0.6	0.6	0.5	100	1,857
of HH	Female	36.5	19.7	33.1	7.2	2.1	0.5	0.4	0.6	100	636

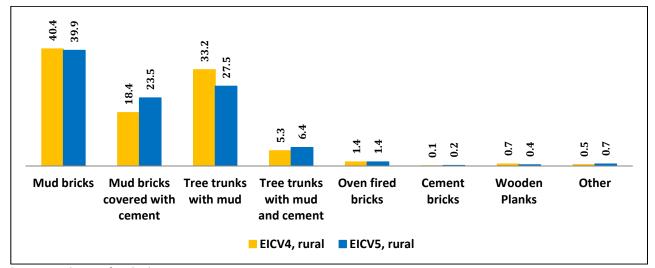


Figure 4.3: Changes in wall material used in rural dwellings

Source: EICV4 and EICV5.

Table 4.7 describes the flooring materials of the dwelling. The beaten earth is the most commonly used flooring materials in the dwellings in Rwanda. It has reduced by six percentage points from 74% in 2013-14 to 68% in 2016-17. At national level, cement is the second common used flooring material, where one out of four households has cement (26%); this shows an increase of five percentage points since 2013-14. In urban areas 64.5% of households have cement as flooring material compared to 17% of rural households in 2016-17.

Another important finding that emerges from the data is that, countrywide, the percentage of households that use tiles as their flooring material has increased almost from 1% in 2013-14 % to 2% in 2016-17. This type of flooring material is mostly used by households in urban areas (8%). Figure 4.4 illustrates that the use of cement floors has increased across all provinces, with some substantial increase around 4% of households in the Southern, Western and Northern provinces in 2016-17.

Table 4.7: Floor material of the dwelling, by province, urban/rural, consumption quintile, habitat and sex of head of HH

	PIOUE		Туре	of flooring	material			m . 1	Nber of
	EICV5	Beaten earth	Hardened dung	Cement	Bricks	Tiles	Other	Total	HHs (in 000s)
All Rwanda		68.2	2.9	25.8	1.2	1.6	0.3	100	2,708
	Kigali City	26.1	0.1	64.3	0.2	8.9	0.3	100	410
	Southern	73.3	3.2	20.1	2.8	0.3	0.3	100	626
Province	Western	81.6	0.0	15.9	1.8	0.2	0.4	100	574
	Northern	81.2	0.0	17	0.7	0.4	0.6	100	422
	Eastern	69.3	8.4	21.7	0.3	0.2	0.1	100	677
Urban/ rural	Urban	26.8	0.2	64.5	0.6	7.6	0.3	100	524
Orbany rurai	Rural	78.1	3.5	16.6	1.4	0.2	0.3	100	2,184
	Q1	91.9	2.4	4.7	0.7	0.0	0.2	100	433
	Q2	85.5	3.3	9.3	1.5	0.1	0.3	100	481
Quintile	Q3	79.7	3.4	14.6	1.6	0.2	0.4	100	528
	Q4	68.0	3.9	26.0	1.3	0.5	0.3	100	573
	Q5	32.7	1.5	58.8	1.0	5.7	0.3	100	694
	Umudugudu	73.8	4.2	19.8	1.5	0.5	0.3	100	1,595
	Unplanned clustered rural housing	78.9	1.2	18.0	1.4	0.1	0.4	100	177
Type of habitat	Isolated rural housing	86.2	1.7	11.1	0.8	0.0	0.2	100	455
	Unplanned urban housing	30.9	0.1	63.5	0.9	4.2	0.4	100	385
	Small settlement	66.7	0.8	28.6	1.0	2.9	0.0	100	20

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EICV5		Type of flooring material							Nber of HHs (in
		Beaten earth	Hardened dung	Cement	Bricks	Tiles	Other	Total	000s)
	Modern planned area	7.7	0.0	67.6	0.0	24.6	0.0	100	77
Sex of head of HH	Male	66.9	2.7	27	1.3	1.7	0.4	100	2031
	Female	72.0	3.2	22.4	0.9	1.3	0.2	100	677

EICV4		Type of flooring material						m . 1	Nber of
		Beaten earth	Hardened dung	Cement	Bricks	Tiles	Other	Total	HHs (in 000s)
All Rwanda		74.0	2.7	21.1	1.2	0.6	0.4	100	2,493
Province	Kigali City	31.4	0.2	63.8	0.3	4.2	0.0	100	295
	Southern	79.9	0.7	16.1	2.7	0.2	0.4	100	597
	Western	85.2	0.2	12.3	1.5	0.3	0.5	100	559
	Northern	85.9	0.2	12.4	0.6	0.1	8.0	100	394
	Eastern	71.0	9.4	19.2	0.2	0.0	0.1	100	647
Urban/ rural	Urban	31.0	1.0	63.3	1.0	3.6	0.2	100	426
	Rural	82.8	3.1	12.4	1.2	0.0	0.4	100	2,067
Quintile	Q1	93.6	2.3	3.6	0.3	0.0	0.2	100	421
	Q2	90.2	2.9	5.5	1.0	0.0	0.5	100	458
	Q3	84.6	3.3	10.5	1.3	0.1	0.3	100	489
	Q4	74.1	3.4	20.7	1.4	0.1	0.4	100	532
	Q5	38.7	1.8	54.8	1.6	2.6	0.5	100	593
Type of habitat	Umudugudu	78.6	4.5	15.3	1.2	0.1	0.4	100	1,227
	Unplanned clustered rural housing	74.2	3.1	21.0	1.5	0.0	0.2	100	216
	Isolated rural housing	90.0	0.7	7.6	1.2	0.0	0.6	100	637
	Unplanned urban housing	29.0	0.2	66.8	0.9	3.0	0.1	100	318
	Small settlement	83.0	0.0	16.6	0.0	0.5	0.0	100	55
	Modern planned area	23.07	0	60.78	2.93	12.8	0.4	100	40
Sex of head of	Male	73.0	2.6	22.1	1.2	0.8	0.4	100	1,857
НН	Female	76.8	3.1	18.5	1.0	0.3	0.4	100	636

Source: EICV4. Base population: all households.

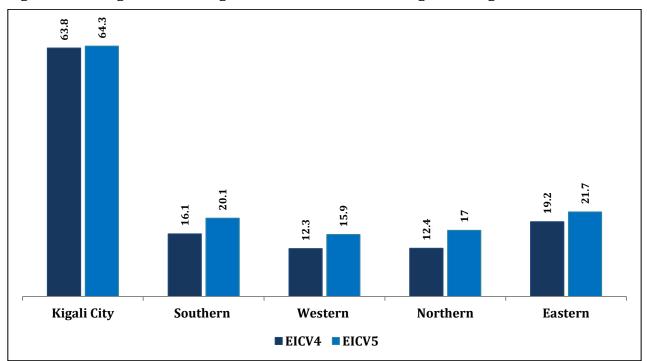


Figure 4.4: Changes in Percentage of HHs with cement flooring according to Province

Source: EICV4 and EICV5.

As for the rainwater management, Table 4.8 presents data on the ways used by households to manage rainwater from their dwellings'roof. Overall, 14.5% of the households have a way of managing rainwater, this shows a decrease of 2.5 percentage points from 17% since 2013-14. Ditches are mostly used by households (9%) as a way of managing rainwater compared to other used types of rainwater management. The breakdown of rainwater management system by types of habitat shows that households in modern planned area have high prominence in the use of ditch in both surveys (36% in 2013-14 and 40% in 2016-17). The data reveal also that, the percentage of households that use tanks as a way of managing rainwater remains almost the same in both surveys (only 2%).

Table 4.8: Percentage of HHs with rainwater catchment systems, by province, urban/rural, consumption quintile, habitat, disability status and sex of head of HH

		Total 0/ of UUs with reinwater	Households w	ith type (	of rainwa	ter catch	ment system		Nhon of UUs (in
	EICV5	Total % of HHs with rainwater catchment system	Rain water tank	Ditch	Piped away	Other	No measure	Total	Nber of HHs (in 000s)
All Rwanda		14.5	2.2	9.4	1.6	1.3	85.5	100	2,708
	Kigali City	30.3	4.3	22.5	2.8	8.0	69.7	100	410
	Southern	6.3	1.1	4.0	1.0	0.2	93.7	100	626
Province	Western	18.3	1.9	13.6	8.0	2.0	81.7	100	574
	Northern	15.9	2.1	7.9	3.0	3.0	84.1	100	422
	Eastern	8.4	2.2	3.9	1.3	1.0	91.6	100	677
Urban/rural	Urban	30.3	4.4	21.9	3.1	0.9	69.7	100	524
Of Dall/Tural	Rural	10.7	1.7	6.4	1.3	1.4	89.3	100	2,184
	Q1	7.8	0.5	5.1	1.0	1.2	92.2	100	433
	Q2	9.1	1.3	5.3	1.1	1.3	90.9	100	481
Quintile	Q3	10.7	1.5	6.7	1.5	1.0	89.3	100	528
	Q4	13.2	1.9	8.2	1.6	1.5	86.8	100	573
	Q5	26.5	4.6	18.0	2.5	1.4	73.5	100	694
	Umudugudu	12.3	2.1	7.3	1.4	1.5	87.7	100	1,595
	Unplanned clustered rural housing	11.6	0.9	8.2	1.4	1.2	88.4	100	177
Type of habitat	Isolated rural housing	8.5	1.2	5.1	1.1	1.1	91.5	100	455
Type of flabitat	Unplanned urban housing	24	2.5	17.7	2.9	0.9	76.0	100	385
	Small settlement	23.3	9.6	11.9	1.8	0.0	76.7	100	20
	Modern planned area	51.8	9.2	39.5	2.9	0.3	48.2	100	77
Disability status	without disability	14.7	2.2	9.5	1.7	1.3	85.3	100	2,316
Disability status	with disability	13.6	2.3	8.6	1.3	1.3	86.4	100	392
Sex of head of	Male	15.7	2.3	10.4	1.7	1.4	84.3	100	2,031
НН	Female	10.8	2.0	6.5	1.4	1.0	89.2	100	677

Source: EICV5. Base population: all households.

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	EICV4	Total % of HHs with	Household		pe of rain	water ca	tchment	Total	Nber of HHs
	EICVŦ	rainwater catchment system	Rain water tank	Ditch	Piped away	Other	No measure	Total	(in 000s)
All Rwanda		17.4	2.1	13.4	1.8	0.3	82.5	100	2,493
	Kigali City	35.2	4.5	27.8	2.9	0.0	64.8	100	295
	Southern	8.6	0.5	6.1	1.9	0.0	91.4	100	597
Province	Western	29	1.4	24.6	2.4	0.6	71.0	100	559
	Northern	14.2	2.9	10.6	0.7	0.2	85.7	100	394
	Eastern	9.5	2.6	5.5	1.2	0.4	90.3	100	647
Huban /munal	Urban	32.1	4.3	25.27	2.32	0.17	67.9	100	426
Urban/rural	Rural	14.4	1.6	10.95	1.65	0.26	85.5	100	2,067
	Q1	11.41	0.7	9.8	0.7	0.4	88.4	100	421
	Q2	13.7	1.2	10.9	1.5	0.2	86.2	100	458
Quintile	Q3	14.27	1.3	11.2	1.6	0.2	85.7	100	489
	Q4	15.66	1.8	11.8	2.1	0.1	84.3	100	532
	Q5	28.8	4.6	21.1	2.7	0.4	71.2	100	593
	Umudugudu	14.6	2.1	10.7	1.6	0.2	85.4	100	1,227
	Unplanned clustered rural housing	10.4	1.3	8.6	0.5	0.3	89.4	100	216
Tyme of hebitet	Isolated rural housing	15.6	1.0	12.6	2.0	0.1	84.3	100	637
Type of habitat	Unplanned urban housing	33.2	4.1	26.5	2.7	0.0	66.8	100	318
	Small settlement	16.8	1.3	11.0	0.7	3.8	83.2	100	55
	Modern planned area	47.4	7.8	35.9	3.8	0.0	52.6	100	40
Disability	without disability	17.9	2.2	13.7	1.8	0.2	82.1	100	2,100
status	with disability	15.1	1.5	11.7	1.7	0.3	84.8	100	394
Sex of head of	Male	18.5	2.3	14.4	1.7	0.3	81.4	100	1,857
НН	Female	14.3	1.6	10.6	2.0	0.2	85.7	100	636

Source: EICV4. Base population: all households.

Concerning the rubbish disposal, Table 4.9 highlights that compost heap and thrown in bushes/fields remain the most widely used method by households for rubbish disposal in Rwanda (42.5% and 46.5% respectively in 2016-17). A close analysis reveals a slight increase of two percentage points in the use of rubbish collection services at national level from 6% in 2013-14 to 8% in 2016-17. The data illustrate that rubbish collection services reach more households in urban areas. This shows an increase of six percentage points from 36% to 42% over the same period. In rural areas, 48% of the households use a compost heap as their main method of rubbish disposal, and 50% throw their waste in the bushes or fields in 2016-17.

Table 4.9: Waste management facilities, by province, urban/rural, consumption quintile, habitat and sex of head of HH

				Main method of ru	bish disposal					Total Nber
	EICV5	Compost heap	Thrown in bushes/ fields	Rubbish collection service	Dumped in river/lake	Publicly managed refuse area	Burnt	Other	Total	of HHs (000s)
All Rwanda		42.5	46.5	8.3	0.2	2.0	0.1	0.4	100	2,708
	Kigali City	13.6	33.5	48.9	0.7	2.6	0.3	0.3	100	410
	Southern	37.6	58.8	0.7	0.1	2.5	0.1	0.3	100	626
Province	Western	47.1	48.5	1.6	0.1	2.2	0.0	0.5	100	574
	Northern	46.2	50.5	1.1	0.0	1.6	0.0	0.5	100	422
	Eastern	58.5	38.7	1.0	0.1	1.3	0.1	0.2	100	677
Urban/ rural	Urban	21.5	30.8	42.1	0.4	4.2	0.3	0.7	100	524
Orban/ rurar	Rural	47.6	50.2	0.2	0.1	1.5	0.1	0.3	100	2,184
	Q1	40.4	57.6	0.1	0.1	1.2	0.1	0.5	100	433
	Q2	44.4	52.8	1.0	0.0	1.4	0.0	0.3	100	481
Quintile	Q3	46.4	49.9	1.6	0.1	1.8	0.0	0.3	100	528
	Q4	47.0	45.9	4.1	0.3	2.2	0.1	0.3	100	573
	Q5	36.0	33.0	27.1	0.2	2.9	0.3	0.4	100	694
	Umudugudu	50.9	45.9	1.3	0.1	1.5	0.0	0.3	100	1,595
	Unplanned clustered rural housing	38.5	55.4	0.4	0.1	4.5	0.3	0.8	100	177
Type of	Isolated rural housing	40.1	58.2	0.0	0.1	1.4	0.0	0.2	100	455
habitat	Unplanned urban housing	19.5	36.8	39.0	0.4	3.4	0.5	0.4	100	385
	Small settlement	39.8	50.2	3.8	0.0	6.2	0.0	0.0	100	20
	Modern planned area	8.3	16.7	70.1	1.5	2.5	0.4	0.5	100	77
Sex of head	Male	44	44.6	8.7	0.2	2.1	0.1	0.3	100	2,031
of HH	Female	38.3	52.0	7.3	0.1	1.7	0.0	0.5	100	677

Source: EICV5. Base population: all households.

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				Main method of ru	bish disposal					Total Nber
	EICV4	Compost heap	Thrown in bushes / fields	Rubbish collection service	Dumped in river /lake	Publicly managed refuse area	Burnt	Other	Total	of HHs (000s)
All Rwanda		51.6	40.2	6.2	0.1	1.5	0.1	0.2	100	2,493
	Kigali City	20.6	30.7	46.5	0.5	1.1	0.2	0.5	100	295
	Southern	54.3	43.6	0.5	0.0	1.4	0.0	0.2	100	597
Province	Western	52.9	43.6	1.5	0.3	1.5	0.0	0.2	100	559
	Northern	51.8	46.7	0.7	0.0	0.8	0.0	0.1	100	394
	Eastern	62.2	34.6	0.7	0.0	2.3	0.1	0.1	100	647
Urban/rural	Urban	29.5	29.8	35.8	0.4	3.5	0.2	0.8	100	426
Orban/rurar	Rural	56.2	42.4	0.1	0.1	1.1	0.0	0.1	100	2,067
	Q1	47.1	50.8	0.7	0.3	0.9	0.0	0.2	100	421
	Q2	53.1	44.6	1.3	0.1	0.9	0.0	0.1	100	458
Quintile	Q3	53.9	43.2	2.0	0.1	0.8	0.0	0.0	100	489
	Q4	54.8	39.3	4.4	0.1	1.3	0.0	0.0	100	532
	Q5	49.0	27.8	19.1	0.1	3.3	0.2	0.6	100	593
	Umudugudu	59.7	38.5	0.3	0.1	1.2	0.0	0.2	100	1,227
	Unplanned clustered rural housing	50.9	43.9	1.5	0.0	3.5	0.1	0.2	100	216
Type of	Isolated rural housing	52.5	47.1	0.0	0.0	0.4	0.0	0.0	100	637
habitat	Unplanned urban housing	23.7	29.7	42.9	0.5	2.5	0.1	0.5	100	318
	Small settlement	33.2	60.3	0.5	0.0	5.7	0.4	0.0	100	55
	Modern planned area	41.5	19.5	29.9	0.0	7.3	0.0	1.8	100	40
Sex of head	Male	53.2	38.4	6.5	0.1	1.5	0.1	0.2	100	1,857
of HH	Female	47.1	45.6	5.4	0.2	1.5	0.0	0.1	100	636

Source: EICV4. Base population: all households.

## 4.2. Distance to basic public services

This section provides information on the mean walking time to key public amenities (Market, Primary, and secondary schools, health centres). In general, the data indicate that the specified services have become a little bit more accessible to households between EICV4 and EICV5. Table 4.10 shows that the mean walking time to services in rural areas has slightly decreased. For example, while 37% of the households walked 1-2 hours to a health centre in 2013-14, 35% spend the same time in 2016-17. Similarly, the percentage of households walking 0-30 minutes to a health center increased from 18% to 22% between 2013-14 and 2016-17.

Table 4.10: Walking distance to basic services (market/shop, primary schools, secondary schools, health centre), by Urban/rural

	Mean walking		Tin	ne to service	(minutes)			Total no. of
EICV5	time to service minutes	0-29 min	30-59 min	60-119 min	120+min	Frequency of use not known	Total	HHs (in 000s) using the service
Food market/shop								
All Rwanda	50.0	23.9	25.2	43	2.9	5.1	100	2,708
Urban	25.7	51.8	29.5	7.7	0.2	10.8	100	524
Rural	55.4	17.1	24.2	51.4	3.5	3.7	100	2,184
Primary school								
All Rwanda	25.4	30.9	17.7	4.8	0.0	46.5	100	2,708
Urban	20.6	24.2	7.9	1.9	0.0	66.0	100	524
Rural	26.1	32.5	20.1	5.5	0.0	41.9	100	2184
Secondary school								
All Rwanda	35.7	6.0	5.1	2.7	0.3	85.9	100	2,708
Urban	23.0	8.0	4.3	0.6	0.0	87.0	100	524
Rural	38.5	5.5	5.3	3.2	0.4	85.6	100	2,184
Health centre							•	
All Rwanda	49.9	26.1	31.4	30.7	7.2	4.5	100	2708
Urban	33.0	44.9	27.6	12.4	2.4	12.7	100	524
Rural	53.5	21.6	32.3	35.1	8.4	2.6	100	2184

Source: EICV5. Base population: Households using a particular service sometimes, regularly, often.

	Mean walking		Time	to service	(minutes)			Total no. of
EICV4	time to service minutes	0-29 min	30-59 min	60-119 min	120+min	Frequency of use not known	Total	HHs (in 000s) using the service
Food market/sho	р							
All Rwanda	51.6	31.1	25.9	28.88	11.6	2.52	100	2,493
Urban	24.2	61.4	23.96	9.47	0.62	4.54	100	426
Rural	57.1	24.9	26.3	32.89	13.86	2.1	100	2,067
Primary school								
All Rwanda	25.6	33.6	18.22	5.23	0.31	42.63	100	2,493
Urban	17.6	30.8	7.88	0.81	0	60.5	100	426
Rural	26.7	34.2	20.36	6.14	0.38	38.94	100	2,067
Secondary school								
All Rwanda	38.3	7.4	5.6	3.5	0.8	82.8	100	2,493
Urban	21.7	12.9	4.0	1.2	0.0	81.9	100	426
Rural	41.9	6.2	5.9	4.0	1.0	82.9	100	2,067
Health centre								
All Rwanda	56.9	22.4	28.6	32.5	11.5	4.9	100	2,493
Urban	30.7	45.5	29.1	12.6	1.2	11.6	100	426
Rural	61.9	17.7	28.5	36.6	13.6	3.5	100	2,067

Source: EICV4. Base population: Households using a particular service sometimes, regularly, often.

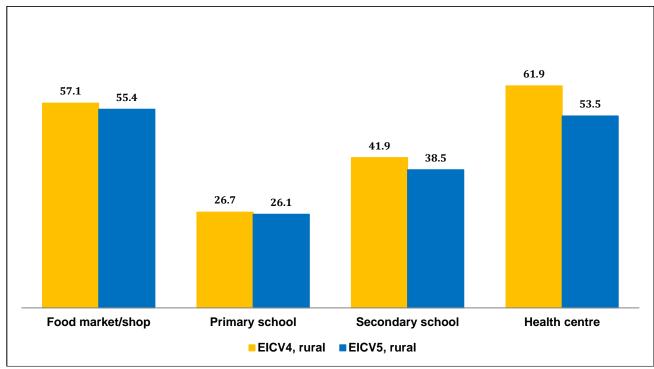


Figure 4.5: Change in walking distance to basic services (in minutes)

Source: EICV4 and EICV5.

#### 4.3. Relocation

This section deals with information related to household relocation. In this regard, Table 4.11 shows that at national level, 75% of households reported having lived in a different dwelling prior to shifting to the one they currently occupy. The level of household relocation almost remains the same in EICV5. The data reveal also that, 50% of the households had spent less than five years in their current dwelling, this has not changed since 2013-14.

Table 4.11: Percentage of HH that lived in other dwelling before occupying current dwelling and time spent in current dwelling, by province, urban/rural, consumption quintile, habitat and sex of head of HH

		HH occupying other dwelling	Ti	me spen	t in curre	nt dwell	ing		Total no. of HHs occupying other
EI	CV5	before moving to current	Less than 5 years	5-9 Years	10-14 Year	15-19 Year	More than 20 Years	Total	dwelling before moving to current (000s)
All Rwanda		75.1	50.4	19.9	9.7	8.0	12.0	100	2,033
	Kigali City	85.7	73.6	11.7	6.0	4.2	4.6	100	351
	Southern	68.5	46.0	18.8	8.7	7.5	19.1	100	429
Province	Western	70.3	44.2	20.3	11.2	7.4	17.0	100	403
	Northern	71.1	39.7	21.7	12.4	9.9	16.3	100	300
	Eastern	81.2	49.2	25.0	10.2	10.2	5.4	100	549
Urban/	Urban	84.9	69.9	12.7	7.6	5.0	4.7	100	445
rural	Rural	72.7	44.9	22.0	10.2	8.8	14.1	100	1,588
	Q1	77.7	46.3	25.6	10.8	7.8	9.4	100	336
	Q2	73.8	45.9	23.4	10.9	8.0	11.8	100	355
Quintile	Q3	72.1	46.6	21.1	9.8	8.6	13.9	100	380
	Q4	72.5	48.8	18.0	10.0	8.5	14.7	100	415
	Q5	78.7	59.6	14.9	7.8	7.2	10.5	100	546
	Umudugudu	74.9	47.3	23.1	9.9	9.3	10.4	100	1,195
Type of habitat	Unplanned clustered rural	71.3	44.0	18.8	11.4	7.4	18.3	100	126

		HH occupying other dwelling	Ti	me spen	t in curre	nt dwell	ing		Total no. of HHs occupying other
EIC	CV5	before moving to current	Less than 5 years	5-9 Years	10-14 Year	15-19 Year	More than 20 Years	Total	dwelling before moving to current (000s)
	housing								
	Isolated								
	rural	67.2	35.5	18.3	12.0	9.2	25.2	100	306
	housing								
	Unplanned								
	urban	83.6	73.6	11.4	5.9	3.6	5.4	100	322
	housing								
	Small	76.3	42.5	25.9	18.5	0.9	12.3	100	15
	settlement	7 0.5	12.0	23.7	10.5	0.7	12.5	100	
	Modern								
	planned	90.1	74.7	13.0	7.3	2.9	2.0	100	69
	area								
Sex of head	Male	71.2	53.9	20.8	9.5	7.0	8.7	100	1446
of HH	Female	86.7	41.6	17.8	10.0	10.3	20.3	100	586

Source: EICV5.

FIG	NY 4	HH occupying other dwelling	Ti	me spen	it in curr	ent dwel	ling	Takal	Total no. of HHs occupying other
	CV4	before moving to current	Less than 5 years	5-9 Years	10-14 Year	15-19 Year	More than 20 Years	Total	dwelling before moving to current (000s)
All Rwanda		74.7	50.3	17.7	10.8	9.1	12.2	100	1,863
	Kigali City	84.9	65.2	15.3	8.7	5.1	5.8	100	251
	Southern	67.1	46.9	14.6	9.1	9.5	20.0	100	401
Province	Western	71.2	46.6	17.5	11.4	8.2	16.4	100	398
	Northern	73.8	41.5	19.2	13.7	10.8	14.9	100	291
	Eastern	80.7	53.4	20.7	11.0	10.5	4.4	100	523
Urban/rural	Urban	84.3	64.2	15.3	10.3	4.9	5.3	100	360
Or Dail/Tur ai	Rural	72.7	46.9	18.3	10.9	10.1	13.8	100	1,503
	Q1	80.4	54.7	16.4	11.2	8.8	8.9	100	338
	Q2	76.6	46.9	20.1	11.7	9.5	11.9	100	351
Quintile	Q3	71.3	45.5	20.2	11.4	9.4	13.5	100	349
Quintile _	Q4	70.7	46.5	17.9	10.1	10.0	15.6	100	376
	Q5	75.6	56.5	14.9	9.9	7.9	10.8	100	448
	Umudugudu	76.0	52.8	18.0	10.7	9.8	8.7	100	933
	Unplanned clustered rural housing	72.3	46.1	20.7	11.4	8.1	13.8	100	157
Type of	Isolated rural housing	67.0	33.2	18.8	12.5	11.6	23.9	100	427
habitat	Unplanned urban housing	84.7	68.7	13.6	7.9	4.2	5.6	100	270
	Small settlement	79.9	58.3	16.8	11.0	5.4	8.5	100	44
	Modern planned area	83.8	56.6	16.6	12.5	5.2	9.1	100	33
Sex of head	Male	70.1	54.8	18.8	10.5	7.2	8.7	100	1,301
of HH	Female	88.3	39.9	15.2	11.4	13.4	20.2	100	561

Source: EICV4.

With regard to reasons pushing households to relocate, Table 4.12 provides information on the main reasons behind this trend. These include: getting better house (29%), building / buying own house (26%) and moving to a better neighborhood (16%) in 2016-17.

Table 4.12: Main reasons causing HHs to change their accommodation, by province, urban/rural, consumption quintile, habitat and sex of head of HH

				Main r	easons causi	ng HHs to c	hange their acc	ommodation				
	EICV5	Resettle-ment policy	Evacuated / disaster	Get a better house	Build/ buy own house	Renting cost	Move to a better neighbor-hood	Access to new/ different job	Forced by owner/ parent	Other	Total	Total no. of HHs changing accommoda- tion (000s)
All Rwanda		6.9	1.5	29.0	26.1	9.1	15.9	4.3	2.8	4.4	100	2,033
	Kigali City	0.9	0.1	15.1	26.6	26.2	11.9	10.7	4.4	4.0	100	351
	Southern	8.3	2.1	28.6	24.9	7.2	17.3	2.9	3.1	5.5	100	429
Province	Western	6.1	3.0	32.7	26.0	4.0	18.5	2.6	2.4	4.8	100	403
	Northern	5.4	2.2	44.5	24.7	2.6	13.5	2.5	1.5	3.1	100	300
	Eastern	11.2	0.7	27.0	27.6	7.0	16.6	3.5	2.4	4.1	100	549
Urban/ rural	Urban	1.4	8.0	15.6	27.4	21.9	12.7	11.7	4.0	4.4	100	445
Orban, rarar	Rural	8.5	1.8	32.7	25.7	5.6	16.7	2.2	2.4	4.4	100	1,588
	Q1	9.1	2.5	30.6	27.7	5.7	15.4	1.1	3.7	4.3	100	336
	Q2	8.4	1.7	32.5	24.8	8.2	16.3	1.1	2.9	4.2	100	355
Quintile	Q3	8.4	1.8	31.4	23.4	7.8	18.2	2.0	3.1	4.0	100	380
	Q4	7.2	1.5	29.0	27.0	8.3	16.4	3.8	2.5	4.4	100	415
	Q5	3.5	0.8	24.1	27.2	13.4	13.8	10.4	2.1	4.8	100	546
	Umudugudu	11.2	1.8	28.2	26.5	5.6	18.1	2.6	2.0	3.9	100	1,195
	Unplanned clustered rural housing	1.5	2.4	34.0	29.2	5.5	13.0	4.2	3.7	6.5	100	126
Type of habitat	Isolated rural housing	1.0	1.8	46.7	21.8	3.8	14.3	2.1	2.9	5.6	100	306
7 F 57640	Unplanned urban housing	0.2	0.4	15.9	25.5	26.7	11.5	11.0	4.6	4.2	100	322
	Small settlement	2.0	1.0	39.6	26.5	6.9	12.9	5.4	3.4	2.3	100	15
	Modern planned area	2.1	0.0	14.4	34.6	19.4	9.6	11.1	4.6	4.1	100	69
Sex of head of	Male	6.3	1.4	26.9	28.5	10.2	15.9	5.1	2.4	3.4	100	1446
НН	Female	8.5	2.0	34.2	20.2	6.6	15.8	2.2	3.7	6.9	100	586

Source: EICV5. Base population : All households changing their accommodation.

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			1	Main reason	s causing HI	Hs to char	nge their accom	modation				
	EICV4	Resettle ment policy	Evacuated / disaster	Get a better house	Build/ buy own house	Renting cost	Move to a better neighbor hood	Access to new/ different job	Forced by owner /parent	Other	Total	Total no. of HHs changing accomm odation (000s)
All Rwanda		9.8	1.4	32.9	25.0	6.4	14.8	3.4	3.1	3.1	100	1,863
	Kigali City	1.2	0.2	19.8	29.2	19.7	12.2	9.6	3.9	4.2	100	251
	Southern	12.0	0.9	35.7	23.1	4.6	14.1	2.6	3.9	3.1	100	401
Province	Western	6.1	3.6	35.7	26.2	4.8	14.7	2.4	3.4	3.1	100	398
	Northern	9.3	2.3	47.0	16.1	2.1	18.6	1.0	1.5	2.1	100	291
	Eastern	15.5	0.2	27.1	28.7	5.2	14.5	3.0	2.8	3.0	100	523
Urban/ rural	Urban	2.1	0.4	19.7	29.5	19.2	12.1	9.0	4.2	4.0	100	360
Orbany rurar	Rural	11.7	1.7	36.1	24.0	3.4	15.5	2.0	2.9	2.9	100	1,503
	Q1	14.0	2.3	33.7	23.0	3.9	14.5	0.9	4.3	3.6	100	338
	Q2	11.0	1.7	34.1	25.4	5.4	14.9	0.9	3.8	2.8	100	351
Quintile	Q3	11.1	1.4	36.4	24.1	5.1	15.0	1.2	3.1	2.5	100	349
	Q4	10.0	1.2	35.5	24.8	6.6	14.4	2.2	2.4	3.0	100	376
	Q5	4.7	0.7	26.6	27.2	10.1	15.2	9.8	2.4	3.4	100	448
	Umudugudu	18.3	1.4	29.0	25.4	3.8	14.8	2.0	2.7	2.6	100	933
	Unplanned clustered rural housing	2.2	1.7	37.5	24.6	6.7	16.6	3.4	3.8	3.4	100	157
Type of habitat	Isolated rural housing	1.3	2.0	48.7	21.9	1.8	16.9	1.5	2.7	3.2	100	427
	Unplanned urban housing	1.3	0.3	19.5	26.9	22.5	11.3	9.9	4.1	4.1	100	270
	Small settlement	1.2	1.3	42.3	27.2	3.5	9.7	6.3	4.1	4.5	100	44
	Modern planned area	0.0	0.6	16.2	40.1	12.3	12.9	8.3	6.7	2.9	100	33
Sex of head of	Male	9.5	1.3	30.4	27.1	7.2	15.0	4.1	2.9	2.6	100	1,301
НН	Female	10.5	1.7	38.9	20.2	4.7	14.3	1.7	3.7	4.3	100	561

Source: EICV4. Base population: All households changing their accommodation.

# 4.4. Dwelling ownership and rent arrangements

This section provides information on the trend in status of ownership of dwelling between EICV4 and EICV5. Table 4.13 indicates that the majority of households in Rwanda in 2016-17 own their dwellings (76.5%), while (17%) live in rented dwellings. However, the percentage of households owning their dwelling has reduced by 4.5 percentage points, while those living in the rented dwellings has increased by 2.5 percentage points since 2013-14. At provincial level, Kigali City has the highest percentage of households renting the dwellings (54%) and the least percentage of households owning their dwelling (38.5%) in 2016-17. In contrast, the Northern Province has the highest percentage of households owning their dwellings (90%) followed by the Western Province with (85%) of the households. The tenancy/renting is more common in the households in urban areas, where one in two households lives in rented dwelling (50%) while in rural areas, only 9% of the households live in rented dwellings. Tenancy/ renting is most common in the richest quintile. While the level of tenancy scored 28% in 2013-14 it reaches 34% in 2016-17.

Table 4.13: Occupancy status, by province, urban/rural, consumption quintile, habitat and sex of head of HH

	EICV5	Owner occupied (with/ without mortgage)	(renting)	Dwelling provided by employer	Dwelling provided free of charge	Temporary camp or settlement		Total	Nber of HHs (in 000s)
All Rwanda		76.5	16.7	0.4	6.0	0.2	0.1	100	2,708
	Kigali City	38.5	53.8	0.9	6.8	0.0	0.0	100	410
	Southern	80.8	10.7	0.2	8.1	0.1	0.1	100	626
Province	Western	85.4	8.3	0.1	5.7	0.3	0.2	100	574
	Northern	89.7	5.9	0.2	3.8	0.2	0.3	100	422
	Eastern	79.9	13.6	0.8	5.3	0.2	0.1	100	677
Urban/rural	Urban	43.1	50.0	0.7	5.9	0.2	0.2	100	524
or barry rur ar	Rural	84.6	8.7	0.4	6.1	0.2	0.1	100	2,184
	Q1	83.7	7.8	0.2	7.8	0.4	0.1	100	433
	Q2	82.7	10.4	0.0	6.4	0.3	0.1	100	481
Quintile	Q3	82.3	11.7	0.3	5.5	0.0	0.2	100	528
	Q4	80.5	12.4	0.5	6.3	0.2	0.2	100	573
	Q5	60.1	33.8	0.9	4.9	0.2	0.1	100	694
	Umudugudu	84.0	10.1	0.2	5.3	0.2	0.2	100	1,595
	Unplanned clustered rural housing	79.7	13.0	0.4	6.3	0.5	0.1	100	177
Type of habitat	Isolated rural housing	86.8	4.5	0.8	7.5	0.3	0.1	100	455
	Unplanned urban housing	39.3	52.7	0.7	7.2	0.1	0.0	100	385
	Small settlement	68.2	20.5	2.0	9.3	0.0	0.0	100	20
	Modern planned area	41.8	51.8	1.3	5.2	0.0	0.0	100	77
Sex of head of HH	Male	76.6	17.5	0.5	5.1	0.1	0.1	100	2031
Sex of flead of HH	Female	76.2	14.1	0.1	8.8	0.4	0.4	100	677

Source: EICV5. Base population: all households.

				Current occu	pancy status				
	EICV4	Owner occupied (with/ without mortgage)	Tenancy (renting)	Dwelling provided by employer	Dwelling provided free of charge	Temporary camp or settlement	Other	Total	Nber of HHs (in 000s)
All Rwanda		80.9	13.5	0.3	5.1	0.2	0.1	100	2,493
	Kigali City	47.8	47.4	0.4	4.4	0.1	0.0	100	295
	Southern	83.1	8.1	0.2	8.2	0.4	0.0	100	597
Province	Western	84.9	8.7	0.2	5.9	0.3	0.0	100	559
	Northern	92.6	3.5	0.0	3.7	0.1	0.1	100	394
	Eastern	83.3	13.2	0.5	2.9	0.2	0.1	100	647
Huban /munal	Urban	49.9	44.2	0.7	5.1	0.1	0.0	100	426
Urban/rural	Rural	87.2	7.1	0.2	5.1	0.2	0.1	100	2,067
	Q1	86.1	7.7	0.1	5.8	0.4	0.1	100	421
	Q2	85.8	8.0	0.1	5.7	0.3	0.0	100	458
Quintile	Q3	85.6	8.6	0.2	5.5	0.1	0.0	100	489
	Q4	84.0	10.8	0.2	4.7	0.3	0.1	100	532
	Q5	66.6	28.2	0.7	4.4	0.1	0.1	100	593
	Umudugudu	86.5	8.7	0.2	4.5	0.1	0.1	100	1,227
	Unplanned clustered rural housing	79.5	12.9	0.1	7.0	0.5	0.1	100	216
Type of habitat	Isolated rural housing	90.4	3.3	0.1	5.8	0.4	0.0	100	637
	Unplanned urban housing	44.5	50.0	0.5	5.0	0.1	0.0	100	318
	Small settlement	79.5	13.4	1.6	4.5	1.0	0.0	100	55
	Modern planned area	55.9	36.5	1.9	5.0	0.7	0.0	100	40
Sex of head of HH	Male	80.8	14.6	0.3	4.1	0.2	0.1	100	1,857
sex of flead of HH	Female	81.1	10.3	0.2	8.1	0.3	0.0	100	636

Source: EICV4. Base population: all households.

The information provided in the Table 4.13 reveals that in Rwanda, the majority of households own their dwellings. Estimates in Table 4.14 provide detailed information on the owner of the dwelling whereby the general trend points towards joint ownership between the head of household and his/her spouse. At national level, more than half of houses are jointly owned by the head of the household and his/her spouse (56%). This has decreased by two percentage points from 58% between 2013-14 and 2016-17. The percentage of households with house joint ownership is much higher in rural areas (56%) compared to urban areas (50%). At provincial level, the joint ownership is much higher in the Western Province (62%) followed by the Northern Province (58%). The lowest prevalence of joint ownership is observed in Kigali City with a level of 43.5%.

Table 4.14: Percentage of households owning the dwelling according to the specific household member(s) owning the dwelling, by province, urban/rural, consumption quintile, habitat and sex of head of HH

			Owner	of the dwelling f	for HHs owning	dwelling		Total	Total no. of HHs
	ICV5	Head	Spouse	Spouse with Head	Other HH member	Relative	Other	Total	where HH is owned (000s)
All Rwanda		43.3	0.7	55.6	0.1	0.1	0.2	100	2,073
	Kigali City	55.6	0.5	43.5	0.1	0.0	0.4	100	158
	Southern	46.6	0.6	52.5	0.1	0.1	0.1	100	505
Province	Western	36.6	8.0	61.9	0.3	0.1	0.2	100	490
	Northern	40.6	1.3	57.6	0.0	0.0	0.5	100	379
	Eastern	44.5	0.4	55.0	0.0	0.0	0.1	100	540
Hrhan /rural	Urban	47.7	1.4	50.0	0.3	0.1	0.5	100	226
Urban/rural	Rural	42.7	0.6	56.3	0.1	0.1	0.2	100	1,847
	Q1	41.1	0.8	57.6	0.1	0.1	0.3	100	362
	Q2	38.7	0.9	60.2	0.1	0.1	0.0	100	398
Quintile	Q3	42.1	0.7	56.9	0.0	0.0	0.2	100	434
	Q4	44.9	0.6	54.0	0.2	0.0	0.3	100	461
	Q5	48.9	0.6	49.9	0.2	0.0	0.4	100	417
	Umudugudu	42.3	0.7	56.7	0.1	0.1	0.2	100	1,340
	Unplanned clustered rural housing	47.1	0.6	51.8	0.3	0.0	0.2	100	141
Tymo of habitat	Isolated rural housing	40.3	0.7	58.5	0.0	0.0	0.4	100	395
Type of habitat	Unplanned urban housing	55.5	1.2	43.0	0.2	0.0	0.0	100	151
	Small settlement	49.9	1.4	48.7	0.0	0.0	0.0	100	13
	Modern planned area	42.2	0.5	56.6	0.0	0.0	0.7	100	32
Sex of head of HH	Male	25.3	0.8	73.7	0.1	0.0	0.2	100	1,557
Sex of fledu of HH	Female	97.6	0.5	1.1	0.3	0.1	0.5	100	516

Source: EICV5. Base population: households owning their dwelling.

	FICVA		Owner of	the dwelling fo	or those owning	dwelling		m . 1	Total no. of HHs
EICV4		Head	Spouse	Spouse with Head	Other HH member	Relative	Other	Total	where HH is owned (000s)
All Rwanda		40.9	0.9	57.7	0.1	0.0	0.3	100	2,016
	Kigali City	56.9	1.8	41.2	0.0	0.0	0.1	100	141
	Southern	41.5	0.6	57.1	0.3	0.1	0.4	100	496
Province	Western	37.5	1.2	61.1	0.1	0.0	0.3	100	475
	Northern	33.8	0.5	65.0	0.1	0.1	0.4	100	365
	Eastern	44.1	0.9	54.8	0.1	0.0	0.2	100	539
Huban /wwwal	Urban	48.1	1.9	49.7	0.0	0.1	0.2	100	213
Urban/rural	Rural	40.1	0.8	58.7	0.1	0.0	0.3	100	1,803

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			Owner of	the dwelling fo	or those owning	dwelling		Total	Total no. of HHs
	EICV4	Head	Spouse	Spouse with Head	Other HH member	Relative	Other	Total	where HH is owned (000s)
	Q1	41.6	1.2	56.8	0.1	0.0	0.3	100	362
	Q2	39.2	0.9	59.5	0.1	0.0	0.3	100	393
Quintile	Q3	37.1	0.8	61.6	0.3	0.0	0.3	100	419
-	Q4	41.5	0.7	57.2	0.1	0.1	0.4	100	447
	Q5	45.5	0.8	53.4	0.1	0.1	0.2	100	395
	Umudugudu	39.6	0.8	59.2	0.1	0.0	0.3	100	1,061
	Unplanned clustered rural housing	39.5	0.8	59.5	0.0	0.1	0.1	100	172
Type of habitat	Isolated rural housing	41.0	0.7	57.7	0.2	0.1	0.4	100	576
Type of flabitat	Unplanned urban housing	53.5	1.8	44.6	0.0	0.0	0.1	100	142
	Small settlement	36.7	2.2	61.1	0.0	0.0	0.0	100	44
	Modern planned area	42.0	2.4	55.7	0.0	0.0	0.0	100	22
Sex of head of HH	Male	21.4	1.1	77.2	0.1	0.0	0.2	100	1,500
Sex of flead of fin	Female	97.7	0.3	1.0	0.3	0.1	0.6	100	516

Source: EICV4. Base population: households owning their dwelling.

With reference to demographic and income characteristics, Table 4.15 shows that households owning their dwelling are distributed almost equally across the different wealth quintiles (varies in the range of 18-22% both in EICV4 and EICV5). A close analysis reveals that renting of dwellings is mostly common in the highest quintiles (52%) compared to the lowest quintiles. In addition, the percentage of households renting their accommodation is predominantly found within the age group of 20-39 in both surveys (around 76%). The distribution of households according to household size shows that the tenancy is heavily skewed towards smaller households (1-4People) with 77%.

Table 4.15: Demographic and income characteristics comparison of HH renting versus HH owning dwelling

	77.0V.	Owner of the d	lwelling for thos	se owning dwelling	411.5
	EICV5	Owner- occupied	Tenancy (renting)	Dwelling provided by employer / free	All Rwanda
	Q1	17.5	7.5	19.9	16.0
	Q2	19.2	11.1	17.7	17.8
Outatio	Q3	21.0	13.7	17.4	19.5
Quintile	Q4	22.2	15.7	22.2	21.2
	Q5	20.1	52.0	22.8	25.6
	Total	100	100	100	100
	·				
	1-2People	14.2	38.2	33.6	19.5
	3-4People	35.1	39.2	39.6	36.1
Household Size	5-6People	31.8	16.7	20.2	28.5
	7 and more People	19.0	5.9	6.6	16.0
	Total	100	100	100	100
C	Male	75.1	78.9	65.7	75.0
Sex of Household-head	Female	24.9	21.1	34.3	25.0
Householu-lieau	Total	100	100	100	100
	14-19Years	0.1	0.8	0.8	0.3
	20-29Years	10.9	37.3	25.9	16.3
	30-39Years	26.7	38.6	30.8	28.9
Age of	40-49Years	20.7	15.0	19.6	19.7
Household-head	50-59Years	19.1	6.1	9.4	16.3
	60-69Years	12.9	1.6	7.4	10.7
	70+ Years	9.6	0.5	6.2	7.8
	Total	100	100	100	100
	Umudugudu	64.6	35.7	50.2	58.9
	Unplanned clustered rural housing	6.8	5.1	6.8	6.5
Type of habitat	Isolated rural housing	19.0	4.6	21.5	16.8
	Unplanned urban housing	7.3	44.9	17.4	14.2
	Small settlement	0.6	0.9	1.3	0.7
	Modern planned area	1.5	8.8	2.8	2.8
	Total	100	100	100	100
C FICUE	1041	100	100	100	100

Source: EICV5.

	DVOV.4	Owner of the dwo	elling for those	owning dwelling		
	EICV4	Owner- occupied	Tenancy (renting)	Dwelling provided by employer / free	All Rwanda	
	Q1	18.0	9.6	18.3	16.8	
	Q2	19.5	11.0	19.7	18.4	
Quintile	Q3	20.8	12.6	20.7	19.7	
	Q4	22.2	17.1	19.1	21.3	
	Q5	19.6	49.8	22.4	23.8	
	Total	100	100	100	100	
	1-2People	12.1	31.1	31.5	15.7	
	3-4People	35.3	42.7	42.0	36.7	
Household Size	5-6People	32.0	19.1	20.5	29.6	
	7 and more People	20.6	7.1	6.0	18.0	
	Total	100	100	100	100	
Sex of	Male	74.4	80.5	60.7	74.5	
Sex of Household-head	Female	25.6	19.5	39.3	25.5	
Householu-Heau	Total	100	100	100	100	
Age of	14-19Years	0.3	0.9	2.5	0.5	
Household-head	20-29Years	13.1	37.7	26.7	17.1	

	DIOVA	Owner of the dwo	elling for those	owning dwelling	All D
	EICV4	Owner- occupied	Tenancy (renting)	Dwelling provided by employer / free	All Rwanda
	30-39Years	25.0	38.8	28.9	27.1
	40-49Years	19.6	13.6	16.2	18.6
	50-59Years	20.7	5.9	12.8	18.3
	60-69Years	11.7	2.1	5.9	10.1
70+ Years		9.6	0.9	7.2	8.3
	Total	100	100	100	100
	Umudugudu	52.6	31.6	43.2	49.3
	Unplanned clustered rural housing	8.5	8.3	11.4	8.7
Tyme of hebitet	Isolated rural housing	28.6	6.2	28.1	25.5
Type of habitat	Unplanned urban housing	7.0	47.4	12.8	12.8
	Small settlement	2.2	2.2	2.5	2.2
	Modern planned area	1.1	4.3	2.0	1.6
	Total	100	100	100	100

Source: EICV4.

### 4.5. Ownership of home assets

The survey captures also information on ownership of durable assets by households. Table 4.16 shows that the percentage of households owning at least one refrigerator remains almost the same in EICV4 and EICV5 (around 1.6%) at national level. In contrast, the percentage of households owning at least one cooking appliance has significantly increased from 0.5% in 2013-14 to 3% in 2016-17. At Provincial level, in both survey rounds, the ownership of refrigerator is more predominant in the households in Kigali City (9%) compared to other provinces (less than 1%). The percentage of households owning at least one cooking appliance has substantially increased in the households living in the modern planned areas compared to other types of habitat. This shows an increase of fifteen percentage points from 8% in 2013-14 to 23% in 2016-17. Regarding ownership of refrigerator, 25% of the households in the modern planned areas own at least one refrigerator in EICV5, this shows also a significant increase of six percentage points from 19% in EICV4.

Table4 .16: Percentage of households owning at least one refrigerator and cooking machine, by province, urban/rural, consumption quintile, habitat and sex of head of HH

	EICUE	% of househo	olds owning	Total no. of HHs
	EICV5	Refrigerator	Cooker machine	(in 000s)
All Rwanda		1.6	3.0	2,708
	Kigali City	8.6	9.5	410
	Southern	0.4	1.0	626
Province	Western	0.5	2.8	574
	Northern	0.3	1.7	422
	Eastern	0.3	1.8	677
Urban/rural	Urban	7.9	8.9	524
Or Daily Tur ar	Rural	0.2	1.6	2,184
	Q1	0.0	1.6	433
	Q2	0.0	0.9	481
Quintile	Q3	0.0	1.2	528
	Q4	0.2	1.0	573
	Q5	6.3	8.2	694
	Umudugudu	0.5	2.0	1,595
	Unplanned clustered rural housing	0.3	1.0	177
Type of habitat	Isolated rural housing	0.1	1.2	455
	Unplanned urban housing	4.1	5.9	385
	Small settlement	2.9	4.2	20
	Modern planned area	25.4	22.7	77
Sex of head of HH	Male	1.9	2.9	2031
JEX UI IIEAU UI IIII	Female	1.0	3.1	677

Source: EICV5. Base Population: all households.

	EICV4	% of househo	olds owning	Total no. of HHs
	EICV4	Refrigerator	Cooker machine	(in 000s)
All Rwanda		1.5	0.5	2,493
	Kigali City	9.2	2.9	295
	Southern	0.3	0.2	597
Province	Western	0.6	0.4	559
	Northern	0.4	0.3	394
	Eastern	0.6	0.1	647
Huban /minal	Urban	8.0	2.6	426
Urban/rural	Rural	0.2	0.1	2,067
	Q1	0.0	0.0	421
	Q2	0.0	0.0	458
Quintile	Q3	0.1	0.0	489
	Q4	0.1	0.0	532
	Q5	6.2	2.3	593
	Umudugudu	0.3	0.2	1,227
	Unplanned clustered rural housing	0.4	0.2	216
Type of habitat	Isolated rural housing	0.2	0.1	637
Type of flabitat	Unplanned urban housing	7.7	2.3	318
	Small settlement	0.5	0.0	55
	Modern planned area	19.0	8.0	40
Sex of head of HH	Male	1.7	0.6	1,857
Sex of flead of fift	Female	0.9	0.4	636

Source: EICV4. Base Population: all households.

## Chapter 5. Transport

This chapter deals with households' perceptions of the transport infrastructure in their communities. The main mode of transportation in Rwanda is basically land transportation. EICV surveys provide information on household perception of: - distance to transport infrastructure, the use or non use of transport infrastructure and perceptions about any change in quality of the infrastructure. In addition, this section provides information on trend in household ownership of assets used for transportation such as vehicles, motorcycles and bicycles between 2013-14 and 2016-17.

### 5.1. Household perceptions of transport infrastructure

This section focuses on two transport amenities: all-weather roads and public transport stages. Table 5.1 shows that the percentage of households accessing all-weather roads regularly or often increased by two percentage points from 96% in 2013-14 to 98% in 2016-17 at national level. Improvement in the usage of all-weather roads is observed across all five Provinces almost to the same extent (around 1%), except for the households in Western Province, where an increase of six percentage points is observed from 91% since 2013-14. However, the lowest usage rate is observed in the Southern Province, where 3% of households reported use of all-weather roads sometimes or not at all in 2016-17. This is in line with information shown in Figure 5.1.

Southern rural

Regularly or often

2.0

99.9

99.9

Southern rural

Regularly or often

Sometimes or Not at all

Figure 5.1: Usage rates for all-weather roads in rural areas, EICV5

Source: EICV5.

Table 5.1: Usage rates for all-weather road, by province, urban/rural and consumption quintile

				Total Nber				
EICV5		Regularly	Often	Sometimes	Not at all	Don't know about this service	Total	of HHs (000s)
All Rwanda		90.3	7.9	1.6	0.1	0.1	100	2,708
	Kigali City	86.8	12.7	0.3	0.1	0.0	100	410
	Southern	88.6	8.2	2.9	0.2	0.1	100	626
Province	Western	86.4	10.7	2.6	0.2	0.0	100	574
	Northern	93.6	4.2	2.0	0.2	0.0	100	422
	Eastern	95.0	4.7	0.2	0.0	0.1	100	677
Huban /munal	Urban	84.8	12.9	2.0	0.2	0.1	100	524
Urban/rural	Rural	91.6	6.7	1.5	0.1	0.0	100	2,184
	Q1	90.6	7.2	2.0	0.1	0.0	100	433
	Q2	92.2	5.8	1.8	0.1	0.1	100	481
Quintile	Q3	90.7	7.5	1.5	0.2	0.1	100	528
-	Q4	89.2	9.1	1.6	0.2	0.0	100	573
	Q5	89.3	9.2	1.4	0.1	0.0	100	694

Source: EICV5. Base population: all households.

EICV4			Use frequ	ency of all-we	ather road		m . 1	Total Nber
		Regularly	Often	Sometimes	Not at all	Don't know about this service	Total	of HHs (000s)
All Rwanda		81.9	14.3	3.3	0.5	0.0	100	2,493
	Kigali City	90.7	8.5	0.5	0.2	0.1	100	295
	Southern	82.5	14.3	2.4	0.7	0.0	100	597
Province	Western	72.6	18.3	8.0	1.1	0.0	100	559
	Northern	86.4	10.3	3.0	0.3	0.0	100	394
	Eastern	82.4	15.9	1.5	0.2	0.0	100	647
Huban /munal	Urban	88.3	10.7	0.8	0.2	0.1	100	426
Urban/rural	Rural	80.5	15.0	3.8	0.6	0.0	100	2,067
	Q1	77.1	16.3	5.6	0.8	0.1	100	421
	Q2	79.6	16.0	3.8	0.6	0.0	100	458
Quintile	Q3	82.4	14.1	3.2	0.4	0.0	100	489
	Q4	82.0	14.2	3.2	0.6	0.0	100	532
	Q5	86.4	11.8	1.3	0.4	0.1	100	593

Source: EICV4. Base population: all households.

The data reveal that the majority of rural households in Rwanda are within 20 minutes walking distance from an all-weather road as shown in Figure 5.2. Another Striking abservation from Table 5.2 is that, the provision of roads has improved across all provinces since 2013-14 ranging between 87% and 99%. However, the Western Province retains the lowest percentage of households accessing all-weather road in less than 20 minutes in both surveys (79% in 2013-14 and 87% in 2016-17).

Table 5.2: Walking distance to nearest all-weather road, by province, urban/rural and consumption quintile

		Wall	king distance	e to the neare	est all-weather ro	ad		Total no. of
EICV5		0-19 minutes' walk	20-59 minutes' walk	60-119 minutes' walk	120+minutes' walk	Don't know of facility	Total	HHs using the service (000s)
All Rwanda		93.4	5.9	0.5	0.0	0.2	100	2,708
	Kigali City	98.8	1.1	0.0	0.0	0.2	100	410
	Southern	93.8	5.6	0.4	0.0	0.3	100	626
Province	Western	86.6	12.1	1.0	0.1	0.3	100	574
	Northern	88.1	10.2	1.5	0.0	0.2	100	422
	Eastern	98.7	1.2	0.0	0.0	0.1	100	677
Urban/rural	Urban	97.8	1.7	0.2	0.0	0.3	100	524
Orban/rurai	Rural	92.3	6.9	0.6	0.0	0.2	100	2,184
	Q1	90.9	7.8	1.0	0.1	0.2	100	433
	Q2	90.4	8.9	0.5	0.0	0.2	100	481
Quintile	Q3	92.2	6.8	0.6	0.0	0.3	100	528
	Q4	94.1	5.1	0.6	0.0	0.2	100	573
	Q5	97.1	2.7	0.1	0.0	0.1	100	694

Source: EICV5. Base population: households using a particular service sometimes, regularly or often.

		Wal	lking distance	e to the neare	est all-weather ro	ad		Total no. of
EICV4		0-19 minutes' walk	20-59 minutes' walk	60-119 minutes' walk	120+minutes' walk	Don't know of facility	Total	HHs using the service (000s)
All Rwanda		87.9	9.3	1.8	0.4	0.6	100	2,493
	Kigali City	97.5	2.2	0.0	0.0	0.3	100	295
	Southern	89.1	7.9	1.6	0.6	0.8	100	597
Province	Western	78.6	16.4	3.0	0.9	1.2	100	559
	Northern	84.4	12.8	2.1	0.5	0.3	100	394
	Eastern	92.6	5.5	1.7	0.1	0.3	100	647
Hubon /munol	Urban	98.0	1.7	0.1	0.0	0.3	100	426
Urban/rural	Rural	85.8	10.8	2.2	0.5	0.7	100	2,067
	Q1	83.1	13.0	2.4	0.5	1.0	100	421
	Q2	84.8	11.6	2.5	0.5	0.6	100	458
Quintile	Q3	87.0	10.4	1.9	0.4	0.4	100	489
	Q4	87.9	9.1	1.7	0.6	0.7	100	532
	Q5	94.5	4.1	0.9	0.2	0.5	100	593

Source: EICV4. Base population: households using a particular service sometimes, regularly or often.

93.5

88.3

93.5

76.1

85.2

83.2

87.7

92.0

98.8

Southern rural

Western rural

Northern rural

EICV4

EICV5

Figure 5.2: Percentage of rural HHs that can walk to an all-weather road in less than 20 minutes

Source: EICV4 and EICV5.

Accessibility to all-weather roads is not only measured in terms of time, the travel distance can be also used as a way of roads accessibility measurement. Table 5.3 shows that the mean distance (in meter) to an all-weather road is (329 meters) at national level in 2016-17. 68.5% of the households are within 200 metres to an all-weather road and 84% are within 500 metres. At provincial level, households in the Western Province have to travel further to all-weather road (577 meters) compared to other provinces, this is in contrast to Kigali City where households have to travel less to an all-weather road (115 meters). The data reveal also that, accessibility to an all-weather road may be related to type of habitat since, households living in Imidugudu are close to all-weather road (258 meters). By contrast, households living in other types of habitat such as isolated rural housing and small settlement have to travel further (731 meters) and (764 meters) respectively.

Table 5.3: Distance to an all-weather road in meters, by province, urban/rural and consumption quintile

		Mean distance to an		Dista	ince to all-wea	ther road in m	etters			Total no. of HHs
	EICV5	all-weather road (m)	0-200 m	201-500 m	501-1000 m	1001-1500 m	1501-2000 m	more than 2000 m	Total	using the service ( in 000s)
All Rwanda		329	68.5	15.1	9.7	2.5	2.0	2.3	100	2,703
	Kigali City	115	90.0	9.1	0.5	0.1	0.3	0.0	100	409
	Southern	352	63.3	18.7	11.1	2.4	2.0	2.5	100	624
Province	Western	577	49.6	19.1	17.1	5.3	4.1	4.8	100	572
	Northern	495	54.4	18.8	15.2	4.3	3.0	4.2	100	421
	Eastern	125	84.8	9.6	4.2	0.6	0.5	0.2	100	676
Urban/ rural	Urban	148	84.5	10.7	3.5	0.7	0.3	0.2	100	522
Orban/ rurai	Rural	373	64.6	16.1	11.1	2.9	2.4	2.8	100	2181
	Q1	430	59.7	18.7	12.2	3.6	2.9	2.9	100	432
	Q2	420	61.7	16.5	12.1	3.1	3.0	3.6	100	480
Quintile	Q3	354	66.1	15.7	10.5	2.9	2.1	2.7	100	526
	Q4	323	68.0	14.5	11.3	2.4	1.6	2.2	100	572
	Q5	190	80.7	11.8	4.5	1.2	0.9	0.9	100	693
	Umudugudu	258	73.9	13.8	7.7	1.7	1.2	1.7	100	1591
	Unplanned clustered rural housing	427	57.0	19.5	14.7	3.6	2.0	3.2	100	177
Type of habitat	Isolated rural housing	731	34.8	22.7	23.2	6.9	6.0	6.4	100	454
	Unplanned urban housing	130	87.3	10.7	1.3	0.2	0.4	0.0	100	384
	Small settlement	764	47.6	18.2	13.6	9.9	5.1	5.7	100	20
	Modern planned area	93	92.2	7.3	0.3	0.2	0.0	0.0	100	77

Source: EICV5. Base population: households using a particular service sometimes, regularly or often.

Considering the threshold of two kilometers, accessibility to all-weather roads is very high to households in all regions and is almost to the same magnitude. In urban areas, 100% of households are within 2 km to an all-weather road and 97% in rural areas as shown in Figure 5.3.

99.8 97.2

Urban Rural

Figure 5.3: Percentage of HHs that are within 2km to an all-weather road by region, EICV5

Source: EICV5.

Table 5.4 presents the reasons reported by households for non-frequent or non-use of roads. The data show that 11% of households do not use all weather roads due to the long distance in 2016-17, this has reduced by four percentage points from 15% in 2013-14. It is observed from the data that, 79% of the households do not use all weather roads just because they did not need it frequently in 2016-17.

Table 5.4: Reasons for not using all-weather road, by urban/rural and consumption quintile

	EICV5		Reasons for no		Total no. of HHs not			
EICV			Poor quality of service	No need	Infrequent need	Other	Total	using the service (000s)
All Rwanda		11.1	2.3	5.5	78.7	2.4	100	49
Urban/ rural	Urban	9.3	2.3	6.2	79.5	2.7	100	12
Orbany ruran	Rural	11.7	2.3	5.2	78.5	2.3	100	38
	Q1	12.2	1.9	5.4	79.8	0.7	100	9
	Q2	15.4	1.6	5.0	78.1	0.0	100	10
Quintile	Q3	6.9	3.6	10.8	75.2	3.5	100	9
	Q4	6.5	4.4	2.9	83.6	2.7	100	10
	Q5	14.6	0.0	3.7	76.9	4.8	100	11

Source: EICV4. Notes: (1) Calculated only on the basis of HHs that did not use the service at all, did not know about it or used it only sometimes.

			Reasons for no	ot using all-wea	ther road			Total no. of HHs
EICV4		Too far	Poor quality of service	Don't know about it	Infrequent need	Other	Total	not using the service (000s)
All Rwanda		15.4	2.0	10.0	70.8	1.8	100	95
Urban/rural	Urban	0.0	0.0	19.8	76.5	3.7	100	4
Orban/rurai	Rural	16.1	2.1	9.6	70.5	1.7	100	91
	Q1	14.1	1.3	7.4	74.3	3.0	100	27
	Q2	12.9	3.0	10.1	71.7	2.3	100	20
Quintile	Q3	17.6	3.6	6.8	71.2	0.8	100	17
	Q4	16.8	0.9	10.9	71.5	0.0	100	20
	Q5	17.1	1.4	20.8	57.7	3.1	100	10

Source: EICV4. Notes: (1) Calculated only on the basis of HHs that did not use the service at all, did not know about it or used it only sometimes.

Regarding the user satisfaction, Table 5.5 shows that at national level, 79% of households are satisfied with their nearest all-weather road compared to 77% in EICV4, this shows an improvement of the level of user satisfaction of two percentage points. The highest user satisfaction is observed in the Northern and Eastern provinces with 85% of the households in each province while the lowest user satisfaction is observed in Kigali City with 69% in 2016-17. Concerning the perceptions of changes in quality of all-weather roads, 35% of respondents observed an improvement in both surveys. The data reveal also that, 60% of the households feel that the quality has remained the same while 4.5% observed a decline in quality over the past 12 months in 2016-17.

Table 5.5: User satisfaction with all-weather roads and perceptions of changes in quality over last 12 months, by province, urban/rural and consumption quintile

		Satisf	action		Service Q	uality cha	ange , last 12 ı	months		Total
EICV	EICV5		Not satisfied	Total	Declining	Same	Improving	Don't know	Total	Nber of HHs (000s)
All Rwanda		79.0	21.0	100	4.5	60.4	34.9	0.3	100	2,703
	Kigali City	69.4	30.6	100	6.2	66.6	26.9	0.4	100	409
	Southern	78.6	21.4	100	4.9	55.5	39.4	0.2	100	624
Province	Western	74.4	25.6	100	4.9	62.7	32.2	0.1	100	572
	Northern	85.2	14.8	100	2.7	64.8	32.4	0.1	100	421
	Eastern	85.1	14.9	100	4.0	56.2	39.3	0.4	100	676
Urban/ rural	Urban	75.3	24.7	100	5.3	64.7	29.6	0.4	100	522
Orbany ruran	Rural	79.9	20.1	100	4.4	59.3	36.1	0.2	100	2,181
	Q1	81.8	18.2	100	3.5	60.1	36.4	0.0	100	432
	Q2	79.2	20.8	100	4.7	60.5	34.5	0.3	100	480
Quintile	Q3	80.0	20.0	100	4.4	59.6	36.0	0.1	100	526
	Q4	77.4	22.6	100	4.9	58.4	36.3	0.4	100	572
	Q5	77.6	22.4	100	4.8	62.6	32.2	0.4	100	693

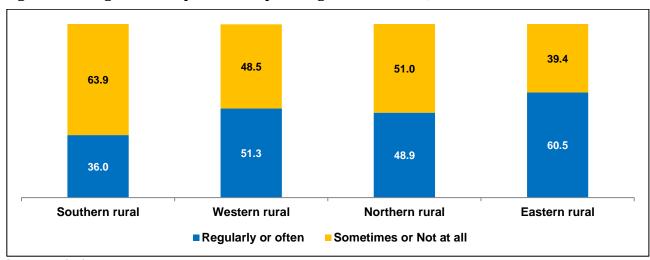
Source: EICV5. Base population: Households using a particular service sometimes, regularly, often.

		Satisf	action		Service Q	uality ch	ange , last 12 r	nonths		Total
EIG	EICV4		Not satisfied	Total	Declining	Same	Improving	Don't know	Total	Nber of HHs (000s)
All Rwanda	a	76.9	23.1	100	5.9	58.8	35.0	0.3	100	2,479
	Kigali City	72.7	27.3	100	5.1	64.6	30.0	0.3	100	295
	Southern	78.5	21.5	100	6.9	54.5	38.5	0.1	100	593
Province	Western	69.8	30.2	100	7.2	59.6	33.0	0.2	100	552
	Northern	78.5	21.5	100	6.0	54.7	39.1	0.1	100	393
	Eastern	82.5	17.5	100	4.1	62.0	33.4	0.5	100	646
Urban/	Urban	81.1	18.9	100	4.0	62.0	33.5	0.6	100	425
rural	Rural	76.1	23.9	100	6.3	58.2	35.4	0.2	100	2,053
	Q1	76.4	23.6	100	4.9	58.6	36.4	0.1	100	417
	Q2	76.7	23.3	100	6.1	58.0	35.9	0.1	100	455
Quintile	Q3	75.6	24.4	100	6.4	58.6	34.7	0.2	100	487
	Q4	77.3	22.7	100	6.6	58.0	35.2	0.3	100	528
	Q5	78.2	21.8	100	5.4	60.6	33.5	0.5	100	591

Source: EICV4. Base population: Households using a particular service sometimes, regularly, often.

Table 5.6 presents data on the usage of public transport stages. 77% of the households in urban areas reported using public transport stage regularly or often in 2016-17, this shows a decrease of five percentage points from 82% of the households since 2013-14. In rural areas, 51% of the households reported using public transport stage regularly or often, this shows an increase of about eight percentage points from 43.5% between 2013-14 and 2016-17. The highest usage rate of public transport stages was in Kigali City (87%) while the lowest usage rate is observed in the Southern Province, where 62% of households reported that they use public transport stages sometimes or not at all in 2016-17. This associates with information illustrated in Figure 5.4.

Figure 5.4: Usage rates for public transport stage in rural areas, EICV5



Source: EICV5.

Table 5.6: Usage rates for public transport stage, by province, urban/rural and consumption quintile

			Use freque	ncy of public tr	ansport stag	e		Total Nber
EICV	EICV5		Often Sometim		Not at all	Don't know about this service	Total	of HHs (000s)
All Rwanda		43.2	12.9	31.4	12.4	0.1	100	2,708
	Kigali City	63.7	23.2	10.5	2.7	0.0	100	410
Durandara	Souther n	25.8	11.6	38.6	23.8	0.2	100	626
Province	Western	41.3	11.6	32.9	14.1	0.2	100	574
	Norther n	42.6	7.2	40.2	9.9	0.1	100	422
	Eastern	48.9	12.4	30.7	8.0	0.1	100	677
Huban /munal	Urban	54.9	22.4	19.4	3.1	0.2	100	524
Urban/rural	Rural	40.4	10.6	34.3	14.7	0.1	100	2,184
	Q1	33.4	7.1	36.4	23.0	0.2	100	433
	Q2	37.7	8.7	37.6	15.8	0.2	100	481
Quintile	Q3	40.7	11.1	35.7	12.3	0.1	100	528
	Q4	43.2	14.8	32.1	9.7	0.1	100	573
	Q5	55.0	19.1	20.1	5.8	0.1	100	694

Source: EICV5. Base population: all households.

			Use freque	ncy of public ti	ransport stag	e		Total Nber
EIC	EICV4		Often	Sometimes	Not at all	Don't know about this service	Total	of HHs (000s)
All Rwanda		31.8	18.3	36.5	13.4	0.1	100	2,493
	Kigali City	69.5	16.2	12.4	1.9	0.1	100	295
	Southern	24.9	16.6	41.0	17.5	0.0	100	597
Province	Western	17.4	15.7	44.3	22.5	0.1	100	559
	Northern	34.4	19.8	34.9	10.7	0.2	100	394
	Eastern	31.7	22.1	37.6	8.6	0.1	100	647
Urban/rural	Urban	59.6	22.0	16.3	2.0	0.1	100	426
Orban/rurai	Rural	26.0	17.5	40.7	15.7	0.1	100	2,067
	Q1	19.4	11.9	41.5	27.2	0.1	100	421
	Q2	23.4	15.8	42.5	18.2	0.1	100	458
Quintile	Q3	28.4	17.1	42.2	12.3	0.0	100	489
	Q4	34.0	20.5	36.0	9.5	0.1	100	532
	Q5	47.9	23.7	24.1	4.2	0.1	100	593

Source: EICV4. Base population: all households.

With regard to walking distance to the nearest public transport stage, Table 5.7 shows that in rural areas only 18% of households walk for less than 20 minutes to a public transport stage compared to 65.5% in urban areas. The Southern Province displays the lowest percentage of households having access to a public transport stage in less than 20 minutes (17%). Access to a public transport stage in less than 20 minutes is continuously skewed towards the richest quintile in both surveys.

Table 5.7: Walking distance to nearest public transport stage, by province, Urban / rural and consumption quintile

		Walking o	listance to t	he nearest p	ublic transp	ort stage		Total no. of HHs
EIC	EICV5		20–59 minutes' walk	60-119 minutes' walk	120+ minutes' walk	Don't know of facility	Total	using the service (in 000s)
All Rwanda		26.8	26.6	29.5	4.5	12.6	100	2,708
	Kigali City	57.6	30.9	8.8	0.0	2.7	100	410
	Southern	17.4	24.4	30.1	4.1	24.0	100	626
Province	Western	20.3	26.2	32.7	6.5	14.3	100	574
	Northern	21.3	27.6	32.9	8.1	10.0	100	422
	Eastern	25.9	25.7	36.8	3.6	8.0	100	677
Urban/ rural	Urban	65.5	27.5	3.4	0.3	3.3	100	524
Orbany rurai	Rural	17.6	26.3	35.8	5.5	14.8	100	2,184
	Q1	15.4	23.3	32.3	5.8	23.2	100	433
	Q2	17.4	26.0	34.5	6.0	16.0	100	481
Quintile	Q3	21.2	27.0	34.7	4.6	12.4	100	528
	Q4	23.0	29.4	33.0	4.8	9.8	100	573
	Q5	47.9	26.3	17.6	2.3	5.9	100	694

Source: EICV5. Base population: households using a particular service sometimes, regularly or often.

		Walking	distance to t	he nearest p	ıblic transp	ort stage		Total no. of HHs
EIC	EICV4		20-59 minutes' walk	60-119 minutes' walk	120+ minutes' walk	Don't know of facility	Total	using the service (in 000s)
All Rwanda		26.0	24.2	19.6	16.8	13.5	100	2,493
	Kigali City	56.5	25.8	10.2	5.5	2.0	100	295
	Southern	19.7	26.8	21.3	14.8	17.5	100	597
Province	Western	17.1	22.5	18.3	19.4	22.6	100	559
	Northern	16.9	24.9	23.7	23.6	10.9	100	394
	Eastern	31.1	22.2	20.8	17.3	8.7	100	647
Urban/ rural	Urban	64.9	30.1	2.8	0.1	2.1	100	426
Orbany rurai	Rural	18.0	23.0	23.0	20.2	15.8	100	2,067
	Q1	13.6	20.2	19.7	19.2	27.3	100	421
	Q2	17.3	22.7	22.4	19.3	18.4	100	458
Quintile	Q3	19.8	25.5	23.3	19.0	12.3	100	489
	Q4	24.9	27.6	20.7	17.3	9.6	100	532
	Q5	47.6	24.1	13.1	10.9	4.3	100	593

Source: EICV4. Base population: households using a particular service sometimes, regularly or often.

Table 5.8 shows the reasons stated for non use or non frequent use of public transport stage. 91% of the households in urban areas reported that they did not need public transport stages often (no need or infrequent need) in 2016-17 and 88% in 2013-14. In rural areas, 86% of the households reported also that they did not need public transport stages often and only 7% of the households reported that the service is too far away in 2016-17.

Table 5.8: Reasons for not using public transport stage, by province, urban/rural and consumption quintile

		Rea	sons for not u	sing public t	ransport stag	e		Total no. of
EIC	EICV5		Too far		Total	HHs not using the service (in 000s)		
All Rwanda		6.4	1.7	18.3	68.2	5.4	100	1,190
	Kigali City	14.8	2.8	12.7	66.5	3.1	100	54
	Southern	5.1	1.5	27.4	59.4	6.6	100	392
Province	Western	7.6	2.0	16.2	66.5	7.7	100	271
	Northern	5.8	1.0	13.0	75.3	5.0	100	212
	Eastern	5.7	2.2	12.1	77.8	2.2	100	262
Huban /munal	Urban	4.0	0.8	8.7	82.4	4.1	100	119
Urban/rural	Rural	6.6	1.8	19.3	66.7	5.6	100	1,072
	Q1	5.9	0.7	25.3	61.2	6.9	100	258
	Q2	5.2	1.7	19.7	67.3	6.1	100	258
Quintile	Q3	6.2	1.9	16.8	70.7	4.4	100	254
	Q4	6.9	1.6	14.7	71.6	5.3	100	240
	Q5	8.2	3.1	13.0	71.7	4.1	100	180

Source: EICV5. Notes: (1) Calculated only on the basis of HHs that did not use the service at all, did not know about it or used it only sometimes.

		R	easons for not	using public t	ransport stage			Total no. of HHs
EIC	EICV4		Too far		Total	not using the service (in 000s)		
All Rwanda		7.5	1.0	17.7	68.4	5.5	100	1,243
	Kigali City	10.5	2.7	9.4	73.5	3.8	100	42
	Southern	3.9	0.8	18.9	70.4	5.9	100	349
Province	Western	7.0	8.0	25.0	61.7	5.5	100	373
	Northern	13.1	0.8	11.2	71.1	3.8	100	180
	Eastern	8.5	1.3	12.1	71.9	6.2	100	299
Huban /munal	Urban	0.4	1.7	7.7	88.0	2.2	100	78
Urban/rural	Rural	8.0	0.9	18.3	67.1	5.7	100	1,165
	Q1	8.9	0.3	25.5	58.0	7.3	100	289
	Q2	6.7	1.0	19.5	67.1	5.7	100	277
Quintile	Q3	7.1	1.2	15.0	71.3	5.3	100	266
	Q4	7.0	1.2	13.9	73.6	4.4	100	242
	Q5	7.8	1.5	10.9	76.0	3.9	100	168

Source: EICV4. Notes: (1) Calculated only on the basis of HHs that did not use the service at all, did not know about it or used it only sometimes.

Table 5.9 presents data on the user satisfaction levels of households that use public transport stages. Overall, 83% of the households are satisfied, this shows a slight increase of one percentage point since 2013-14. The level of user satisfaction in urban areas is higher (88%) compared to rural areas (81%). 33% of respondents perceived that the quality of public transport stages has improved, and 63% feel that the quality of public transport stages has remained the same, while only 2% perceived a decline in quality over the last 12 months in 2016-17.

Table 5.9: User satisfaction with public transport stage and perceptions of changes in quality over last 12 months, by province, urban/rural and consumption quintile

EICV5		Satisfa	action		Service Qu	ality cha	nge , last 12 n	nonths		Total no.
		Satisfied	Not satisfied	Total	Declining	Same	Improving	Don't know	Total	of HHs using the service (in 000s)
All Rwanda		82.6	17.4	100	1.7	63.0	33.3	2.0	100	2,368
	Kigali City	85.4	14.6	100	4.1	59.5	36.1	0.3	100	399
	Southern	80.1	19.9	100	2.1	59.7	35.4	2.8	100	476
Province	Western	79.5	20.5	100	1.3	64.3	32.4	2.1	100	492
	Northern	85.8	14.2	100	0.6	72.2	25.4	1.7	100	380
	Eastern	83.1	16.9	100	0.8	61.1	35.6	2.5	100	622
Urban/ rural	Urban	87.6	12.4	100	3.0	57.8	38.5	0.8	100	507
Orban/ rurar	Rural	81.2	18.8	100	1.3	64.4	31.9	2.3	100	1,862
	Q1	83.4	16.6	100	1.0	64.2	32.1	2.7	100	332
	Q2	80.6	19.4	100	1.3	66.0	29.9	2.8	100	404
Quintile	Q3	82.0	18.0	100	1.2	62.9	33.7	2.3	100	462
	Q4	82.5	17.5	100	1.5	62.6	34.1	1.7	100	517
	Q5	83.9	16.1	100	2.7	60.9	35.2	1.1	100	653

Source: EICV5. Base population: Households using a particular service sometimes, regularly, often.

EICV4		Satisfa	action	al	Service Qu	iality cha	nge , last 12 m	onths	al	Total no. of HHs
		Satisfied	Not satisfied	Total	Declining	Same	Improving	Don't know	Total	using the service (000s)
All Rwanda		81.6	18.4	100	2.5	56.3	40.1	1.2	100	2,158
	Kigali City	84.7	15.3	100	7.0	56.4	36.2	0.4	100	290
	Southern	78.6	21.4	100	1.9	55.9	41.1	1.1	100	493
Province	Western	78.7	21.3	100	2.3	53.0	42.8	1.9	100	433
	Northern	85.0	15.0	100	1.2	51.4	46.6	0.9	100	351
	Eastern	82.9	17.1	100	1.6	61.9	35.2	1.3	100	591
Huban / munal	Urban	87.2	12.8	100	5.0	51.6	42.7	8.0	100	418
Urban/ rural	Rural	80.3	19.7	100	1.9	57.4	39.4	1.3	100	1,740
	Q1	81.0	19.0	100	1.5	58.6	38.2	1.7	100	306
	Q2	79.8	20.2	100	2.1	55.8	40.5	1.6	100	374
Quintile	Q3	81.4	18.7	100	2.1	54.5	42.1	1.3	100	429
	Q4	82.7	17.3	100	2.1	57.5	39.6	8.0	100	481
	Q5	82.5	17.5	100	3.8	55.8	39.6	0.9	100	568

Source: EICV4. Base population: Households using a particular service sometimes, regularly, often.

# 5.2. Ownership of transportation assets

This section presents information on ownership of transport assets for private, not commercial use. Table 5.10 shows that ownership of bicycles, motorcycles and cars in 2016-17 stands at, 13%, 1% and 1% respectively. However, the bicycles ownership shows a decrease of three percentage points from 16% in EICV4 at national level. In Kigali City, the percentage of households owning at least one car has slightly increased by 0.5 percentage point from 5% since 2013-14. In rural areas, 14 % of households own a bicycle, and this is driven by the households in Eastern Province with the highest bicycles ownership (29%). The data reveal also that motorcycles and cars are owned exclusively by households in the richest quintile in both surveys.

Table 5.10: Ownership of transportation assets (bicycle, motorcycle, vehicles), by province, urban / rural, consumption quintile, habitat and sex of head of HH

EICV5		% of h	% of households owning				
		Bicycle	Motorcycle	Car	HHs (in 000s)		
All Rwanda	All Rwanda		1.0	1.0	2,708		
	Kigali City	8.1	1.3	5.5	410		
	Southern	11.5	0.9	0.2	626		
Province	Western	3.8	0.5	0.2	574		
	Northern	8.9	0.7	0.4	422		
	Eastern	29.2	1.3	0.3	677		
Huban /wunal	Urban	9	1.3	4.9	524		
Urban/rural	Rural	14.4	0.9	0.1	2,184		
	Q1	4.9	0.0	0.0	433		
	Q2	9.7	0.0	0.0	481		
Quintile	Q3	13.8	0.1	0.0	528		
	Q4	19.1	1.1	0.0	573		
	Q5	16.0	2.8	4.1	694		
	Umudugudu	16.6	1.0	0.4	1,595		
	Unplanned clustered rural housing	10.9	0.2	0.0	177		
Type of habitat	Isolated rural housing	8.2	0.4	0.0	455		
Type of flabitat	Unplanned urban housing	8.9	1.4	2.4	385		
	Small settlement	6.4	0.0	2.9	20		
	Modern planned area	6.6	2.6	15.8	77		
Sex of head of HH	Male	16.2	1.3	1.3	2031		
sex of flead of HH	Female	4.9	0.1	0.4	677		

Source: EICV5. Base population: all households.

	EICV4	% of h	% of households owning					
		Bicycle	Motorcycle	Car	HHs (in 000s)			
All Rwanda		15.8	0.9	0.8	2,493			
	Kigali City	8.2	1.1	4.9	295			
	Southern	14.8	0.6	0.3	597			
Province	Western	3.8	0.4	0.4	559			
	Northern	11.2	0.8	0.3	394			
	Eastern	33.3	1.6	0.1	647			
II 1 / 1	Urban	9.7	1.8	4.5	426			
Urban/rural	Rural	17.0	0.8	0.0	2,067			
	Q1	4.96	0.0	0.0	421			
	Q2	11.63	0.0	0.0	458			
Quintile	Q3	15.8	0.1	0.0	489			
•	Q4	21.39	0.4	0.0	532			
	Q5	21.5	3.4	3.4	593			
	Umudugudu	20.8	0.9	0.1	1,227			
	Unplanned clustered rural housing	19.3	1.1	0.0	216			
m (1 1	Isolated rural housing	10.1	0.3	0.0	637			
Type of habitat	Unplanned urban housing	6.8	1.5	3.8	318			
	Small settlement	8.6	1.3	0.5	55			
	Modern planned area	14.1	4.4	15.6	40			
C Cl 1 - CIIII	Male	18.9	1.2	1.0	1,857			
Sex of head of HH	Female	6.5	0.1	0.3	636			

Source: EICV4. Base population: all households.

# Chapter 6. Information and Communication Technology

This chapter discusses the trends in household ownership of Information and Communication Technology (ICT) devices (like mobile phones, computer, etc). Furthermore, it presents information on distance, usage rates and level of user satisfaction of ICT services while comparing 2013-14 and 2016-17.

#### 6.1. Ownership of ICT devices and internet access

Information presented in this section is at household level. Ownership in this case refers to at least one member of the household with an ICT device. Therefore, estimates of ICT penetration at household level presented in this chapter may be higher than the penetration at individual level. Table 6.1 shows that at national level, 67% of the households own at least one mobile phone, this has increased by three percentage points from 64% since 2013-14. At provincial level, the ownership of mobile phone is the highest in households in Kigali city (88%), followed by the Eastern Province (66%) and the least mobile phone ownership in the Southern Province with 58% of the households. The most striking increase is observed in the percentage of households owning at least one radio<sup>4</sup>, which increased from 60% to 74% between 2013-14 and 2016-17. In general, the Female-headed households remain deprived with regard to the ownership of durables (59% of Radio, 54% of Mobile phone, 2% of Computer and 6% of TV set) when compared to the average male-headed households (79% of Radio, 71% of Mobile Phone, 4% of Computer and 12% of TV set) in 2016-17. The highest percentage of mobile phone owners fall within the richest quintiles in both surveys.

Table 6.1: Ownership of ICT devices (Mobile phone, Computer, Radio, TV set, Video/DVD player), by province, urban / rural, consumption quintile, habitat and sex of head of HH

77077			% of h	ouseholds o	wning		Total no.
	EICV5	Radio	Computer	Mobile phone	TV set	Video / DVD Player	of HHs (in 000s)
All Rwanda		73.8	3.3	66.9	10.4	6.7	2,708
	Kigali City	91.5	12.8	88.0	36.0	25.1	410
	Southern	67.2	1.7	58.3	5.2	3.3	626
Province	Western	69.5	1.2	64.1	6.5	4.3	574
	Northern	73.2	1.9	64.5	5.7	3.6	422
	Eastern	73.1	1.6	66.1	5.8	2.9	677
Urban/rural	Urban	91.3	13.1	88.6	35.0	24.2	524
Of Dall/Tural	Rural	69.6	0.9	61.7	4.5	2.6	2,184
	Q1	52.0	0.0	44.1	0.3	0.2	433
	Q2	64.0	0.1	55.4	1.4	0.7	481
Quintile	Q3	72.0	0.2	64.0	2.0	1.1	528
	Q4	79.6	0.7	72.9	7.0	3.9	573
	Q5	90.7	12.0	86.5	31.9	21.6	694
	Umudugudu	71.7	1.8	64.6	6.3	3.7	1,595
	Unplanned clustered rural housing	68.6	0.9	61.7	6.5	4.1	177
Type of habitat	Isolated rural housing	65.7	0.2	56.4	1.7	0.9	455
Type of nabitat	Unplanned urban housing	89.7	8.6	85.8	29.4	20.9	385
	Small settlement	73.0	4.6	68.5	14.6	6.3	20
	Modern planned area	97.3	31.2	95.9	58.8	40.2	77
Sex of head of	Male	78.6	3.6	71.1	11.9	7.9	2031
НН	Female	59.3	2.3	54.3	5.7	3.3	677

Source: EICV5. Base population: all households.

EICV4 Radio Computer Mobile phone TV set Video / DVD Player (in 000s)

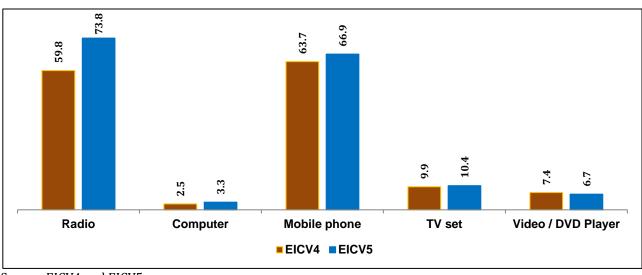
<sup>&</sup>lt;sup>4</sup> For EICV5 Data, Household with at least one household member having a mobile phone with a radio was considered as a household owning a radio.

			Total no.				
E	ICV5	Radio	Computer	Mobile phone	TV set	Video / DVD Player	of HHs (in 000s)
All Rwanda		59.8	2.5	63.7	9.9	7.4	2,493
	Kigali City	66.9	12.8	90	44.1	34.2	295
	Southern	57.9	1.3	54	4.9	3.9	597
Province	Western	52	1.1	58.2	5.9	3.9	559
	Northern	61.9	1.2	60.8	4.1	2.1	394
	Eastern	63.9	1.0	67.0	6.1	4.6	647
Urban/rural	Urban	67.5	12.2	87.9	41.4	31.5	426
UI Dali/I ul al	Rural	58.2	0.5	58.6	3.4	2.4	2,067
	Q1	37.51	0	37.96	0.41	0.2	421
	Q2	52.05	0	52.18	0.85	0.5	458
Quintile	Q3	60.21	0.17	61.4	1.89	1.5	489
	Q4	66.16	0.36	70.67	6.88	5.0	532
	Q5	75.5	10.2	86.3	33.0	24.8	593
	Umudugudu	60.4	0.9	61.3	4.6	3.2	1,227
	Unplanned clustered rural housing	57.9	1.2	64.1	7.3	5.0	216
Type of habitat	Isolated rural housing	55.2	0.2	53.0	1.3	0.9	637
••	Unplanned urban housing	67.5	11.8	89.9	43.7	34.0	318
	Small settlement	50.3	1.4	66.2	7.1	6.5	55
_	Modern planned area	76.7	25.2	90.4	60.6	40.7	40
Sex of head of	Male	66.1	2.8	68.0	11.2	8.6	1,857
НН	Female	41.5	1.7	50.9	6.1	3.8	636

Source: EICV4. Base population: all households

Figure 6.1 which shows trend in ownership of ICT devices between 2013-14 and 2016-17 reveals an increase across all devices at national level except video/DVD Player which shows a slight decrease from 7.4% in 2013-14 to 6.7% in 2016-17.

Figure 6.1: Changes in ownership of ICT devices



Source: EICV4 and EICV5.

The survey provides also information on private internet access at home as shown in Table 6.2 and Figure 6.2. Overall, 17% of the households have access to internet at home in 2016/17, this has almost doubled at the national level from 9% of the households since the last survey in 2013/14. The findings also show that, 38% of urban and 12% of rural households have access to the internet at home in EICV5. A significant improvement can be seen in all five provinces. In particular, the percentage of households that have access to internet has grown by approximately eight percentage points in the Western and Eastern Provinces. Mobile phones are the most common used modes of accessing internet at home (96%) followed by modems (4%) in 2016-2017. Internet access at home is mostly predominantly in the highest quintile in both surveys (30%in EICV4 and 41% in EICV5).

39.1 33.2 26.1 24.2 13.3 12.6 12.1 10.6 4.6 4.2 3.8 3.5 Kigali city Other urban Southern rural Western rural Northern rural Eastern rural ■EICV4 ■EICV5

Figure 6.2: Percentage of HHs with internet access at home

Source: EICV4 & EICV5.

Table 6.2: Percentage of HH with internet access at home, and type of internet connection, by province, urban/rural and consumption quintile

EICV5		% of HH with internet	Ту	pes of intern		Total Nber of		
		access at home	Mobile Landline/ Modem Wi		Wireless	Total	HHs (000s)	
All Rwanda		17.2	95.8	0.1	3.8	0.3	100	2708
	Kigali City	39.1	93.5	0.0	5.9	0.6	100	410
	Southern	11.7	95.8	0.2	3.8	0.2	100	626
Province	Western	14.1	98.5	0.2	1.2	0.0	100	574
	Northern	13.0	96.4	0.0	3.6	0.0	100	422
	Eastern	14.4	97.1	0.0	2.7	0.2	100	677
Urban/rural	Urban	38.1	92.5	0.0	6.9	0.6	100	524
Of Dall/Tural	Rural	12.2	98.3	0.1	1.5	0.1	100	2184
	Q1	4.1	100.0	0.0	0.0	0.0	100	433
Quintile	Q2	6.4	99.4	0.6	0.0	0.0	100	481
	Q3	9.3	100.0	0.0	0.0	0.0	100	528
	Q4	14.8	99.4	0.0	0.6	0.0	100	573
	Q5	40.9	93.4	0.1	6.1	0.5	100	694

Source: EICV5. Base population: all households.

		% of HH with	Тур	oes of intern	et connecti	vity		Total Nber of
EIC	:V4	internet access at home	Mobile phone	Landline / LAN	Modem	Wireless	Total	HHs (000s)
All Rwanda		9.3	81.3	0.3	17.6	0.8	100	2,493
	Kigali City	33.2	76.4	0.4	21.8	1.3	100	295
	Southern	5.6	81.1	0.4	18.0	0.4	100	597
Province	Western	6.0	85.6	0.0	14.4	0.0	100	559
	Northern	6.5	81.1	0.6	17.1	1.3	100	394
	Eastern	6.5	89.8	0.0	10.2	0.0	100	647
Huban /munal	Urban	33.5	75.0	0.4	23.4	1.1	100	426
Urban/rural	Rural	4.4	91.3	0.2	8.4	0.2	100	2,067
	Q1	0.8	100.0	0.0	0.0	0.0	100	421
	Q2	1.1	83.1	0.0	16.9	0.0	100	458
Quintile	Q3	2.2	90.4	0.0	9.7	0.0	100	489
	Q4	6.9	96.9	0.0	3.1	0.0	100	532
	Q5	29.8	77.2	0.4	21.4	1.0	100	593

Source: EICV4. Base population: all households.

## **6.2.** Public ICT facilities

This section focuses on usage rates and satisfaction levels with public internet service facilities and phones. Table 6.3 shows that only 1% of Rwandan households use public internet facilities (regularly and often) in 2016-17 compared to 2% in 2013-14. The highest usage rate is found in Kigali (2.5%) compared to other provinces. A striking finding that emerges from comparing both surveys is that using public internet facilities in all regions has significantly decreased. For example, in urban areas the usage rate has decreased by six percentage points from 9% in EICV4 to 3% in EICV5. This is not due to the fact that the percentage of households who reported not to be aware of the internet service has increased, because the number has reduced by half from 46% in 2013-14. Instead, this might be explained by the increased use of private internet sources observed in the previous section.

Table 6.3: Usage rates for internet service facility, by province, urban/rural, consumption quintile and sex of head of HH

		Ţ	Jse freque	ncy of interne	t service facil	lity		Total Nhau
EIC	CV5	Regularly	Often	Sometimes	Not at all	Don't know about this service	Total	Total Nber of HHs (000s)
All Rwanda		0.5	0.5	2.2	73.2	23.5	100	2,708
	Kigali City	1.0	1.5	4.7	81.8	11.0	100	410
	Southern	0.4	0.4	2.0	57.3	39.9	100	626
Province	Western	0.5	0.4	2.2	75.4	21.5	100	574
	Northern	0.7	0.3	1.2	77.5	20.3	100	422
	Eastern	0.3	0.4	1.3	78.3	19.8	100	677
Huban /munal	Urban	1.0	1.8	6.2	81.6	9.4	100	524
Urban/rural	Rural	0.4	0.2	1.2	71.2	26.9	100	2,184
	Q1	0.1	0.1	0.2	65.9	33.7	100	433
	Q2	0.3	0.1	0.4	70.6	28.6	100	481
Quintile	Q3	0.2	0.1	0.7	73.7	25.3	100	528
	Q4	0.4	0.4	1.6	74.9	22.8	100	573
	Q5	1.4	1.6	6.2	77.8	13.0	100	694
Sex of head	Male	0.5	0.6	2.3	75.2	21.4	100	2,031
of HH	Female	0.6	0.2	1.8	67.4	30.0	100	677

Source: EICV5. Base population: all households.

		U	Jse freque	ncy of internet	service faci	lity		Total Nhou
EICV-	4	Regularly	Often	Sometimes	Not at all	Don't know about this service	Total	Total Nber of HHs (000s)
All Rwanda		0.9	1.0	3.4	48.4	46.2	100	2,493
	Kigali City	4.1	2.6	8.7	73.8	10.8	100	295
	Southern	0.8	8.0	2.0	38.9	57.5	100	597
Province	Western	0.4	0.7	3.2	49.1	46.6	100	559
	Northern	0.5	1.1	3.3	48.3	46.8	100	394
	Eastern	0.2	0.7	2.6	45.1	51.4	100	647
Hubon /manal	Urban	4.2	4.5	11.1	66.9	13.4	100	426
Urban/rural	Rural	0.2	0.3	1.8	44.6	53.0	100	2,067
	Q1	0.0	0.0	0.4	36.4	63.2	100	421
	Q2	0.2	0.1	0.7	40.3	58.8	100	458
Quintile	Q3	0.1	0.3	1.5	47.1	51.0	100	489
	Q4	0.7	0.5	2.3	53.6	42.9	100	532
	Q5	2.9	3.5	10.3	59.6	23.6	100	593
Sex of head of HH	Male	1.0	1.0	3.4	50.3	44.4	100	1,857
Sex of flead of HH	Female	0.7	1.1	3.5	43.0	51.7	100	636

Source: EICV4. Base population: all households.

Table 6.4 provides information on the satisfaction levels among the households that use public internet services. 91% of households are satisfied with their nearest internet services in 2016-17. The high satisfaction rate is spread evenly across all regions of the country. 31% of households perceived an improvement in quality of public internet services in 2016-17 and 62% feel that the quality has remained the same.

Table 6.4: User satisfaction with internet service facility and perceptions of changes in quality over last 12 months, by province, urban/rural and consumption quintile

		Satisf	action		Service Qu	ality cha	inge , last 12 n	nonths		Total no. of
EIO	CV5	Satisfied	Not satisfied	Total	Declining	Same	Improving	Don't know	Total	HHs using the service (in 000s)
All Rwanda	1	91.2	8.8	100	1.8	61.8	30.8	5.6	100	88
	Kigali City	94.6	5.4	100	1.0	65.7	30.8	2.4	100	29
	Southern	92.7	7.3	100	1.8	58.5	30.7	8.9	100	17
Province	Western	86.5	13.5	100	2.2	64.8	25.5	7.5	100	18
	Northern	90.3	9.7	100	1.7	65.1	30.0	3.1	100	9
	Eastern	88.9	11.1	100	3.2	51.3	38.4	7.1	100	13
Urban/	Urban	94.2	5.8	100	1.4	64.9	29.6	4.1	100	47
rural	Rural	87.8	12.2	100	2.3	58.3	32.1	7.3	100	41
	Q1	71.3	28.7	100	0.0	68.7	31.3	0.0	100	2
	Q2	86.0	14.0	100	5.4	69.9	24.7	0.0	100	4
Quintile	Q3	89.0	11.0	100	3.3	53.1	43.6	0.0	100	5
	Q4	91.4	8.6	100	0.0	59.7	27.3	13.0	100	13
	Q5	92.2	7.8	100	1.9	62.3	30.8	5.0	100	63

Source: EICV5. Base population: households using a particular service sometimes, regularly or often.

		Satist	faction	al	Service Q	uality ch	ange , last 12 r	nonths	_	Total no. of
EIC	V4	Satisfied	Not satisfied	Total	Declining	Same	Improving	Don't know	Total	HHs using the service (in 000s)
All Rwanda		92.4	7.6	100	1.5	55.6	38.9	4.0	100	133
	Kigali City	96.2	3.8	100	0.4	67.6	27.4	4.6	100	45
	Southern	94.5	5.5	100	1.5	53.8	41.7	3.0	100	22
Province	Western	94.0	6.0	100	1.5	33.3	60.3	5.0	100	24
	Northern	84.4	15.6	100	2.2	57.2	39.9	8.0	100	20
	Eastern	88.0	12.0	100	2.8	55.5	36.0	5.8	100	23
Urban/	Urban	96.1	3.9	100	1.1	60.3	35.2	3.4	100	84
rural	Rural	86.1	13.9	100	2.0	47.5	45.4	5.1	100	49
	Q1	91.0	9.0	100	0.0	39.2	51.8	9.0	100	2
	Q2	93.1	6.9	100	0.0	47.2	48.6	4.3	100	4
Quintile	Q3	91.2	8.8	100	0.0	46.3	48.6	5.1	100	9
	Q4	93.8	6.2	100	0.9	52.2	42.8	4.1	100	19
	Q5	92.3	7.8	100	1.8	57.7	36.7	3.8	100	99

Source: EICV4. Base population: households using a particular service sometimes, regularly or often.

With reference to the use of public telephones, Table 6.5 shows that the percentage of households using public phones regularly or often reduced from 6% to 2% in 2016-17 at national level. This can be explained by the increased ownership of mobile phones observed in the previous section. Public phones usage rate in urban areas is higher (3%) compared to rural areas (2%) in 2016-17.

Table 6.5: Usage rates for public telephone, by province, urban/rural and consumption quintile

			Usage	rates for pul	olic telephor	1e		Total Nber
EIG	CV5	Regularly	Often	Sometimes	Not at all	Don't know about this service	Total	of HHs (000s)
All Rwanda	a	1.3	8.0	0.9	83.1	14.0	100	2,708
	Kigali City	1.4	1.8	0.4	75.3	21.1	100	410
	Southern	0.5	0.6	0.5	71.3	27.1	100	626
Province	Western	0.5	0.5	1.3	90.9	6.8	100	574
	Northern	4.6	1.1	0.8	82.3	11.1	100	422
	Eastern	0.4	0.4	1.4	92.4	5.4	100	677
Urban/	Urban	1.5	1.6	1.4	80.8	14.7	100	524
rural	Rural	1.2	0.6	0.8	83.6	13.8	100	2,184
	Q1	0.6	0.4	1.0	81.1	16.8	100	433
	Q2	1.1	0.4	1.0	83.7	13.8	100	481
Quintile	Q3	1.1	0.3	0.9	85.0	12.7	100	528
	Q4	1.3	1.1	0.8	84.4	12.5	100	573
	Q5	1.8	1.4	0.9	81.3	14.6	100	694

Source: EICV5. Base population: all households.

			Usage	rates for pub	lic telephon	e		Total Nber of
EIG	CV4	Regularly	Often	Sometimes	Not at all	Don't know about this service	Total	HHs (000s)
All Rwanda		2.9	3.4	6.6	74.6	12.6	100	2,493
	Kigali City	9.6	4.7	3.1	78.9	3.8	100	295
	Southern	0.9	0.6	4.4	79.1	15.1	100	597
Province	Western	1.1	2.6	5.3	75.2	15.8	100	559
	Northern	5.9	6.1	11.4	68.0	8.6	100	394
	Eastern	1.3	4.4	8.5	72.0	13.9	100	647
Urban/	Urban	6.0	6.0	5.7	78.3	3.9	100	426
rural	Rural	2.2	2.8	6.8	73.8	14.4	100	2,067
	Q1	1.5	2.0	5.3	73.1	18.2	100	421
	Q2	2.0	3.6	6.4	71.9	16.0	100	458
Quintile	Q3	2.0	2.7	7.3	74.9	13.1	100	489
	Q4	3.2	3.8	7.7	74.1	11.3	100	532
	Q5	4.9	4.4	6.1	77.9	6.7	100	593

Source: EICV4. Base population: all households.

## Annex A: District disaggregation tables for selected indicators from EICV5 and EICV4

Table A.1: Main drinking water source/access to improved drinking water, by district (EICV5, EICV4)

			Im	proved drinki	ng water sour	ce			Unimproved/ot	her drinking wat	er source			Total no.
EICV5	% use improved	Protecte d spring	Public standpipe	Piped into dwelling / yard	Borehole	Protected well	Rain water	Surface water	Unprotected spring	Unprotected well	Tank truck	Other	Total	of HHs (in 000s)
Rwanda	87.4	38.3	35.4	9.4	3.0	1.2	0.1	4.4	6.5	0.5	0.1	1.0	100	2,708
Nyarugenge	96.9	3.5	48.9	41.2	1.1	2.2	0.0	1.3	0.8	0.7	0.0	0.3	100	81
Gasabo	95.8	16.0	50.2	26.6	0.7	2.2	0.0	1.3	2.0	0.0	0.0	0.9	100	230
Kicukiro	95.2	12.4	35.2	45.2	1.5	0.9	0.0	1.1	0.8	0.0	1.3	1.6	100	98
Nyanza	86.6	62.6	15.5	5.3	2.7	0.4	0.0	4.8	6.4	0.6	0.0	1.5	100	79
Gisagara	95.5	64.2	28.5	2.8	0.0	0.0	0.0	0.5	2.6	0.2	0.0	1.2	100	82
Nyaruguru	82.6	42.0	38.2	2.0	0.0	0.5	0.0	2.7	13.5	0.1	0.0	1.1	100	64
Huye	89.7	50.0	32.7	4.7	0.5	1.7	0.0	2.2	5.7	1.2	0.0	1.1	100	82
Nyamagabe	84.5	67.5	12.1	4.1	0.0	0.8	0.0	1.1	13.6	0.6	0.0	0.2	100	77
Ruhango	87.9	56.8	11.0	2.6	14.4	3.1	0.0	3.8	7.7	0.2	0.0	0.4	100	71
Muhanga	83.2	50.3	14.3	9.5	0.0	9.0	0.0	2.4	9.0	3.1	0.0	2.2	100	78
Kamonyi	91.9	65.5	21.1	3.9	0.0	1.3	0.0	0.5	5.7	1.2	0.0	0.7	100	93
Karongi	90.2	54.7	27.0	7.9	0.6	0.0	0.0	2.4	5.7	0.2	0.0	1.5	100	78
Rutsiro	65.5	36.5	27.9	0.9	0.0	0.2	0.0	3.1	30.9	0.0	0.0	0.5	100	73
Rubavu	98.6	12.1	67.3	16.3	0.4	1.1	1.3	0.3	0.0	0.2	0.0	1.0	100	96
Nyabihu	86.0	53.5	30.7	0.7	0.0	0.7	0.4	2.7	10.5	0.6	0.0	0.2	100	67
Ngororero	84.0	71.4	11.7	0.6	0.0	0.4	0.0	1.2	13.4	0.6	0.0	0.8	100	82
Rusizi	87.6	34.3	45.7	5.0	2.7	0.0	0.0	3.4	8.9	0.0	0.0	0.0	100	95
Nyamasheke	89.0	55.5	26.8	5.1	0.0	1.5	0.0	0.7	9.9	0.4	0.0	0.0	100	
Rulindo	92.3	47.2	42.2	2.8	0.0	0.0	0.0	2.0	5.2	0.5	0.0	0.0	100	78
Gakenke	71.0	51.5	18.0	1.3	0.0	0.1	0.0	0.7	26.3	1.0	0.0	1.0	100	84
Musanze	92.5	16.0	59.4	16.2	0.0	0.9	0.0	5.0	0.2	0.2	0.0	2.1	100	91
Burera	94.0	42.7	47.7	2.7	0.2	0.6	0.2	1.1	4.9	0.0	0.0	0.0	100	82
Gicumbi	88.0	68.2	12.4	4.5	0.2	2.6	0.0	2.6	8.0	0.6	0.0	0.8	100	88
Rwamagana	88.3	48.8	28.8	10.7	0.0	0.0	0.0	7.6	0.4	0.0	0.0	3.7	100	89
Nyagatare	80.4	5.9	42.6	4.0	26.7	1.2	0.2	14.3	2.9	0.4	0.0	1.9	100	132
Gatsibo	79.1	42.2	27.5	2.1	6.9	0.4	0.0	14.4	4.8	1.3	0.0	0.4	100	108
Kayonza	88.1	32.7	45.8	2.6	4.3	2.3	0.3	9.3	0.7	0.4	0.0	1.5	100	83
Kirehe	84.3	26.4	53.6	2.0	2.3	0.0	0.0	8.1	6.5	0.0	0.0	1.1	100	87
Ngoma	82.6	29.1	44.9	6.6	0.8	1.3	0.0	5.4	7.1	2.0	0.0	2.9	100	83
Bugesera	77.5	9.4	49.0	5.7	12.4	0.9	0.0	19.6	0.2	0.4	2.3	0.0	100	95

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	% use		Imp	roved drinking	water source	2		U	nimproved/ot	her drinking wa	iter source			Total no.
EICV4	improve d	Protected spring	Public standpipe	Piped into dwelling / yard	Borehole	Protected well	Rain water	Surface water	Unprotected spring	Unprotected well	Tank truck	Other	Total	of HHs (in 000s)
Rwanda	84.8	38.3	34.0	8.1	3.2	0.9	0.2	5.3	6.7	0.9	0.1	2.3	100	2,493
Nyarugenge	92.5	10.0	38.2	40.6	3.2	0.5	0.0	1.6	0.9	0.0	0.0	5.0	100	73
Gasabo	85.6	13.8	40.8	30.0	0.9	0.0	0.0	0.8	4.7	0.4	0.0	8.5	100	147
Kicukiro	74.7	3.0	22.9	46.5	0.2	2.1	0.0	0.2	0.9	0.2	1.9	22.2	100	76
Nyanza	89.6	64.3	14.5	5.1	1.7	3.9	0.0	2.0	6.5	1.8	0.0	0.0	100	77
Gisagara	92.9	65.4	26.4	0.6	0.0	0.4	0.0	1.3	3.3	0.6	0.0	2.0	100	79
Nyaruguru	73.8	35.0	38.0	0.0	0.0	0.6	0.2	1.5	23.9	0.6	0.0	0.2	100	61
Huye	96.0	57.3	27.8	9.8	0.0	1.0	0.0	0.0	3.8	0.2	0.0	0.0	100	79
Nyamagabe	79.9	64.1	13.3	2.6	0.0	0.0	0.0	4.6	11.6	2.2	0.0	1.7	100	73
Ruhango	80.0	63.7	5.6	3.2	4.3	3.2	0.0	10.9	5.2	2.5	0.0	1.4	100	77
Muhanga	89.0	62.2	14.6	10.8	0.0	1.5	0.0	1.4	9.1	0.4	0.0	0.0	100	73
Kamonyi	82.2	53.7	26.7	1.5	0.0	0.4	0.0	5.8	9.5	1.4	0.0	1.1	100	79
Karongi	82.8	47.5	26.9	5.5	2.6	0.0	0.2	5.1	11.1	0.2	0.0	0.8	100	75
Rutsiro	77.5	53.4	21.1	1.5	0.6	0.8	0.0	6.7	13.9	0.7	0.0	1.2	100	73
Rubavu	98.4	8.9	75.2	10.1	0.0	1.8	2.2	0.2	0.8	0.2	0.2	0.2	100	92
Nyabihu	86.2	53.5	30.1	0.9	0.0	0.0	1.7	1.6	11.0	1.2	0.0	0.0	100	64
Ngororero	81.2	69.4	9.7	1.8	0.0	0.2	0.0	1.7	16.8	0.4	0.0	0.0	100	81
Rusizi	83.9	23.5	45.0	8.5	6.3	0.6	0.0	4.7	9.3	0.0	0.0	2.1	100	89
Nyamasheke	79.9	57.2	19.5	2.9	0.0	0.2	0.0	3.3	15.1	0.2	0.0	1.4	100	86
Rulindo	94.7	62.2	29.1	2.5	0.0	0.8	0.0	1.5	3.2	0.7	0.0	0.0	100	69
Gakenke	84.5	62.9	20.9	0.8	0.0	0.0	0.0	3.9	11.0	0.6	0.0	0.0	100	80
Musanze	95.3	23.3	60.6	9.9	1.5	0.0	0.0	2.4	0.8	0.2	0.0	1.2	100	86
Burera	88.0	41.7	41.8	1.4	0.2	2.7	0.2	4.9	6.3	0.8	0.0	0.0	100	74
Gicumbi	90.6	63.6	25.7	1.0	0.0	0.0	0.2	3.0	6.4	0.0	0.0	0.0	100	86
Rwamagana	93.7	36.7	42.8	12.6	1.1	0.2	0.4	4.2	0.5	0.7	0.0	0.9	100	85
Nyagatare	72.5	4.6	44.6	3.8	17.9	1.3	0.4	16.5	5.1	3.3	0.0	2.5	100	113
Gatsibo	74.3	30.6	29.0	2.6	10.6	1.2	0.4	16.3	5.7	3.8	0.0	0.0	100	105
Kayonza	88.2	18.3	55.5	4.1	9.9	0.2	0.3	9.4	0.4	0.0	0.0	2.0	100	86
Kirehe	87.1	19.6	62.0	1.1	2.9	1.5	0.0	3.0	8.7	0.8	0.0	0.4	100	84
Ngoma	84.4	29.2	48.5	1.6	5.0	0.0	0.0	11.5	3.9	0.2	0.0	0.0	100	81
Bugesera	69.5	9.7	36.3	5.6	16.0	1.7	0.2	20.1	1.6	0.4	0.0	8.4	100	94

Table A.2: Time to improved water source, by district (EICV5, EICV4)

			Time	e to imp	roved	water so	urce (N	Minutes)			
EICV5	Mean time to improved water source (Min.)	Water piped into dwelling /yard	0-4 min	5-14 min	15-29 min	30-59 min	60+ min	No improved Source	Frequency of use not Known	Total	Total Nber of HHs (in 000s)
Rwanda	9.6	9.4	17.7	33.6	13.8	5.7	0.0	12.6	7.1	100	2,708
Nyarugenge	7.5	41.2	22.1	19.1	6.0	5.6	0.0	3.1	2.9	100	81
Gasabo	6.5	26.6	20.2	25.9	10.3	2.0	0.0	4.2	10.7	100	230
Kicukiro	4.9	45.2	15.3	20.4	5.0	1.4	0.0	4.8	7.9	100	98
Nyanza	13.1	5.3	11.9	35.6	19.0	11.8	0.0	13.4	2.8	100	79
Gisagara	10.6	2.8	14.7	40.3	23.3	5.2	0.0	4.5	9.2	100	82
Nyaruguru	7.6	2.0	25.7	30.0	10.9	2.3	0.0	17.4	11.7	100	64
Huye	9.4	4.7	16.4	39.6	18.5	2.3	0.0	10.3	8.2	100	82
Nyamagabe	10.8	4.1	9.8	40.9	24.4	3.6	0.0	15.5	1.7	100	77
Ruhango	10.0	2.6	19.0	41.7	13.7	7.0	0.0	12.1	3.8	100	71
Muhanga	9.7	9.5	15.0	36.0	15.2	4.6	0.0	16.8	2.9	100	78
Kamonyi	12.4	3.9	12.7	40.1	19.7	12.4	0.0	8.1	3.2	100	93
Karongi	8.0	7.9	24.8	40.1	12.4	2.9	0.0	9.8	2.2	100	78
Rutsiro	9.7	0.9	14.5	29.0	12.6	3.6	0.0	34.5	5.0	100	73
Rubavu	7.8	16.3	21.5	44.2	12.5	3.3	0.0	1.4	0.9	100	96
Nyabihu	8.4	0.7	24.2	42.6	12.8	4.2	0.0	14.0	1.5	100	67
Ngororero	11.8	0.6	11.4	39.2	23.4	7.4	0.0	16.0	2.0	100	82
Rusizi	8.4	5.0	24.9	28.6	13.0	2.9	0.0	12.4	13.2	100	95
Nyamasheke	8.2	5.1	25.8	34.1	11.3	4.1	0.0	11.0	8.5	100	83
Rulindo	8.1	2.8	25.4	43.1	11.1	4.3	0.0	7.7	5.6	100	78
Gakenke	10.6	1.3	11.5	33.4	14.9	4.8	0.0	29.0	5.0	100	84
Musanze	8.7	16.2	17.6	39.4	9.3	4.4	0.0	7.5	5.5	100	91
Burera	7.5	2.7	24.6	50.5	11.6	0.4	0.0	6.0	4.2	100	82
Gicumbi	15.6	4.5	9.3	31.4	18.5	17.5	0.0	12.0	6.8	100	88
Rwamagana	12.2	10.7	9.4	26.4	18.2	6.3	0.0	11.7	17.4	100	89
Nyagatare	11.8	4.0	18.0	30.6	15.2	9.6	0.0	19.6	3.2	100	132
Gatsibo	11.7	2.1	7.5	29.1	12.0	5.7	0.0	20.9	22.7	100	108
Kayonza	13.1	2.6	13.9	35.2	18.1	16.1	0.0	11.9	2.2	100	83
Kirehe	8.2	2.0	26.7	28.1	8.6	4.6	0.0	15.7	14.3	100	87
Ngoma	11.6	6.6	14.9	33.8	11.0	9.9	0.0	17.4	6.4	100	83
Bugesera	8.2	5.7	24.2	22.4	10.1	4.0	0.0	22.5	11.1	100	95

			Time	to imp	roved v	ater so	urce (M	linutes)			
EICV4	Mean time to improved water source (Min.)	Water piped into dwelling	0-4 min	5-14 min	15-29 min	30-59 min	60+ min	No improve d Source	Frequen cy of use not Known	Total	Total Nber of HHs (in 000s)
Rwanda	11.2	8.1	17.0	32.9	14.8	6.6	1.3	15.2	4.2	100	2,493
Nyarugenge	7.2	40.6	13.3	25.4	6.6	2.7	1.4	7.5	2.5	100	73
Gasabo	9.5	30.0	13.7	21.1	8.5	5.3	1.5	14.4	5.5	100	147
Kicukiro	5.8	46.5	9.7	11.3	2.8	2.8	0.3	25.3	1.4	100	76
Nyanza	11.4	5.1	12.3	39.7	20.8	5.4	1.5	10.4	4.8	100	77
Gisagara	15.2	0.7	17.5	27.7	26.1	16.6	2.4	7.1	2.0	100	79
Nyaruguru	8.9	0.0	24.5	26.8	9.7	4.1	0.2	26.2	8.5	100	61
Huye	8.6	9.8	25.4	38.9	15.3	2.8	0.0	4.0	3.8	100	79
Nyamagabe	9.5	2.6	18.7	39.1	15.5	3.5	0.2	20.1	0.4	100	73
Ruhango	11.4	3.2	7.1	41.9	20.2	4.4	0.2	20.0	2.9	100	77
Muhanga	9.4	10.8	16.4	41.9	15.1	3.4	0.6	11.0	0.8	100	73
Kamonyi	10.4	1.5	21.6	38.3	11.0	6.3	1.2	17.8	2.4	100	79
Karongi	10.2	5.6	22.0	32.2	14.7	6.6	1.0	17.2	0.8	100	75
Rutsiro	11.6	1.5	13.6	37.5	12.8	6.6	1.2	22.5	4.3	100	73
Rubavu	8.5	10.1	31.2	36.4	12.6	5.8	0.0	1.6	2.2	100	92

			Time	to imp	roved w	vater so	urce (M	linutes)			
EICV4	Mean time to improved water source (Min.)	Water piped into dwelling	0-4 min	5-14 min	15-29 min	30-59 min	60+ min	No improve d Source	Frequen cy of use not Known	Total	Total Nber of HHs (in 000s)
Nyabihu	10.6	0.9	24.8	33.6	14.7	5.0	1.7	13.8	5.6	100	64
Ngororero	10.5	1.9	11.7	45.4	15.4	5.2	0.4	18.8	1.2	100	81
Rusizi	9.9	8.5	17.6	31.0	7.7	2.9	1.9	16.1	14.4	100	89
Nyamasheke	12.2	2.9	10.6	39.5	16.3	7.7	0.9	20.1	1.8	100	86
Rulindo	15.8	2.5	14.3	35.6	22.8	12.4	5.3	5.3	1.7	100	69
Gakenke	12.0	0.8	15.3	39.0	21.0	7.4	0.9	15.5	0.2	100	80
Musanze	7.5	10.0	24.0	43.9	11.8	1.8	0.0	4.7	3.9	100	86
Burera	12.8	1.4	13.1	39.7	25.1	7.6	1.1	12.0	0.0	100	74
Gicumbi	14.8	1.1	10.4	37.5	25.4	10.8	2.1	9.4	3.5	100	86
Rwamagana	13.9	12.6	9.8	25.9	18.8	8.3	0.4	6.3	17.8	100	85
Nyagatare	14.4	3.8	10.1	30.8	14.0	6.9	2.5	27.5	4.5	100	113
Gatsibo	15.7	2.6	6.8	31.3	18.2	10.2	2.4	25.7	2.8	100	105
Kayonza	12.3	4.1	28.2	24.5	8.2	10.1	2.8	11.8	10.4	100	86
Kirehe	10.1	1.1	33.5	28.0	10.4	9.3	1.4	12.9	3.4	100	84
Ngoma	8.8	1.6	32.4	29.1	11.9	3.9	0.2	15.6	5.3	100	81
Bugesera	13.6	5.6	10.1	26.4	14.5	8.9	1.1	30.5	2.9	100	94

Table A.3: User satisfaction with main drinking water source and perceptions of change in quality over last 12 months, by district (EICV5, EICV4)

	Satisfaction Service Quality change , last 12 mont		months		Total Nhow of				
EICV5	Satisfied	Not satisfied	Total	Declining	Same	Improving	Don't know	Total	Total Nber of HHs (000s)
All Rwanda	52.8	47.2	100	8.3	54.9	17.3	19.5	100	2,708
Nyarugenge	49.8	50.2	100	1.7	53.1	8.8	36.4	100.0	81
Gasabo	57.1	42.9	100	3.4	50.6	21.4	24.6	100	230
Kicukiro	49.1	50.9	100	1.2	48.2	14.1	36.5	100	98
Nyanza	44.4	55.6	100	17.8	54.1	19.6	8.5	100	79
Gisagara	59.7	40.3	100	8.2	70.9	8.4	12.5	100	82
Nyaruguru	44.8	55.2	100	11.2	45.2	16.8	26.8	100	64
Huye	39.9	60.1	100	8.3	67.9	9.9	13.9	100	82
Nyamagabe	54.8	45.2	100	11.3	70.1	8.5	10.1	100	77
Ruhango	41.9	58.1	100	21.4	48.3	19.8	10.6	100	71
Muhanga	60.9	39.1	100	7.1	55.7	21.5	15.7	100	78
Kamonyi	71.7	28.3	100	3.8	58.3	31.6	6.2	100	93
Karongi	53.3	46.7	100	11.2	68.3	7.5	12.9	100	78
Rutsiro	41.5	58.5	100	11.7	53.4	13.0	21.9	100	73
Rubavu	77.1	22.9	100	8.7	55.1	27.5	8.7	100	96
Nyabihu	69.8	30.2	100	8.0	62.0	22.1	7.8	100	67
Ngororero	55.0	45.0	100	12.0	68.6	11.9	7.4	100	82
Rusizi	32.2	67.8	100	14.3	51.2	10.2	24.4	100	95
Nyamasheke	55.2	44.8	100	6.9	51.2	26.4	15.4	100	83
Rulindo	64.1	35.9	100	2.8	62.2	22.9	12.1	100	78
Gakenke	47.1	52.9	100	11.2	56.3	12.2	20.2	100	84
Musanze	72.1	27.9	100	0.4	62.1	13.7	23.7	100	91
Burera	57.7	42.3	100	10.5	67.6	10.9	11.0	100	82
Gicumbi	66.2	33.8	100	7.0	58.3	21.4	13.2	100	88
Rwamagana	46.8	53.2	100	4.6	52.8	10.1	32.5	100	89
Nyagatare	52.5	47.5	100	5.4	47.1	25.9	21.7	100	132
Gatsibo	31.4	68.6	100	8.8	34.0	15.8	41.4	100	108
Kayonza	66.7	33.3	100	6.4	63.1	21.5	9.0	100	83
Kirehe	45.8	54.2	100	11.2	43.1	22.2	23.5	100	87
Ngoma	43.7	56.3	100	12.8	45.2	21.4	20.6	100	83
Bugesera	28.9	71.1	100	14.5	45.2	8.8	31.5	100	95

	Satis	faction		Service (	Quality cha	nge , last 12 m	onths		<b>Total Nber</b>
EICV4	Satisfied	Not satisfied	Total	Declining	Same	Improving	Don't	Total	of HHs
							know		(000s)
All Rwanda	55.3	44.8	100	9.3	53.7	18.9	18.1	100	2,493
Nyarugenge	52.1	48.0	100	3.9	71.1	2.8	22.3	100	73
Gasabo	42.1	58.0	100	7.7	49.3	13.5	29.6	100	147
Kicukiro	40.3	59.7	100	5.0	34.2	12.0	48.8	100	76
Nyanza	62.5	37.5	100	14.9	59.1	18.9	7.2	100	77
Gisagara	66.8	33.3	100	12.7	48.9	31.9	6.5	100	79
Nyaruguru	45.0	55.0	100	7.3	40.1	21.7	31.0	100	61
Huye	67.2	32.8	100	4.9	61.8	19.8	13.6	100	79
Nyamagabe	55.5	44.5	100	11.6	48.7	22.8	16.9	100	73
Ruhango	36.3	63.7	100	5.0	61.3	11.0	22.8	100	77
Muhanga	66.5	33.5	100	9.5	71.3	3.7	15.4	100	73
Kamonyi	57.8	42.2	100	12.2	64.1	15.1	8.6	100	79
Karongi	62.6	37.4	100	9.7	52.3	25.8	12.3	100	75
Rutsiro	49.3	50.7	100	11.9	59.2	8.0	21.0	100	73
Rubavu	77.5	22.5	100	4.5	47.4	37.2	10.9	100	92
Nyabihu	50.0	50.0	100	17.0	50.0	19.0	14.1	100	64
Ngororero	65.0	35.0	100	14.2	48.6	24.4	12.8	100	81
Rusizi	44.1	55.9	100	12.0	31.1	24.2	32.8	100	89
Nyamasheke	47.0	53.0	100	9.2	61.9	10.2	18.7	100	86
Rulindo	74.2	25.8	100	10.5	77.2	7.6	4.7	100	69
Gakenke	65.4	34.6	100	6.6	50.8	29.6	13.0	100	80
Musanze	61.1	38.9	100	8.4	60.3	19.4	11.9	100	86
Burera	66.1	34.0	100	4.4	42.5	51.0	2.1	100	74
Gicumbi	62.8	37.2	100	6.6	70.7	15.4	7.4	100	86
Rwamagana	51.6	48.4	100	4.6	46.2	15.0	34.2	100	85
Nyagatare	50.0	50.0	100	6.6	33.5	33.7	26.2	100	113
Gatsibo	39.9	60.1	100	11.4	67.7	4.3	16.6	100	105
Kayonza	49.9	50.1	100	14.1	48.4	14.4	23.1	100	86
Kirehe	67.9	32.1	100	4.7	53.2	31.3	10.8	100	84
Ngoma	65.1	34.9	100	7.1	66.2	9.4	17.2	100	81
Bugesera	34.6	65.5	100	21.0	47.4	13.6	18.1	100	94
Source: FICVA							•		

Table A.4: Reasons for not using drinking water declared as nearest source, by district (EICV5, EICV4)

	% not using	Reasons for	r not usinį	g drinking v	vater declar	ed as neares	t source		Total no. of
EICV5	drinking water declared as nearest source	Too expensiv e	Not safe	Difficult terrain	Too far	Does not function	Other	Total	HHs not using the nearest drinking water source in (000s)
All Rwanda	14.2	21.5	3.5	3.2	21.0	45.4	5.5	100	385
Nyarugenge	3.5	10.2	0.0	10.1	8.0	71.6	0.0	100	3
Gasabo	6.3	29.6	11.6	2.0	32.8	24.1	0.0	100	14
Kicukiro	8.8	9.7	2.0	0.0	21.7	62.8	3.8	100	9
Nyanza	9.9	17.9	2.1	0.0	36.1	35.6	8.2	100	8
Gisagara	11.1	52.2	0.0	0.0	12.7	33.3	1.8	100	9
Nyaruguru	27.0	30.7	2.4	0.4	29.7	29.8	6.9	100	17
Huye	11.6	38.2	24.4	3.9	1.7	28.0	3.7	100	9
Nyamagabe	7.8	34.0	10.4	7.7	26.5	21.4	0.0	100	6
Ruhango	14.8	16.0	3.0	4.8	20.0	53.4	2.7	100	10
Muhanga	6.6	6.8	3.2	6.2	35.0	41.1	7.6	100	5
Kamonyi	4.9	73.4	0.0	3.9	10.4	8.1	4.3	100	5
Karongi	11.3	19.6	8.1	15.3	25.7	26.8	4.6	100	9
Rutsiro	20.1	10.1	17.8	3.3	45.6	22.2	1.0	100	15
Rubavu	2.2	11.6	0.0	0.0	36.9	30.0	21.5	100	2
Nyabihu	11.9	35.9	0.0	0.0	44.0	14.5	5.6	100	8
Ngororero	4.1	6.6	0.0	16.0	66.7	10.8	0.0	100	3
Rusizi	20.6	25.6	1.9	3.5	5.8	52.5	10.7	100	20
Nyamasheke	15.0	19.9	2.9	9.0	29.5	38.6	0.0	100	12
Rulindo	13.0	32.4	0.0	8.2	12.7	34.0	12.7	100	10

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	% not using	Reasons for	r not usinį	g drinking v	vater declar	ed as neares	t source		Total no. of
EICV5	drinking water declared as nearest source	Too expensiv e	Not safe	Difficult terrain	Too far	Does not function	Other	Total	HHs not using the nearest drinking water source in (000s)
Gakenke	19.7	11.3	8.4	6.6	33.3	29.3	11.1	100	17
Musanze	8.6	36.2	0.0	2.4	7.2	30.1	24.1	100	8
Burera	11.0	17.1	0.0	17.3	13.8	41.7	10.2	100	9
Gicumbi	14.3	11.4	1.3	0.0	40.2	44.2	2.9	100	13
Rwamagana	28.1	26.1	0.7	0.8	15.0	55.4	2.1	100	25
Nyagatare	18.1	18.9	2.2	1.2	36.9	36.5	4.2	100	24
Gatsibo	41.4	8.9	0.6	0.0	5.8	82.8	2.0	100	45
Kayonza	9.8	4.4	2.4	2.2	34.3	35.0	21.7	100	8
Kirehe	23.7	15.9	0.9	1.7	11.7	69.8	0.0	100	21
Ngoma	21.1	35.0	2.0	2.2	22.7	22.5	15.7	100	18
Bugesera	25.3	20.5	0.9	2.6	2.1	70.6	3.2	100	24

	% not	Reasons for not using drinking water declared as nearest source							Total no. of
EICV4	using drinking water declared as nearest source	Too expensive	Not safe	Difficult terrain	Too far	Does not function	Other	Total	HHs not using the nearest drinking water source in (000s)
All Rwanda	16.6	16.4	2.8	3.2	37.0	37.6	3.0	100	415
Nyarugenge	13.8	0.0	4.6	1.8	2.8	87.3	3.6	100	10
Gasabo	10.2	12.0	12.2	7.0	67.2	1.7	0.0	100	15
Kicukiro	2.1	52.1	0.0	0.0	21.2	14.6	12.1	100	2
Nyanza	10.7	29.8	7.8	0.0	41.6	16.9	3.9	100	8
Gisagara	8.7	45.6	0.0	0.0	52.3	2.1	0.0	100	7
Nyaruguru	29.5	15.9	0.6	0.0	71.6	11.1	0.7	100	18
Huye	6.8	48.7	3.3	3.0	36.0	5.7	3.3	100	5
Nyamagabe	18.7	10.2	3.3	12.3	73.1	0.0	1.1	100	14
Ruhango	22.1	15.1	3.9	2.9	61.3	15.1	1.8	100	17
Muhanga	11.1	4.0	0.0	14.7	56.1	25.3	0.0	100	8
Kamonyi	14.1	13.5	2.8	3.0	38.4	23.4	18.9	100	11
Karongi	14.2	10.4	5.6	2.7	75.1	4.7	1.5	100	11
Rutsiro	21.2	5.9	2.0	4.8	62.3	22.0	3.0	100	15
Rubavu	0.4	0.0	0.0	0.0	100.0	0.0	0.0	100	0
Nyabihu	16.2	20.8	5.6	10.6	21.9	26.9	14.3	100	10
Ngororero	20.1	0.0	2.9	11.5	66.9	18.8	0.0	100	16
Rusizi	29.1	12.1	5.2	0.7	33.1	48.9	0.0	100	26
Nyamasheke	20.8	10.9	5.5	3.7	52.9	26.2	1.0	100	18
Rulindo	5.8	52.1	3.6	15.8	21.2	7.2	0.0	100	4
Gakenke	12.8	0.0	3.3	3.3	88.5	4.9	0.0	100	10
Musanze	13.9	40.8	0.0	0.0	4.6	44.0	10.6	100	12
Burera	3.1	19.7	11.3	0.0	62.5	6.5	0.0	100	2
Gicumbi	12.3	36.6	0.0	1.7	29.7	31.9	0.0	100	11
Rwamagana	25.7	17.4	0.0	0.0	23.2	49.4	10.0	100	22
Nyagatare	23.6	9.2	0.0	0.0	10.5	78.7	1.6	100	27
Gatsibo	25.0	10.2	4.7	0.8	12.6	71.7	0.0	100	26
Kayonza	24.8	9.3	0.0	7.3	28.0	49.5	6.0	100	21
Kirehe	13.2	36.6	1.0	0.0	37.2	23.6	1.6	100	11
Ngoma	26.7	45.7	0.8	1.6	16.4	34.0	1.7	100	22
Bugesera	37.6	8.6	1.7	0.5	7.6	79.4	2.1	100	35

Table A.5: Sanitation type used/access to improved sanitation, by district (EICV5, EICV4)

	use Je	ved red Hs		proved nitation	Unim	proved s	sanitation		
EICV5	% improved type	% use improved type ,not shared with other HHs	Flush toilet	Pit latrine with solid slab	Pit latrine without slab	Other	No toilet whatsoever	Total	Total Nber of HHs (000s)
Rwanda	86.2	66.2	1.9	84.3	9.8	0.2	3.8	100	2,708
Nyarugenge	99.3	35.9	6.9	92.5	0.1	0.0	0.5	100	81
Gasabo	92.8	42.5	5.9	86.9	4.6	0.0	2.6	100	230
Kicukiro	94.5	44.7	19.3	75.2	4.2	0.0	1.3	100	98
Nyanza	53.3	41.0	0.2	53.2	39.6	0.0	7.1	100	79
Gisagara	59.8	49.0	1.1	58.7	28.5	0.0	11.7	100	82
Nyaruguru	82.8	67.8	0.4	82.4	13.5	0.0	3.8	100	64
Huye	78.7	62.0	0.5	78.3	14.8	0.0	6.4	100	82
Nyamagabe	80.6	65.8	0.6	80.0	12.1	0.0	7.4	100	77
Ruhango	53.4	45.2	0.4	52.9	44.1	0.0	2.5	100	71
Muhanga	93.9	80.4	1.1	92.8	5.2	0.0	0.8	100	78
Kamonyi	91.5	76.8	0.6	91.0	5.2	0.2	3.0	100	93
Karongi	84.6	73.5	0.2	84.5	10.5	0.0	4.9	100	78
Rutsiro	91.1	79.0	0.0	91.1	5.1	0.2	3.6	100	73
Rubavu	94.1	54.0	2.7	91.3	2.0	0.0	3.9	100	96
Nyabihu	80.1	63.6	0.0	80.1	10.9	0.2	8.8	100	67
Ngororero	77.6	63.9	0.0	77.6	13.8	4.6	3.9	100	82
Rusizi	90.4	73.3	1.4	89.0	7.9	0.0	1.7	100	95
Nyamasheke	96.0	89.0	0.3	95.8	0.6	0.0	3.3	100	83
Rulindo	84.6	74.1	0.1	84.5	14.7	0.0	0.7	100	78
Gakenke	94.7	88.3	0.1	94.6	3.2	0.0	2.1	100	84
Musanze	83.2	70.4	2.9	80.3	11.1	0.3	5.4	100	91
Burera	81.4	70.5	0.0	81.4	11.8	0.0	6.8	100	82
Gicumbi	88.2	80.9	0.2	88.0	9.4	0.6	1.8	100	88
Rwamagana	92.3	77.2	0.7	91.6	3.3	0.0	4.4	100	89
Nyagatare	94.7	77.2	0.2	94.5	3.3	0.0	2.0	100	132
Gatsibo	82.2	71.1	0.2	82.0	14.4	0.0	3.4	100	108
Kayonza	83.9	66.9	0.0	83.9	10.8	0.0	5.3	100	83
Kirehe	95.3	80.2	0.0	95.3	2.8	0.0	2.0	100	87
Ngoma	94.3	81.1	0.4	93.9	3.0	0.0	2.7	100	83
Bugesera	87.0	72.7	0.3	86.7	7.7	0.0	5.3	100	95

peac		roved proved shared HHs	_	oroved itation	Uni	mproved s				
EICV4	% use improved type	% use improved type ,not shared with other HHs	Flush toilet	Pit latrine with solid slab	Pit latrine without slab	Other	No toilet whatsoever	Total	Total Nber of HHs (000s)	
Rwanda	83.4	63.5	1.8	81.6	13.5	0.0	3.2	100	2,493	
Nyarugenge	89.9	32.2	7.2	82.7	8.9	0.0	1.2	100	73	
Gasabo	94.0	48.2	6.3	87.7	4.7	0.0	1.3	100	147	
Kicukiro	94.9	40.1	14.0	80.9	4.9	0.0	0.2	100	76	
Nyanza	80.9	65.2	1.2	79.8	16.9	0.0	2.2	100	77	
Gisagara	61.8	49.1	0.3	61.5	27.6	0.0	10.6	100	79	
Nyaruguru	70.7	59.3	0.3	70.4	23.9	0.0	5.4	100	61	
Huye	71.7	53.0	3.5	68.3	28.1	0.0	0.2	100	79	

	ed	ved red	_	oroved itation	Uni	mproved s	anitation		
EICV4	% use improved type	% use improved type ,not shared with other HHs	Flush toilet	Pit latrine with solid slab	Pit latrine without slab	Other	No toilet whatsoever	Total	Total Nber of HHs (000s)
Nyamagabe	83.7	68.5	0.4	83.3	9.4	0.0	6.9	100	73
Ruhango	31.5	26.2	0.2	31.3	63.8	0.0	4.7	100	77
Muhanga	79.7	64.2	2.2	77.5	18.8	0.0	1.5	100	73
Kamonyi	76.9	63.6	0.8	76.1	18.1	0.0	5.0	100	79
Karongi	77.4	64.9	0.8	76.6	17.8	0.0	4.8	100	75
Rutsiro	83.4	72.8	8.0	82.6	8.1	0.0	8.5	100	73
Rubavu	91.9	56.2	2.6	89.3	3.4	0.0	4.7	100	92
Nyabihu	72.2	54.0	0.0	72.2	16.3	0.9	10.6	100	64
Ngororero	84.7	71.6	0.6	84.1	14.1	0.0	1.2	100	81
Rusizi	90.5	73.0	1.9	88.5	6.6	0.0	3.0	100	89
Nyamasheke	92.5	82.0	0.2	92.3	4.0	0.0	3.5	100	86
Rulindo	81.3	73.4	0.2	81.1	16.0	0.0	2.7	100	69
Gakenke	92.1	84.1	0.2	91.9	7.9	0.0	0.0	100	80
Musanze	84.2	64.0	2.2	82.0	14.1	0.0	1.8	100	86
Burera	81.2	69.5	0.7	80.5	12.8	0.0	6.1	100	74
Gicumbi	89.7	82.4	0.4	89.3	5.5	0.0	4.8	100	86
Rwamagana	97.8	77.3	0.6	97.2	2.2	0.0	0.0	100	85
Nyagatare	95.1	76.2	0.7	94.4	1.7	0.0	3.2	100	113
Gatsibo	86.3	71.8	0.4	85.9	13.2	0.0	0.5	100	105
Kayonza	91.7	66.6	0.3	91.4	7.6	0.0	0.6	100	86
Kirehe	90.4	73.4	0.6	89.8	8.8	0.0	0.8	100	84
Ngoma	77.1	62.0	0.2	76.8	21.9	0.0	1.0	100	81
Bugesera	78.9	56.8	1.0	77.8	18.3	0.0	2.8	100	94

Table A.6: Primary fuel used for lighting, by district (EICV5, EICV4)

				Ŋ	Main sour	ce of ligh	iting					
EICV5	Electricity distributor	Oil Lamp	Fire-wood	Candle	Lantern	Batteries /Bulb	Recharge-able batteries	Torch/ Phone	Solar panel	Other	Total	Total Nber of HHs (000s)
Rwanda	27.1	1.4	3.7	6.1	3.5	6.5	0.2	43.4	7.3	0.6	100	2,708
Nyarugenge	81.3	0.5	0.0	7.7	1.1	1.3	0.0	6.3	1.3	0.5	100	81
Gasabo	74.7	1.0	0.7	11.8	1.9	1.3	0.0	7.5	1.0	0.1	100	230
Kicukiro	84.4	0.5	0.0	9.9	1.1	0.0	0.0	3.9	0.3	0.0	100	98
Nyanza	14.3	0.3	1.6	2.1	4.9	4.2	0.2	58.1	14.3	0.0	100	79
Gisagara	10.3	0.2	11.7	3.3	2.0	10.6	0.0	54.0	7.0	1.0	100	82
Nyaruguru	9.4	0.2	12.9	5.3	1.2	7.3	0.1	56.0	7.2	0.5	100	64
Huye	14.0	1.6	6.2	7.2	4.7	5.1	0.2	48.9	11.6	0.5	100	82
Nyamagabe	8.8	1.0	9.7	4.6	0.2	9.6	0.2	56.0	9.5	0.4	100	77
Ruhango	19.8	2.2	2.2	2.5	4.6	42.1	0.2	22.7	3.4	0.4	100	71
Muhanga	19.6	2.0	2.5	3.7	3.5	4.1	0.0	57.2	7.1	0.2	100	78
Kamonyi	18.2	3.5	0.6	8.3	5.1	21.7	1.0	35.0	6.0	0.7	100	93
Karongi	13.9	0.7	4.8	2.2	0.6	1.5	0.0	54.9	21	0.4	100	78
Rutsiro	11.3	1.9	7.9	5.2	0.2	0.5	0.7	57.4	13.9	1.0	100	73
Rubavu	40.8	2.0	7.2	14.4	2.9	7.2	0.0	24.4	0.4	0.7	100	96
Nyabihu	17.0	0.6	7.3	8.5	2.5	3.7	0.0	56.4	2.0	1.8	100	67
Ngororero	7.0	1.2	12.6	2.0	1.7	3.3	0.2	63.6	7.6	0.8	100	82
Rusizi	32.2	3.0	3.5	4.8	1.4	11.3	0.0	32.0	11.2	0.6	100	95
Nyamasheke	22.1	4.0	5.6	4.5	2.1	2.4	0.2	43.2	15.3	0.5	100	83
Rulindo	15.1	8.0	2.3	7.2	0.4	4.5	0.2	56.2	9.6	3.7	100	78
Gakenke	11.9	0.5	3.2	1.3	1.6	5.6	0.9	68.4	5.4	1.2	100	84

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				N	Main sour	ce of ligh	nting					
EICV5	Electricity distributor	Oil Lamp	Fire-wood	Candle	Lantern	Batteries /Bulb	Recharge-able batteries	Torch/ Phone	Solar panel	Other	Total	Total Nber of HHs (000s)
Musanze	32.3	0.6	8.1	12.8	1.3	3.5	0.2	39.2	1.6	0.4	100	91
Burera	18.0	1.0	3.7	2.6	2.7	5.5	0.2	60.6	5.6	0.0	100	82
Gicumbi	11.9	0.6	2.2	10.3	1.0	5.0	0.4	65.2	2.3	1.0	100	88
Rwamagana	28.1	3.3	0.4	7.8	4.1	5.0	0.2	40.9	9.1	1.1	100	89
Nyagatare	15.3	0.4	0.2	4.5	1.1	8.2	0.0	58.8	11.0	0.4	100	132
Gatsibo	13.7	1.4	0.8	4.3	1.1	4.4	0.2	57.1	16.6	0.4	100	108
Kayonza	18.9	4.3	1.1	4.7	11.6	17.7	1.2	29.0	10.6	0.9	100	83
Kirehe	15.6	1.4	0.7	1.4	17.3	3.8	0.3	53.2	6.4	0.0	100	87
Ngoma	18.1	2.7	2.1	2.2	27.0	3.8	0.2	34.9	7.5	1.5	100	83
Bugesera	18.8	0.2	1.4	5.1	0.0	3.4	0.2	66.4	4.4	0.0	100	95

			Maiı	1 source	of lighting					
EICV4	Electricity distributor	Oil Lamp	Firewood	Candle	Lantern	Batteries	Solar panel	Other	Total	Total Nber of HHs (000s)
Rwanda	19.8	5.0	5.5	7.4	13.2	44.2	1.7	3.2	100	2,493
Nyarugenge	75.7	3.0	0.0	11.5	3.8	2.7	0.3	3.1	100	73
Gasabo	68.3	2.0	0.5	11.2	1.6	15.9	0.2	0.4	100	147
Kicukiro	80.6	1.8	0.0	9.7	2.0	3.8	0.0	2.1	100	76
Nyanza	10.9	13.1	2.2	1.7	10.8	58.1	2.5	0.8	100	77
Gisagara	0.9	3.5	13.2	3.4	11.1	66.5	1.4	0.0	100	79
Nyaruguru	2.9	1.8	25.8	5.1	4.5	55.3	2.5	2.0	100	61
Huye	17.2	1.7	5.5	10.0	22.3	39.6	3.1	0.6	100	79
Nyamagabe	5.9	2.5	16.0	5.8	3.0	61.7	4.4	0.6	100	73
Ruhango	8.9	6.2	2.7	1.2	26.2	53.2	0.4	1.1	100	77
Muhanga	17.5	3.6	3.2	2.3	23.1	49.3	0.8	0.4	100	73
Kamonyi	8.9	10.1	0.5	4.4	26.1	39.1	2.1	8.9	100	79
Karongi	9.3	3.9	9.4	4.8	4.2	58.7	7.3	2.4	100	75
Rutsiro	7.3	4.3	13.9	5.1	2.2	62.6	3.8	0.8	100	73
Rubavu	27.7	4.0	5.5	17.0	12.3	31.6	0.0	1.9	100	92
Nyabihu	10.4	6.2	13.0	9.7	9.6	44.5	0.4	6.1	100	64
Ngororero	5.2	3.5	14.9	4.9	10.7	59.2	0.2	1.2	100	81
Rusizi	28.6	16.9	5.2	3.9	6.1	34.8	2.8	1.7	100	89
Nyamasheke	9.4	10.1	13.9	5.3	8.4	40.8	6.4	5.8	100	86
Rulindo	9.0	2.9	2.2	18.0	3.4	23.7	2.0	38.7	100	69
Gakenke	4.6	1.8	4.2	3.4	7.7	73.9	1.8	2.5	100	80
Musanze	23.6	3.9	7.7	12.5	6.7	41.7	0.2	3.7	100	86
Burera	10.0	5.3	10.4	5.5	7.5	59.4	0.6	1.3	100	74
Gicumbi	4.0	3.5	4.2	9.5	3.6	71.5	2.6	1.1	100	86
Rwamagana	26.7	7.6	0.4	6.5	21.7	31.1	1.7	4.3	100	85
Nyagatare	19.9	5.8	0.5	7.7	5.0	59.3	0.9	1.0	100	113
Gatsibo	13.4	6.3	2.5	9.2	6.5	59.5	0.5	2.2	100	105
Kayonza	17.1	4.0	0.2	5.7	36.5	31.7	1.6	3.3	100	86
Kirehe	8.4	4.3	0.2	5.5	44.4	36.2	0.6	0.4	100	84
Ngoma	6.8	3.2	1.5	2.4	61.2	22.1	0.6	2.1	100	81
Bugesera	13.7	3.4	1.7	12.8	9.4	53.4	1.1	4.4	100	94

Table A.7: Primary fuel used for cooking, by district (EICV5, EICV4)

		Mai	n type of cook	ing fuel			
EICV5	Firewood	Charcoal	Crop waste	Gas or biogas	Other	Total	Total Nber of HHs (000s)
Rwanda	79.9	17.4	0.6	1.1	0.9	100	2,708
Nyarugenge	20.6	67.8	0.0	8.0	3.7	100	81
Gasabo	26.2	66.8	0.0	3.8	3.3	100	230
Kicukiro	15.2	71.3	0.0	10.3	3.2	100	98
Nyanza	93.5	5.5	0.0	0.0	1.0	100	79
Gisagara	95.9	3.2	0.0	0.5	0.5	100	82
Nyaruguru	95.6	3.6	0.0	0.2	0.6	100	64
Huye	88.2	11.4	0.0	0.4	0.0	100	82
Nyamagabe	96.1	3.2	0.0	0.0	0.7	100	77
Ruhango	94.8	3.1	0.8	0.0	1.3	100	71
Muhanga	89.1	10.2	0.2	0.5	0.0	100	78
Kamonyi	88.8	10.4	0.7	0.2	0.0	100	93
Karongi	92.0	7.4	0.0	0.0	0.6	100	78
Rutsiro	97.1	2.8	0.0	0.0	0.1	100	73
Rubavu	58.9	40.1	0.0	0.3	0.7	100	96
Nyabihu	88.1	11.9	0.0	0.0	0.0	100	67
Ngororero	96.7	3.0	0.0	0.0	0.3	100	82
Rusizi	86.2	12.4	0.0	0.5	0.9	100	95
Nyamasheke	98.0	1.8	0.0	0.0	0.2	100	83
Rulindo	93.5	5.6	0.0	0.2	0.6	100	78
Gakenke	97.2	2.3	0.0	0.0	0.5	100	84
Musanze	80.7	18.7	0.0	0.4	0.2	100	91
Burera	91.6	5.9	1.8	0.6	0.0	100	82
Gicumbi	96.2	3.2	0.2	0.0	0.3	100	88
Rwamagana	76.8	17.7	4.0	0.6	0.9	100	89
Nyagatare	90.1	5.5	2.3	0.4	1.6	100	132
Gatsibo	92.3	4.5	3.0	0.2	0.0	100	108
Kayonza	91.7	7.9	0.0	0.1	0.4	100	83
Kirehe	95.4	3.9	0.2	0.0	0.5	100	87
Ngoma	85.9	7.6	4.9	0.6	1.0	100	83
Bugesera	91.4	7.5	0.0	0.3	0.8	100	95

		Main t	ype of cooking	fuel			Total Nhan of
EICV4	Firewood	Charcoal	Crop waste	Gas or biogas	Other	Total	Total Nber of HHs (000s)
Rwanda	83.3	15.2	0.8	0.2	0.6	100	2,493
Nyarugenge	18.3	76.8	0.0	0.4	4.5	100	73
Gasabo	33.4	64.1	0.5	0.7	1.3	100	147
Kicukiro	17.2	77.9	0.0	2.3	2.6	100	76
Nyanza	93.2	6.6	0.0	0.0	0.2	100	77
Gisagara	99.2	0.5	0.2	0.0	0.0	100	79
Nyaruguru	98.5	0.8	0.0	0.2	0.4	100	61
Huye	85.8	14.0	0.0	0.0	0.2	100	79
Nyamagabe	93.8	3.2	2.6	0.0	0.4	100	73
Ruhango	89.9	3.3	6.3	0.2	0.2	100	77
Muhanga	87.5	11.5	0.2	0.0	0.8	100	73
Kamonyi	94.2	5.4	0.2	0.0	0.2	100	79
Karongi	91.2	7.6	0.2	0.2	0.9	100	75
Rutsiro	97.1	2.2	0.0	0.2	0.4	100	73
Rubavu	65.3	34.5	0.0	0.0	0.2	100	92
Nyabihu	88.5	10.9	0.2	0.0	0.4	100	64
Ngororero	97.2	2.6	0.0	0.0	0.2	100	81
Rusizi	84.3	14.9	0.0	0.0	0.8	100	89
Nyamasheke	98.8	0.8	0.4	0.0	0.0	100	86

		Main t		Total Nber of			
EICV4	Firewood	Charcoal	Crop waste	Gas or biogas	Other	Total	HHs (000s)
Rulindo	94.6	4.7	0.0	0.2	0.6	100	69
Gakenke	99.2	0.8	0.0	0.0	0.0	100	80
Musanze	86.0	14.0	0.0	0.0	0.0	100	86
Burera	95.6	4.0	0.0	0.2	0.2	100	74
Gicumbi	97.3	1.5	0.6	0.0	0.6	100	86
Rwamagana	85.0	14.3	0.0	0.0	0.8	100	85
Nyagatare	83.5	7.3	8.7	0.0	0.5	100	113
Gatsibo	93.2	6.0	0.0	0.2	0.6	100	105
Kayonza	84.5	14.8	0.0	0.0	0.8	100	86
Kirehe	95.8	4.2	0.0	0.0	0.0	100	84
Ngoma	96.4	3.2	0.0	0.0	0.4	100	81
Bugesera	92.3	7.6	0.0	0.0	0.2	100	94

Table A.8: Proportion of households by type of cooking stove, by district (EICV5)

			Type of cookin	g stove				
EICV5	Three stone	Self-Built Stove	Manufactu red Stove	Charcoal/ fire stove	Efficient cookstove	Other	Total	Total Nber of HHs (000s)
All Rwanda	53.2	14.8	1.3	16.2	13.5	1.0	100	2708
Nyarugenge	16.2	2.0	8.7	65.9	4.5	2.8	100	81
Gasabo	24.0	1.3	3.9	61.6	6.1	3.2	100	230
Kicukiro	14.4	2.4	10.6	58.7	11.1	2.8	100	98
Nyanza	65.7	7.0	0.0	12.0	14.1	1.2	100	79
Gisagara	57.7	27.9	0.5	7.9	5.9	0.1	100	82
Nyaruguru	69.2	12.1	0.2	2.7	15.1	0.7	100	64
Huye	62.7	19.8	0.4	10.8	6.3	0.0	100	82
Nyamagabe	75.7	11.6	0.2	2.4	9.6	0.4	100	77
Ruhango	63.0	12.6	0.0	4.5	18.6	1.3	100	71
Muhanga	60.0	11.4	0.5	7.7	20.4	0.0	100	78
Kamonyi	61.7	1.6	0.0	12.8	23.8	0.0	100	93
Karongi	54.6	24.3	0.2	4.4	16.2	0.4	100	78
Rutsiro	67.5	15.0	0.0	2.4	15.1	0.0	100	73
Rubavu	48.7	1.8	0.8	33.1	15.1	0.5	100	96
Nyabihu	69.7	5.4	0.0	11.5	12.6	0.8	100	67
Ngororero	68.5	5.2	0.2	2.3	23.5	0.3	100	82
Rusizi	50.9	23.8	0.7	5.8	18.2	0.7	100	95
Nyamasheke	67.9	10.7	1.1	1.5	18.5	0.2	100	83
Rulindo	63.6	11.8	0.2	7.5	15.3	1.5	100	78
Gakenke	63.0	25.1	0.0	2.1	8.6	1.2	100	84
Musanze	76.7	1.7	0.4	17.5	3.6	0.0	100	91
Burera	80.4	4.6	0.6	4.2	10.1	0.0	100	82
Gicumbi	69.5	19.6	0.4	2.2	8.3	0.0	100	88
Rwamagana	46.6	11.3	0.6	16.8	23.7	1.0	100	89
Nyagatare	41.5	43.0	0.7	6.3	6.3	2.2	100	132
Gatsibo	54.7	23.4	0.2	4.0	17.6	0.0	100	108
Kayonza	37.9	42.2	0.5	8.0	11.1	0.4	100	83
Kirehe	41.4	39.7	0.0	4.1	14.3	0.5	100	87
Ngoma	49.9	23.2	1.0	9.0	15.5	1.5	100	83
Bugesera	48.8	9.2	0.3	11.0	29.9	0.8	100	95

Table A.9: Proportion of households by cooking stove installation area, by district (EICV5)

		Cooking st	tove instal	llation a	rea			
EICV5	In dwelling, not in sleeping area	In dwelling, in a sleeping area	In a separate Dwelling	In a veranda	Outdoors	Other	Total	Total Nber of HHs (000s)
All Rwanda	19.5	5.0	53.4	1.3	20.1	0.7	100	2708
Nyarugenge	10.0	1.3	31.8	4.3	50.0	2.6	100	81
Gasabo	11.9	2.3	33.6	4.0	45.8	2.5	100	230
Kicukiro	12.3	3.1	39.7	3.6	38.5	2.8	100	98
Nyanza	25.2	8.4	56	0.2	9.2	1.0	100	79
Gisagara	52.7	13.0	28.7	0.0	5.6	0.0	100	82
Nyaruguru	51.6	11.7	33.9	0.2	2	0.6	100	64
Huye	41.0	9.0	40.8	0.2	8.9	0.0	100	82
Nyamagabe	34.0	10.1	53.8	0.4	1.2	0.4	100	77
Ruhango	21.6	6.2	68.7	0.4	2.0	1.1	100	71
Muhanga	18.9	8.0	69.1	1.2	2.8	0.0	100	78
Kamonyi	14.4	9.3	61.1	0.2	15	0.0	100	93
Karongi	30.3	7.7	53.4	0.7	7.5	0.4	100	78
Rutsiro	44.2	8.0	46.5	0.0	1.3	0.0	100	73
Rubavu	53.6	11.5	24.8	0.3	9.1	0.7	100	96
Nyabihu	48.4	8.8	40.7	0.2	1.9	0.0	100	67
Ngororero	29.0	14.9	53.7	0.0	2.0	0.3	100	82
Rusizi	11.7	3.5	67.0	8.0	16.4	0.7	100	95
Nyamasheke	14.6	3.0	75.9	0.6	5.6	0.2	100	83
Rulindo	11.8	2.3	70.2	1.8	13.2	0.6	100	78
Gakenke	21.8	2.9	71.1	0.4	3.3	0.5	100	84
Musanze	25.1	4.0	53.1	1.5	16.3	0.0	100	91
Burera	16.6	1.7	59.2	1.2	21.4	0.0	100	82
Gicumbi	7.6	2.0	67.1	1.4	21.9	0.0	100	88
Rwamagana	4.6	0.6	58.1	4.8	30.8	1.1	100	89
Nyagatare	4.4	2.0	54.2	0.2	38.0	1.2	100	132
Gatsibo	3.6	0.8	63.1	0.0	32.6	0.0	100	108
Kayonza	2.7	0.7	56.7	1.3	38.3	0.4	100	83
Kirehe	2.0	0.4	71.6	1.1	24.4	0.5	100	87
Ngoma	2.9	1.0	64.3	1.5	30.1	0.2	100	83
Bugesera	5.0	2.8	62.2	0.8	28.8	0.4	100	95

Table A.10: Types of habitat, by district (EICV5, EICV4)

			Туре	of habitat				
EICV5	Umudugudu	Unplanned clustered rural housing	Isolated rural housing	Unplanne d urban housing	Small settlement	Modern planned area	Total	Total Nber of HHs (000s)
Rwanda	58.9	6.5	16.8	14.2	0.7	2.8	100	2,708
Nyarugenge	6.6	0.0	0.4	91.9	0.2	0.8	100	81
Gasabo	2.8	0.3	1.2	71.2	0.2	24.3	100	230
Kicukiro	4.8	0.0	0.2	79.7	0.4	14.9	100	98
Nyanza	21.7	8.0	67.3	2.8	0.0	0.3	100	79
Gisagara	87.2	4.2	7.6	0.0	0.0	1.0	100	82
Nyaruguru	75.9	7.5	14.7	8.0	1.2	0.0	100	64
Huye	64.4	12.4	14.0	9.2	0.0	0.0	100	82
Nyamagabe	71.1	3.6	21.8	3.1	0.2	0.2	100	77
Ruhango	40.0	19.8	38.7	0.0	1.5	0.0	100	71
Muhanga	57.3	4.9	16.1	20.6	0.5	0.6	100	78
Kamonyi	40.0	8.7	47.4	1.2	2.4	0.4	100	93
Karongi	74.6	2.9	18.7	3.6	0.2	0.0	100	78
Rutsiro	78.8	3.8	16.3	0.1	1.0	0.0	100	73
Rubavu	80.5	8.1	3.9	4.7	2.8	0.0	100	96
Nyabihu	18.2	17.5	48.5	2.8	13.0	0.0	100	67
Ngororero	41.7	10.3	47.6	0.1	0.3	0.0	100	82
Rusizi	46.4	35.1	9.1	8.9	0.6	0.0	100	95
Nyamasheke	70.3	9.8	19.8	0.0	0.1	0.0	100	83
Rulindo	57.6	3.7	38.6	0.0	0.1	0.0	100	78
Gakenke	85.4	0.4	14.0	0.0	0.2	0.0	100	84
Musanze	72.4	1.2	18.1	6.4	0.0	1.8	100	91
Burera	71.3	3.1	25.5	0.0	0.0	0.1	100	82
Gicumbi	56.8	26.4	14.7	0.7	0.0	1.4	100	88
Rwamagana	83.9	3.5	10.5	1.9	0.2	0.0	100	89
Nyagatare	81.8	2.4	11.3	4.5	0.0	0.0	100	132
Gatsibo	86.3	1.9	11.8	0.0	0.0	0.0	100	108
Kayonza	93.7	1.8	3.5	0.9	0.0	0.0	100	83
Kirehe	97.7	0.0	1.5	0.9	0.0	0.0	100	87
Ngoma	88.1	0.9	4.7	5.5	0.6	0.2	100	83
Bugesera	83.9	8.6	6.8	0.3	0.0	0.3	100	95

			Type of ha	bitat				
EICV4	Umudugudu	Unplanned clustered rural housing	Isolated rural housing	Unplanned urban housing	Small settlement	Modern planned area	Total	Total Nber of HHs (000s)
Rwanda	49.2	8.7	25.6	12.8	2.2	1.6	100	2,493
Nyarugenge	0.0	0.0	0.0	100.0	0.0	0.0	100	73
Gasabo	4.1	4.4	26.8	62.0	0.2	2.5	100	147
Kicukiro	2.6	0.0	0.3	91.8	0.0	5.3	100	76
Nyanza	31.9	2.7	53.8	5.8	5.8	0.0	100	77
Gisagara	60.9	6.0	33.1	0.0	0.0	0.0	100	79
Nyaruguru	82.9	0.9	16.0	0.0	0.2	0.0	100	61
Huye	63.0	6.0	10.0	9.8	0.5	10.8	100	79
Nyamagabe	66.6	4.0	25.0	4.4	0.0	0.0	100	73
Ruhango	13.4	56.3	22.9	7.3	0.0	0.2	100	77
Muhanga	41.9	2.8	42.7	12.2	0.0	0.4	100	73
Kamonyi	50.3	0.8	44.9	0.0	0.0	3.9	100	79
Karongi	44.0	1.9	46.9	6.3	0.9	0.2	100	75
Rutsiro	76.2	3.7	20.0	0.0	0.2	0.0	100	73
Rubavu	19.4	16.0	12.8	9.9	37.5	4.5	100	92
Nyabihu	33.5	22.4	33.0	0.0	11.1	0.0	100	64
Ngororero	16.7	3.3	79.8	0.0	0.0	0.2	100	81
Rusizi	54.9	10.0	23.3	8.2	0.6	3.0	100	89
Nyamasheke	56.0	2.9	34.4	6.7	0.0	0.0	100	86
Rulindo	48.5	2.5	48.3	0.3	0.2	0.2	100	69
Gakenke	69.9	4.5	25.4	0.0	0.2	0.0	100	80
Musanze	52.3	3.4	24.7	5.6	5.0	9.0	100	86
Burera	3.6	29.5	64.3	2.1	0.5	0.0	100	74
Gicumbi	41.8	3.1	53.6	1.5	0.0	0.0	100	86
Rwamagana	80.1	2.6	11.0	6.3	0.0	0.0	100	85
Nyagatare	83.3	3.7	12.8	0.0	0.0	0.2	100	113
Gatsibo	62.7	25.4	6.3	0.0	1.4	4.2	100	105
Kayonza	58.7	26.3	4.2	10.6	0.0	0.3	100	86
Kirehe	98.5	1.1	0.4	0.0	0.0	0.0	100	84
Ngoma	89.7	1.0	3.8	5.5	0.0	0.0	100	81
Bugesera	77.9	12.9	7.0	1.8	0.4	0.0	100	94

Table A.11: Types of dwelling, by district (EICV5, EICV4)

			Type of dwel	ling			
EICV5	Single house dwelling	Multiple HH dwelling	Multi-storied building with one or more HH	Group of enclosed dwellings: multiple HH	Group of enclosed dwellings: single HH	Total	Total Nber of HHs (000s)
Rwanda	88.8	6.0	0.1	3.8	1.3	100	2,708
Nyarugenge	43.0	37.7	0.3	14.7	4.2	100	81
Gasabo	51.8	31.0	0.0	13.2	4.0	100	230
Kicukiro	49.6	3.1	1.9	37.2	8.2	100	98
Nyanza	95.4	2.5	0.0	2.1	0.0	100	79
Gisagara	95.3	3.9	0.0	0.7	0.0	100	82
Nyaruguru	95.6	4.3	0.0	0.1	0.0	100	64
Huye	94.6	4.8	0.0	0.4	0.2	100	82
Nyamagabe	94.1	5.9	0.0	0.0	0.0	100	77
Ruhango	96.0	2.6	0.2	0.7	0.4	100	71
Muhanga	89.6	4.7	0.0	2.0	3.6	100	78
Kamonyi	97.0	2.1	0.5	0.4	0.0	100	93
Karongi	97.3	2.5	0.0	0.2	0.0	100	78
Rutsiro	96.6	3.0	0.0	0.3	0.1	100	73
Rubavu	94.0	1.5	0.0	4.2	0.3	100	96
Nyabihu	93.3	2.7	0.0	1.7	2.4	100	67
Ngororero	97.3	2.0	0.3	0.4	0.0	100	82
Rusizi	92.4	6.3	0.0	0.7	0.7	100	95
Nyamasheke	98.5	0.2	0.0	0.8	0.5	100	83
Rulindo	98.1	0.3	0.0	1.1	0.5	100	78
Gakenke	99.6	0.4	0.0	0.0	0.0	100	84
Musanze	95.4	1.0	0.0	1.8	1.8	100	91
Burera	97.3	1.7	0.0	1.0	0.0	100	82
Gicumbi	97.3	0.2	0.0	0.8	1.7	100	88
Rwamagana	94.0	5.8	0.0	0.2	0.0	100	89
Nyagatare	97.7	0.9	0.0	1.4	0.0	100	132
Gatsibo	97.3	1.0	0.0	1.3	0.4	100	108
Kayonza	95.9	2.7	0.0	1.4	0.0	100	83
Kirehe	98.8	0.8	0.0	0.4	0.0	100	87
Ngoma	94.8	3.5	0.0	1.8	0.0	100	83
Bugesera	92.6	1.7	0.0	1.8	3.9	100	95

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			Type of dwel	ling			
EICV4	Single house dwelling	Multiple HH dwelling	Multi-storied building with one or more HH	Group of enclosed dwellings: multiple HH	Group of enclosed dwellings: single HH	Total	Total Nber of HHs (000s)
Rwanda	90.4	4.6	0.1	2.7	2.2	100	2,493
Nyarugenge	48.5	27.5	0.2	20.3	3.6	100	73
Gasabo	78.8	16.1	0.2	4.4	0.6	100	147
Kicukiro	62.3	1.9	1.2	22.4	12.3	100	76
Nyanza	93.7	3.3	0.0	1.8	1.2	100	77
Gisagara	92.1	7.4	0.0	0.4	0.1	100	79
Nyaruguru	94.4	5.7	0.0	0.0	0.0	100	61
Huye	96.2	3.8	0.0	0.0	0.0	100	79
Nyamagabe	96.9	3.1	0.0	0.0	0.0	100	73
Ruhango	81.2	1.5	0.0	4.4	12.9	100	77
Muhanga	99.6	0.4	0.0	0.0	0.0	100	73
Kamonyi	60.7	4.0	0.2	5.6	29.5	100	79
Karongi	97.8	1.6	0.0	0.6	0.0	100	75
Rutsiro	98.0	1.7	0.0	0.4	0.0	100	73
Rubavu	86.4	11.4	0.0	1.7	0.4	100	92
Nyabihu	96.6	2.2	0.0	0.8	0.4	100	64
Ngororero	98.3	1.1	0.0	0.0	0.6	100	81
Rusizi	96.1	2.7	0.2	1.0	0.0	100	89
Nyamasheke	98.2	1.2	0.0	0.2	0.4	100	86
Rulindo	99.1	0.2	0.0	0.4	0.2	100	69
Gakenke	99.4	0.6	0.0	0.0	0.0	100	80
Musanze	97.7	1.5	0.0	0.6	0.1	100	86
Burera	100.0	0.0	0.0	0.0	0.0	100	74
Gicumbi	99.8	0.0	0.0	0.2	0.0	100	86
Rwamagana	89.2	5.4	0.2	5.2	0.0	100	85
Nyagatare	89.8	5.2	0.0	2.2	2.7	100	113
Gatsibo	95.5	2.1	0.0	1.3	1.2	100	105
Kayonza	90.3	9.5	0.0	0.2	0.0	100	86
Kirehe	99.6	0.2	0.0	0.0	0.2	100	84
Ngoma	97.1	2.3	0.0	0.6	0.0	100	81
Bugesera	86.9	4.2	0.2	6.5	2.1	100	94

Table A.12: Number of persons per bedroom, by district (EICV5, EICV4)

	Mean no. of people	Avera	age number of p	oersons per bed	lroom		Total Nber of
EIVC5	per bedroom	Less than 2	2-4 persons	4-6 persons	6 or more persons	Total	HHs (in 000s)
All Rwanda	2.2	34.8	56.8	7.5	0.9	100	2,708
Nyarugenge	2.0	45.1	48.2	5.9	0.8	100	81
Gasabo	2.1	43.9	47.6	6.8	1.8	100	230
Kicukiro	2.1	42.3	48.8	8.0	0.9	100	98
Nyanza	2.3	34.1	56.1	8.9	0.8	100	79
Gisagara	2.3	26.1	64.2	9.2	0.4	100	82
Nyaruguru	2.4	31.7	54.6	12.6	1.1	100	64
Huye	2.0	43.6	52.6	3.8	0.0	100	82
Nyamagabe	2.3	27.0	65.0	7.6	0.5	100	77
Ruhango	2.1	38.5	55.1	6.0	0.4	100	71
Muhanga	2.3	33.0	55.7	10.4	0.9	100	78
Kamonyi	2.4	31.3	55.4	11.4	1.9	100	93
Karongi	2.2	32.4	60.8	6.1	0.7	100	78
Rutsiro	2.2	29.0	64.2	6.6	0.2	100	73
Rubavu	2.2	38.7	53.1	7.7	0.4	100	96
Nyabihu	2.3	29.7	61.4	8.5	0.4	100	67
Ngororero	2.5	22.1	66.8	10.1	1.0	100	82
Rusizi	2.3	33.2	58.2	7.7	0.8	100	95
Nyamasheke	2.1	39.4	51.9	8.4	0.2	100	83
Rulindo	2.0	44.9	49.1	5.8	0.2	100	78
Gakenke	2.0	39.3	57.3	3.4	0.0	100	84
Musanze	2.2	34.1	59.7	5.6	0.6	100	91
Burera	1.9	44.4	53.1	2.5	0.0	100	82
Gicumbi	2.3	32.0	58.5	7.8	1.7	100	88
Rwamagana	2.1	35.8	57.4	6.1	0.7	100	89
Nyagatare	2.4	27.3	64.2	7.5	1.0	100	132
Gatsibo	2.3	28.5	64.4	6.2	0.9	100	108
Kayonza	2.4	26.3	64.4	7.7	1.7	100	83
Kirehe	2.3	31.7	57.8	8.9	1.6	100	87
Ngoma	2.1	41.7	48.3	8.1	1.9	100	83
Bugesera	2.5	25.6	61.6	11.4	1.4	100	95

	Mean no.	Avera	ge number of p	ersons per bed	lroom		
EIVC4	of people per bedroom	Less than 2	2-4 persons	4-6 persons	6 or more persons	Total	Total Nber of HHs (in 000s)
All Rwanda	2.3	33.1	58.4	7.8	0.8	100	2,493
Nyarugenge	2.2	42.5	46.2	8.8	2.5	100	73
Gasabo	2.2	34.4	57.7	7.7	0.2	100	147
Kicukiro	2.2	35.7	55.9	8.0	0.4	100	76
Nyanza	2.4	30.5	55.9	12.2	1.5	100	77
Gisagara	2.1	39.8	54.7	5.0	0.4	100	79
Nyaruguru	2.5	26.5	58.4	13.2	1.9	100	61
Huye	2.3	30.3	60.8	8.5	0.4	100	79
Nyamagabe	2.5	28.7	57.6	12.3	1.4	100	73
Ruhango	2.2	34.1	58.9	6.6	0.4	100	77
Muhanga	2.1	42.5	50.4	5.5	1.7	100	73
Kamonyi	2.2	37.9	55.2	6.5	0.4	100	79
Karongi	2.3	30.4	61.7	7.7	0.2	100	75
Rutsiro	2.4	23.7	68.3	7.9	0.2	100	73
Rubavu	2.5	25.3	64.0	9.2	1.6	100	92
Nyabihu	2.3	30.9	61.7	7.4	0.0	100	64
Ngororero	2.1	37.7	57.5	4.6	0.2	100	81
Rusizi	2.3	30.4	59.5	8.5	1.6	100	89
Nyamasheke	2.3	32.9	58.3	7.9	0.9	100	86

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	Mean no.	Avera	ge number of p	ersons per bed	lroom		
EIVC4	of people per bedroom	Less than 2	2-4 persons	4-6 persons	6 or more persons	Total	Total Nber of HHs (in 000s)
Rulindo	2.2	33.1	62.4	3.9	0.6	100	69
Gakenke	2.1	39.6	55.2	5.1	0.0	100	80
Musanze	1.9	49.2	48.3	2.3	0.2	100	86
Burera	2.3	24.6	68.1	7.1	0.2	100	74
Gicumbi	2.2	36.1	57.2	6.5	0.2	100	86
Rwamagana	2.1	40.8	52.9	5.6	0.7	100	85
Nyagatare	2.5	24.5	64.7	9.7	1.1	100	113
Gatsibo	2.3	34.5	55.3	9.8	0.4	100	105
Kayonza	2.5	23.9	64.0	10.6	1.6	100	86
Kirehe	2.4	27.5	63.1	8.3	1.0	100	84
Ngoma	2.1	42.0	51.3	5.5	1.3	100	81
Bugesera	2.4	24.1	64.4	11.1	0.5	100	94

Table A.13: Floor area, by district (EICV5, EICV4)

EICV5	Mean floor area		Floor area o	f dwelling		Total	Total no. of
	(sqm)	1-24 (m²)	25-49 (m <sup>2</sup> )	50-74 (m <sup>2</sup> )	75+(m²)	2 2 2 2 2 2	HHs (in 000s)
All Rwanda	40.1	22.3	55.7	15.4	6.6	100	2,708
Nyarugenge	39.3	38.0	38.2	13.7	10.1	100	81
Gasabo	41.0	44.6	30.2	10.7	14.5	100	230
Kicukiro	53.3	33.5	31.9	11.9	22.8	100	98
Nyanza	35.9	24.8	57.6	14.6	3.0	100	79
Gisagara	33.9	29.5	58.1	10.2	2.2	100	82
Nyaruguru	39.0	16.5	68.3	9.4	5.8	100	64
Huye	40.8	17.4	59.3	16.9	6.4	100	82
Nyamagabe	38.6	15.8	65.8	14.1	4.3	100	77
Ruhango	44.3	17.9	59.6	14.9	7.6	100	71
Muhanga	45.4	16.4	54.6	19.2	9.9	100	78
Kamonyi	42.3	20.4	52.6	18.2	8.8	100	93
Karongi	45.1	10.0	60.4	23.0	6.6	100	78
Rutsiro	46.4	8.4	55.5	29.8	6.3	100	73
Rubavu	45.1	16.5	54.3	19.5	9.7	100	96
Nyabihu	41.1	13.7	58.6	25.0	2.7	100	67
Ngororero	37.9	13.9	67.5	17.3	1.3	100	82
Rusizi	36.2	24.6	57.7	14.1	3.6	100	95
Nyamasheke	41.4	14.9	61.3	18.0	5.8	100	83
Rulindo	38.7	19.6	60.1	15.8	4.5	100	78
Gakenke	35.1	20.7	66.5	10.4	2.4	100	84
Musanze	48.2	12.3	56.5	20.8	10.4	100	91
Burera	37.5	16.8	65.1	15.4	2.7	100	82
Gicumbi	38.3	14.1	70.5	11.8	3.6	100	88
Rwamagana	38.6	21.5	53.5	19.6	5.4	100	89
Nyagatare	35.5	26.3	57.3	13.9	2.4	100	132
Gatsibo	38.2	21.2	59.6	15.8	3.3	100	108
Kayonza	35.1	28.9	54.2	14.0	2.9	100	83
Kirehe	35.2	22.7	62.3	12.4	2.6	100	87
Ngoma	38.7	22.5	56.5	13.0	8.0	100	83
Bugesera	38.3	18.1	66.8	10.0	5.1	100	95

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EICV4	Mean floor area		Floor area o	Total	Total no. of HHs (in 000s)		
		1-24(m <sup>2</sup> )	25-49(m <sup>2</sup> )	50-74(m <sup>2</sup> )	75+(m <sup>2</sup> )		
All Rwanda	38.9	21.9	58.3	14.1	5.8	100	2,493
Nyarugenge	44.1	31.1	39.7	14.7	14.5	100	73
Gasabo	44.1	32.8	39.2	13.8	14.2	100	147
Kicukiro	50.7	34.2	30.3	16.2	19.4	100	76
Nyanza	35.5	25.9	60.7	8.6	4.8	100	77
Gisagara	34.8	24.5	62.8	10.9	1.8	100	79
Nyaruguru	39.9	14.1	66.1	17.1	2.7	100	61
Huye	39.8	22.9	57.6	12.8	6.8	100	79
Nyamagabe	38.2	18.4	62.3	16.2	3.2	100	73
Ruhango	37.6	23.5	60.2	12.5	3.8	100	77
Muhanga	40.3	18.6	60.5	15.3	5.6	100	73
Kamonyi	36.6	23.4	63.7	9.1	3.7	100	79
Karongi	42.1	17.9	55.9	20.3	5.9	100	75
Rutsiro	43.6	10.7	60.2	23.7	5.4	100	73
Rubavu	42.8	18.6	57.1	15.8	8.5	100	92
Nyabihu	42.8	11.8	60.0	22.9	5.3	100	64
Ngororero	38.6	17.2	64.7	14.3	3.7	100	81
Rusizi	42.9	19.0	53.9	18.5	8.6	100	89
Nyamasheke	36.1	21.5	63.6	11.0	3.9	100	86
Rulindo	37.2	17.7	65.6	13.6	3.1	100	69
Gakenke	33.3	22.4	67.7	8.9	1.0	100	80
Musanze	43.1	13.0	62.1	16.5	8.5	100	86
Burera	35.9	19.3	64.6	14.2	1.9	100	74
Gicumbi	33.5	18.8	72.6	7.0	1.7	100	86
Rwamagana	38.9	21.7	55.1	17.3	5.9	100	85
Nyagatare	34.4	26.3	61.2	9.0	3.6	100	113
Gatsibo	37.0	19.8	62.4	13.5	4.3	100	105
Kayonza	38.3	22.8	54.0	18.5	4.7	100	86
Kirehe	33.8	26.6	59.9	11.2	2.3	100	84
Ngoma	34.0	28.4	56.2	12.9	2.5	100	81
Bugesera	38.1	19.5	63.5	11.8	5.2	100	94

Table A.14: Roofing material of the dwelling, by district (EICV5, EICV4)

			Туре	of roofing n	naterial				Total no. of
EICV5	Thatch / leaves	Metal sheets	Clay tiles	Concrete	Plastic or plywood	Industrial tiles	Other	Total	HHs (in 000s)
Rwanda	0.0	67.3	32.6	0.0	0.0	0.0	0.0	100	2,708
Nyarugenge	0.0	99.1	0.8	0.0	0.0	0.1	0.0	100	81
Gasabo	0.0	99.1	0.6	0.0	0.0	0.3	0.0	100	230
Kicukiro	0.0	99.3	0.6	0.1	0.0	0.0	0.0	100	98
Nyanza	0.0	36.3	63.7	0.0	0.0	0.0	0.0	100	79
Gisagara	0.0	22.9	76.9	0.0	0.0	0.0	0.2	100	82
Nyaruguru	0.0	21.5	78.1	0.0	0.1	0.0	0.3	100	64
Huye	0.0	37.1	62.9	0.0	0.0	0.0	0.0	100	82
Nyamagabe	0.0	18.3	81.7	0.0	0.0	0.0	0.0	100	77
Ruhango	0.0	15.3	84.2	0.0	0.2	0.3	0.0	100	71
Muhanga	0.2	13.0	86.3	0.0	0.2	0.0	0.2	100	78
Kamonyi	0.0	49.5	50.5	0.0	0.0	0.0	0.0	100	93
Karongi	0.0	32.0	67.8	0.0	0.0	0.0	0.1	100	78
Rutsiro	0.0	10.5	89.5	0.0	0.0	0.0	0.0	100	73
Rubavu	0.0	72.5	27.2	0.0	0.0	0.2	0.0	100	96
Nyabihu	0.0	38.2	61.7	0.0	0.2	0.0	0.0	100	67
Ngororero	0.0	8.9	91.1	0.0	0.0	0.0	0.0	100	82
Rusizi	0.0	99.8	0.0	0.0	0.2	0.0	0.0	100	95
Nyamasheke	0.0	78.3	21.4	0.0	0.0	0.0	0.2	100	83
Rulindo	0.0	50.7	49.3	0.0	0.0	0.0	0.0	100	78
Gakenke	0.0	44.6	55.4	0.0	0.0	0.0	0.0	100	84
Musanze	0.0	74.5	25.3	0.0	0.0	0.0	0.2	100	91
Burera	0.0	78.8	21.2	0.0	0.0	0.0	0.0	100	82
Gicumbi	0.0	88.0	12.0	0.0	0.0	0.0	0.0	100	88
Rwamagana	0.0	98.8	1.0	0.0	0.0	0.0	0.3	100	89
Nyagatare	0.0	99.6	0.4	0.0	0.0	0.0	0.0	100	132
Gatsibo	0.0	96.0	3.8	0.0	0.0	0.2	0.0	100	108
Kayonza	0.0	99.6	0.2	0.0	0.2	0.0	0.0	100	83
Kirehe	0.0	98.9	1.1	0.0	0.0	0.0	0.0	100	87
Ngoma	0.0	98.6	1.4	0.0	0.0	0.0	0.0	100	83
Bugesera	0.0	94.2	5.8	0.0	0.0	0.0	0.0	100	95

EICV4		,	Type of roof	ing material			Total	Total no. of
EICV4	Thatch or leaves	Metal sheets	Clay tiles	Concrete	Plastic or plywood	Other	Total	HHs (in 000s)
Rwanda	0.3	61.1	38.4	0.0	0.1	0.0	100	2,492
Nyarugenge	0.0	99.3	0.7	0.0	0.0	0.0	100	73
Gasabo	0.4	99.2	0.5	0.0	0.0	0.0	100	147
Kicukiro	0.0	98.9	0.6	0.2	0.2	0.1	100	75
Nyanza	0.0	33.9	66.2	0.0	0.0	0.0	100	77
Gisagara	0.0	8.9	90.7	0.0	0.3	0.1	100	79
Nyaruguru	0.2	13.9	85.7	0.0	0.0	0.2	100	61
Huye	0.2	31.1	68.3	0.0	0.4	0.0	100	79
Nyamagabe	0.0	13.9	85.6	0.0	0.2	0.2	100	73
Ruhango	0.0	6.1	93.7	0.0	0.2	0.0	100	77
Muhanga	0.0	10.3	89.7	0.0	0.0	0.0	100	73
Kamonyi	0.0	35.3	64.7	0.0	0.0	0.0	100	79
Karongi	0.2	24.9	74.7	0.0	0.0	0.2	100	75
Rutsiro	0.2	5.6	93.9	0.0	0.2	0.0	100	73
Rubavu	0.4	72.3	27.4	0.0	0.0	0.0	100	92
Nyabihu	0.2	37.2	62.5	0.0	0.2	0.0	100	64
Ngororero	0.2	6.4	93.2	0.2	0.0	0.0	100	81
Rusizi	1.4	97.3	1.1	0.0	0.2	0.0	100	89
Nyamasheke	0.2	69.6	29.8	0.2	0.2	0.0	100	86
Rulindo	0.2	39.9	59.9	0.0	0.0	0.0	100	69

EICV4		ŗ	Гуре of roof	ing material			Total	Total no. of HHs (in
EICV4	Thatch or leaves	Metal sheets	Clay tiles	Concrete	Plastic or plywood	Other	Total	000s)
Gakenke	0.0	31.4	68.7	0.0	0.0	0.0	100	80
Musanze	0.2	63.4	36.4	0.0	0.0	0.0	100	86
Burera	0.2	67.5	32.3	0.0	0.0	0.0	100	74
Gicumbi	0.8	85.2	14.0	0.0	0.0	0.0	100	86
Rwamagana	0.2	98.6	1.2	0.0	0.0	0.0	100	85
Nyagatare	1.6	96.6	1.4	0.0	0.4	0.0	100	113
Gatsibo	0.6	93.8	5.6	0.0	0.0	0.0	100	105
Kayonza	0.0	99.4	0.4	0.0	0.2	0.0	100	86
Kirehe	0.8	97.1	2.0	0.0	0.0	0.0	100	84
Ngoma	0.0	97.7	2.3	0.0	0.0	0.0	100	81
Bugesera	0.7	88.8	10.5	0.0	0.0	0.0	100	94

Table A.15: Wall material of the dwelling, by district (EICV5, EICV4)

			Ту	pe of wall ma	iterial					
EICV5	Mud bricks	Mud bricks covered with cement	Tree trunks with mud	Tree trunks with mud and cement	Oven fired bricks	Cement bricks	Wooden Planks	Other	Total	Total no. of HHs (in 000s)
Rwanda	35.4	30.3	23.1	6.7	2.7	8.0	0.4	0.7	100	2,708
Nyarugenge	3.6	44.7	10.1	32.7	5.7	2.4	0.6	0.3	100	81
Gasabo	14.4	62.6	7.6	7.4	3.9	3.3	0.0	0.8	100	230
Kicukiro	8.6	65.6	2.7	5.9	8.5	8.3	0.0	0.4	100	98
Nyanza	32.8	26.1	32.7	6.1	2.0	0.3	0.0	0.0	100	79
Gisagara	16.7	15.1	53.9	12.9	1.4	0.0	0.0	0.0	100	82
Nyaruguru	13.7	12.6	65.0	8.3	0.4	0.0	0.0	0.0	100	64
Huye	12.6	30.9	39.4	15.1	1.9	0.0	0.0	0.0	100	82
Nyamagabe	11.3	5.4	70.0	9.0	4.2	0.0	0.0	0.0	100	77
Ruhango	43.2	43.8	8.0	3.9	0.6	0.0	0.0	0.4	100	71
Muhanga	56.3	36.6	3.7	0.0	3.2	0.2	0.0	0.0	100	78
Kamonyi	42.1	43.3	8.7	3.7	0.9	1.2	0.0	0.0	100	93
Karongi	72.9	20.7	4.4	0.8	1.2	0.0	0.0	0.0	100	78
Rutsiro	70.7	26.3	0.6	0.0	1.3	0.0	0.0	1.0	100	73
Rubavu	39.3	37.8	14.2	2.0	3.3	0.0	2.5	1.0	100	96
Nyabihu	66.1	18.6	11.1	1.4	0.2	0.0	0.2	2.3	100	67
Ngororero	81.0	15.8	2.2	0.0	0.1	0.0	0.0	0.8	100	82
Rusizi	23.9	1.0	58.7	2.0	7.6	0.1	1.8	4.8	100	95
Nyamasheke	33.6	21.9	27.6	6.1	3.3	0.4	7.0	0.0	100	83
Rulindo	34.1	32.4	23.6	8.5	1.4	0.0	0.0	0.0	100	78
Gakenke	69.1	21.3	5.3	0.0	4.1	0.0	0.0	0.2	100	84
Musanze	36.9	19.1	29.8	5.3	5.6	0.3	0.0	2.9	100	91
Burera	45.6	13.1	33.7	4.3	1.7	0.0	0.0	1.6	100	82
Gicumbi	43.5	30.5	16.5	5.9	1.4	0.0	0.0	2.3	100	88
Rwamagana	25.1	30.5	27.9	13.8	2.5	0.0	0.0	0.1	100	89
Nyagatare	53.5	40.6	1.7	1.4	2.4	0.4	0.0	0.2	100	132
Gatsibo	39.4	22.5	29.3	6.7	2.1	0.0	0.0	0.0	100	108
Kayonza	21.6	20.3	43.2	12.1	1.6	1.0	0.0	0.2	100	83
Kirehe	33.9	23.9	32.1	9.8	0.4	0.0	0.0	0.0	100	87
Ngoma	13.6	7.5	61.5	14.1	2.7	0.4	0.0	0.2	100	83
Bugesera	39.4	44.1	12.0	3.7	0.9	0.0	0.0	0.0	100	95

EICV4	Type of wall material	Total	Total no. of HHs	
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		s t	s	S	<b>.</b>					(in 000s)
	ks	Mud bricks covered with cement	trunks ud	Tree trunks with mud and cement	fired					
	oric	bi ed nt	п	<b>5</b> 2		nt S	len SS			
	Mud bricks	Mud covered cement	Tree tru with mud	Tree t with mu cement	0ven bricks	Cement bricks	Wooden Planks	Other		
	Σ	ΣSS	T.	T × 9	lq )	CC	W	0		
Rwanda	36.0	24.2	29.1	6.3	2.8	0.5	0.6	0.5	100	2,493
Nyarugenge	6.1	44.9	15.8	26.5	4.7	1.7	0.0	0.2	100	73
Gasabo	8.7	53.4	16.0	13.3	4.9	3.1	0.2	0.4	100	147
Kicukiro	9.2	64.9	3.5	10.9	5.3	6.0	0.0	0.3	100	76
Nyanza	29.9	25.0	34.9	7.6	2.4	0.2	0.0	0.0	100	77
Gisagara	10.3	8.1	70.9	10.3	0.4	0.0	0.0	0.0	100	79
Nyaruguru	13.0	8.6	71.1	6.2	1.2	0.0	0.0	0.0	100	61
Huye	17.6	22.5	41.9	9.3	8.8	0.0	0.0	0.0	100	79
Nyamagabe	12.2	4.0	71.3	9.1	3.2	0.0	0.2	0.0	100	73
Ruhango	53.5	37.3	7.4	0.6	1.2	0.0	0.0	0.0	100	77
Muhanga	59.5	25.7	6.3	0.4	7.6	0.4	0.0	0.0	100	73
Kamonyi	37.2	36.8	19.7	5.9	0.0	0.4	0.0	0.0	100	79
Karongi	76.8	16.1	6.0	0.0	0.9	0.0	0.0	0.2	100	75
Rutsiro	88.0	8.1	2.2	0.0	1.8	0.0	0.0	0.0	100	73
Rubavu	53.2	24.4	15.1	0.0	3.2	0.0	2.4	1.8	100	92
Nyabihu	64.9	18.1	13.6	0.7	0.1	0.4	0.0	2.2	100	64
Ngororero	78.8	15.8	4.8	0.0	0.6	0.0	0.0	0.0	100	81
Rusizi	15.9	2.0	62.6	4.5	9.9	0.3	4.0	0.7	100	89
Nyamasheke	42.1	12.7	32.8	1.1	0.9	0.0	10.0	0.4	100	86
Rulindo	41.2	24.4	24.3	8.3	1.6	0.2	0.0	0.0	100	69
Gakenke	74.1	17.4	5.3	0.0	3.2	0.0	0.0	0.0	100	80
Musanze	33.6	13.8	36.0	4.5	5.3	0.4	0.0	6.4	100	86
Burera	40.8	10.3	40.2	4.2	2.2	0.5	0.0	2.0	100	74
Gicumbi	35.7	14.1	44.2	5.2	0.6	0.0	0.0	0.2	100	86
Rwamagana	17.7	36.3	29.1	14.4	2.5	0.0	0.0	0.0	100	85
Nyagatare	46.5	40.9	10.0	0.8	1.7	0.2	0.0	0.0	100	113
Gatsibo	28.7	23.6	39.3	5.7	2.8	0.0	0.0	0.0	100	105
Kayonza	25.0	22.1	37.9	12.0	2.7	0.3	0.0	0.0	100	86
Kirehe	37.3	17.9	32.9	10.6	0.9	0.0	0.0	0.4	100	84
Ngoma	11.5	3.5	75.4	8.9	0.7	0.0	0.0	0.0	100	81
Bugesera	38.6	38.8	16.8	4.6	0.6	0.6	0.0	0.0	100	94

Table A.16: Floor material of the dwelling, by district (EICV5, EICV4)

		Ту	pe of floorin	g material				Total no. of
EICV5	Beaten earth	Hardened dung	Cement	Bricks	Tiles	Other	Total	HHs (in 000s)
Rwanda	68.2	2.9	25.8	1.2	1.6	0.3	100	2,708
Nyarugenge	23.5	0.0	71.2	0.0	5.1	0.3	100	81
Gasabo	28.7	0.2	62.9	0.0	7.8	0.3	100	230
Kicukiro	22.3	0.0	61.9	0.8	14.7	0.3	100	98
Nyanza	78.2	0.7	19.7	1.2	0.0	0.2	100	79
Gisagara	77.7	2.6	14.4	4.7	0.4	0.3	100	82
Nyaruguru	77.4	9.0	10.7	2.8	0.1	0.0	100	64
Huye	58.5	12.2	22.6	5.9	0.2	0.6	100	82
Nyamagabe	85.6	0.0	12.1	2.1	0.2	0.0	100	77
Ruhango	72.7	2.0	22.6	2.2	0.3	0.2	100	71
Muhanga	68.1	0.2	27.2	3.6	0.4	0.5	100	78
Kamonyi	70.1	0.0	28.5	0.0	1.1	0.3	100	93
Karongi	81.0	0.0	16.6	2.4	0.0	0.0	100	78
Rutsiro	82.6	0.2	12.5	4.0	0.0	0.6	100	73
Rubavu	66.2	0.0	32.0	0.7	0.9	0.2	100	96
Nyabihu	83.9	0.0	15.0	0.0	0.0	1.1	100	67
Ngororero	87.4	0.0	11.3	1.1	0.0	0.2	100	82
Rusizi	88.7	0.0	7.7	3.2	0.2	0.2	100	95
Nyamasheke	83.5	0.0	14.7	1.0	0.3	0.5	100	83
Rulindo	78.2	0.0	20.4	1.4	0.0	0.0	100	78
Gakenke	84.6	0.0	12.7	1.4	0.2	1.1	100	84
Musanze	74.8	0.0	23.0	0.4	1.5	0.2	100	91
Burera	85.7	0.0	12.5	0.4	0.0	1.4	100	82
Gicumbi	83.1	0.2	15.9	0.2	0.2	0.4	100	88
Rwamagana	72.1	2.2	24.7	0.4	0.7	0.0	100	89
Nyagatare	71.1	2.4	26.1	0.4	0.0	0.0	100	132
Gatsibo	78.0	1.5	19.9	0.4	0.0	0.2	100	108
Kayonza	46.9	34.0	18.9	0.2	0.0	0.0	100	83
Kirehe	57.3	23.8	18.7	0.0	0.0	0.2	100	87
Ngoma	78.3	1.6	19.7	0.2	0.2	0.0	100	83
Bugesera	76.9	0.0	21.7	0.2	0.9	0.3	100	95

		Ty	ype of floorin	g material				Total no.
EICV4	Beaten earth	Hardened dung	Cement	Bricks	Tiles	Other	Total	of HHs (in 000s)
Rwanda	74.0	2.7	21.1	1.2	0.6	0.4	100	2,493
Nyarugenge	33.2	0.0	65.0	0.4	1.4	0.0	100	73
Gasabo	35.3	0.3	59.4	0.5	4.5	0.0	100	147
Kicukiro	22.3	0.0	71.3	0.0	6.4	0.0	100	76
Nyanza	83.8	0.4	15.4	0.4	0.0	0.0	100	77
Gisagara	84.0	0.4	7.6	6.7	0.0	1.4	100	79
Nyaruguru	87.0	2.3	8.8	1.7	0.0	0.2	100	61
Huye	70.6	0.2	24.3	4.4	0.4	0.0	100	79
Nyamagabe	85.0	2.3	9.9	1.7	0.0	1.1	100	73
Ruhango	78.5	0.2	17.8	2.9	0.2	0.4	100	77
Muhanga	75.4	0.0	21.4	2.6	0.2	0.4	100	73

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		Ту	pe of floorin	g material				Total no. of HHs (in
EICV4	Beaten earth	Hardened dung	Cement	Bricks	Tiles	Other	Total	of HHs (in 000s)
Kamonyi	76.7	0.0	22.1	0.8	0.4	0.0	100	79
Karongi	87.0	0.2	9.8	2.6	0.0	0.4	100	75
Rutsiro	87.9	0.2	8.2	3.5	0.0	0.2	100	73
Rubavu	74.2	0.0	24.1	0.4	1.1	0.2	100	92
Nyabihu	86.5	0.0	13.5	0.0	0.0	0.0	100	64
Ngororero	87.5	0.2	10.0	1.0	0.0	1.2	100	81
Rusizi	84.6	0.8	11.8	1.6	0.7	0.5	100	89
Nyamasheke	90.3	0.0	7.1	1.3	0.2	1.2	100	86
Rulindo	83.6	0.0	15.6	0.6	0.0	0.2	100	69
Gakenke	87.2	0.0	9.6	0.9	0.2	2.2	100	80
Musanze	81.2	0.0	17.3	0.4	0.4	0.6	100	86
Burera	88.5	0.2	10.0	0.6	0.0	0.7	100	74
Gicumbi	89.0	0.7	9.5	0.6	0.0	0.2	100	86
Rwamagana	67.8	1.7	30.0	0.4	0.0	0.2	100	85
Nyagatare	73.9	4.5	21.5	0.0	0.0	0.0	100	113
Gatsibo	73.0	9.7	17.3	0.0	0.0	0.0	100	105
Kayonza	58.6	22.4	18.0	0.5	0.3	0.2	100	86
Kirehe	80.7	3.6	15.3	0.2	0.0	0.2	100	84
Ngoma	62.9	27.3	9.4	0.4	0.0	0.0	100	81
Bugesera	77.9	0.0	21.9	0.0	0.0	0.2	100	94

Table A.17: Percentage of HHS with rainwater catchment systems, by district (EICV5, EICV4)

	Total % of HHs	Ту	pe of rai	nwater catchmo	ent systen	1		Total no.
EICV5	with rainwater catchment system	Rain water tank	Ditch	Piped away	Other	No measure	Total	Total no. of HHs (in 000s)
All Rwanda	14.5	2.2	9.4	1.6	1.3	85.5	100	2,708
Nyarugenge	20.2	3.5	15.2	0.3	1.2	79.8	100	81
Gasabo	25.7	2.7	20.2	2.0	0.7	74.3	100	230
Kicukiro	49.7	8.7	33.9	6.7	0.5	50.3	100	98
Nyanza	4.2	0.8	3.0	0.2	0.2	95.8	100	79
Gisagara	4.9	0.8	3.4	0.7	0.0	95.1	100	82
Nyaruguru	4.1	2.5	1.4	0.2	0.0	95.9	100	64
Huye	4.6	1.3	3.1	0.2	0.0	95.4	100	82
Nyamagabe	9.7	1.0	6.6	2.1	0.0	90.3	100	77
Ruhango	6.4	1.1	4.0	0.4	0.8	93.6	100	71
Muhanga	12.1	1.1	7.0	3.3	0.7	87.9	100	78
Kamonyi	4.5	0.6	3.2	0.7	0.0	95.5	100	93
Karongi	7.1	1.2	4.5	1.3	0.0	92.9	100	78
Rutsiro	18.9	0.2	3.5	0.2	15.0	81.1	100	73
Rubavu	23.7	5.3	16.8	1.3	0.2	76.3	100	96
Nyabihu	13.2	4.5	8.3	0.4	0.0	86.8	100	67
Ngororero	8.5	0.8	6.7	0.8	0.2	91.5	100	82
Rusizi	24.6	0.5	23.6	0.5	0.0	75.4	100	95
Nyamasheke	28.7	0.4	27.3	0.9	0.2	71.3	100	83
Rulindo	6.2	1.5	4.6	0.0	0.1	93.8	100	78
Gakenke	28.0	0.8	16.9	10.4	0.0	72.0	100	84
Musanze	13.0	1.2	10.8	1.0	0.0	87.0	100	91
Burera	7.0	2.3	2.2	2.2	0.3	93.0	100	82
Gicumbi	24.2	4.7	4.5	1.2	13.8	75.8	100	88
Rwamagana	10.7	1.1	5.5	0.3	3.7	89.3	100	89
Nyagatare	6.2	2.2	3.6	0.4	0.0	93.8	100	132
Gatsibo	7.2	2.1	4.7	0.4	0.0	92.8	100	108
Kayonza	9.3	3.3	1.2	0.8	4.0	90.7	100	83
Kirehe	10.0	4.3	5.5	0.2	0.0	90.0	100	87
Ngoma	13.5	0.8	4.8	7.7	0.2	86.5	100	83
Bugesera	4.2	1.9	2.0	0.3	0.0	95.8	100	95

	Total % of HHs	Ту	pe of rai	nwater catchi	nent syste	m	T-4-1	Total no. of
EICV4	catchment system	Rain water tank	Ditch	Piped away	Other	No measure	Total	HHs (in 000s)
All Rwanda	17.4	2.1	13.4	1.8	0.3	82.5	100	2,493
Nyarugenge	22.9	3.1	17.6	2.1	0.0	77.1	100	73
Gasabo	31.8	4.6	25.6	1.5	0.0	68.3	100	147
Kicukiro	53.7	5.5	41.8	6.4	0.0	46.3	100	76
Nyanza	3.6	0.8	2.6	0.2	0.0	96.4	100	77
Gisagara	2.5	0.2	2.0	0.2	0.0	97.5	100	79
Nyaruguru	3.3	0.7	2.0	0.7	0.0	96.7	100	61
Huye	13.5	0.2	10.9	2.4	0.0	86.5	100	79
Nyamagabe	6.2	0.4	4.9	0.9	0.0	93.8	100	73
Ruhango	2.6	1.0	1.0	0.6	0.0	97.4	100	77
Muhanga	17.9	0.4	12.3	5.2	0.0	82.1	100	73
Kamonyi	18.1	0.4	12.5	5.1	0.0	81.9	100	79
Karongi	13.6	0.2	9.3	4.1	0.0	86.5	100	75
Rutsiro	24.2	1.3	19.8	3.1	0.0	75.8	100	73
Rubavu	11.8	1.6	8.8	0.8	0.6	88.2	100	92
Nyabihu	35.0	1.0	30.6	0.4	3.2	64.8	100	64
Ngororero	44.6	1.7	37.1	5.8	0.0	55.4	100	81

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	Total % of HHs	1.3	ype of rai	nwater catchi	nent syste	m		Total no. of
EICV4	catchment system	Rain water tank	Ditch	Piped away	Other	No measure	Total	HHs (in 000s)
Rusizi	36.2	3.4	30.3	1.9	0.6	63.8	100	89
Nyamasheke	38.0	0.4	36.9	0.6	0.0	62.1	100	86
Rulindo	21.5	2.4	17.5	1.4	0.2	78.5	100	69
Gakenke	11.1	1.5	9.1	0.4	0.0	88.9	100	80
Musanze	18.0	2.5	14.6	0.8	0.1	82.0	100	86
Burera	8.7	1.8	6.5	0.4	0.0	91.3	100	74
Gicumbi	12.2	5.9	5.9	0.4	0.4	87.5	100	86
Rwamagana	11.5	0.4	9.8	1.2	0.2	88.5	100	85
Nyagatare	9.9	3.1	6.4	0.2	8.0	89.5	100	113
Gatsibo	10.7	2.6	7.5	0.4	0.4	89.2	100	105
Kayonza	10.0	6.6	2.6	0.3	0.5	90.0	100	86
Kirehe	14.3	1.3	7.4	5.6	0.2	85.5	100	84
Ngoma	5.5	1.1	3.5	0.9	0.2	94.3	100	81
Bugesera	5.0	2.9	1.2	0.7	0.2	95.0	100	94

Table A.18: Waste management facilities, by district (EICV5, EICV4)

		N	Main method	of rubbish (	disposal				Total Nber
EICV5	Compost heap	Thrown in bushes / fields	Rubbish collection service	Dumped in river /lake	Publicly managed refuse area	Burnt	Other	Total	of HHs (in 000s)
All Rwanda	42.5	46.5	8.3	0.2	2.0	0.1	0.4	100	2,708
Nyarugenge	12.7	29.2	55.7	0.9	1.5	0.0	0.0	100	81
Gasabo	14.9	37.3	43.4	0.8	2.8	0.1	0.6	100	230
Kicukiro	11.4	28.2	56.2	0.4	3.0	0.9	0.0	100	98
Nyanza	38.6	58.0	0.5	0.2	1.3	0.4	1.0	100	79
Gisagara	48.8	47.8	0.3	0.0	3.1	0.0	0.0	100	82
Nyaruguru	43.5	55.3	0.0	0.1	1.1	0.0	0.0	100	64
Huye	43.1	55.8	0.1	0.0	0.8	0.0	0.2	100	82
Nyamagabe	39.0	59.6	0.0	0.2	1.0	0.0	0.2	100	77
Ruhango	37.0	59.8	0.2	0.0	2.3	0.2	0.5	100	71
Muhanga	31.4	63.5	1.8	0.0	2.7	0.5	0.2	100	78
Kamonyi	22.4	68.5	2.3	0.0	6.7	0.0	0.0	100	93
Karongi	59.4	38.2	0.8	0.0	1.5	0.0	0.1	100	78
Rutsiro	45.4	52.3	0.0	0.0	2.3	0.0	0.0	100	73
Rubavu	26.4	63.2	8.0	0.0	1.7	0.0	0.7	100	96
Nyabihu	44.0	51.4	0.2	0.6	3.3	0.0	0.4	100	67
Ngororero	46.0	50.2	0.0	0.0	1.9	0.0	1.9	100	82
Rusizi	47.0	48.7	0.9	0.0	3.3	0.0	0.2	100	95
Nyamasheke	64.5	33.4	0.0	0.1	1.7	0.0	0.2	100	83
Rulindo	53.7	45.7	0.0	0.0	0.4	0.0	0.2	100	78
Gakenke	57.1	41.6	0.0	0.0	0.8	0.0	0.5	100	84
Musanze	38.9	53.6	4.1	0.0	2.7	0.2	0.4	100	91
Burera	34.8	63.0	0.5	0.0	1.4	0.0	0.2	100	82
Gicumbi	47.2	48.4	0.7	0.0	2.7	0.0	1.0	100	88
Rwamagana	61.5	34.1	1.2	0.3	1.2	0.0	1.7	100	89
Nyagatare	42.2	52.1	3.6	0.0	1.9	0.2	0.0	100	132
Gatsibo	65.0	33.6	0.2	0.2	1.0	0.0	0.0	100	108
Kayonza	65.8	32.8	0.7	0.0	0.6	0.1	0.0	100	83
Kirehe	83.5	15.2	0.2	0.0	0.9	0.2	0.0	100	87
Ngoma	74.0	24.6	0.0	0.0	1.2	0.0	0.2	100	83
Bugesera	28.2	69.6	0.3	0.0	1.6	0.3	0.0	100	95

			Main method	l of rubbish	disposal				Total Nber	
EICV4	Compost heap	Thrown in bushes / fields	Rubbish collection service	Dumped in river /lake	Publicly managed refuse area	Burnt	Other	Total	of HHs (in 000s)	
All Rwanda	51.6	40.2	6.2	0.1	1.5	0.1	0.2	100	2,493	
Nyarugenge	14.4	24.0	59.9	1.4	0.3	0.0	0.0	100	73	
Gasabo	23.1	34.6	39.9	0.2	1.8	0.3	0.0	100	147	
Kicukiro	21.7	29.4	46.5	0.0	0.7	0.0	1.8	100	76	
Nyanza	51.3	44.3	0.0	0.0	4.4	0.0	0.0	100	77	
Gisagara	72.4	27.4	0.0	0.0	0.2	0.0	0.0	100	79	
Nyaruguru	55.2	44.0	0.0	0.0	0.8	0.0	0.0	100	61	
Huye	63.7	33.9	0.2	0.0	1.6	0.0	0.6	100	79	
Nyamagabe	51.9	47.4	0.0	0.0	0.2	0.0	0.6	100	73	
Ruhango	39.3	59.1	0.0	0.0	1.6	0.0	0.0	100	77	

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			Main method	l of rubbish	disposal				Total Nber	
EICV4	Compost heap	Thrown in bushes / fields	Rubbish collection service	Dumped in river /lake	Publicly managed refuse area	Burnt	Other	Total	of HHs (in 000s)	
Muhanga	44.4	49.9	3.4	0.0	1.9	0.0	0.4	100	73	
Kamonyi	55.0	44.0	0.2	0.2	0.6	0.0	0.0	100	79	
Karongi	59.6	38.8	0.2	0.0	1.1	0.2	0.0	100	75	
Rutsiro	51.7	47.3	0.0	0.0	0.8	0.0	0.2	100	73	
Rubavu	28.0	62.4	6.9	0.2	2.5	0.0	0.0	100	92	
Nyabihu	52.5	46.7	0.0	0.0	0.6	0.0	0.2	100	64	
Ngororero	52.7	46.2	0.2	0.0	0.8	0.0	0.0	100	81	
Rusizi	65.0	28.3	1.8	0.5	3.3	0.0	1.2	100	89	
Nyamasheke	62.6	35.9	0.0	0.9	0.6	0.0	0.0	100	86	
Rulindo	61.3	37.4	0.2	0.0	0.8	0.0	0.2	100	69	
Gakenke	49.2	50.2	0.0	0.0	0.4	0.0	0.2	100	80	
Musanze	43.3	52.4	3.0	0.0	1.2	0.0	0.1	100	86	
Burera	44.7	54.4	0.0	0.0	0.9	0.0	0.0	100	74	
Gicumbi	61.1	38.5	0.0	0.0	0.4	0.0	0.0	100	86	
Rwamagana	56.4	40.1	1.6	0.0	1.7	0.0	0.2	100	85	
Nyagatare	62.7	31.0	1.5	0.2	4.6	0.1	0.0	100	113	
Gatsibo	70.0	27.4	0.4	0.0	2.0	0.2	0.0	100	105	
Kayonza	68.2	27.7	0.6	0.0	3.5	0.0	0.0	100	86	
Kirehe	80.9	16.8	0.0	0.0	2.1	0.0	0.2	100	84	
Ngoma	63.9	34.9	0.0	0.0	1.2	0.0	0.0	100	81	
Bugesera	34.0	64.1	0.4	0.0	0.7	0.4	0.4	100	94	

Table A.19: Main reasons causing HHs to change their accommodation, by district (EICV5, EICV4)

			Main rea	sons causing l	HHs to change	their accommod	ation				
EICV5	Resettlement policy	Evacuated / disaster	Get a better house	Build/ buy own house	Renting cost	Move to a better neighborhood	Access to new/ different job	Forced by owner parent	/ /Other	Total	Total Nber of HHs (000s)
All Rwanda	6.9	1.5	29.0	26.1	9.1	15.9	4.3	2.8	4.4	100	2,033
Nyarugenge	1.7	0.4	14.5	24.5	25.9	15.8	9.2	5.2	2.8	100	70
Gasabo	0.9	0.0	17.0	25.3	24.5	11.7	11.9	4.6	4.1	100	198
Kicukiro	0.2	0.1	11.1	31.7	30.6	9.1	9.3	3.4	4.7	100	83
Nyanza	1.4	1.2	35.5	27.0	6.1	9.8	4.2	4.4	10.4	100	53
Gisagara	23.5	1.3	19.4	25.4	9.6	11.9	2.6	3.2	3.2	100	61
Nyaruguru	15.3	1.9	31.7	20.5	1.6	14.1	2.4	4.3	8.2	100	46
Huye	6.4	0.0	21.5	25.8	10.3	24.9	2.2	2.5	6.5	100	56
Nyamagabe	16.5	4.9	28.8	27.6	2.4	12.5	1.3	3.1	2.8	100	46
Ruhango	0.8	2.2	27.9	28.0	8.4	21.4	2.1	3.6	5.4	100	47
Muhanga	2.0	6.4	33.3	19.6	6.3	21.8	3.9	2.2	4.6	100	51
Kamonyi	1.5	0.0	32.1	25.0	10.4	20.9	4.2	2.1	3.8	100	68
Karongi	2.0	2.0	34.6	22.6	3.2	22.4	4.4	3.3	5.6	100	50
Rutsiro	15.7	3.2	19.3	24.9	3.8	27.2	0.2	1.2	4.5	100	44
Rubavu	1.1	0.6	25.9	37.6	8.3	13.4	6.9	3.2	2.9	100	77
Nyabihu	1.5	2.6	43.4	26.2	4.3	11.8	2.1	3.9	4.1	100	48
Ngororero	2.6	10.7	36.2	22.9	1.5	14.6	1.6	2.0	7.8	100	57
Rusizi	14.2	1.6	34.3	21.2	3.0	16.6	0.7	2.1	6.2	100	74
Nyamasheke	5.8	1.0	35.9	22.9	2.5	27.8	0.5	8.0	2.8	100	55
Rulindo	0.6	0.3	44.8	26.7	2.2	13.8	5.8	2.4	3.4	100	55
Gakenke	10.0	4.8	47.5	12.7	1.4	19.1	0.7	1.0	2.7	100	63
Musanze	6.0	2.7	40.3	27.1	5.2	12.3	2.9	0.6	3.0	100	64
Burera	5.8	1.0	46.4	23.3	2.2	15.2	2.3	1.1	2.7	100	61
Gicumbi	3.9	2.0	43.4	34.8	1.8	6.4	1.2	2.5	4.0	100	58
Rwamagana	8.3	0.8	23.9	31.3	9.4	11.1	2.5	5.3	7.5	100	65
Nyagatare	3.8	0.6	28.7	30.9	10.6	17.5	3.8	1.4	2.6	100	118
Gatsibo	6.1	1.3	26.8	24.5	5.2	25.2	4.5	1.3	5.1	100	86
Kayonza	9.8	0.8	18.9	36.2	7.3	14.2	3.3	3.0	6.5	100	71
Kirehe	12.6	0.2	37.7	20.5	3.6	18.6	3.6	2.1	1.1	100	69
Ngoma	24.9	0.7	22.0	25.8	3.4	13.7	3.3	1.9	4.2	100	64
Bugesera	19.1	0.0	29.5	22.7	7.4	12.8	3.2	2.6	2.9	100	76

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			Main rea	sons causing HH:	s to change t	heir accommodat	tion				Total
EICV4	Resettlement policy	Evacuated / disaster	Get a better house	Build/ buy own house	Renting cost	Move to a better neighborhood	Access to new/ different job	Forced by owner/ parent	Other	Total	Nber of HHs (000s)
All Rwanda	9.8	1.4	32.9	25.0	6.4	14.8	3.4	3.1	3.1	100	1,863
Nyarugenge	0.0	0.3	21.2	30.4	17.8	11.7	9.6	7.5	1.5	100	62
Gasabo	2.2	0.0	23.2	28.6	19.1	11.0	10.0	2.8	3.1	100	124
Kicukiro	0.5	0.5	11.8	29.2	22.6	14.9	9.0	2.5	9.0	100	65
Nyanza	5.8	1.4	40.8	23.4	6.6	12.5	3.5	2.6	3.5	100	55
Gisagara	37.4	0.7	28.2	11.7	1.9	14.7	0.3	4.2	1.0	100	56
Nyaruguru	26.1	1.1	33.9	21.1	2.1	11.4	0.7	2.9	0.7	100	42
Huye	14.7	0.9	23.6	31.3	7.4	10.0	3.0	6.2	3.0	100	54
Nyamagabe	1.5	1.3	38.8	31.2	3.8	14.0	1.3	2.6	5.6	100	44
Ruhango	0.9	0.3	36.7	28.5	4.1	18.2	4.2	5.0	2.2	100	50
Muhanga	5.8	1.7	41.8	16.4	4.4	18.1	4.0	3.4	4.5	100	45
Kamonyi	2.1	0.0	43.1	22.0	5.9	14.5	3.8	4.0	4.6	100	54
Karongi	4.3	1.7	35.5	26.5	4.7	15.3	4.6	3.1	4.3	100	47
Rutsiro	16.7	1.8	30.5	25.3	4.9	11.3	1.6	6.3	1.6	100	48
Rubavu	0.7	1.1	32.4	35.3	10.2	11.3	3.1	3.9	2.1	100	72
Nyabihu	2.7	5.6	35.6	29.1	3.3	11.2	2.5	3.2	6.8	100	47
Ngororero	2.6	5.4	42.5	19.0	1.0	22.3	1.9	4.5	0.9	100	53
Rusizi	9.5	5.7	36.7	25.3	5.9	10.4	1.9	2.1	2.6	100	68
Nyamasheke	7.2	4.1	37.0	21.0	1.7	21.6	1.7	1.4	4.4	100	64
Rulindo	2.8	1.3	46.9	18.8	2.7	20.5	0.8	3.0	3.2	100	47
Gakenke	23.4	1.5	48.5	10.8	0.3	12.5	0.5	0.9	1.8	100	58
Musanze	8.7	2.7	36.5	18.9	2.4	25.0	1.0	2.7	2.1	100	65
Burera	3.5	3.4	43.2	20.1	1.3	25.2	1.9	0.5	0.8	100	57
Gicumbi	7.3	2.3	60.0	12.4	3.6	10.5	0.6	0.9	2.5	100	64
Rwamagana	8.3	0.0	32.2	31.1	5.0	12.6	3.5	3.3	4.0	100	64
Nyagatare	11.4	0.0	21.9	34.0	6.8	14.6	3.4	3.5	4.4	100	104
Gatsibo	10.9	0.0	40.9	22.6	3.9	15.3	3.3	2.3	0.9	100	81
Kayonza	10.8	0.2	22.5	23.0	6.5	25.2	3.1	5.6	3.1	100	69
Kirehe	10.0	0.5	26.4	38.1	4.2	14.8	0.7	0.9	4.4	100	72
Ngoma	40.9	0.6	18.9	26.4	1.7	6.4	1.2	2.0	1.8	100	58
Bugesera	22.4	0.5	26.2	23.6	6.9	11.7	4.9	1.9	2.1	100	75

Table A. 20: Occupancy status, by district (EICV5, EICV4)

Part   Part			Cu	irrent occupanc	y status				m . 1 . c
Nyarugenge         38.4         56.0         0.4         5.1         0.2         0.0         100         81           Gasabo         38.8         52.6         0.8         7.8         0.0         0.0         100         230           Kicukiro         38.1         54.8         1.3         5.9         0.0         0.0         100         98           Nyanza         77.9         13.4         0.6         8.1         0.0         0.0         100         79           Sisagara         80.9         12.7         0.0         6.3         0.1         0.0         100         82           Nyaruguru         84.3         6.6         0.0         8.6         0.2         0.2         100         64           Huye         75.1         11.7         0.1         13.1         0.0         0.0         100         82           Nyamagabe         84.6         5.6         0.2         9.4         0.0         0.2         100         77           Ruhango         85.3         7.5         0.2         6.8         0.2         0.0         100         71           Muhanga         82.8         10.7         0.2         6.1	EICV5	occupied (with/without		provided by	provided free of	camp or	Other	Total	
Gasabo         38.8         52.6         0.8         7.8         0.0         0.0         100         230           Kicukiro         38.1         54.8         1.3         5.9         0.0         0.0         100         98           Nyanza         77.9         13.4         0.6         8.1         0.0         0.0         100         79           Gisagara         80.9         12.7         0.0         6.3         0.1         0.0         100         82           Nyaruguru         84.3         6.6         0.0         8.6         0.2         0.2         100         64           Huye         75.1         11.7         0.1         13.1         0.0         0.0         100         82           Nyamagabe         84.6         5.6         0.2         9.4         0.0         0.2         100         77           Ruhango         85.3         7.5         0.2         6.8         0.2         0.0         100         73           Kamonyi         77.2         15.2         0.4         6.6         0.4         0.2         100         93           Karongi         86.8         8.0         0.1         4.4	All Rwanda	76.5	16.7	0.4	6.0	0.2	0.1	100	2,708
Kicukiro         38.1         54.8         1.3         5.9         0.0         0.0         100         98           Nyanza         77.9         13.4         0.6         8.1         0.0         0.0         100         79           Gisagara         80.9         12.7         0.0         6.3         0.1         0.0         100         82           Nyaruguru         84.3         6.6         0.0         8.6         0.2         0.2         100         64           Huye         75.1         11.7         0.1         13.1         0.0         0.0         100         86           Huye         75.1         11.7         0.1         13.1         0.0         0.0         100         77           Ruhango         85.3         7.5         0.2         6.8         0.2         0.0         100         77           Ruhango         85.3         7.5         0.2         6.8         0.2         0.0         100         78           Kamonyi         77.2         15.2         0.4         6.6         0.4         0.2         100         93           Karongi         86.8         8.0         0.1         4.4	Nyarugenge	38.4	56.0	0.4	5.1	0.2	0.0	100	81
Nyanza         77.9         13.4         0.6         8.1         0.0         0.0         100         79           Gisagara         80.9         12.7         0.0         6.3         0.1         0.0         100         82           Nyaruguru         84.3         6.6         0.0         8.6         0.2         0.2         100         64           Huye         75.1         11.7         0.1         13.1         0.0         0.0         100         82           Nyamagabe         84.6         5.6         0.2         9.4         0.0         0.2         100         77           Ruhango         85.3         7.5         0.2         6.8         0.2         0.0         100         71           Muhanga         82.8         10.7         0.2         6.1         0.2         0.0         100         73           Kamonyi         77.2         15.2         0.4         6.6         0.4         0.2         100         93           Karongi         86.8         8.0         0.1         4.4         0.0         0.7         100         73           Rutsiro         90.6         3.8         0.2         5.1 <t< td=""><td>Gasabo</td><td>38.8</td><td>52.6</td><td>0.8</td><td>7.8</td><td>0.0</td><td>0.0</td><td>100</td><td>230</td></t<>	Gasabo	38.8	52.6	0.8	7.8	0.0	0.0	100	230
Gisagara         80.9         12.7         0.0         6.3         0.1         0.0         100         82           Nyaruguru         84.3         6.6         0.0         8.6         0.2         0.2         100         64           Huye         75.1         11.7         0.1         13.1         0.0         0.0         100         82           Nyamagabe         84.6         5.6         0.2         9.4         0.0         0.2         100         77           Ruhango         85.3         7.5         0.2         6.8         0.2         0.0         100         71           Muhanga         82.8         10.7         0.2         6.1         0.2         0.0         100         78           Kamonyi         77.2         15.2         0.4         6.6         0.4         0.2         100         93           Karongi         86.8         8.0         0.1         4.4         0.0         0.7         100         78           Rutsiro         90.6         3.8         0.2         5.1         0.2         0.0         100         73           Rubavu         72.9         19.7         0.2         6.3 <t< td=""><td>Kicukiro</td><td>38.1</td><td>54.8</td><td>1.3</td><td>5.9</td><td>0.0</td><td>0.0</td><td>100</td><td>98</td></t<>	Kicukiro	38.1	54.8	1.3	5.9	0.0	0.0	100	98
Nyaruguru         84.3         6.6         0.0         8.6         0.2         0.2         100         64           Huye         75.1         11.7         0.1         13.1         0.0         0.0         100         82           Nyamagabe         84.6         5.6         0.2         9.4         0.0         0.2         100         77           Ruhango         85.3         7.5         0.2         6.8         0.2         0.0         100         71           Muhanga         82.8         10.7         0.2         6.1         0.2         0.0         100         78           Kamonyi         77.2         15.2         0.4         6.6         0.4         0.2         100         93           Karongi         86.8         8.0         0.1         4.4         0.0         0.7         100         78           Rutsiro         90.6         3.8         0.2         5.1         0.2         0.0         100         73           Rubavu         72.9         19.7         0.2         6.3         0.6         0.2         100         96           Nyabihu         81.5         7.9         0.0         9.9	Nyanza	77.9	13.4	0.6	8.1	0.0	0.0	100	79
Huye         75.1         11.7         0.1         13.1         0.0         0.0         100         82           Nyamagabe         84.6         5.6         0.2         9.4         0.0         0.2         100         77           Ruhango         85.3         7.5         0.2         6.8         0.2         0.0         100         71           Muhanga         82.8         10.7         0.2         6.1         0.2         0.0         100         78           Kamonyi         77.2         15.2         0.4         6.6         0.4         0.2         100         93           Karongi         86.8         8.0         0.1         4.4         0.0         0.7         100         78           Rutsiro         90.6         3.8         0.2         5.1         0.2         0.0         100         73           Rubavu         72.9         19.7         0.2         6.3         0.6         0.2         100         96           Nyabihu         81.5         7.9         0.0         9.9         0.6         0.0         100         67           Ngororero         88.5         4.0         0.0         7.0	Gisagara	80.9	12.7	0.0	6.3	0.1	0.0	100	82
Nyamagabe         84.6         5.6         0.2         9.4         0.0         0.2         100         77           Ruhango         85.3         7.5         0.2         6.8         0.2         0.0         100         71           Muhanga         82.8         10.7         0.2         6.1         0.2         0.0         100         78           Kamonyi         77.2         15.2         0.4         6.6         0.4         0.2         100         93           Karongi         86.8         8.0         0.1         4.4         0.0         0.7         100         78           Rutsiro         90.6         3.8         0.2         5.1         0.2         0.0         100         73           Rubavu         72.9         19.7         0.2         6.3         0.6         0.2         100         96           Nyabihu         81.5         7.9         0.0         9.9         0.6         0.0         100         67           Ngororero         88.5         4.0         0.0         7.0         0.0         0.5         100         82           Rusizi         86.2         8.9         0.2         4.4	Nyaruguru	84.3	6.6	0.0	8.6	0.2	0.2	100	64
Ruhango         85.3         7.5         0.2         6.8         0.2         0.0         100         71           Muhanga         82.8         10.7         0.2         6.1         0.2         0.0         100         78           Kamonyi         77.2         15.2         0.4         6.6         0.4         0.2         100         93           Karongi         86.8         8.0         0.1         4.4         0.0         0.7         100         78           Rutsiro         90.6         3.8         0.2         5.1         0.2         0.0         100         73           Rubavu         72.9         19.7         0.2         6.3         0.6         0.2         100         96           Nyabihu         81.5         7.9         0.0         9.9         0.6         0.0         100         67           Ngororero         88.5         4.0         0.0         7.0         0.0         0.5         100         82           Rusizi         86.2         8.9         0.2         4.4         0.3         0.0         100         95           Nyamasheke         93.4         2.9         0.1         3.3 <td< td=""><td>Huye</td><td>75.1</td><td>11.7</td><td>0.1</td><td>13.1</td><td>0.0</td><td>0.0</td><td>100</td><td>82</td></td<>	Huye	75.1	11.7	0.1	13.1	0.0	0.0	100	82
Muhanga         82.8         10.7         0.2         6.1         0.2         0.0         100         78           Kamonyi         77.2         15.2         0.4         6.6         0.4         0.2         100         93           Karongi         86.8         8.0         0.1         4.4         0.0         0.7         100         78           Rutsiro         90.6         3.8         0.2         5.1         0.2         0.0         100         73           Rubavu         72.9         19.7         0.2         6.3         0.6         0.2         100         96           Nyabihu         81.5         7.9         0.0         9.9         0.6         0.0         100         67           Ngororero         88.5         4.0         0.0         7.0         0.0         0.5         100         82           Rusizi         86.2         8.9         0.2         4.4         0.3         0.0         100         95           Nyamasheke         93.4         2.9         0.1         3.3         0.1         0.2         100         83           Rulindo         87.6         7.1         0.4         4.0 <th< td=""><td>Nyamagabe</td><td>84.6</td><td>5.6</td><td>0.2</td><td>9.4</td><td>0.0</td><td>0.2</td><td>100</td><td>77</td></th<>	Nyamagabe	84.6	5.6	0.2	9.4	0.0	0.2	100	77
Kamonyi         77.2         15.2         0.4         6.6         0.4         0.2         100         93           Karongi         86.8         8.0         0.1         4.4         0.0         0.7         100         78           Rutsiro         90.6         3.8         0.2         5.1         0.2         0.0         100         73           Rubavu         72.9         19.7         0.2         6.3         0.6         0.2         100         96           Nyabihu         81.5         7.9         0.0         9.9         0.6         0.0         100         67           Ngororero         88.5         4.0         0.0         7.0         0.0         0.5         100         82           Rusizi         86.2         8.9         0.2         4.4         0.3         0.0         100         95           Nyamasheke         93.4         2.9         0.1         3.3         0.1         0.2         100         83           Rulindo         87.6         7.1         0.4         4.0         0.4         0.5         100         78           Gakenke         92.8         2.9         0.2         3.9	Ruhango	85.3	7.5	0.2	6.8	0.2	0.0	100	71
Karongi         86.8         8.0         0.1         4.4         0.0         0.7         100         78           Rutsiro         90.6         3.8         0.2         5.1         0.2         0.0         100         73           Rubavu         72.9         19.7         0.2         6.3         0.6         0.2         100         96           Nyabihu         81.5         7.9         0.0         9.9         0.6         0.0         100         67           Ngororero         88.5         4.0         0.0         7.0         0.0         0.5         100         82           Rusizi         86.2         8.9         0.2         4.4         0.3         0.0         100         95           Nyamasheke         93.4         2.9         0.1         3.3         0.1         0.2         100         83           Rulindo         87.6         7.1         0.4         4.0         0.4         0.5         100         78           Gakenke         92.8         2.9         0.2         3.9         0.1         0.0         100         84           Musanze         85.8         10.6         0.0         2.9	Muhanga	82.8	10.7	0.2	6.1	0.2	0.0	100	78
Rutsiro         90.6         3.8         0.2         5.1         0.2         0.0         100         73           Rubavu         72.9         19.7         0.2         6.3         0.6         0.2         100         96           Nyabihu         81.5         7.9         0.0         9.9         0.6         0.0         100         67           Ngororero         88.5         4.0         0.0         7.0         0.0         0.5         100         82           Rusizi         86.2         8.9         0.2         4.4         0.3         0.0         100         95           Nyamasheke         93.4         2.9         0.1         3.3         0.1         0.2         100         83           Rulindo         87.6         7.1         0.4         4.0         0.4         0.5         100         78           Gakenke         92.8         2.9         0.2         3.9         0.1         0.0         100         84           Musanze         85.8         10.6         0.0         2.9         0.2         0.4         100         91           Burera         90.7         4.8         0.0         4.6         0	Kamonyi	77.2	15.2	0.4	6.6	0.4	0.2	100	93
Rubavu         72.9         19.7         0.2         6.3         0.6         0.2         100         96           Nyabihu         81.5         7.9         0.0         9.9         0.6         0.0         100         67           Ngororero         88.5         4.0         0.0         7.0         0.0         0.5         100         82           Rusizi         86.2         8.9         0.2         4.4         0.3         0.0         100         95           Nyamasheke         93.4         2.9         0.1         3.3         0.1         0.2         100         83           Rulindo         87.6         7.1         0.4         4.0         0.4         0.5         100         78           Gakenke         92.8         2.9         0.2         3.9         0.1         0.0         100         84           Musanze         85.8         10.6         0.0         2.9         0.2         0.4         100         91           Burera         90.7         4.8         0.0         4.6         0.0         0.0         100         82           Gicumbi         91.8         3.7         0.2         3.5         0	Karongi	86.8	8.0	0.1	4.4	0.0	0.7	100	78
Nyabihu         81.5         7.9         0.0         9.9         0.6         0.0         100         67           Ngororero         88.5         4.0         0.0         7.0         0.0         0.5         100         82           Rusizi         86.2         8.9         0.2         4.4         0.3         0.0         100         95           Nyamasheke         93.4         2.9         0.1         3.3         0.1         0.2         100         83           Rulindo         87.6         7.1         0.4         4.0         0.4         0.5         100         78           Gakenke         92.8         2.9         0.2         3.9         0.1         0.0         100         84           Musanze         85.8         10.6         0.0         2.9         0.2         0.4         100         91           Burera         90.7         4.8         0.0         4.6         0.0         0.0         100         82           Gicumbi         91.8         3.7         0.2         3.5         0.4         0.4         100         88           Rwamagana         72.8         16.4         1.0         9.1 <t< td=""><td>Rutsiro</td><td>90.6</td><td>3.8</td><td>0.2</td><td>5.1</td><td>0.2</td><td>0.0</td><td>100</td><td>73</td></t<>	Rutsiro	90.6	3.8	0.2	5.1	0.2	0.0	100	73
Ngororero         88.5         4.0         0.0         7.0         0.0         0.5         100         82           Rusizi         86.2         8.9         0.2         4.4         0.3         0.0         100         95           Nyamasheke         93.4         2.9         0.1         3.3         0.1         0.2         100         83           Rulindo         87.6         7.1         0.4         4.0         0.4         0.5         100         78           Gakenke         92.8         2.9         0.2         3.9         0.1         0.0         100         84           Musanze         85.8         10.6         0.0         2.9         0.2         0.4         100         91           Burera         90.7         4.8         0.0         4.6         0.0         0.0         100         82           Gicumbi         91.8         3.7         0.2         3.5         0.4         0.4         100         88           Rwamagana         72.8         16.4         1.0         9.1         0.5         0.1         100         89           Nyagatare         74.4         18.3         1.6         5.3	Rubavu	72.9	19.7	0.2	6.3	0.6	0.2	100	96
Ngororero         88.5         4.0         0.0         7.0         0.0         0.5         100         82           Rusizi         86.2         8.9         0.2         4.4         0.3         0.0         100         95           Nyamasheke         93.4         2.9         0.1         3.3         0.1         0.2         100         83           Rulindo         87.6         7.1         0.4         4.0         0.4         0.5         100         78           Gakenke         92.8         2.9         0.2         3.9         0.1         0.0         100         84           Musanze         85.8         10.6         0.0         2.9         0.2         0.4         100         91           Burera         90.7         4.8         0.0         4.6         0.0         0.0         100         82           Gicumbi         91.8         3.7         0.2         3.5         0.4         0.4         100         88           Rwamagana         72.8         16.4         1.0         9.1         0.5         0.1         100         89           Nyagatare         74.4         18.3         1.6         5.3	Nyabihu	81.5	7.9	0.0	9.9	0.6	0.0	100	67
Nyamasheke         93.4         2.9         0.1         3.3         0.1         0.2         100         83           Rulindo         87.6         7.1         0.4         4.0         0.4         0.5         100         78           Gakenke         92.8         2.9         0.2         3.9         0.1         0.0         100         84           Musanze         85.8         10.6         0.0         2.9         0.2         0.4         100         91           Burera         90.7         4.8         0.0         4.6         0.0         0.0         100         82           Gicumbi         91.8         3.7         0.2         3.5         0.4         0.4         100         88           Rwamagana         72.8         16.4         1.0         9.1         0.5         0.1         100         89           Nyagatare         74.4         18.3         1.6         5.3         0.2         0.2         100         132           Gatsibo         81.8         10.0         1.1         6.7         0.0         0.4         100         108           Kayonza         81.1         13.3         0.7         4.5		88.5	4.0	0.0	7.0	0.0	0.5	100	82
Rulindo         87.6         7.1         0.4         4.0         0.4         0.5         100         78           Gakenke         92.8         2.9         0.2         3.9         0.1         0.0         100         84           Musanze         85.8         10.6         0.0         2.9         0.2         0.4         100         91           Burera         90.7         4.8         0.0         4.6         0.0         0.0         100         82           Gicumbi         91.8         3.7         0.2         3.5         0.4         0.4         100         88           Rwamagana         72.8         16.4         1.0         9.1         0.5         0.1         100         89           Nyagatare         74.4         18.3         1.6         5.3         0.2         0.2         100         132           Gatsibo         81.8         10.0         1.1         6.7         0.0         0.4         100         108           Kayonza         81.1         13.3         0.7         4.5         0.4         0.0         100         83           Ngoma         88.1         8.7         0.0         2.9         <	Rusizi	86.2	8.9	0.2	4.4	0.3	0.0	100	95
Gakenke         92.8         2.9         0.2         3.9         0.1         0.0         100         84           Musanze         85.8         10.6         0.0         2.9         0.2         0.4         100         91           Burera         90.7         4.8         0.0         4.6         0.0         0.0         100         82           Gicumbi         91.8         3.7         0.2         3.5         0.4         0.4         100         88           Rwamagana         72.8         16.4         1.0         9.1         0.5         0.1         100         89           Nyagatare         74.4         18.3         1.6         5.3         0.2         0.2         100         132           Gatsibo         81.8         10.0         1.1         6.7         0.0         0.4         100         108           Kayonza         81.1         13.3         0.7         4.5         0.4         0.0         100         83           Kirehe         85.6         12.4         0.0         1.8         0.0         0.2         100         83           Ngoma         88.1         8.7         0.0         2.9         <	Nyamasheke	93.4	2.9	0.1	3.3	0.1	0.2	100	83
Musanze         85.8         10.6         0.0         2.9         0.2         0.4         100         91           Burera         90.7         4.8         0.0         4.6         0.0         0.0         100         82           Gicumbi         91.8         3.7         0.2         3.5         0.4         0.4         100         88           Rwamagana         72.8         16.4         1.0         9.1         0.5         0.1         100         89           Nyagatare         74.4         18.3         1.6         5.3         0.2         0.2         100         132           Gatsibo         81.8         10.0         1.1         6.7         0.0         0.4         100         108           Kayonza         81.1         13.3         0.7         4.5         0.4         0.0         100         83           Kirehe         85.6         12.4         0.0         1.8         0.0         0.2         100         83           Ngoma         88.1         8.7         0.0         2.9         0.2         0.0         100         83	Rulindo	87.6	7.1	0.4	4.0	0.4	0.5	100	78
Burera         90.7         4.8         0.0         4.6         0.0         0.0         100         82           Gicumbi         91.8         3.7         0.2         3.5         0.4         0.4         100         88           Rwamagana         72.8         16.4         1.0         9.1         0.5         0.1         100         89           Nyagatare         74.4         18.3         1.6         5.3         0.2         0.2         100         132           Gatsibo         81.8         10.0         1.1         6.7         0.0         0.4         100         108           Kayonza         81.1         13.3         0.7         4.5         0.4         0.0         100         83           Kirehe         85.6         12.4         0.0         1.8         0.0         0.2         100         87           Ngoma         88.1         8.7         0.0         2.9         0.2         0.0         100         83	Gakenke	92.8	2.9	0.2	3.9	0.1	0.0	100	84
Gicumbi         91.8         3.7         0.2         3.5         0.4         0.4         100         88           Rwamagana         72.8         16.4         1.0         9.1         0.5         0.1         100         89           Nyagatare         74.4         18.3         1.6         5.3         0.2         0.2         100         132           Gatsibo         81.8         10.0         1.1         6.7         0.0         0.4         100         108           Kayonza         81.1         13.3         0.7         4.5         0.4         0.0         100         83           Kirehe         85.6         12.4         0.0         1.8         0.0         0.2         100         87           Ngoma         88.1         8.7         0.0         2.9         0.2         0.0         100         83	Musanze	85.8	10.6	0.0	2.9	0.2	0.4	100	91
Rwamagana         72.8         16.4         1.0         9.1         0.5         0.1         100         89           Nyagatare         74.4         18.3         1.6         5.3         0.2         0.2         100         132           Gatsibo         81.8         10.0         1.1         6.7         0.0         0.4         100         108           Kayonza         81.1         13.3         0.7         4.5         0.4         0.0         100         83           Kirehe         85.6         12.4         0.0         1.8         0.0         0.2         100         87           Ngoma         88.1         8.7         0.0         2.9         0.2         0.0         100         83	Burera	90.7	4.8	0.0	4.6	0.0	0.0	100	82
Nyagatare         74.4         18.3         1.6         5.3         0.2         0.2         100         132           Gatsibo         81.8         10.0         1.1         6.7         0.0         0.4         100         108           Kayonza         81.1         13.3         0.7         4.5         0.4         0.0         100         83           Kirehe         85.6         12.4         0.0         1.8         0.0         0.2         100         87           Ngoma         88.1         8.7         0.0         2.9         0.2         0.0         100         83	Gicumbi	91.8	3.7	0.2	3.5	0.4	0.4	100	88
Nyagatare         74.4         18.3         1.6         5.3         0.2         0.2         100         132           Gatsibo         81.8         10.0         1.1         6.7         0.0         0.4         100         108           Kayonza         81.1         13.3         0.7         4.5         0.4         0.0         100         83           Kirehe         85.6         12.4         0.0         1.8         0.0         0.2         100         87           Ngoma         88.1         8.7         0.0         2.9         0.2         0.0         100         83	Rwamagana	72.8	16.4	1.0	9.1	0.5	0.1	100	89
Gatsibo         81.8         10.0         1.1         6.7         0.0         0.4         100         108           Kayonza         81.1         13.3         0.7         4.5         0.4         0.0         100         83           Kirehe         85.6         12.4         0.0         1.8         0.0         0.2         100         87           Ngoma         88.1         8.7         0.0         2.9         0.2         0.0         100         83		74.4	18.3	1.6	5.3	0.2	0.2	100	132
Kayonza     81.1     13.3     0.7     4.5     0.4     0.0     100     83       Kirehe     85.6     12.4     0.0     1.8     0.0     0.2     100     87       Ngoma     88.1     8.7     0.0     2.9     0.2     0.0     100     83		81.8	10.0	1.1	6.7	0.0	0.4	100	108
Kirehe         85.6         12.4         0.0         1.8         0.0         0.2         100         87           Ngoma         88.1         8.7         0.0         2.9         0.2         0.0         100         83		81.1	13.3	0.7	4.5	0.4	0.0	100	
Ngoma 88.1 8.7 0.0 2.9 0.2 0.0 100 83				0.0	1.8	0.0	0.2	100	
		88.1	8.7	0.0	2.9	0.2	0.0	100	83
	Bugesera	78.3	14.1	0.8	6.4	0.4	0.0	100	95

		Cu	rrent occupanc	y status				m . 1
EICV4	Owner occupied (with/without mortgage)	Tenancy (renting)	Dwelling provided by employer	Dwelling provided free of charge	Temporary camp or settlement	Other	Total	Total no. of HHs (in 000s)
All Rwanda	80.9	13.5	0.3	5.1	0.2	0.1	100	2,493
Nyarugenge	43.7	50.8	0.2	5.4	0.0	0.0	100	73
Gasabo	51.6	44.2	0.2	3.7	0.2	0.0	100	147
Kicukiro	44.3	50.3	0.8	4.6	0.0	0.0	100	76
Nyanza	81.4	11.1	0.2	6.6	0.8	0.0	100	77
Gisagara	88.2	3.0	0.0	8.4	0.4	0.0	100	79
Nyaruguru	86.6	3.5	0.4	8.0	1.6	0.0	100	61
Huye	76.3	12.3	0.2	11.2	0.0	0.0	100	79
Nyamagabe	84.0	4.7	0.2	11.1	0.0	0.0	100	73

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		Cu	rrent occupanc	y status				
EICV4	Owner occupied (with/without mortgage)	Tenancy (renting)	Dwelling provided by employer	Dwelling provided free of charge	Temporary camp or settlement	Other	Total	Total no. of HHs (in 000s)
Ruhango	81.5	8.5	0.4	9.1	0.4	0.0	100	77
Muhanga	82.0	10.6	0.4	6.3	0.4	0.2	100	73
Kamonyi	85.3	10.2	0.0	4.6	0.0	0.0	100	79
Karongi	84.7	7.6	0.2	7.3	0.2	0.0	100	75
Rutsiro	85.8	5.5	0.2	8.6	0.0	0.0	100	73
Rubavu	74.3	19.8	0.3	4.8	0.6	0.2	100	92
Nyabihu	79.1	9.7	0.4	10.0	0.8	0.0	100	64
Ngororero	90.5	4.4	0.2	4.9	0.0	0.0	100	81
Rusizi	86.5	9.6	0.1	3.5	0.2	0.0	100	89
Nyamasheke	93.2	2.9	0.2	3.7	0.0	0.0	100	86
Rulindo	89.6	4.7	0.0	5.2	0.0	0.4	100	69
Gakenke	97.3	1.2	0.0	1.5	0.0	0.0	100	80
Musanze	88.8	6.3	0.2	4.6	0.2	0.0	100	86
Burera	92.7	3.6	0.0	3.3	0.4	0.0	100	74
Gicumbi	94.3	1.6	0.0	4.1	0.0	0.0	100	86
Rwamagana	82.0	14.4	0.8	2.8	0.0	0.0	100	85
Nyagatare	77.9	18.4	0.2	3.5	0.0	0.0	100	113
Gatsibo	85.6	9.6	0.8	3.8	0.0	0.2	100	105
Kayonza	76.9	19.2	0.5	2.8	0.6	0.0	100	86
Kirehe	89.1	10.3	0.2	0.4	0.0	0.0	100	84
Ngoma	93.5	3.6	0.2	2.0	0.2	0.4	100	81
Bugesera	80.1	15.0	0.4	4.1	0.4	0.0	100	94

Table A.21: For those owning dwelling: owner of dwelling, by district (EICV5, EICV4)

		Owner of	the dwelling for	those owning	dwelling			Total no. of HHs where
EICV5	Head	Spouse	Spouse with Head	Other HH member	Relative	Other	Total	HH is owned (in 000s)
All Rwanda	43.3	0.7	55.6	0.1	0.1	0.2	100	2,073
Nyarugenge	59.0	0.0	40.5	0.5	0.0	0.0	100	31
Gasabo	56.4	0.6	42.4	0.0	0.0	0.6	100	89
Kicukiro	50.8	0.6	48.6	0.0	0.0	0.0	100	37
Nyanza	37.6	0.0	61.6	0.3	0.0	0.6	100	61
Gisagara	54.9	0.3	44.8	0.0	0.0	0.0	100	66
Nyaruguru	36.2	0.0	63.2	0.2	0.0	0.3	100	54
Huye	48.8	1.5	49.4	0.0	0.0	0.3	100	61
Nyamagabe	51.0	0.0	49.0	0.0	0.0	0.0	100	66
Ruhango	44.6	0.9	53.4	0.3	0.9	0.0	100	61
Muhanga	55.6	2.0	42.4	0.0	0.0	0.0	100	65
Kamonyi	41.9	0.2	57.9	0.0	0.0	0.0	100	72
Karongi	29.3	1.2	69.3	0.0	0.2	0.0	100	68
Rutsiro	35.1	1.2	63.2	0.0	0.0	0.4	100	66
Rubavu	34.1	1.4	63.9	0.3	0.0	0.3	100	70
Nyabihu	45.3	0.2	54.2	0.0	0.0	0.3	100	55
Ngororero	32.5	0.2	67.2	0.0	0.0	0.2	100	73
Rusizi	29.0	0.5	68.6	1.6	0.0	0.2	100	82
Nyamasheke	52.5	0.9	46.1	0.0	0.2	0.2	100	77
Rulindo	50.6	0.2	48.2	0.0	0.0	1.0	100	68
Gakenke	31.8	3.4	63.8	0.0	0.0	1.1	100	78
Musanze	27.7	1.6	70.7	0.0	0.0	0.0	100	78
Burera	31.7	0.4	67.3	0.0	0.2	0.4	100	74
Gicumbi	61.1	0.6	38.2	0.0	0.0	0.0	100	81
Rwamagana	54.2	0.0	45.8	0.0	0.0	0.0	100	65
Nyagatare	39.3	0.3	60.4	0.0	0.0	0.0	100	98
Gatsibo	59.8	0.2	40.0	0.0	0.0	0.0	100	89
Kayonza	34.1	1.4	64.5	0.0	0.0	0.0	100	67
Kirehe	39.8	0.2	59.6	0.0	0.2	0.2	100	74
Ngoma	49.8	0.2	49.9	0.0	0.0	0.0	100	73
Bugesera	33.7	0.3	65.4	0.0	0.0	0.6	100	74

		Owner of th	ne dwelling for	those owning	dwelling			Total no. of HHs where
EICV4	Head	Spouse	Spouse with Head	Other HH member	Relative	Other	Total	HH is owned (in 000s)
All Rwanda	40.9	0.9	57.7	0.1	0.0	0.3	100	2,016
Nyarugenge	55.7	1.8	42.5	0.0	0.0	0.0	100	32
Gasabo	55.8	1.2	43.0	0.0	0.0	0.0	100	76
Kicukiro	60.6	3.2	35.8	0.0	0.0	0.4	100	34
Nyanza	64.2	1.0	33.3	1.0	0.3	0.3	100	63
Gisagara	38.1	0.3	61.6	0.0	0.0	0.0	100	70
Nyaruguru	49.6	1.6	48.2	0.5	0.0	0.0	100	52
Huye	42.4	0.5	56.8	0.3	0.0	0.0	100	60
Nyamagabe	32.2	0.2	67.6	0.0	0.0	0.0	100	62
Ruhango	37.3	0.8	61.9	0.0	0.0	0.0	100	62

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		Owner of th	ne dwelling for	those owning	dwelling			Total no. of HHs where
EICV4	Head	Spouse	Spouse with Head	Other HH member	Relative	Other	Total	HH is owned (in 000s)
Muhanga	37.4	0.3	62.1	0.2	0.0	0.0	100	60
Kamonyi	33.2	0.0	63.5	0.5	0.2	2.7	100	68
Karongi	44.1	0.7	55.2	0.0	0.0	0.0	100	63
Rutsiro	30.8	0.5	68.8	0.0	0.0	0.0	100	62
Rubavu	36.4	3.3	60.0	0.0	0.0	0.3	100	68
Nyabihu	36.4	1.3	61.4	0.0	0.0	8.0	100	51
Ngororero	27.3	1.3	71.2	0.0	0.0	0.2	100	73
Rusizi	42.5	0.2	56.5	0.2	0.0	0.6	100	77
Nyamasheke	43.5	0.9	55.4	0.2	0.0	0.0	100	80
Rulindo	38.5	1.1	59.5	0.2	0.7	0.0	100	62
Gakenke	26.3	0.0	71.7	0.2	0.0	1.8	100	77
Musanze	37.1	0.0	62.7	0.0	0.0	0.2	100	77
Burera	26.5	0.4	73.1	0.0	0.0	0.0	100	69
Gicumbi	40.5	1.3	58.2	0.0	0.0	0.0	100	81
Rwamagana	37.6	0.0	62.0	0.0	0.0	0.4	100	70
Nyagatare	42.7	1.2	56.1	0.0	0.0	0.0	100	88
Gatsibo	37.3	0.3	62.5	0.0	0.0	0.0	100	90
Kayonza	44.6	1.8	53.6	0.0	0.0	0.0	100	66
Kirehe	61.7	1.7	36.4	0.3	0.0	0.0	100	75
Ngoma	49.8	0.2	49.8	0.0	0.0	0.2	100	75
Bugesera	36.1	1.2	61.9	0.3	0.0	0.5	100	75

Table A.22: Percentage of households owning a refrigerator and Cooker machine, by district (EICV5, EICV4)

EICV5	% of house	holds owning	Total Nber of HHs (in
EICV5	Refrigerator	Cooker machine	000s)
All Rwanda	1.6	3.0	2,708
Nyarugenge	7.5	10.2	81
Gasabo	4.9	6.5	230
Kicukiro	18.2	15.7	98
Nyanza	0.3	0.2	79
Gisagara	0.4	0.4	82
Nyaruguru	0.0	1.4	64
Huye	0.2	0.7	82
Nyamagabe	0.2	0.2	77
Ruhango	0.4	2.7	71
Muhanga	1.5	2.0	78
Kamonyi	0.5	0.7	93
Karongi	0.1	0.6	78
Rutsiro	0.0	0.2	73
Rubavu	1.8	1.4	96
Nyabihu	0.0	2.1	67
Ngororero	0.0	0.0	82
Rusizi	0.9	2.9	95
Nyamasheke	0.6	12.1	83
Rulindo	0.0	0.2	78
Gakenke	0.0	0.6	84
Musanze	1.1	1.2	91
Burera	0.0	6.3	82
Gicumbi	0.2	0.3	88
Rwamagana	0.5	5.0	89
Nyagatare	0.0	1.1	132
Gatsibo	0.4	0.2	108
Kayonza	0.3	2.0	83
Kirehe	0.0	0.2	87
Ngoma	0.5	2.8	83
Bugesera	0.6	2.0	95

EICV4	% of housel	nolds owning	Total Nber of HHs (in
EICV4	Refrigerator	Cooker machine	000s)
All Rwanda	1.5	0.5	2,493
Nyarugenge	10.7	2.5	73
Gasabo	7.3	2.5	147
Kicukiro	11.4	4.0	76
Nyanza	0.2	0.0	77
Gisagara	0.0	0.0	79
Nyaruguru	0.0	0.2	61
Huye	0.6	0.0	79
Nyamagabe	0.2	0.4	73
Ruhango	0.4	0.0	77
Muhanga	0.8	0.2	73
Kamonyi	0.2	0.4	79
Karongi	0.0	0.0	75
Rutsiro	0.0	0.5	73
Rubavu	1.9	1.0	92
Nyabihu	0.0	0.0	64
Ngororero	0.2	0.2	81
Rusizi	1.3	0.9	89
Nyamasheke	0.4	0.0	86
Rulindo	0.4	0.4	69
Gakenke	0.0	0.0	80
Musanze	1.6	0.5	86
Burera	0.0	0.4	74
Gicumbi	0.0	0.0	86
Rwamagana	0.4	0.0	85
Nyagatare	1.2	0.0	113
Gatsibo	0.4	0.0	105
Kayonza	0.9	0.5	86
Kirehe	0.2	0.2	84
Ngoma	0.0	0.0	81
Bugesera	0.7	0.2	94

Table A.23: Usage rates for all-weather roads, by district (EICV5, EICV4)

EICV5		Usage	rates for all-w	eather road	I	Total	Total Nber
Licvs	Regularly	Often	Sometimes	Not at all	Don't know about this service	Total	(000s)
All Rwanda	90.3	7.9	1.6	0.1	0.1	100	2,708
Nyarugenge	97.0	2.1	1.0	0.0	0.0	100	81
Gasabo	90.1	9.7	0.1	0.1	0.0	100	230
Kicukiro	70.7	28.6	0.2	0.3	0.1	100	98
Nyanza	93.1	5.2	1.5	0.0	0.2	100	79
Gisagara	98.7	0.7	0.3	0.2	0.0	100	82
Nyaruguru	98.4	1.5	0.1	0.0	0.0	100	64
Huye	93.7	5.9	0.4	0.0	0.0	100	82
Nyamagabe	87.5	10.4	1.6	0.2	0.2	100	77
Ruhango	66.8	27.1	5.4	0.3	0.4	100	71
Muhanga	72.8	14.3	12.5	0.4	0.0	100	78
Kamonyi	95.7	2.4	1.7	0.2	0.0	100	93
Karongi	97.9	1.3	0.7	0.0	0.0	100	78
Rutsiro	72.8	20.9	4.7	1.6	0.0	100	73
Rubavu	79.7	16.7	3.3	0.0	0.2	100	96
Nyabihu	79.9	13.5	6.4	0.2	0.0	100	67
Ngororero	90.5	7.9	1.6	0.0	0.0	100	82
Rusizi	88.8	9.7	1.5	0.0	0.0	100	95
Nyamasheke	93.9	5.3	0.8	0.0	0.0	100	83
Rulindo	98.9	0.9	0.2	0.0	0.0	100	78
Gakenke	92.6	5.1	1.9	0.4	0.0	100	84
Musanze	92.5	5.1	2.0	0.4	0.0	100	91
Burera	90.9	5.4	3.7	0.0	0.0	100	82
Gicumbi	93.6	4.4	2.1	0.0	0.0	100	88
Rwamagana	76.3	23.2	0.3	0.0	0.2	100	89
Nyagatare	98.9	0.7	0.3	0.0	0.0	100	132
Gatsibo	94.1	5.5	0.2	0.0	0.2	100	108
Kayonza	98.0	1.6	0.3	0.0	0.0	100	83
Kirehe	100.0	0.0	0.0	0.0	0.0	100	87
Ngoma	98.8	1.0	0.2	0.0	0.0	100	83
Bugesera	97.7	2.1	0.0	0.0	0.2	100	95

EICV4		Usage 1	rates for all-w	eather road		Total	Total Nber of HHs
	Regularly	Often	Sometimes	Not at all	Don't know about this service		(000s)
All Rwanda	81.9	14.3	3.3	0.5	0.0	100	2,493
Nyarugenge	97.0	2.3	0.4	0.0	0.3	100	73
Gasabo	84.1	14.9	0.6	0.3	0.0	100	147
Kicukiro	97.6	2.0	0.2	0.0	0.2	100	76
Nyanza	56.8	29.7	8.8	4.5	0.2	100	77
Gisagara	93.7	5.8	0.5	0.0	0.0	100	79
Nyaruguru	77.5	22.1	0.2	0.2	0.0	100	61
Huye	93.7	5.3	8.0	0.2	0.0	100	79
Nyamagabe	93.1	3.3	2.8	0.8	0.0	100	73
Ruhango	75.9	21.7	2.4	0.0	0.0	100	77
Muhanga	79.2	19.1	1.7	0.0	0.0	100	73
Kamonyi	88.8	9.6	1.7	0.0	0.0	100	79
Karongi	50.2	37.8	10.6	1.4	0.0	100	75
Rutsiro	73.2	16.6	8.4	1.7	0.0	100	73
Rubavu	91.2	6.5	1.9	0.4	0.0	100	92
Nyabihu	63.2	17.6	16.9	2.3	0.0	100	64
Ngororero	79.6	15.3	4.3	0.8	0.0	100	81
Rusizi	76.3	19.6	3.3	0.8	0.0	100	89
Nyamasheke	68.3	17.2	13.5	0.8	0.2	100	86
Rulindo	81.0	14.5	4.3	0.0	0.2	100	69

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EICV4		Usage rates for all-weather road								
	Regularly	Often	Sometimes	Not at all	Don't know about this service		(000s)			
Gakenke	96.7	1.6	8.0	0.8	0.0	100	80			
Musanze	92.7	5.3	1.8	0.2	0.0	100	86			
Burera	84.3	10.1	5.4	0.2	0.0	100	74			
Gicumbi	76.6	20.2	3.3	0.0	0.0	100	86			
Rwamagana	96.4	3.4	0.2	0.0	0.0	100	85			
Nyagatare	80.4	16.1	2.2	1.1	0.2	100	113			
Gatsibo	56.1	42.4	1.5	0.0	0.0	100	105			
Kayonza	84.2	14.7	1.1	0.0	0.0	100	86			
Kirehe	95.2	3.8	8.0	0.2	0.0	100	84			
Ngoma	80.1	16.1	3.8	0.0	0.0	100	81			
Bugesera	90.6	9.0	0.4	0.0	0.0	100	94			

Table A.24: Walking distance to nearest all-weather road, by district (EICV5, EICV4)

EICV5 All Rwanda	0-19 minutes' walk 93.4	20-59 minutes'	60-119	120 +	Don't	- · ·	
All Rwanda	93.4	walk	minutes' walk	minutes' walk	bon't know of facility	Total	Total no. of HHs using the service (000s)
Ali Awaliua	70.1	5.9	0.5	0.0	0.2	100	2,708
Nyarugenge	97.8	2.2	0.0	0.0	0.0	100	81
Gasabo	99.0	0.9	0.0	0.0	0.1	100	230
Kicukiro	98.9	0.7	0.0	0.0	0.4	100	98
Nyanza	90.7	8.9	0.2	0.0	0.2	100	79
Gisagara	98.0	1.8	0.0	0.0	0.2	100	82
Nyaruguru	97.8	1.7	0.5	0.0	0.0	100	64
Huye	99.8	0.2	0.0	0.0	0.0	100	82
Nyamagabe	89.5	8.9	1.0	0.0	0.5	100	77
Ruhango	88.8	9.9	0.6	0.0	0.7	100	71
Muhanga	87.5	11.7	0.4	0.0	0.4	100	78
Kamonyi	97.2	2.4	0.2	0.0	0.2	100	93
Karongi	89.4	10.0	0.6	0.0	0.0	100	78
Rutsiro	77.9	19.0	1.5	0.0	1.6	100	73
Rubavu	95.1	4.7	0.0	0.0	0.2	100	96
Nyabihu	71.8	25.3	2.7	0.0	0.2	100	67
Ngororero	77.8	20.3	2.0	0.0	0.0	100	82
Rusizi	92.3	6.6	0.7	0.4	0.0	100	95
Nyamasheke	96.2	3.8	0.0	0.0	0.0	100	83
Rulindo	87.4	11.7	0.8	0.0	0.0	100	78
Gakenke	80.6	16.9	2.1	0.0	0.4	100	84
Musanze	90.6	6.8	2.2	0.0	0.4	100	91
Burera	94.8	5.2	0.0	0.0	0.0	100	82
Gicumbi	87.3	10.6	2.0	0.0	0.0	100	88
Rwamagana	98.5	1.3	0.0	0.0	0.2	100	89
Nyagatare	99.4	0.6	0.0	0.0	0.0	100	132
Gatsibo	97.8	2.0	0.0	0.0	0.2	100	108
Kayonza	98.8	1.2	0.0	0.0	0.0	100	83
Kirehe	100.0	0.0	0.0	0.0	0.0	100	87
Ngoma	97.1	2.9	0.0	0.0	0.0	100	83
Bugesera	98.9	0.9	0.0	0.0	0.2	100	95

	w	alking distance to	the nearest al	l-weather ro	ad		
EICV4	0-19 minutes' walk	20-59 minutes' walk	60-119 minutes' walk	120 + minutes' walk	Don't know of facility	Total	Total no. of HHs using the service (000s)
All Rwanda	87.9	9.3	1.8	0.4	0.6	100	2,493
Nyarugenge	98.5	1.2	0.0	0.0	0.3	100	73
Gasabo	96.1	3.6	0.0	0.0	0.3	100	147
Kicukiro	99.3	0.5	0.0	0.0	0.2	100	76
Nyanza	81.3	12.0	1.6	0.4	4.7	100	77
Gisagara	97.6	2.0	0.4	0.0	0.0	100	79
Nyaruguru	91.4	8.2	0.2	0.0	0.2	100	61
Huye	98.5	1.3	0.0	0.0	0.2	100	79
Nyamagabe	59.5	25.7	9.6	4.4	0.8	100	73
Ruhango	97.3	2.7	0.0	0.0	0.0	100	77
Muhanga	86.9	11.9	1.2	0.0	0.0	100	73

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	w	alking distance to	the nearest al	l-weather ro	ad		
EICV4	0-19 minutes' walk	20-59 minutes' walk	60-119 minutes' walk	120 + minutes' walk	Don't know of facility	Total	Total no. of HHs using the service (000s)
Kamonyi	99.0	0.8	0.2	0.0	0.0	100	79
Karongi	81.5	16.2	0.4	0.4	1.4	100	75
Rutsiro	77.2	15.5	4.9	0.6	1.7	100	73
Rubavu	94.0	4.9	0.5	0.2	0.4	100	92
Nyabihu	61.0	27.5	5.5	3.8	2.3	100	64
Ngororero	63.4	30.4	4.6	8.0	0.8	100	81
Rusizi	91.7	4.8	2.3	0.4	0.8	100	89
Nyamasheke	74.7	20.0	3.7	0.6	1.0	100	86
Rulindo	82.4	15.0	2.1	0.4	0.2	100	69
Gakenke	79.8	17.3	1.5	0.6	0.8	100	80
Musanze	92.0	7.6	0.2	0.0	0.2	100	86
Burera	82.8	12.5	3.7	8.0	0.2	100	74
Gicumbi	83.9	12.5	3.0	0.6	0.0	100	86
Rwamagana	97.9	2.1	0.0	0.0	0.0	100	85
Nyagatare	79.8	12.9	5.5	0.5	1.3	100	113
Gatsibo	91.6	7.4	1.0	0.0	0.0	100	105
Kayonza	99.4	0.4	0.2	0.0	0.0	100	86
Kirehe	98.6	0.8	0.4	0.0	0.2	100	84
Ngoma	85.3	11.2	3.4	0.0	0.0	100	81
Bugesera	98.5	1.3	0.2	0.0	0.0	100	94

Table A.25: User satisfaction with all-weather road and perceptions of changes in quality over last 12 months, by district (EICV5, EICV4)

	Satisfa	ection		Service (	Quality char	nge , last 12 m	onths		Total no of HHs
EICV5	Satisfied	Not satisfied	Total	Declining	Same	Improving	Don't know	Total	using the service (in 000s)
All Rwanda	79.0	21.0	100	4.5	60.4	34.9	0.3	100	2,703
Nyarugenge	85.2	14.8	100	2.4	73.8	23.4	0.3	100	81
Gasabo	61.5	38.5	100	7.3	67.6	24.8	0.4	100	230
Kicukiro	74.8	25.2	100	6.7	58.2	34.7	0.4	100	98
Nyanza	69.6	30.4	100	8.5	43.4	47.7	0.4	100	79
Gisagara	90.3	9.7	100	1.1	66.4	32.5	0.0	100	82
Nyaruguru	80.0	20.0	100	2.6	48.6	48.5	0.2	100	64
Huye	79.6	20.4	100	2.3	61.1	36.6	0.0	100	82
Nyamagabe	74.6	25.4	100	4.4	78.3	17.1	0.2	100	77
Ruhango	73.9	26.1	100	9.2	46.2	44.4	0.2	100	71
Muhanga	78.8	21.2	100	5.9	52.0	42.2	0.0	100	78
Kamonyi	81.0	19.0	100	5.3	47.1	47.2	0.5	100	93
Karongi	81.0	19.0	100	2.4	79.6	17.9	0.1	100	78
Rutsiro	74.5	25.5	100	6.2	76.8	17.0	0.0	100	72
Rubavu	73.3	26.7	100	8.1	51.5	40.2	0.2	100	96
Nyabihu	77.3	22.7	100	8.1	63.4	28.4	0.0	100	67
Ngororero	72.6	27.4	100	4.7	59.7	35.6	0.0	100	82
Rusizi	51.4	48.6	100	4.6	62.2	32.7	0.6	100	95
Nyamasheke	95.2	4.8	100	0.7	50.8	48.5	0.0	100	83
Rulindo	86.0	14.0	100	1.0	62.1	36.9	0.0	100	78
Gakenke	70.2	29.8	100	6.6	62.2	31.0	0.2	100	84
Musanze	91.8	8.2	100	0.2	73.8	26.0	0.0	100	90
Burera	88.9	11.1	100	0.9	65.1	33.6	0.4	100	82
Gicumbi	88.5	11.5	100	4.6	60.2	35.1	0.0	100	88
Rwamagana	89.7	10.3	100	1.3	77.4	20.8	0.6	100	89
Nyagatare	87.7	12.3	100	4.5	52.1	43.4	0.0	100	132
Gatsibo	83.0	17.0	100	2.3	57.1	39.8	0.8	100	108
Kayonza	92.6	7.4	100	0.7	50.7	47.9	0.7	100	83
Kirehe	74.5	25.5	100	1.6	70.9	27.6	0.0	100	87
Ngoma	75.0	25.0	100	16.0	26.6	57.0	0.4	100	83
Bugesera	91.9	8.1	100	2.6	58.5	38.3	0.6	100	94

EICV4 -	Satisfaction		Total	Service (	Quality chan	ige , last 12 m	onths	T-4-1	Total no of HHs
	Satisfied	Not satisfied		Declining	Same	Improving	Don't know	Total	using the service (in 000s)
All Rwanda	76.9	23.1	100	5.9	58.8	35.0	0.3	100	2,479
Nyarugenge	15.2	84.8	100	2.6	86.9	10.4	0.2	100	73
Gasabo	40.8	59.2	100	7.5	53.7	38.5	0.3	100	146
Kicukiro	12.8	87.2	100	2.9	64.5	32.4	0.2	100	75
Nyanza	20.0	80.0	100	11.9	60.3	27.6	0.2	100	73
Gisagara	14.0	86.0	100	6.0	29.8	64.2	0.0	100	79
Nyaruguru	25.9	74.1	100	6.2	34.0	59.8	0.0	100	60
Huye	15.7	84.3	100	4.0	46.4	49.6	0.0	100	79
Nyamagabe	14.6	85.4	100	3.6	49.2	47.0	0.2	100	73
Ruhango	33.7	66.3	100	7.6	70.1	22.4	0.0	100	77

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EICUA	Satisfa	nction	Total	Service (	Quality chan	ige , last 12 m	onths	Total	Total no of HHs
EICV4	Satisfied	Not satisfied	Total	Declining	Same	Improving	Don't know	Total	using the service (in 000s)
Muhanga	31.0	69.0	100	6.7	86.2	7.2	0.0	100	73
Kamonyi	18.4	81.6	100	9.2	58.2	32.2	0.4	100	79
Karongi	29.1	71.0	100	10.5	46.2	42.9	0.4	100	74
Rutsiro	31.0	69.0	100	5.4	76.9	17.7	0.0	100	71
Rubavu	11.2	88.8	100	2.3	59.6	37.9	0.2	100	91
Nyabihu	22.7	77.3	100	6.0	54.6	39.0	0.5	100	62
Ngororero	25.5	74.5	100	10.3	55.9	33.8	0.0	100	80
Rusizi	51.5	48.5	100	10.5	54.7	34.3	0.5	100	88
Nyamasheke	38.5	61.5	100	5.5	69.0	25.5	0.0	100	85
Rulindo	7.1	92.9	100	4.0	81.6	14.3	0.2	100	68
Gakenke	19.3	80.7	100	7.2	37.1	55.7	0.0	100	79
Musanze	38.1	61.9	100	8.1	63.6	28.4	0.0	100	86
Burera	13.8	86.2	100	2.1	28.4	69.6	0.0	100	74
Gicumbi	25.0	75.1	100	8.0	63.3	28.3	0.4	100	86
Rwamagana	6.5	93.5	100	2.7	55.7	41.6	0.0	100	85
Nyagatare	22.4	77.6	100	3.8	36.8	59.0	0.4	100	111
Gatsibo	40.1	59.9	100	5.6	85.2	8.4	0.8	100	105
Kayonza	6.8	93.2	100	2.3	80.3	16.3	1.1	100	86
Kirehe	1.6	98.4	100	0.8	56.9	41.4	0.9	100	84
Ngoma	20.7	79.3	100	6.9	72.1	21.0	0.0	100	81
Bugesera	17.8	82.2	100	6.1	50.9	42.8	0.2	100	94

Table A.26: Usage rates for public transport stage, by district (EICV5, EICV4)

		Usage rat	es for public tr	ansport stage			Total no.
EICV5	Regularly	Often	Sometimes	Not at all	Don't know about this service	Total	of HHs (in 000s)
All Rwanda	43.2	12.9	31.4	12.4	0.1	100	2,708
Nyarugenge	56.0	22.5	17.1	4.3	0.0	100	81
Gasabo	71.8	18.1	8.1	2.0	0.0	100	230
Kicukiro	51.0	35.6	10.6	2.8	0.0	100	98
Nyanza	26.3	4.5	46.6	22.6	0.0	100	79
Gisagara	24.1	2.7	33.2	39.9	0.0	100	82
Nyaruguru	23.5	13.2	31.8	30.9	0.6	100	64
Huye	5.8	33.4	39.5	20.6	0.7	100	82
Nyamagabe	34.8	4.1	31.4	29.6	0.0	100	77
Ruhango	26.0	7.2	41.4	25.1	0.3	100	71
Muhanga	25.2	13.8	44.9	15.9	0.2	100	78
Kamonyi	38.6	12.9	38.9	9.6	0.0	100	93
Karongi	70.6	9.3	4.7	15.4	0.0	100	78
Rutsiro	13.9	10.1	45.6	30.4	0.0	100	73
Rubavu	40.1	18.4	33.8	7.2	0.4	100	96
Nyabihu	50.1	17.4	29.6	2.9	0.0	100	67
Ngororero	45.7	15.8	28.9	9.6	0.0	100	82
Rusizi	13.4	6.6	54.7	24.7	0.6	100	95
Nyamasheke	59.6	4.0	28.6	7.8	0.0	100	83
Rulindo	56.7	1.2	38.2	3.9	0.0	100	78
Gakenke	29.4	13.1	45.6	12.0	0.0	100	84
Musanze	39.5	5.6	45.9	8.8	0.2	100	91
Burera	70.7	3.3	17.1	8.7	0.2	100	82
Gicumbi	19.8	12.2	52.4	15.7	0.0	100	88
Rwamagana	31.3	34.9	30.0	3.8	0.0	100	89
Nyagatare	50.3	13.7	32.4	3.2	0.4	100	132
Gatsibo	20.6	9.0	45.4	25.0	0.0	100	108
Kayonza	70.9	4.5	21.3	3.3	0.0	100	83
Kirehe	87.1	2.2	7.2	3.5	0.0	100	87
Ngoma	54.7	4.8	31.4	9.0	0.0	100	83
Bugesera	36.2	16.3	41.2	6.4	0.0	100	95

		Usage ra	ates for public t	ransport stag	e		Total no. of
EICV4	Regularly	Often	Sometimes	Not at all	Don't know about this service	Total	HHs (in 000s)
All Rwanda	31.8	18.3	36.5	13.4	0.1	100	2,493
Nyarugenge	77.9	5.6	15.4	0.7	0.3	100	73
Gasabo	62.8	23.2	11.3	2.7	0.0	100	147
Kicukiro	74.4	12.7	11.6	1.3	0.0	100	76
Nyanza	14.0	25.2	46.5	14.3	0.0	100	77
Gisagara	4.7	7.0	41.2	47.1	0.0	100	79
Nyaruguru	16.6	17.5	47.8	18.2	0.0	100	61
Huye	49.4	11.2	26.0	13.5	0.0	100	79
Nyamagabe	70.5	4.9	11.8	12.8	0.0	100	73
Ruhango	4.6	14.7	65.0	15.7	0.0	100	77
Muhanga	15.7	31.0	43.6	9.7	0.0	100	73

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		Usage ra	ates for public t	ransport stag	e		Total no. of
EICV4	Regularly	Often	Sometimes	Not at all	Don't know about this service	Total	HHs (in 000s)
Kamonyi	23.9	21.8	46.8	7.5	0.0	100	79
Karongi	8.4	10.0	57.6	24.0	0.0	100	75
Rutsiro	17.4	8.1	34.4	39.9	0.2	100	73
Rubavu	19.9	31.2	43.5	5.5	0.0	100	92
Nyabihu	16.9	18.4	55.6	9.0	0.0	100	64
Ngororero	41.3	12.2	26.0	20.5	0.0	100	81
Rusizi	5.6	16.1	51.8	26.3	0.2	100	89
Nyamasheke	12.9	11.5	43.2	32.4	0.0	100	86
Rulindo	16.6	17.7	58.7	6.7	0.2	100	69
Gakenke	40.1	16.5	33.3	10.1	0.0	100	80
Musanze	43.7	25.2	23.3	7.0	0.8	100	86
Burera	54.3	12.8	20.8	12.1	0.0	100	74
Gicumbi	16.7	24.9	41.2	17.2	0.0	100	86
Rwamagana	72.2	12.5	13.1	2.2	0.0	100	85
Nyagatare	25.4	27.4	32.3	14.7	0.2	100	113
Gatsibo	31.3	23.6	27.3	17.9	0.0	100	105
Kayonza	9.0	20.8	67.3	2.9	0.0	100	86
Kirehe	23.7	18.5	48.6	9.0	0.2	100	84
Ngoma	48.9	19.1	30.9	1.0	0.0	100	81
Bugesera	16.0	29.6	46.1	8.3	0.0	100	94

Table A.27: Walking distance to nearest public transport stage, by district (EICV5, EICV4)

	Wall	king distance t	o the nearest p	oublic transport s	stage		
EICV5	0-19 minutes' walk	20–59 minutes' walk	60-119 minutes' walk	120+minutes' walk	Don't know of facility	Total	Total no. of HHs using the service (in 000s)
All Rwanda	26.8	26.6	29.5	4.5	12.6	100	2,708
Nyarugenge	65.0	23.8	6.8	0.0	4.3	100	81
Gasabo	51.9	35.1	11.0	0.0	2.0	100	230
Kicukiro	64.9	27.0	5.3	0.0	2.8	100	98
Nyanza	7.9	18.2	35.5	15.9	22.6	100	79
Gisagara	17.0	13.5	27.9	1.6	39.9	100	82
Nyaruguru	15.9	26.1	25.4	1.1	31.5	100	64
Huye	16.8	32.9	29.1	0.0	21.2	100	82
Nyamagabe	13.7	15.5	40.4	0.8	29.6	100	77
Ruhango	20.4	19.1	25.8	9.3	25.4	100	71
Muhanga	20.8	36.4	23.2	3.5	16.1	100	78
Kamonyi	25.3	31.8	31.9	1.4	9.6	100	93
Karongi	18.2	34.6	26.6	5.3	15.4	100	78
Rutsiro	12.7	21.2	26.3	9.4	30.4	100	73
Rubavu	25.5	30.3	32.5	4.2	7.6	100	96
Nyabihu	26.9	27.6	42.3	0.2	2.9	100	67
Ngororero	11.8	18.5	45.1	15.0	9.6	100	82
Rusizi	17.2	28.1	26.6	2.8	25.3	100	95
Nyamasheke	29.8	22.2	31.4	8.8	7.8	100	83
Rulindo	12.7	15.5	47.0	21.0	3.9	100	78
Gakenke	10.2	31.4	39.2	7.2	12.0	100	84
Musanze	33.6	31.3	25.9	0.2	9.0	100	91
Burera	40.3	30.4	17.9	2.5	8.9	100	82
Gicumbi	9.3	28.2	35.8	11.1	15.7	100	88
Rwamagana	20.7	30.8	44.8	0.0	3.8	100	89
Nyagatare	26.8	28.1	34.0	7.5	3.6	100	132
Gatsibo	9.6	21.5	37.3	6.7	25.0	100	108
Kayonza	26.9	16.4	50.3	3.1	3.3	100	83
Kirehe	32.7	23.5	37.0	3.3	3.5	100	87
Ngoma	40.0	23.3	27.6	0.0	9.0	100	83
Bugesera	28.5	34.5	28.7	2.0	6.4	100	95

	Walkii	ng distance to	the nearest pu	blic transport st	tage		
EICV4	0-19 minutes' walk	20-59 minutes' walk	60-119 minutes' walk	120+minutes ' walk	Don't know of facility	Total	Total no. of HHs using the service (in 000s)
All Rwanda	26.0	24.2	19.6	16.8	13.5	100	2,493
Nyarugenge	68.4	18.5	9.7	2.4	1.1	100	73
Gasabo	47.0	27.3	14.2	8.9	2.7	100	147
Kicukiro	63.6	30.1	2.9	2.0	1.3	100	76
Nyanza	19.6	25.7	23.2	17.2	14.3	100	77
Gisagara	10.6	12.1	18.3	11.9	47.1	100	79
Nyaruguru	20.2	32.2	17.4	12.0	18.2	100	61
Huye	34.2	34.5	13.1	4.7	13.5	100	79
Nyamagabe	9.7	20.7	24.8	32.0	12.8	100	73
Ruhango	19.2	28.0	17.7	19.5	15.7	100	77

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	Walkii	ng distance to	the nearest pu	blic transport st	tage		
EICV4	0-19 minutes' walk	20-59 minutes' walk	60-119 minutes' walk	120+minutes ' walk	Don't know of facility	Total	Total no. of HHs using the service (in 000s)
Muhanga	21.6	34.2	22.9	11.6	9.7	100	73
Kamonyi	22.0	28.0	32.1	10.3	7.5	100	79
Karongi	13.6	26.5	18.7	17.1	24.0	100	75
Rutsiro	14.4	14.2	11.5	19.8	40.1	100	73
Rubavu	21.2	33.3	20.5	19.3	5.7	100	92
Nyabihu	26.5	28.8	20.3	15.4	9.0	100	64
Ngororero	9.6	12.8	21.9	35.2	20.5	100	81
Rusizi	19.5	21.8	17.9	14.4	26.5	100	89
Nyamasheke	15.7	19.8	17.1	14.9	32.4	100	86
Rulindo	15.1	17.5	21.9	38.7	6.9	100	69
Gakenke	7.1	25.8	27.0	30.0	10.1	100	80
Musanze	31.2	35.0	21.0	5.1	7.8	100	86
Burera	20.3	25.9	24.0	17.7	12.1	100	74
Gicumbi	10.1	18.8	24.9	29.1	17.2	100	86
Rwamagana	28.4	39.9	18.8	10.7	2.2	100	85
Nyagatare	35.0	23.6	14.3	12.3	14.9	100	113
Gatsibo	19.9	13.2	22.4	26.6	17.9	100	105
Kayonza	39.5	12.9	21.7	23.1	2.9	100	86
Kirehe	34.8	22.0	19.2	14.9	9.2	100	84
Ngoma	37.5	23.5	26.0	12.0	1.0	100	81
Bugesera	24.6	22.0	24.7	20.4	8.3	100	94

Table A28: Distance to an all-weather road in meters, by district (EICV5)

	Mean		Distance	e to all-wea	ther road i	in metters			Total no. of HHs
EICV5	distance to an all- weather road (m)	0-200 m	201- 500 m	501- 1000 m	1001- 1500 m	1501- 2000 m	more than 2000 m	Total	using the service ( in 000s)
All Rwanda	329.3	68.5	15.1	9.7	2.5	2.0	2.3	100	2,703
Nyarugenge	131.1	86.0	12.2	0.9	0.2	0.7	0.0	100	81
Gasabo	126.0	89.5	9.7	0.5	0.1	0.2	0.0	100	230
Kicukiro	77.5	94.4	5.3	0.2	0.2	0.0	0.0	100	98
Nyanza	528.6	53.1	23.4	11.5	3.4	3.9	4.7	100	79
Gisagara	213.0	70.7	17.0	10.6	0.3	1.1	0.2	100	82
Nyaruguru	260.8	65.9	19.7	11.5	1.4	0.8	0.8	100	64
Huye	78.2	88.5	9.7	1.5	0.0	0.2	0.0	100	82
Nyamagabe	514.4	45.8	20.4	22.2	6.2	3.1	2.3	100	77
Ruhango	591.3	50.6	25.0	8.9	5.2	2.7	7.5	100	71
Muhanga	421.6	61.5	16.2	12.3	3.2	2.7	4.2	100	78
Kamonyi	254.4	67.2	19.4	10.5	0.3	1.6	1.0	100	93
Karongi	604.5	41.8	26.3	18.2	6.3	3.3	4.1	100	78
Rutsiro	1073.4	26.6	21.9	22.6	8.8	6.9	13.2	100	72
Rubavu	268.4	73.2	11.4	8.6	4.0	1.0	1.8	100	96
Nyabihu	741.9	39.3	15.9	25.0	8.2	6.3	5.2	100	67
Ngororero	763.4	32.2	20.2	25.4	5.9	10.4	5.9	100	82
Rusizi	509.1	53.1	22.3	14.3	4.0	1.6	4.7	100	95
Nyamasheke	231.5	71.6	16.5	9.6	1.0	0.7	0.6	100	83
Rulindo	564.7	45.2	23.6	16.3	6.9	3.3	4.5	100	78
Gakenke	789.9	37.4	21.1	19.9	7.0	5.2	9.4	100	84
Musanze	301.2	70.8	12.4	10.8	2.5	2.5	1.1	100	90
Burera	453.6	53.0	20.4	18.2	3.2	1.5	3.7	100	82
Gicumbi	391.7	63.3	17.3	11.6	2.4	2.5	2.8	100	88
Rwamagana	207.6	71.1	20.3	7.1	0.6	0.4	0.4	100	89
Nyagatare	89.6	88.5	7.7	2.4	0.8	0.4	0.2	100	132
Gatsibo	109.9	88.5	5.5	4.4	0.6	0.8	0.2	100	108
Kayonza	179.9	76.0	16.8	5.5	1.3	0.4	0.0	100	83
Kirehe	49.9	95.2	2.8	2.1	0.0	0.0	0.0	100	87
Ngoma	198.8	78.9	12.3	5.7	0.7	1.5	0.9	100	83
Bugesera	68.0	92.1	4.8	3.1	0.0	0.0	0.0	100	94

Table A.29: User satisfaction with public transport stage and perceptions of changes in quality over last 12 months, by district (EICV5, EICV4)

	Satisfa	action		Service (	Quality cha	ınge , last 12 ı	nonths		Total no. of
EICV5	Satisfied	Not satisfied	Total	Declining	Same	Improving	Don't know	Total	HHs using the service ( in 000s)
All Rwanda	82.6	17.4	100	1.7	63.0	33.3	2.0	100	2,368
Nyarugenge	83.2	16.8	100	7.1	59.3	33.1	0.6	100	78
Gasabo	88.4	11.6	100	1.4	63.2	35.1	0.2	100	225
Kicukiro	80.3	19.7	100	7.9	51.1	40.7	0.3	100	96
Nyanza	71.9	28.1	100	1.1	55.7	38.5	4.7	100	61
Gisagara	78.7	21.3	100	0.5	84.6	13.8	1.1	100	49
Nyaruguru	83.6	16.4	100	1.0	44.8	48.9	5.3	100	44
Huye	59.6	40.4	100	1.7	77.9	20.1	0.3	100	64
Nyamagabe	90.9	9.1	100	0.7	81.0	16.6	1.8	100	55
Ruhango	74.7	25.3	100	9.9	44.9	42.8	2.4	100	53
Muhanga	90.4	9.6	100	1.0	44.6	52.2	2.2	100	66
Kamonyi	88.6	11.4	100	1.5	49.4	44.9	4.3	100	84
Karongi	84.8	15.2	100	1.0	75.7	20.8	2.6	100	66
Rutsiro	75.6	24.4	100	1.7	49.6	47.0	1.7	100	51
Rubavu	91.7	8.3	100	1.4	58.4	40.0	0.2	100	88
Nyabihu	80.0	20.0	100	0.0	65.0	34.0	1.0	100	66
Ngororero	74.2	25.8	100	1.9	80.3	15.1	2.7	100	74
Rusizi	64.9	35.1	100	1.8	69.2	22.8	6.2	100	71
Nyamasheke	82.0	18.0	100	1.1	50.0	48.4	0.5	100	76
Rulindo	87.8	12.2	100	0.2	70.0	28.5	1.2	100	75
Gakenke	71.7	28.3	100	2.2	75.7	17.4	4.6	100	74
Musanze	96.6	3.4	100	0.2	71.3	26.8	1.6	100	82
Burera	83.9	16.1	100	0.5	86.2	12.2	1.2	100	75
Gicumbi	87.7	12.3	100	0.0	58.0	42.0	0.0	100	74
Rwamagana	82.2	17.8	100	0.4	87.4	10.3	1.9	100	85
Nyagatare	83.5	16.5	100	0.2	60.2	39.4	0.2	100	128
Gatsibo	84.2	15.8	100	1.3	48.4	40.1	10.1	100	81
Kayonza	88.3	11.7	100	0.5	67.9	30.1	1.4	100	80
Kirehe	84.0	16.0	100	1.2	64.4	33.0	1.4	100	84
Ngoma	80.9	19.1	100	0.5	36.4	61.9	1.2	100	75
Bugesera	78.9	21.1	100	1.8	60.1	35.3	2.8	100	89

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	Satisfa	action		Service (	Quality ch	ange , last 12	months		Total no. of
EICV4	Satisfied	Not satisfied	Total	Declining	Same	Improving	Don't know	Total	HHs using the service ( in 000s)
All Rwanda	81.7	18.4	100	2.5	56.3	40.1	1.2	100	2,158
Nyarugenge	4.1	95.9	100	2.0	89.7	8.4	0.0	100	72
Gasabo	17.2	82.8	100	6.3	46.6	46.7	0.4	100	143
Kicukiro	22.3	77.7	100	13.0	42.9	43.2	0.9	100	75
Nyanza	13.5	86.5	100	4.9	47.9	46.6	0.7	100	66
Gisagara	9.8	90.2	100	3.2	33.6	62.9	0.3	100	42
Nyaruguru	34.0	66.0	100	3.0	53.8	43.0	0.3	100	50
Huye	3.6	96.4	100	0.2	41.7	57.4	0.7	100	68
Nyamagabe	19.6	80.4	100	0.9	55.8	42.4	1.0	100	64
Ruhango	60.7	39.3	100	1.5	58.4	37.9	2.2	100	64
Muhanga	21.6	78.4	100	1.4	89.3	9.1	0.2	100	66
Kamonyi	9.9	90.1	100	1.0	58.4	38.0	2.6	100	73
Karongi	19.3	80.7	100	6.0	34.1	56.3	3.5	100	57
Rutsiro	49.5	50.5	100	6.5	79.4	14.1	0.0	100	44
Rubavu	10.6	89.4	100	1.2	52.2	45.0	1.5	100	86
Nyabihu	12.7	87.3	100	2.3	59.7	35.4	2.6	100	58
Ngororero	7.7	92.3	100	0.0	39.3	57.8	2.9	100	64
Rusizi	28.1	71.9	100	0.6	46.8	51.3	1.3	100	66
Nyamasheke	34.4	65.7	100	1.5	68.3	29.0	1.2	100	58
Rulindo	16.1	84.0	100	0.4	89.1	10.2	0.2	100	64
Gakenke	8.0	92.0	100	2.7	23.1	73.5	0.7	100	71
Musanze	10.0	90.0	100	0.8	52.0	46.7	0.5	100	80
Burera	15.1	84.9	100	0.0	26.2	73.8	0.0	100	65
Gicumbi	26.5	73.5	100	1.8	68.3	27.0	2.8	100	71
Rwamagana	9.0	91.0	100	0.4	50.8	48.6	0.2	100	83
Nyagatare	31.3	68.7	100	1.4	47.4	49.4	1.8	100	96
Gatsibo	29.1	70.9	100	2.1	84.3	12.6	1.0	100	86
Kayonza	7.2	92.8	100	0.6	82.8	14.2	2.3	100	83
Kirehe	9.1	90.9	100	0.9	54.2	42.2	2.7	100	76
Ngoma	24.5	75.6	100	4.8	81.9	13.1	0.2	100	80
Bugesera	7.2	92.8	100	1.1	34.5	63.5	0.9	100	86

Table A.30: Reasons for not using public transport stage, by district (EICV5, EICV4)

		Reasons for not u	sing public tr	ansport stage			Total no. of
EICV5	Too far	Poor quality of service	No need	Infrequent need	Other	Total	HHs not using the service (in 000s)
All Rwanda	6.4	1.7	18.3	68.2	5.4	100	1,190
Nyarugenge	9.9	0.0	14.5	74.1	1.5	100	17
Gasabo	20.1	3.6	14.2	57.7	4.5	100	23
Kicukiro	12.2	5.2	7.8	72.2	2.6	100	13
Nyanza	1.4	0.0	25.7	69.2	3.7	100	54
Gisagara	6.0	3.7	40.4	36.6	13.3	100	60
Nyaruguru	6.9	3.6	40.8	44.7	4.1	100	40
Huye	6.5	0.3	32.2	57.8	3.1	100	50
Nyamagabe	2.9	0.3	48.1	42.4	6.3	100	47
Ruhango	7.1	0.3	14.2	67.8	10.6	100	47
Muhanga	5.3	3.0	5.5	79.7	6.6	100	48
Kamonyi	5.3	0.4	10.8	79.9	3.6	100	45
Karongi	3.8	10.7	54.0	24.5	7.0	100	16
Rutsiro	15.8	0.0	10.1	68.3	5.7	100	55
Rubavu	3.7	0.0	10.4	83.4	2.5	100	40
Nyabihu	2.2	0.0	7.8	87.0	2.9	100	22
Ngororero	9.3	1.1	20.6	64.5	4.6	100	32
Rusizi	5.5	1.5	17.7	59.6	15.7	100	76
Nyamasheke	6.8	7.4	12.6	67.7	5.5	100	30
Rulindo	3.4	0.0	9.2	77.1	10.3	100	33
Gakenke	6.8	1.5	13.2	70.2	8.3	100	48
Musanze	6.1	0.0	11.0	79.4	3.5	100	50
Burera	8.1	6.8	28.8	51.4	4.9	100	21
Gicumbi	5.1	0.0	10.9	83.4	0.6	100	60
Rwamagana	3.9	4.0	6.2	80.8	5.0	100	30
Nyagatare	12.2	1.7	8.1	76.0	2.0	100	48
Gatsibo	4.4	0.0	18.5	76.6	0.6	100	76
Kayonza	7.9	0.0	10.0	80.1	1.9	100	20
Kirehe	8.6	29.2	25.1	37.1	0.0	100	9
Ngoma	5.7	0.5	8.0	83.3	2.5	100	34
Bugesera	0.8	1.8	10.7	83.0	3.7	100	45

		Reasons for not u	using public trai	isport stage			Total no.
EICV4	Too far	Poor quality of service	Don't know about it	Infrequent need	Other	Total	of HHs not using the service (in 000s)
All Rwanda	7.5	1.0	17.7	68.4	5.5	100	1,243
Nyarugenge	9.9	2.5	4.9	81.4	1.3	100	12
Gasabo	14.1	0.0	15.7	65.9	4.3	100	21
Kicukiro	3.7	8.8	1.4	80.2	5.9	100	10
Nyanza	5.9	0.7	21.8	69.2	2.4	100	47
Gisagara	2.8	0.4	40.2	46.5	10.1	100	70
Nyaruguru	2.6	1.1	11.6	72.2	12.4	100	40
Huye	3.2	1.9	11.6	80.7	2.6	100	31
Nyamagabe	8.2	0.8	28.5	46.6	15.9	100	18
Ruhango	4.5	1.3	3.6	88.3	2.4	100	62
Muhanga	2.3	0.0	14.3	78.9	4.5	100	39
Kamonyi	4.3	0.4	15.6	78.3	1.5	100	43
Karongi	6.4	1.3	26.5	61.6	4.2	100	61
Rutsiro	11.3	2.7	35.8	32.9	17.3	100	54
Rubavu	2.4	0.0	11.2	84.2	2.2	100	45
Nyabihu	5.9	0.0	7.1	83.9	3.2	100	41
Ngororero	13.8	0.0	36.3	47.3	2.6	100	38
Rusizi	6.8	0.8	19.9	69.1	3.4	100	70

		Reasons for not u	ısing public traı	isport stage			Total no.
EICV4	Too far	Poor quality of service	Don't know about it	Infrequent need	Other	Total	of HHs not using the service (in 000s)
Nyamasheke	4.1	0.3	34.6	56.6	4.4	100	65
Rulindo	21.7	0.0	8.4	69.5	0.3	100	45
Gakenke	6.8	2.5	5.4	73.6	11.8	100	34
Musanze	1.2	0.0	14.9	76.8	7.1	100	26
Burera	28.9	1.3	22.9	45.0	1.9	100	24
Gicumbi	8.2	0.7	9.9	80.5	8.0	100	50
Rwamagana	1.2	3.6	15.5	76.0	3.6	100	13
Nyagatare	6.5	1.8	27.1	54.0	10.6	100	53
Gatsibo	14.3	4.8	23.0	55.0	2.9	100	47
Kayonza	5.9	0.0	0.3	93.5	0.3	100	60
Kirehe	4.9	0.0	0.6	73.7	20.8	100	48
Ngoma	11.7	0.6	1.3	85.1	1.3	100	26
Bugesera	11.6	0.0	15.8	71.4	1.1	100	51

Table A.31: Ownership of transportation assets (bicycle, motorcycle, vehicles), by district (EICV5, EICV4)

EICV5	% of	households owning		Total no. of
EICVS	Bicycle	Motorcycle	Car	HHs (in 000s)
All Rwanda	13.3	1.0	1.0	2,708
Nyarugenge	3.0	0.5	2.9	81
Gasabo	9.2	1.4	3.5	230
Kicukiro	9.7	1.7	12.3	98
Nyanza	14.2	0.7	0.0	79
Gisagara	17.8	1.8	0.0	82
Nyaruguru	7.6	0.3	0.3	64
Huye	10.7	0.6	0.4	82
Nyamagabe	7.4	1.1	0.2	77
Ruhango	15.8	0.8	0.0	71
Muhanga	11.6	1.7	0.4	78
Kamonyi	6.8	0.2	0.0	93
Karongi	2.5	1.8	0.0	78
Rutsiro	1.4	0.5	0.0	73
Rubavu	5.3	0.0	0.5	96
Nyabihu	3.3	0.0	0.0	67
Ngororero	2.3	0.3	0.0	82
Rusizi	8.1	0.2	0.7	95
Nyamasheke	2.3	1.1	0.1	83
Rulindo	12.1	0.9	0.0	78
Gakenke	5.4	1.1	0.0	84
Musanze	7.1	0.2	1.7	91
Burera	8.8	0.8	0.0	82
Gicumbi	11.6	0.9	0.2	88
Rwamagana	25.1	1.1	0.3	89
Nyagatare	35.2	1.8	0.2	132
Gatsibo	24.6	1.6	0.2	108
Kayonza	26.1	1.1	0.2	83
Kirehe	25.9	1.2	0.0	87
Ngoma	27.7	0.8	0.4	83
Bugesera	36.8	1.0	0.5	95

EICV4	% of	households owning		Total no. of HHs (in 000s)
	Bicycle	Motorcycle	Car	(m ooos)
All Rwanda	15.8	0.9	0.8	2,493
Nyarugenge	3.9	0.7	2.5	73
Gasabo	9.4	0.7	4.2	147
Kicukiro	10.0	2.3	8.5	76
Nyanza	18.4	0.9	0.0	77
Gisagara	20.4	0.2	0.0	79
Nyaruguru	10.0	0.4	0.0	61
Huye	17.6	1.2	0.2	79
Nyamagabe	7.6	1.0	0.4	73
Ruhango	17.6	0.4	0.4	77
Muhanga	10.7	0.4	0.8	73
Kamonyi	14.5	0.4	0.4	79
Karongi	2.3	0.4	0.2	75
Rutsiro	3.6	0.2	0.0	73
Rubavu	6.6	0.6	1.1	92
Nyabihu	3.9	0.0	0.0	64
Ngororero	2.7	0.7	0.0	81
Rusizi	5.9	0.3	1.1	89
Nyamasheke	0.8	0.6	0.0	86
Rulindo	10.1	2.1	0.0	69
Gakenke	8.2	0.3	0.0	80
Musanze	10.6	0.4	0.8	86
Burera	9.9	0.6	0.0	74
Gicumbi	16.4	0.6	0.4	86
Rwamagana	34.1	2.9	0.0	85
Nyagatare	37.1	3.0	0.2	113
Gatsibo	25.9	1.2	0.2	105
Kayonza	34.7	0.9	0.3	86
Kirehe	29.6	0.8	0.0	84
Ngoma	29.5	0.2	0.0	81
Bugesera	41.4	1.9	0.2	94

Table A.32: Ownership of ICT devices (mobile phone, computer, radio, TV set & Video/DVD player), by district (EICV5, EICV4)

		% of ho	ouseholds owni	ng		Total no. of
EICV5	Radio	Computer	Mobile phone	TV set	Video / DVD Player	HHs(in 000s)
All Rwanda	73.8	3.3	66.9	10.4	6.7	2,708
Nyarugenge	93.5	12.2	90.1	39.2	27.2	81
Gasabo	89.9	9.6	85.7	29.6	22.4	230
Kicukiro	93.8	20.9	91.4	48.3	29.6	98
Nyanza	65.8	0.8	55.0	4.7	3.4	79
Gisagara	54.3	1.6	44.4	2.4	1.2	82
Nyaruguru	64.5	2.0	53.5	2.7	1.8	64
Huye	65.3	1.2	55.4	6.7	4.4	82
Nyamagabe	66.0	1.1	53.3	3.0	1.6	77
Ruhango	74.6	1.7	66.7	2.9	1.9	71
Muhanga	74.8	3.8	69.7	9.1	5.6	78
Kamonyi	72.3	1.4	67.4	8.9	5.4	93
Karongi	69.6	1.4	63.3	5.0	3.5	78
Rutsiro	63.5	0.2	56.4	2.3	0.7	73
Rubavu	73.0	3.1	68.7	14.0	7.1	96
Nyabihu	65.7	0.5	62.1	5.3	4.6	67
Ngororero	67.5	0.6	57.5	2.4	2.1	82
Rusizi	71.3	0.8	67.8	7.8	6.2	95
Nyamasheke	73.5	1.2	70.2	6.1	4.4	83
Rulindo	73.7	1.3	65.2	5.4	2.0	78
Gakenke	71.0	0.8	60.3	1.9	1.9	84
Musanze	76.9	4.4	71.2	12.5	8.3	91
Burera	73.8	2.3	66.4	3.5	2.0	82
Gicumbi	70.7	0.6	59.3	4.6	3.4	88
Rwamagana	77.8	2.6	71.9	10.3	7.2	89
Nyagatare	74.7	1.1	69.7	5.6	1.7	132
Gatsibo	70.8	1.7	63.2	4.2	2.3	108
Kayonza	70.9	1.5	65.5	5.4	3.8	83
Kirehe	74.5	0.2	66.2	2.8	1.3	87
Ngoma	73.9	2.0	64.3	5.6	2.4	83
Bugesera	69.3	2.7	60.9	6.9	2.4	95

		% of	households ownir	ıg		T-4-1
EICV4	Radio	Computer	Mobile phone	TV set	Video / DVD Player	Total no. of HHs(in 000s)
All Rwanda	59.8	2.5	63.7	9.9	7.4	2,493
Nyarugenge	67.0	12.3	91.4	48.9	37.2	73
Gasabo	66.3	10.7	87.0	36.1	27.2	147
Kicukiro	67.7	17.3	94.4	54.8	45.0	76
Nyanza	59.4	1.4	54.3	5.5	4.9	77
Gisagara	56.3	0.0	40.6	0.0	0.0	79
Nyaruguru	54.8	0.4	45.5	0.9	0.2	61
Huye	58.7	3.3	57.6	10.7	8.6	79
Nyamagabe	54.8	1.1	46.6	2.8	2.8	73
Ruhango	54.3	0.6	57.2	4.3	2.8	77
Muhanga	64.0	3.1	64.3	8.9	8.0	73
Kamonyi	60.2	0.6	64.6	5.3	3.1	79
Karongi	52.2	0.6	53.7	4.0	3.0	75
Rutsiro	52.2	1.1	50.2	2.2	1.8	73
Rubavu	48.9	1.6	67.8	11.9	8.1	92
Nyabihu	50.8	0.6	64.1	2.8	1.7	64
Ngororero	53.6	2.0	49.3	3.6	2.3	81
Rusizi	58.2	1.5	64.4	10.9	7.0	89
Nyamasheke	47.7	0.4	56.4	3.3	2.1	86
Rulindo	62.6	1.5	63.9	5.3	3.8	69
Gakenke	65.8	0.2	60.0	1.0	0.2	80
Musanze	61.8	3.2	67.4	9.8	5.1	86

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		% of	households ownir	ıg		Total we of
EICV4	Radio	Computer	Mobile phone	TV set	Video / DVD Player	Total no. of HHs(in 000s)
Burera	57.8	0.6	60.1	1.7	0.6	74
Gicumbi	61.2	0.4	52.8	2.1	0.9	86
Rwamagana	74.0	1.2	75.2	12.2	6.6	85
Nyagatare	64.6	0.9	67.9	6.7	5.8	113
Gatsibo	63.9	0.6	58.6	6.0	5.4	105
Kayonza	63.9	1.5	72.3	6.6	6.2	86
Kirehe	58.8	0.2	68.3	3.1	2.6	84
Ngoma	61.5	1.0	60.5	2.2	1.4	81
Bugesera	60.4	1.7	67.4	5.5	3.6	94

Table A.33: Usage rates for internet service facility, by district (EICV5, EICV4)

		Usage r	ates for intern	et service fa	acility		Total no of IIIIo
EICV5	Regularly	Often	Sometimes	Not at all	Don't know about this service	Total	Total no. of HHs (in 000s)
All Rwanda	0.5	0.5	2.2	73.2	23.5	100	2,708
Nyarugenge	1.1	1.4	6.0	91.3	0.1	100	81
Gasabo	0.9	0.5	3.1	78.5	17.0	100	230
Kicukiro	1.0	3.8	7.3	81.8	6.1	100	98
Nyanza	0.7	0.4	2.6	43.4	52.8	100	79
Gisagara	0.0	0.4	2.0	62.9	34.8	100	82
Nyaruguru	0.4	0.2	0.9	24.5	74.0	100	64
Huye	0.0	0.0	2.3	54.5	43.2	100	82
Nyamagabe	1.0	0.2	1.8	59.0	37.9	100	77
Ruhango	0.4	0.4	1.3	80.4	17.5	100	71
Muhanga	0.2	0.5	3.1	67.3	28.9	100	78
Kamonyi	0.4	0.6	1.9	61.7	35.4	100	93
Karongi	2.0	0.0	1.8	65.4	30.8	100	78
Rutsiro	0.3	0.6	0.4	71.3	27.3	100	73
Rubavu	0.0	1.0	2.7	78.4	17.9	100	96
Nyabihu	0.0	0.0	2.0	86.2	11.9	100	67
Ngororero	0.5	0.5	2.4	84.9	11.7	100	82
Rusizi	0.2	0.5	3.9	61.0	34.4	100	95
Nyamasheke	0.7	0.2	1.9	83.0	14.3	100	83
Rulindo	0.0	0.0	1.6	60.3	38.2	100	78
Gakenke	0.4	0.4	0.8	77.9	20.4	100	84
Musanze	1.0	0.2	1.5	74.0	23.3	100	91
Burera	1.1	0.4	1.4	75.5	21.6	100	82
Gicumbi	1.0	0.4	0.8	97.6	0.2	100	88
Rwamagana	0.0	0.9	2.0	89.6	7.6	100	89
Nyagatare	0.2	0.4	2.1	69.8	27.6	100	132
Gatsibo	0.2	0.4	0.6	81.5	17.3	100	108
Kayonza	0.7	0.3	0.9	64.1	34.0	100	83
Kirehe	0.4	0.0	0.7	84.0	14.9	100	87
Ngoma	0.6	0.4	1.6	68.3	29.1	100	83
Bugesera	0.2	0.5	0.9	91.6	6.8	100	95

EICV4         Regularly         Often         Sometimes         Not at all both about about about with about this service.         Total with (in 000s)           All Rwanda         0.9         1.0         3.4         48.4         46.2         100         2,493           Nyarugenge         6.0         1.5         15.3         70.6         6.6         100         73           Gasabo         3.2         2.5         5.1         73.8         15.4         100         147           Kicukiro         4.1         3.8         9.3         76.8         6.1         100         76           Nyanza         0.6         1.4         1.4         73.4         23.2         100         77           Gisagara         0.0         0.0         2.10         27.9         70.9         100         79           Nyaruguru         0.0         0.4         3.2         17.1         79.3         100         61           Huye         3.1         1.1         2.4         45.0         48.4         100         79           Nyamagabe         1.0         0.2         1.6         33.5         63.6         100         73           Ruhango         0.0         0.2 </th <th></th> <th></th> <th>Usage rates</th> <th>for internet s</th> <th>ervice facility</th> <th></th> <th></th> <th>Total no. of</th>			Usage rates	for internet s	ervice facility			Total no. of
Nyarugenge         6.0         1.5         15.3         70.6         6.6         100         73           Gasabo         3.2         2.5         5.1         73.8         15.4         100         147           Kicukiro         4.1         3.8         9.3         76.8         6.1         100         76           Nyanza         0.6         1.4         1.4         73.4         23.2         100         77           Gisagara         0.0         0.2         1.0         27.9         70.9         100         79           Nyaruguru         0.0         0.4         3.2         17.1         79.3         100         61           Huye         3.1         1.1         2.4         45.0         48.4         100         79           Nyamagabe         1.0         0.2         1.6         33.5         63.6         100         73           Ruhango         0.0         0.2         2.3         36.0         61.5         100         77           Muhanga         1.9         2.9         3.2         24.3         67.7         100         73           Kamonyi         0.0         0.2         1.0         48.3	EICV4	Regularly	Often	Sometimes	Not at all	about this	Total	HHs (in
Gasabo         3.2         2.5         5.1         73.8         15.4         100         147           Kicukiro         4.1         3.8         9.3         76.8         6.1         100         76           Nyanza         0.6         1.4         1.4         73.4         23.2         100         77           Gisagara         0.0         0.2         1.0         27.9         70.9         100         79           Nyaruguru         0.0         0.4         3.2         17.1         79.3         100         61           Huye         3.1         1.1         2.4         45.0         48.4         100         79           Nyamagabe         1.0         0.2         1.6         33.5         63.6         100         73           Ruhango         0.0         0.2         2.3         36.0         61.5         100         77           Muhanga         1.9         2.9         3.2         24.3         67.7         100         73           Karongi         0.0         0.2         1.0         48.3         50.5         100         75           Rutsiro         0.0         0.0         0.4         36.9	All Rwanda	0.9	1.0	3.4	48.4	46.2	100	2,493
Kicukiro         4.1         3.8         9.3         76.8         6.1         100         76           Nyanza         0.6         1.4         1.4         73.4         23.2         100         77           Gisagara         0.0         0.2         1.0         27.9         70.9         100         79           Nyaruguru         0.0         0.4         3.2         17.1         79.3         100         61           Huye         3.1         1.1         2.4         45.0         48.4         100         79           Nyamagabe         1.0         0.2         1.6         33.5         63.6         100         73           Ruhango         0.0         0.2         2.3         36.0         61.5         100         77           Muhanga         1.9         2.9         3.2         24.3         67.7         100         73           Kamonyi         0.0         0.2         1.0         48.3         50.5         100         79           Karongi         0.0         0.2         1.0         48.3         50.5         100         75           Rutsiro         0.0         0.0         0.4         36.9	Nyarugenge		1.5	15.3		6.6	100	73
Nyanza         0.6         1.4         1.4         73.4         23.2         100         77           Gisagara         0.0         0.2         1.0         27.9         70.9         100         79           Nyaruguru         0.0         0.4         3.2         17.1         79.3         100         61           Huye         3.1         1.1         2.4         45.0         48.4         100         79           Nyamagabe         1.0         0.2         1.6         33.5         63.6         100         73           Ruhango         0.0         0.2         2.3         36.0         61.5         100         77           Muhanga         1.9         2.9         3.2         24.3         67.7         100         73           Karongi         0.0         0.2         1.0         48.3         50.5         100         79           Karongi         0.0         0.2         1.0         48.3         50.5         100         75           Rutsiro         0.0         0.0         0.4         36.9         62.7         100         73           Rubavu         1.1         2.9         5.7         87.4	Gasabo	3.2	2.5	5.1	73.8	15.4	100	147
Gisagara         0.0         0.2         1.0         27.9         70.9         100         79           Nyaruguru         0.0         0.4         3.2         17.1         79.3         100         61           Huye         3.1         1.1         2.4         45.0         48.4         100         79           Nyamagabe         1.0         0.2         1.6         33.5         63.6         100         73           Ruhango         0.0         0.2         2.3         36.0         61.5         100         77           Muhanga         1.9         2.9         3.2         24.3         67.7         100         73           Kamonyi         0.0         0.2         1.0         48.3         50.5         100         79           Karongi         0.0         0.3         3.4         33.8         62.6         100         75           Rutsiro         0.0         0.0         0.4         36.9         62.7         100         73           Rubavu         1.1         2.9         5.7         87.4         3.0         100         92           Nyabihu         0.0         0.4         2.4         58.7	Kicukiro	4.1	3.8	9.3	76.8	6.1	100	
Nyaruguru         0.0         0.4         3.2         17.1         79.3         100         61           Huye         3.1         1.1         2.4         45.0         48.4         100         79           Nyamagabe         1.0         0.2         1.6         33.5         63.6         100         73           Ruhango         0.0         0.2         2.3         36.0         61.5         100         77           Muhanga         1.9         2.9         3.2         24.3         67.7         100         73           Kamonyi         0.0         0.2         1.0         48.3         50.5         100         79           Karongi         0.0         0.2         1.0         48.3         50.5         100         75           Rutsiro         0.0         0.0         0.4         36.9         62.7         100         73           Rubavu         1.1         2.9         5.7         87.4         3.0         100         92           Nyabihu         0.0         0.4         2.4         58.7         38.5         100         64           Rusiro         0.5         0.4         7.1         58.6	Nyanza	0.6	1.4	1.4	73.4	23.2	100	
Huye         3.1         1.1         2.4         45.0         48.4         100         79           Nyamagabe         1.0         0.2         1.6         33.5         63.6         100         73           Ruhango         0.0         0.2         2.3         36.0         61.5         100         77           Muhanga         1.9         2.9         3.2         24.3         67.7         100         73           Kamonyi         0.0         0.2         1.0         48.3         50.5         100         79           Karongi         0.0         0.2         1.0         48.3         50.5         100         79           Kutsiro         0.0         0.0         0.4         36.9         62.7         100         73           Rubavu         1.1         2.9         5.7         87.4         3.0         100         92           Nyabihu         0.0         0.4         2.4         58.7         38.5         100         64           Ngororero         0.4         0.2         1.7         38.2         59.6         100         81           Rusizi         0.5         0.4         7.1         58.6	Gisagara	0.0	0.2	1.0	27.9	70.9	100	79
Nyamagabe         1.0         0.2         1.6         33.5         63.6         100         73           Ruhango         0.0         0.2         2.3         36.0         61.5         100         77           Muhanga         1.9         2.9         3.2         24.3         67.7         100         73           Kamonyi         0.0         0.2         1.0         48.3         50.5         100         79           Karongi         0.0         0.3         3.4         33.8         62.6         100         75           Rutsiro         0.0         0.0         0.4         36.9         62.7         100         73           Rubavu         1.1         2.9         5.7         87.4         3.0         100         92           Nyabihu         0.0         0.4         2.4         58.7         38.5         100         64           Ngororero         0.4         0.2         1.7         38.2         59.6         100         81           Rusizi         0.5         0.4         7.1         58.6         33.4         100         89           Nyamasheke         0.2         0.2         1.1         25.2	Nyaruguru	0.0	0.4	3.2	17.1	79.3	100	61
Ruhango         0.0         0.2         2.3         36.0         61.5         100         77           Muhanga         1.9         2.9         3.2         24.3         67.7         100         73           Kamonyi         0.0         0.2         1.0         48.3         50.5         100         79           Karongi         0.0         0.3         3.4         33.8         62.6         100         75           Rutsiro         0.0         0.0         0.4         36.9         62.7         100         73           Rubavu         1.1         2.9         5.7         87.4         3.0         100         92           Nyabihu         0.0         0.4         2.4         58.7         38.5         100         64           Ngororero         0.4         0.2         1.7         38.2         59.6         100         81           Rusizi         0.5         0.4         7.1         58.6         33.4         100         89           Nyamasheke         0.2         0.2         1.1         25.2         73.3         100         86           Rulindo         0.2         0.6         2.1         58.1	Huye	3.1	1.1	2.4	45.0	48.4	100	79
Muhanga         1.9         2.9         3.2         24.3         67.7         100         73           Kamonyi         0.0         0.2         1.0         48.3         50.5         100         79           Karongi         0.0         0.3         3.4         33.8         62.6         100         75           Rutsiro         0.0         0.0         0.4         36.9         62.7         100         73           Rubavu         1.1         2.9         5.7         87.4         3.0         100         92           Nyabihu         0.0         0.4         2.4         58.7         38.5         100         64           Ngororero         0.4         0.2         1.7         38.2         59.6         100         81           Rusizi         0.5         0.4         7.1         58.6         33.4         100         89           Nyamasheke         0.2         0.2         1.1         25.2         73.3         100         86           Rulindo         0.2         0.6         2.1         58.1         39.1         100         69           Gakenke         0.2         0.5         2.0         42.8	Nyamagabe	1.0	0.2	1.6	33.5	63.6	100	73
Kamonyi         0.0         0.2         1.0         48.3         50.5         100         79           Karongi         0.0         0.3         3.4         33.8         62.6         100         75           Rutsiro         0.0         0.0         0.4         36.9         62.7         100         73           Rubavu         1.1         2.9         5.7         87.4         3.0         100         92           Nyabihu         0.0         0.4         2.4         58.7         38.5         100         64           Ngororero         0.4         0.2         1.7         38.2         59.6         100         81           Rusizi         0.5         0.4         7.1         58.6         33.4         100         89           Nyamasheke         0.2         0.2         1.1         25.2         73.3         100         86           Rulindo         0.2         0.6         2.1         58.1         39.1         100         69           Gakenke         0.2         0.5         2.0         42.8         54.5         100         86           Burera         1.5         1.1         3.9         63.8	Ruhango	0.0	0.2	2.3	36.0	61.5	100	77
Karongi         0.0         0.3         3.4         33.8         62.6         100         75           Rutsiro         0.0         0.0         0.4         36.9         62.7         100         73           Rubavu         1.1         2.9         5.7         87.4         3.0         100         92           Nyabihu         0.0         0.4         2.4         58.7         38.5         100         64           Ngororero         0.4         0.2         1.7         38.2         59.6         100         81           Rusizi         0.5         0.4         7.1         58.6         33.4         100         89           Nyamasheke         0.2         0.2         1.1         25.2         73.3         100         86           Rulindo         0.2         0.6         2.1         58.1         39.1         100         69           Gakenke         0.2         0.5         2.0         42.8         54.5         100         80           Musanze         0.3         2.3         7.0         44.1         46.2         100         86           Burera         1.5         1.1         3.9         63.8	Muhanga	1.9	2.9	3.2	24.3	67.7	100	73
Rutsiro         0.0         0.0         0.4         36.9         62.7         100         73           Rubavu         1.1         2.9         5.7         87.4         3.0         100         92           Nyabihu         0.0         0.4         2.4         58.7         38.5         100         64           Ngororero         0.4         0.2         1.7         38.2         59.6         100         81           Rusizi         0.5         0.4         7.1         58.6         33.4         100         89           Nyamasheke         0.2         0.2         1.1         25.2         73.3         100         86           Rulindo         0.2         0.6         2.1         58.1         39.1         100         69           Gakenke         0.2         0.5         2.0         42.8         54.5         100         80           Musanze         0.3         2.3         7.0         44.1         46.2         100         86           Burera         1.5         1.1         3.9         63.8         29.8         100         74           Gicumbi         0.2         1.1         1.5         36.3	Kamonyi	0.0	0.2	1.0	48.3	50.5	100	79
Rubavu         1.1         2.9         5.7         87.4         3.0         100         92           Nyabihu         0.0         0.4         2.4         58.7         38.5         100         64           Ngororero         0.4         0.2         1.7         38.2         59.6         100         81           Rusizi         0.5         0.4         7.1         58.6         33.4         100         89           Nyamasheke         0.2         0.2         1.1         25.2         73.3         100         86           Rulindo         0.2         0.6         2.1         58.1         39.1         100         69           Gakenke         0.2         0.5         2.0         42.8         54.5         100         80           Musanze         0.3         2.3         7.0         44.1         46.2         100         86           Burera         1.5         1.1         3.9         63.8         29.8         100         74           Gicumbi         0.2         1.1         1.5         36.3         61.0         100         86           Rwamagana         0.0         1.2         2.0         58.1	Karongi	0.0	0.3	3.4	33.8	62.6	100	75
Nyabihu         0.0         0.4         2.4         58.7         38.5         100         64           Ngororero         0.4         0.2         1.7         38.2         59.6         100         81           Rusizi         0.5         0.4         7.1         58.6         33.4         100         89           Nyamasheke         0.2         0.2         1.1         25.2         73.3         100         86           Rulindo         0.2         0.6         2.1         58.1         39.1         100         69           Gakenke         0.2         0.5         2.0         42.8         54.5         100         80           Musanze         0.3         2.3         7.0         44.1         46.2         100         86           Burera         1.5         1.1         3.9         63.8         29.8         100         74           Gicumbi         0.2         1.1         1.5         36.3         61.0         100         86           Rwamagana         0.0         1.2         2.0         58.1         38.8         100         85           Nyagatare         0.1         0.2         2.2         39.9 <td>Rutsiro</td> <td>0.0</td> <td>0.0</td> <td>0.4</td> <td>36.9</td> <td>62.7</td> <td>100</td> <td>73</td>	Rutsiro	0.0	0.0	0.4	36.9	62.7	100	73
Ngororero         0.4         0.2         1.7         38.2         59.6         100         81           Rusizi         0.5         0.4         7.1         58.6         33.4         100         89           Nyamasheke         0.2         0.2         1.1         25.2         73.3         100         86           Rulindo         0.2         0.6         2.1         58.1         39.1         100         69           Gakenke         0.2         0.5         2.0         42.8         54.5         100         80           Musanze         0.3         2.3         7.0         44.1         46.2         100         86           Burera         1.5         1.1         3.9         63.8         29.8         100         74           Gicumbi         0.2         1.1         1.5         36.3         61.0         100         86           Rwamagana         0.0         1.2         2.0         58.1         38.8         100         85           Nyagatare         0.1         0.2         2.2         39.9         57.5         100         113           Gatsibo         0.6         0.6         1.6         43.4 <td>Rubavu</td> <td>1.1</td> <td>2.9</td> <td>5.7</td> <td>87.4</td> <td>3.0</td> <td>100</td> <td>92</td>	Rubavu	1.1	2.9	5.7	87.4	3.0	100	92
Rusizi         0.5         0.4         7.1         58.6         33.4         100         89           Nyamasheke         0.2         0.2         1.1         25.2         73.3         100         86           Rulindo         0.2         0.6         2.1         58.1         39.1         100         69           Gakenke         0.2         0.5         2.0         42.8         54.5         100         80           Musanze         0.3         2.3         7.0         44.1         46.2         100         86           Burera         1.5         1.1         3.9         63.8         29.8         100         74           Gicumbi         0.2         1.1         1.5         36.3         61.0         100         86           Rwamagana         0.0         1.2         2.0         58.1         38.8         100         85           Nyagatare         0.1         0.2         2.2         39.9         57.5         100         113           Gatsibo         0.6         0.6         1.6         43.4         53.8         100         105           Kayonza         0.4         1.1         4.1         44.1 <td>Nyabihu</td> <td>0.0</td> <td>0.4</td> <td>2.4</td> <td>58.7</td> <td>38.5</td> <td>100</td> <td>64</td>	Nyabihu	0.0	0.4	2.4	58.7	38.5	100	64
Nyamasheke         0.2         0.2         1.1         25.2         73.3         100         86           Rulindo         0.2         0.6         2.1         58.1         39.1         100         69           Gakenke         0.2         0.5         2.0         42.8         54.5         100         80           Musanze         0.3         2.3         7.0         44.1         46.2         100         86           Burera         1.5         1.1         3.9         63.8         29.8         100         74           Gicumbi         0.2         1.1         1.5         36.3         61.0         100         86           Rwamagana         0.0         1.2         2.0         58.1         38.8         100         85           Nyagatare         0.1         0.2         2.2         39.9         57.5         100         113           Gatsibo         0.6         0.6         1.6         43.4         53.8         100         105           Kayonza         0.4         1.1         4.1         44.1         50.3         100         86           Kirehe         0.3         0.0         1.5         70.4 <td>Ngororero</td> <td>0.4</td> <td>0.2</td> <td>1.7</td> <td>38.2</td> <td>59.6</td> <td>100</td> <td>81</td>	Ngororero	0.4	0.2	1.7	38.2	59.6	100	81
Rulindo         0.2         0.6         2.1         58.1         39.1         100         69           Gakenke         0.2         0.5         2.0         42.8         54.5         100         80           Musanze         0.3         2.3         7.0         44.1         46.2         100         86           Burera         1.5         1.1         3.9         63.8         29.8         100         74           Gicumbi         0.2         1.1         1.5         36.3         61.0         100         86           Rwamagana         0.0         1.2         2.0         58.1         38.8         100         85           Nyagatare         0.1         0.2         2.2         39.9         57.5         100         113           Gatsibo         0.6         0.6         1.6         43.4         53.8         100         105           Kayonza         0.4         1.1         4.1         44.1         50.3         100         86           Kirehe         0.3         0.0         1.5         70.4         27.9         100         84           Ngoma         0.2         0.4         2.1         32.5	Rusizi	0.5	0.4	7.1	58.6	33.4	100	89
Gakenke         0.2         0.5         2.0         42.8         54.5         100         80           Musanze         0.3         2.3         7.0         44.1         46.2         100         86           Burera         1.5         1.1         3.9         63.8         29.8         100         74           Gicumbi         0.2         1.1         1.5         36.3         61.0         100         86           Rwamagana         0.0         1.2         2.0         58.1         38.8         100         85           Nyagatare         0.1         0.2         2.2         39.9         57.5         100         113           Gatsibo         0.6         0.6         1.6         43.4         53.8         100         105           Kayonza         0.4         1.1         4.1         44.1         50.3         100         86           Kirehe         0.3         0.0         1.5         70.4         27.9         100         84           Ngoma         0.2         0.4         2.1         32.5         64.8         100         81	Nyamasheke	0.2	0.2	1.1	25.2	73.3	100	86
Musanze         0.3         2.3         7.0         44.1         46.2         100         86           Burera         1.5         1.1         3.9         63.8         29.8         100         74           Gicumbi         0.2         1.1         1.5         36.3         61.0         100         86           Rwamagana         0.0         1.2         2.0         58.1         38.8         100         85           Nyagatare         0.1         0.2         2.2         39.9         57.5         100         113           Gatsibo         0.6         0.6         1.6         43.4         53.8         100         105           Kayonza         0.4         1.1         4.1         44.1         50.3         100         86           Kirehe         0.3         0.0         1.5         70.4         27.9         100         84           Ngoma         0.2         0.4         2.1         32.5         64.8         100         81	Rulindo	0.2	0.6	2.1	58.1	39.1	100	69
Burera         1.5         1.1         3.9         63.8         29.8         100         74           Gicumbi         0.2         1.1         1.5         36.3         61.0         100         86           Rwamagana         0.0         1.2         2.0         58.1         38.8         100         85           Nyagatare         0.1         0.2         2.2         39.9         57.5         100         113           Gatsibo         0.6         0.6         1.6         43.4         53.8         100         105           Kayonza         0.4         1.1         4.1         44.1         50.3         100         86           Kirehe         0.3         0.0         1.5         70.4         27.9         100         84           Ngoma         0.2         0.4         2.1         32.5         64.8         100         81	Gakenke	0.2	0.5	2.0	42.8	54.5	100	80
Gicumbi         0.2         1.1         1.5         36.3         61.0         100         86           Rwamagana         0.0         1.2         2.0         58.1         38.8         100         85           Nyagatare         0.1         0.2         2.2         39.9         57.5         100         113           Gatsibo         0.6         0.6         1.6         43.4         53.8         100         105           Kayonza         0.4         1.1         4.1         44.1         50.3         100         86           Kirehe         0.3         0.0         1.5         70.4         27.9         100         84           Ngoma         0.2         0.4         2.1         32.5         64.8         100         81	Musanze	0.3	2.3	7.0	44.1	46.2	100	86
Rwamagana         0.0         1.2         2.0         58.1         38.8         100         85           Nyagatare         0.1         0.2         2.2         39.9         57.5         100         113           Gatsibo         0.6         0.6         1.6         43.4         53.8         100         105           Kayonza         0.4         1.1         4.1         44.1         50.3         100         86           Kirehe         0.3         0.0         1.5         70.4         27.9         100         84           Ngoma         0.2         0.4         2.1         32.5         64.8         100         81	Burera	1.5	1.1	3.9	63.8	29.8	100	74
Nyagatare         0.1         0.2         2.2         39.9         57.5         100         113           Gatsibo         0.6         0.6         1.6         43.4         53.8         100         105           Kayonza         0.4         1.1         4.1         44.1         50.3         100         86           Kirehe         0.3         0.0         1.5         70.4         27.9         100         84           Ngoma         0.2         0.4         2.1         32.5         64.8         100         81	Gicumbi	0.2	1.1	1.5	36.3	61.0	100	86
Gatsibo         0.6         0.6         1.6         43.4         53.8         100         105           Kayonza         0.4         1.1         4.1         44.1         50.3         100         86           Kirehe         0.3         0.0         1.5         70.4         27.9         100         84           Ngoma         0.2         0.4         2.1         32.5         64.8         100         81	Rwamagana	0.0	1.2	2.0	58.1	38.8	100	85
Kayonza         0.4         1.1         4.1         44.1         50.3         100         86           Kirehe         0.3         0.0         1.5         70.4         27.9         100         84           Ngoma         0.2         0.4         2.1         32.5         64.8         100         81	Nyagatare	0.1	0.2	2.2	39.9	57.5	100	113
Kirehe         0.3         0.0         1.5         70.4         27.9         100         84           Ngoma         0.2         0.4         2.1         32.5         64.8         100         81	Gatsibo	0.6	0.6	1.6	43.4	53.8	100	105
Ngoma 0.2 0.4 2.1 32.5 64.8 100 81	Kayonza	0.4	1.1	4.1	44.1	50.3	100	86
	Kirehe		0.0			27.9	100	
Bugesera         0.0         1.5         4.4         30.8         63.3         100         94	Ngoma	0.2	0.4	2.1	32.5	64.8	100	81
	Bugesera	0.0	1.5	4.4	30.8	63.3	100	94

Table A.34: Usage rates for public telephone, by district (EICV5, EICV4)

		Usage ra	tes for public te	elephone			m . 1 . c
EICV5	Regularly	Often	Sometimes	Not at all	Don't know about this service	Total	Total no. of HHs (in 000s)
All Rwanda	1.3	0.8	0.9	83.1	14.0	100	2,708
Nyarugenge	0.0	0.0	0.0	100.0	0.0	100	81
Gasabo	0.2	0.0	0.2	67.9	31.7	100	230
Kicukiro	5.1	7.4	1.4	72.1	14.0	100	98
Nyanza	0.8	0.0	0.7	49.3	49.2	100	79
Gisagara	0.0	0.2	0.0	87.0	12.8	100	82
Nyaruguru	0.0	2.8	1.8	31.7	63.7	100	64
Huye	0.0	0.0	0.2	77.4	22.4	100	82
Nyamagabe	0.2	0.0	0.4	87.1	12.3	100	77
Ruhango	1.5	0.2	0.7	92.4	5.2	100	71
Muhanga	0.4	0.0	0.2	74.0	25.4	100	78
Kamonyi	1.3	1.5	0.4	66.4	30.4	100	93
Karongi	0.2	0.3	0.0	92.6	6.8	100	78
Rutsiro	2.1	2.7	4.8	81.3	9.1	100	73
Rubavu	0.3	0.0	1.8	92.1	5.7	100	96
Nyabihu	0.3	0.2	0.5	95.4	3.6	100	67
Ngororero	0.8	0.2	0.4	95.6	2.9	100	82
Rusizi	0.0	0.0	1.2	82.7	16.1	100	95
Nyamasheke	0.0	0.2	0.5	97.6	1.6	100	83
Rulindo	0.0	0.0	0.1	64.0	35.8	100	78
Gakenke	0.4	0.2	0.2	94.5	4.7	100	84

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		Usage ra	tes for public te	elephone			Total no. of
EICV5	Regularly	Often	Sometimes Not at all		Don't know about this service	Total	Total no. of HHs (in 000s)
Musanze	0.0	0.0	0.2	85.8	14.0	100	91
Burera	0.0	0.0	0.0	97.2	2.8	100	82
Gicumbi	21.9	5.3	3.3	69.5	0.0	100	88
Rwamagana	0.0	0.2	0.6	97.9	1.3	100	89
Nyagatare	0.0	0.2	0.2	85.4	14.2	100	132
Gatsibo	1.5	1.4	6.1	88.2	2.9	100	108
Kayonza	0.4	0.0	0.8	90.9	7.8	100	83
Kirehe	0.0	0.0	0.3	94.7	5.0	100	87
Ngoma	0.6	0.0	0.4	95.5	3.5	100	83
Bugesera	0.3	0.6	0.9	98.2	0.0	100	95

		Usage rat	es for public tel	ephone			
EICV4	Regularly	Often	Sometimes	Not at all	Don't know about this service	Total	Total no. of HHs (in 000s)
All Rwanda	2.9	3.4	6.6	74.6	12.6	100	2,493
Nyarugenge	4.7	0.2	8.2	77.1	9.9	100	73
Gasabo	16.6	9.3	1.9	69.9	2.3	100	147
Kicukiro	0.6	0.0	0.5	98.2	0.7	100	76
Nyanza	0.0	1.2	2.4	93.8	2.6	100	77
Gisagara	0.4	0.8	3.1	60.1	35.7	100	79
Nyaruguru	0.0	0.6	10.2	49.8	39.3	100	61
Huye	0.0	0.0	2.7	91.0	6.3	100	79
Nyamagabe	3.8	0.0	1.3	81.6	13.4	100	73
Ruhango	0.0	0.0	2.1	90.9	7.1	100	77
Muhanga	1.7	0.5	3.9	78.0	15.9	100	73
Kamonyi	1.3	1.6	10.4	81.4	5.4	100	79
Karongi	4.3	9.0	10.7	59.8	16.3	100	75
Rutsiro	0.6	0.2	3.7	76.7	18.8	100	73
Rubavu	1.0	3.7	5.5	88.8	1.0	100	92
Nyabihu	1.0	3.7	9.9	83.1	2.4	100	64
Ngororero	0.7	0.6	2.5	72.5	23.7	100	81
Rusizi	0.4	1.8	5.7	85.1	7.0	100	89
Nyamasheke	0.2	0.0	0.3	59.2	40.3	100	86
Rulindo	13.8	6.7	13.8	49.3	16.4	100	69
Gakenke	1.1	1.2	11.8	79.0	7.0	100	80
Musanze	6.1	15.0	12.8	56.8	9.4	100	86
Burera	2.1	2.7	14.5	75.7	5.1	100	74
Gicumbi	7.3	4.0	4.9	77.6	6.2	100	86
Rwamagana	0.4	2.2	3.5	85.2	8.8	100	85
Nyagatare	0.2	2.3	5.5	84.7	7.3	100	113
Gatsibo	4.9	10.3	6.9	73.7	4.2	100	105
Kayonza	0.4	3.5	17.3	64.2	14.6	100	86
Kirehe	0.4	0.4	14.6	79.5	5.0	100	84
Ngoma	0.2	0.0	1.4	58.2	40.2	100	81
Bugesera	1.7	10.1	11.1	55.0	22.0	100	94

Table A.35: Distribution of HHs across aggregated Tier, by district (EICV5)

EICV5		Distribution	of househol	ds across aggre	gated Tier	
	Tier_0	Tier_1	Tier_2	Tier_3	Tier_4	Tier_5
All Rwanda	65.30	7.70	1.30	12.70	4.10	8.80
Nyarugenge	0.51	0.03	0.02	0.65	0.54	1.26
Gasabo	2.07	0.09	0.14	2.61	0.86	2.72
Kicukiro	0.57	0.01	0.08	1.16	0.36	1.45
Nyanza	2.06	0.43	0.04	0.19	0.10	0.08
Gisagara	2.48	0.23	0.01	0.15	0.01	0.13
Nyaruguru	1.96	0.17	0.03	0.08	0.08	0.04
Huye	2.23	0.33	0.02	0.27	0.07	0.09
Nyamagabe	2.32	0.28	0.02	0.13	0.05	0.06
Ruhango	2.01	0.12	0.01	0.32	0.09	0.07
Muhanga	2.10	0.20	0.12	0.31	0.06	0.10
Kamonyi	2.60	0.22	0.06	0.26	0.18	0.13
Karongi	1.83	0.67	0.02	0.23	0.07	0.06
Rutsiro	2.01	0.41	0.06	0.11	0.04	0.07
Rubavu	2.12	0.17	0.12	0.89	0.07	0.17
Nyabihu	2.02	0.06	0.05	0.25	0.02	0.09
Ngororero	2.60	0.24	0.03	0.12	0.02	0.03
Rusizi	1.98	0.39	0.01	0.56	0.15	0.41
Nyamasheke	1.87	0.51	0.05	0.18	0.34	0.10
Rulindo	2.15	0.25	0.03	0.27	0.05	0.11
Gakenke	2.54	0.23	0.02	0.25	0.02	0.05
Musanze	2.20	0.08	0.03	0.60	0.07	0.35
Burera	2.30	0.16	0.03	0.41	0.03	0.08
Gicumbi	2.77	0.09	0.01	0.16	0.07	0.14
Rwamagana	2.05	0.29	0.03	0.64	0.10	0.17
Nyagatare	3.59	0.45	0.14	0.53	0.07	0.10
Gatsibo	2.79	0.63	0.03	0.35	0.08	0.11
Kayonza	2.13	0.35	0.02	0.29	0.14	0.14
Kirehe	2.49	0.20	0.02	0.21	0.09	0.20
Ngoma	2.26	0.25	0.04	0.25	0.11	0.16
Bugesera	2.67	0.13	0.05	0.32	0.17	0.15

Table A.36: Distribution of HHs across capacity Tier, by district (EICV5)

FIGUE		Distribution of ho	useholds across o	apacity Tier	
EICV5	Tier_0	Tier_1	Tier_2	Tier_3	Tier_5
All Rwanda	65.20	7.30	0.50	0.10	27.0
Nyarugenge	0.51	0.02	0.02	0.00	2.45
Gasabo	2.07	0.07	0.01	0.00	6.35
Kicukiro	0.56	0.00	0.02	0.00	3.05
Nyanza	2.06	0.43	0.01	0.00	0.41
Gisagara	2.48	0.22	0.01	0.00	0.31
Nyaruguru	1.96	0.17	0.01	0.00	0.22
Huye	2.23	0.33	0.02	0.00	0.43
Nyamagabe	2.32	0.27	0.02	0.00	0.26
Ruhango	2.00	0.11	0.00	0.02	0.50
Muhanga	2.10	0.20	0.03	0.01	0.56
Kamonyi	2.58	0.20	0.04	0.00	0.62
Karongi	1.83	0.63	0.01	0.00	0.40
Rutsiro	2.01	0.40	0.01	0.02	0.25
Rubavu	2.08	0.08	0.00	0.00	1.38
Nyabihu	2.02	0.05	0.00	0.00	0.43
Ngororero	2.59	0.23	0.01	0.00	0.21
Rusizi	1.98	0.39	0.00	0.00	1.13
Nyamasheke	1.87	0.50	0.00	0.00	0.68
Rulindo	2.15	0.25	0.03	0.00	0.43
Gakenke	2.54	0.19	0.01	0.00	0.37
Musanze	2.20	0.05	0.01	0.00	1.08
Burera	2.30	0.16	0.01	0.00	0.55
Gicumbi	2.77	0.08	0.01	0.00	0.39
Rwamagana	2.05	0.29	0.02	0.00	0.92
Nyagatare	3.59	0.43	0.11	0.00	0.75
Gatsibo	2.77	0.63	0.03	0.00	0.56
Kayonza	2.13	0.35	0.01	0.00	0.58
Kirehe	2.49	0.20	0.02	0.00	0.50
Ngoma	2.25	0.24	0.01	0.01	0.54
Bugesera	2.67	0.13	0.04	0.01	0.65

Table A.37: Distribution of HHs across duration Tier-day time, by district (EICV5)

	Distrib	ution of househ	olds across durat	ion Tier-day time	9
EICV5	Tier_0	Tier_2	Tier_3	Tier_4	Tier_5
All Rwanda	0.50	0.20	1.00	12.80	85.60
Nyarugenge	0.00	0.00	0.00	0.36	8.74
Gasabo	0.00	0.00	0.16	1.48	21.90
Kicukiro	0.05	0.00	0.03	1.10	10.14
Nyanza	0.02	0.02	0.06	0.21	1.20
Gisagara	0.00	0.00	0.00	0.14	1.01
Nyaruguru	0.00	0.00	0.03	0.21	0.57
Huye	0.00	0.00	0.00	0.10	1.47
Nyamagabe	0.00	0.00	0.00	0.19	0.77
Ruhango	0.04	0.00	0.00	0.44	1.42
Muhanga	0.00	0.03	0.06	0.57	1.46
Kamonyi	0.05	0.00	0.02	0.40	1.83
Karongi	0.00	0.00	0.11	0.46	0.94
Rutsiro	0.01	0.00	0.12	0.19	0.69
Rubavu	0.15	0.00	0.11	1.12	3.73
Nyabihu	0.00	0.02	0.00	0.27	1.28
Ngororero	0.03	0.02	0.05	0.16	0.53
Rusizi	0.00	0.00	0.00	0.49	3.70
Nyamasheke	0.00	0.00	0.05	0.29	2.18
Rulindo	0.00	0.00	0.00	0.21	1.40
Gakenke	0.00	0.03	0.02	0.12	1.21
Musanze	0.00	0.03	0.05	0.65	3.28
Burera	0.00	0.00	0.00	0.50	1.51
Gicumbi	0.00	0.03	0.03	0.28	1.11
Rwamagana	0.00	0.00	0.00	0.24	3.10
Nyagatare	0.00	0.00	0.03	1.04	1.68
Gatsibo	0.08	0.00	0.00	0.66	1.32
Kayonza	0.00	0.00	0.03	0.21	1.91
Kirehe	0.00	0.00	0.00	0.18	1.66
Ngoma	0.03	0.00	0.00	0.23	1.75
Bugesera	0.00	0.00	0.02	0.31	2.10

Table A.38: Distribution of HHs across duration Tier-evening, by district (EICV5)

	Distribution of Households across duration Tier-evening				
EICV5	Tier_1	Tier_2	Tier_3	Tier_5	
All Rwanda	1.70	3.10	34.90	60.30	
Nyarugenge	0.03	0.00	1.16	7.91	
Gasabo	0.09	0.47	7.28	15.69	
Kicukiro	0.06	0.22	3.30	7.75	
Nyanza	0.02	0.12	0.52	0.85	
Gisagara	0.04	0.02	0.46	0.62	
Nyaruguru	0.01	0.07	0.14	0.59	
Huye	0.00	0.02	0.84	0.70	
Nyamagabe	0.05	0.00	0.21	0.70	
Ruhango	0.06	0.04	0.81	0.99	
Muhanga	0.03	0.36	0.83	0.91	
Kamonyi	0.06	0.09	0.90	1.25	
Karongi	0.13	0.06	0.67	0.63	
Rutsiro	0.05	0.16	0.22	0.57	
Rubavu	0.45	0.46	3.04	1.18	
Nyabihu	0.06	0.18	0.79	0.54	
Ngororero	0.08	0.08	0.24	0.39	
Rusizi	0.00	0.03	0.72	3.45	

	Distribution of Households across duration Tier-evening						
EICV5	Tier_1	Tier_2	Tier_3	Tier_5			
Nyamasheke	0.03	0.18	0.18	2.13			
Rulindo	0.00	0.00	0.76	0.84			
Gakenke	0.13	0.02	0.85	0.38			
Musanze	0.11	0.09	1.94	1.87			
Burera	0.00	0.10	1.10	0.82			
Gicumbi	0.02	0.00	0.48	0.93			
Rwamagana	0.00	0.02	1.94	1.38			
Nyagatare	0.07	0.11	1.89	0.68			
Gatsibo	0.08	0.00	1.11	0.87			
Kayonza	0.00	0.04	0.72	1.39			
Kirehe	0.02	0.00	0.41	1.42			
Ngoma	0.05	0.09	0.49	1.38			
Bugesera	0.00	0.05	0.93	1.45			

Table A.39: Distribution of HHs across reliability Tier, by district (EICV5)

	Distribution of households across reliability Tier				
EICV5	Tier_3	Tier_4	Tier_5		
All Rwanda	2.80	18.50	78.70		
Nyarugenge	0.37	2.33	6.40		
Gasabo	0.10	3.73	19.71		
Kicukiro	0.27	1.46	9.59		
Nyanza	0.03	0.47	1.02		
Gisagara	0.04	0.02	1.08		
Nyaruguru	0.11	0.31	0.40		
Huye	0.07	0.25	1.25		
Nyamagabe	0.02	0.36	0.58		
Ruhango	0.11	0.52	1.27		
Muhanga	0.04	0.35	1.73		
Kamonyi	0.03	0.66	1.61		
Karongi	0.02	0.33	1.15		
Rutsiro	0.04	0.24	0.72		
Rubavu	0.02	0.34	4.76		
Nyabihu	0.08	0.08	1.41		
Ngororero	0.19	0.09	0.51		
Rusizi	0.00	0.91	3.29		
Nyamasheke	0.12	1.61	0.80		
Rulindo	0.14	0.25	1.22		
Gakenke	0.02	0.11	1.24		
Musanze	0.06	0.25	3.71		
Burera	0.19	0.23	1.59		
Gicumbi	0.03	0.29	1.12		
Rwamagana	0.11	0.44	2.79		
Nyagatare	0.03	0.24	2.47		
Gatsibo	0.03	0.34	1.70		
Kayonza	0.18	0.63	1.34		
Kirehe	0.12	0.48	1.25		
Ngoma	0.14	0.56	1.31		
Bugesera	0.07	0.67	1.70		

Table A.40: Distribution of HHs across quality Tier, by district (EICV5)

PICUE	Distribution of house	eholds across quality Tier
EICV5	Tier_3	Tier_5
All Rwanda	18.30	81.70
Nyarugenge	1.08	8.03
Gasabo	3.40	20.13
Kicukiro	1.20	10.12
Nyanza	0.32	1.20
Gisagara	0.10	1.05
Nyaruguru	0.14	0.67
Huye	0.33	1.24
Nyamagabe	0.39	0.56
Ruhango	0.41	1.49
Muhanga	0.71	1.41
Kamonyi	0.17	2.13
Karongi	0.37	1.12
Rutsiro	0.25	0.75
Rubavu	1.37	3.75
Nyabihu	0.29	1.28
Ngororero	0.21	0.58
Rusizi	1.73	2.47
Nyamasheke	0.45	2.07
Rulindo	0.25	1.35
Gakenke	0.51	0.86
Musanze	0.69	3.31
Burera	0.83	1.19
Gicumbi	0.23	1.20
Rwamagana	0.80	2.54
Nyagatare	0.44	2.30
Gatsibo	0.28	1.78
Kayonza	0.34	1.81
Kirehe	0.31	1.54
Ngoma	0.35	1.66
Bugesera	0.36	2.08

Table A.41: Distribution of HHs across legality Tier, by district (EICV5)

EICV5	Distribution of HHs across legality Tier
	Tier_5
All Rwanda	100
Nyarugenge	9.10
Gasabo	23.54
Kicukiro	11.32
Nyanza	1.51
Gisagara	1.15
Nyaruguru	0.82
Huye	1.56
Nyamagabe	0.95
Ruhango	1.90
Muhanga	2.12
Kamonyi	2.30
Karongi	1.50
Rutsiro	1.00
Rubavu	5.12
Nyabihu	1.57
Ngororero	0.79

EICV5	Distribution of HHs across legality Tier
	Tier_5
Rusizi	4.20
Nyamasheke	2.52
Rulindo	1.61
Gakenke	1.37
Musanze	4.01
Burera	2.01
Gicumbi	1.43
Rwamagana	3.34
Nyagatare	2.74
Gatsibo	2.06
Kayonza	2.15
Kirehe	1.85
Ngoma	2.01
Bugesera	2.43

Table A.42: Distribution of HHs across safety Tier, by district (EICV5)

	Distribution of	households
EICV5	across Safe	
	Tier_3	Tier_5
All Rwanda	0.20	99.80
Nyarugenge	0.00	9.10
Gasabo	0.03	23.50
Kicukiro	0.04	11.29
Nyanza	0.00	1.51
Gisagara	0.00	1.15
Nyaruguru	0.00	0.82
Huye	0.00	1.56
Nyamagabe	0.00	0.95
Ruhango	0.00	1.90
Muhanga	0.00	2.12
Kamonyi	0.00	2.30
Karongi	0.00	1.50
Rutsiro	0.02	0.98
Rubavu	0.08	5.04
Nyabihu	0.03	1.54
Ngororero	0.00	0.79
Rusizi	0.00	4.20
Nyamasheke	0.00	2.52
Rulindo	0.00	1.61
Gakenke	0.00	1.37
Musanze	0.00	4.01
Burera	0.00	2.01
Gicumbi	0.00	1.43
Rwamagana	0.00	3.34
Nyagatare	0.00	2.74
Gatsibo	0.00	2.06
Kayonza	0.00	2.15
Kirehe	0.00	1.85
Ngoma	0.00	2.01
Bugesera	0.00	2.43

## **Annex B: Confidence Intervals for selected indicators, EICV5**

Table B.1: Percentage of HH whose main water source is improved, EICV5

All Rwanda Kigali City Southern Western Northern Eastern Other urban Southern rural Western rural Urban Rural Q1 Q2 Q3	87.4 95.9 88.0 86.5 87.5 82.6 94.2 87.3 85.3 86.9 81.6 95.8 85.4	0.6 0.9 0.9 1.0 1.2 1.6 0.8 1.0 1.2 1.3 1.8 0.6	86.3 94.2 86.2 84.4 85.1 79.3 92.7 85.4 82.9 84.3 78.2 94.6	88.5 97.5 89.8 88.5 89.9 85.8 95.7 89.3 87.7 89.5	14,580 1,620 3,840 3,360 2,400 3,360 1,284 3,480 2,940 2,160
Kigali City Southern Western Northern Eastern Other urban Southern rural Western rural Northern rural Eastern rural Urban Rural Q1 Q2	95.9 88.0 86.5 87.5 82.6 94.2 87.3 85.3 86.9 81.6 95.8 85.4	0.9 0.9 1.0 1.2 1.6 0.8 1.0 1.2 1.3 1.8	94.2 86.2 84.4 85.1 79.3 92.7 85.4 82.9 84.3 78.2	97.5 89.8 88.5 89.9 85.8 95.7 89.3 87.7 89.5	1,620 3,840 3,360 2,400 3,360 1,284 3,480 2,940
Southern Western Northern Eastern Other urban Southern rural Western rural Northern rural Eastern rural Urban Rural Q1 Q2	88.0 86.5 87.5 82.6 94.2 87.3 85.3 86.9 81.6 95.8 85.4	0.9 1.0 1.2 1.6 0.8 1.0 1.2 1.3 1.8 0.6	86.2 84.4 85.1 79.3 92.7 85.4 82.9 84.3 78.2	89.8 88.5 89.9 85.8 95.7 89.3 87.7 89.5	3,840 3,360 2,400 3,360 1,284 3,480 2,940
Western Northern Eastern Other urban Southern rural Western rural Northern rural Eastern rural Urban Rural Q1 Q2	86.5 87.5 82.6 94.2 87.3 85.3 86.9 81.6 95.8 85.4	1.0 1.2 1.6 0.8 1.0 1.2 1.3 1.8 0.6	84.4 85.1 79.3 92.7 85.4 82.9 84.3 78.2	88.5 89.9 85.8 95.7 89.3 87.7 89.5	3,360 2,400 3,360 1,284 3,480 2,940
Northern Eastern Other urban Southern rural Western rural Northern rural Eastern rural Urban Rural Q1 Q2	87.5 82.6 94.2 87.3 85.3 86.9 81.6 95.8 85.4	1.2 1.6 0.8 1.0 1.2 1.3 1.8 0.6	85.1 79.3 92.7 85.4 82.9 84.3 78.2	89.9 85.8 95.7 89.3 87.7 89.5	2,400 3,360 1,284 3,480 2,940
Eastern Other urban Southern rural Western rural Northern rural Eastern rural Urban Rural Q1 Q2	82.6 94.2 87.3 85.3 86.9 81.6 95.8 85.4	1.6 0.8 1.0 1.2 1.3 1.8 0.6	79.3 92.7 85.4 82.9 84.3 78.2	85.8 95.7 89.3 87.7 89.5	3,360 1,284 3,480 2,940
Other urban Southern rural Western rural Northern rural Eastern rural Urban Rural Q1 Q2	94.2 87.3 85.3 86.9 81.6 95.8 85.4	0.8 1.0 1.2 1.3 1.8 0.6	92.7 85.4 82.9 84.3 78.2	95.7 89.3 87.7 89.5	1,284 3,480 2,940
Southern rural Western rural Northern rural Eastern rural Urban Rural Q1 Q2	87.3 85.3 86.9 81.6 95.8 85.4 82.0	1.0 1.2 1.3 1.8 0.6	85.4 82.9 84.3 78.2	89.3 87.7 89.5	3,480 2,940
Western rural Northern rural Eastern rural Urban Rural Q1 Q2	85.3 86.9 81.6 95.8 85.4 82.0	1.2 1.3 1.8 0.6	82.9 84.3 78.2	87.7 89.5	2,940
Northern rural Eastern rural Urban Rural Q1 Q2	86.9 81.6 95.8 85.4 82.0	1.3 1.8 0.6	84.3 78.2	89.5	
Eastern rural Urban Rural Q1 Q2	81.6 95.8 85.4 82.0	1.8 0.6	78.2		
Urban Rural Q1 Q2	95.8 85.4 82.0	0.6			3,096
Rural Q1 Q2	85.4 82.0		94 n	96.9	2,526
Q1 Q2	82.0		84.1	86.8	12,054
Q2		1.1	79.8	84.2	2,429
	84.7	0.9	82.9	86.5	2,656
QJ	87.3	0.8	85.8	88.9	2,868
Q4	87.4	0.8	85.8	89.1	3,078
Q5	92.8	0.6	91.5	94.1	3,549
Nyarugenge	96.9	1.5	94.0	99.7	540
Gasabo	95.8	1.2	93.4	98.2	540
Kicukiro	95.2	1.7	91.9	98.5	540
Nyanza	86.6	2.3	82.1	91.0	480
Gisagara	95.5	1.4	92.8	98.2	480
Nyaruguru	82.6	3.5	75.8	89.5	480
Huye	89.7	3.3	83.2	96.2	480
Nyamagabe	84.5	3.0	78.6	90.4	480
Ruhango	87.9	2.3	83.4	92.3	480
Muhanga	83.2	3.0	77.3	89.2	480
Kamonyi	91.9	1.4	89.1	94.6	480
Karongi	90.2	1.9	86.4	94.0	480
Rutsiro	65.5	4.6	56.5	74.6	480
Rubavu	98.6	0.5	97.5	99.6	480
Nyabihu	86.0	2.6	80.8	91.2	480
Ngororero	84.0	2.7	78.7	89.4	480
Rusizi	87.6	3.1	81.6	93.7	480
Nyamasheke	89.0	2.6	83.9	94.1	480
Rulindo	92.3	1.7	89.0	95.5	480
Gakenke	71.0	3.7	63.8	78.2	480
Musanze	92.5	2.3	88.0	97.1	480
Burera	94.0	2.2	89.7	98.4	480
Gicumbi	88.0	3.0	82.1	94.0	480
Rwamagana	88.3	2.8	82.8	93.9	480
Nyagatare	80.4	4.3	72.0	88.9	480
Gatsibo	79.1	4.9	69.5	88.6	480
Kayonza	88.1	3.6	81.0	95.2	480
Kirehe	84.3	4.1	76.3	92.3	480
Ngoma	82.6	2.9	77.0	88.3	480
Bugesera	77.5	5.7	66.4	88.6	480

Table B.2: Percentage of population whose main water source is improved, EICV5

EICV5	Estimate	Standard error	Lower	Upper	Unweighted count
All Rwanda	87.2	0.6	86.0	88.3	64,314
Kigali City	95.5	1.1	93.4	97.7	6,511
Southern	87.8	1.0	85.9	89.6	16,837
Western	86.7	1.1	84.5	88.9	15,680
Northern	87.7	1.3	85.2	90.1	10,480
Eastern	82.1	1.8	78.7	85.6	14,806
Other urban	94.7	0.7	93.3	96.1	5,731
Southern rural	87.1	1.0	85.1	89.2	15,245
Western rural	85.4	1.3	82.9	88.0	13,731
Northern rural	86.9	1.4	84.2	89.6	9,348
Eastern rural	81.2	1.9	77.6	84.8	13,748
Urban	96.0	0.6	94.9	97.1	10,728
Rural	85.2	0.7	83.7	86.6	53,586
Q1	82.4	1.1	80.2	84.6	13,107
Q2	84.9	1.0	83.0	86.8	12,887
Q3	87.7	0.8	86.1	89.3	12,842
Q4	87.2	1.0	85.3	89.1	12,676
Q5	93.2	0.7	91.8	94.5	12,802
Nyarugenge	96.3	1.7	93.0	99.6	2,114
Gasabo	95.3	1.8	91.8	98.7	2,096
Kicukiro	95.6	1.7	92.2	98.9	2,301
Nyanza	86.4	2.7	81.2	91.6	1,998
Gisagara	95.6	1.5	92.8	98.5	2,040
Nyaruguru	81.6	3.7	74.4	88.9	2,278
Huye	89.1	3.5	82.4	95.9	2,055
Nyamagabe	84.0	3.1	78.0	90.0	2,143
Ruhango	87.3	2.4	82.6	92.0	2,119
Muhanga	84.4	2.9	78.7	90.0	2,109
Kamonyi	92.0	1.6	88.9	95.1	2,095
Karongi	90.3	2.0	86.3	94.3	2,234
Rutsiro	66.0	4.6	56.9	75.1	2,215
Rubavu	98.9	0.5	98.0	99.8	2,230
Nyabihu	86.5	2.7	81.2	91.8	2,190
Ngororero	84.1	2.8	78.6	89.6	2,168
Rusizi	87.4	3.3	81.0	93.9	2,392
Nyamasheke	89.0	3.4	82.3	95.7	2,251
Rulindo	91.3	1.9	87.6	94.9	2,032
Gakenke	71.9	3.7	64.7	79.1	2,061
Musanze	92.7	2.3	88.2	97.2	2,164
Burera	93.6	2.5	88.7	98.5	2,067
Gicumbi	88.5	3.1	82.5	94.6	2,156
Rwamagana	88.7	2.9	83.0	94.3	2,006
Nyagatare	78.3	5.1	68.3	88.2	2,174
Gatsibo	78.5	5.0	68.8	88.2	2,177
Kayonza	88.6	3.6	81.6	95.5	2,156
Kirehe	84.9	4.0	77.1	92.8	2,144
Ngoma	82.6	3.0	76.6	88.5	2,057
Bugesera	77.4	5.7	66.3	88.4	2,092

Table B.3: Mean distance (meters) to nearest improved drinking water source, EICV5

EICV5	Estimate	Standard error	Lower	Upper	Unweighted count
All Rwanda	504.9	11.3	482.8	527.0	9,469
Kigali City	231.9	25.3	182.4	281.4	1,416
Southern	596.4	20.1	557.0	635.8	2,429
Western	517.7	17.9	482.6	552.7	2,293
Northern	559.9	23.6	513.7	606.0	1,694
Eastern	614.8	34.6	547.1	682.6	1,637
Other urban	194.6	17.9	159.6	229.7	1,023
Southern rural	647.9	19.5	609.7	686.2	2,152
Western rural	575.6	17.7	541.0	610.2	1,963
Northern rural	615.6	24.1	568.3	662.9	1,487
Eastern rural	663.0	36.5	591.4	734.6	1,428
Urban	147.6	11.0	126.0	169.2	2,157
Rural	626.7	12.3	602.6	650.7	7,312
Q1	645.6	18.6	609.2	682.1	1,348
Q2	626.1	17.6	591.5	660.7	1,591
Q3	581.3	15.5	551.0	611.6	1,778
Q4	566.2	17.6	531.8	600.6	1,969
Q5	293.3	13.8	266.2	320.4	2,783
Nyarugenge	244.1	61.1	124.4	363.8	495
Gasabo	269.8	38.4	194.6	345.0	463
Kicukiro	130.9	24.3	83.3	178.4	458
Nyanza	843.4	74.7	697.1	989.7	276
Gisagara	701.5	55.1	593.5	809.6	305
Nyaruguru	583.2	48.4	488.4	678.1	223
Huye	505.6	48.6	410.3	600.8	302
Nyamagabe	599.0	46.3	508.1	689.8	348
Ruhango	550.0	61.1	430.2	669.9	278
Muhanga	418.0	36.0	347.5	488.5	348
Kamonyi	601.5	63.1	477.9	725.1	349
Karongi	524.9	51.3	424.5	625.4	368
Rutsiro	789.8	59.0	674.2	905.5	278
Rubavu	414.3	43.6	328.9	499.7	441
Nyabihu	310.6	22.8	266.0	355.2	295
Ngororero	642.8	32.3	579.5	706.1	372
Rusizi	603.1	72.6	460.7	745.4	227
Nyamasheke	406.2	35.6	336.4	475.9	312
Rulindo	607.5	40.6	528.0	687.1	323
Gakenke	676.0	44.7	588.4	763.7	281
Musanze	293.5	40.0	215.1	372.0	389
Burera	551.8	41.8	469.9	633.7	362
Gicumbi	754.5	76.0	605.5	903.5	339
Rwamagana	709.2	87.7	537.3	881.1	252
Nyagatare	729.9	111.7	511.1	948.8	237
Gatsibo	387.8	42.2	305.2	470.4	191
Kayonza	704.1	81.8	543.8	864.4	292
Kirehe	503.0	69.5	366.8	639.2	226
Ngoma	599.3	97.4	408.4	790.3	250
Bugesera	588.6	90.4	411.3	765.8	189

Table B.4: Mean time (minutes) to improved water source, EICV5

EICV5	Estimate	Standard error	Lower	Upper	Unweighted count
All Rwanda	9.6	0.2	9.3	10.0	10,931
Kigali City	6.3	0.8	4.7	7.9	1,068
Southern	10.6	0.3	10.1	11.2	3,075
Western	8.8	0.3	8.3	9.3	2,618
Northern	10.1	0.3	9.5	10.7	1,874
Eastern	11.1	0.5	10.2	12.0	2,296
Other urban	7.2	0.5	6.3	8.1	935
Southern rural	10.9	0.3	10.4	11.5	2,799
Western rural	9.2	0.3	8.6	9.8	2,290
Northern rural	10.3	0.3	9.6	11.0	1,736
Eastern rural	11.3	0.5	10.4	12.2	2,103
Urban	6.0	0.6	4.7	7.2	1,702
Rural	10.5	0.2	10.1	10.8	9,229
Q1	10.7	0.3	10.2	11.2	1,798
Q2	10.7	0.3	10.1	11.2	2,025
Q3	10.2	0.2	9.7	10.6	2,277
Q4	10.0	0.3	9.5	10.5	2,394
Q5	7.4	0.3	6.7	8.0	2,437
Nyarugenge	7.5	1.2	5.1	9.8	329
Gasabo	6.5	1.3	4.0	9.0	399
Kicukiro	4.9	0.7	3.6	6.3	340
Nyanza	13.1	0.7	11.6	14.5	393
Gisagara	10.6	0.8	9.0	12.2	407
Nyaruguru	7.6	0.6	6.5	8.7	330
Huye	9.4	0.8	7.8	10.9	372
Nyamagabe	10.8	0.7	9.5	12.2	387
Ruhango	10.0	0.7	8.5	11.4	397
Muhanga	9.7	0.7	8.4	10.9	366
Kamonyi	12.4	1.0	10.5	14.4	423
Karongi	8.0	0.7	6.6	9.3	400
Rutsiro	9.7	0.8	8.2	11.2	294
Rubavu	7.8	0.7	6.4	9.1	436
Nyabihu	8.4	0.6	7.2	9.5	398
Ngororero	11.8	0.5	10.8	12.7	394
Rusizi	8.4	0.9	6.5	10.2	327
Nyamasheke	8.2	0.8	6.7	9.7	369
Rulindo	8.1	0.6	7.1	9.2	412
Gakenke	10.6	0.6	9.4	11.8	314
Musanze	8.7	0.7	7.3	10.1	355
Burera	7.5	0.5	6.4	8.5	420
Gicumbi	15.6	1.0	13.6	17.7	373
Rwamagana	12.2	1.1	10.1	14.3	302
Nyagatare	11.8	1.2	9.4	14.2	361
Gatsibo	11.7	0.9	10.0	13.4	263
Kayonza	13.1	1.3	10.5	15.7	404
Kirehe	8.2	1.1	6.1	10.3	328
Ngoma	11.6	1.4	8.9	14.2	342
Bugesera Source: EICV5.	8.2	1.0	6.3	10.1	296

Table B.5: Percentage of HH with improved sanitation, EICV5

EICV5	Estimate	Standard error	Lower	Upper	Unweighted count
All Rwanda	86.2	0.4	85.5	86.9	14,580
Kigali City	94.5	0.9	92.6	96.3	1,620
Southern	74.6	0.9	72.9	76.4	3,840
Western	88.1	0.7	86.8	89.4	3,360
Northern	86.5	0.9	84.6	88.3	2,400
Eastern	90.0	0.6	88.8	91.2	3,360
Other urban	90.5	1.2	88.1	92.9	1,284
Southern rural	73.4	1.0	71.5	75.3	3,480
Western rural	87.5	0.7	86.1	89.0	2,940
Northern rural	85.9	1.0	84.0	87.8	2,160
Eastern rural	89.9	0.6	88.7	91.1	3,096
Urban	93.6	0.8	92.0	95.2	2,526
Rural	84.4	0.4	83.6	85.2	12,054
Q1	76.3	0.9	74.4	78.1	2,429
Q2	81.0	0.8	79.4	82.6	2,656
Q3	85.9	0.7	84.5	87.4	2,868
Q4	88.5	0.6	87.3	89.8	3,078
Q5	94.2	0.5	93.3	95.1	3,549
Nyarugenge	99.3	0.4	98.6	100.1	540
Gasabo	92.8	1.5	89.8	95.7	540
Kicukiro	94.5	1.4	91.8	97.2	540
Nyanza	53.3	3.4	46.6	60.1	480
Gisagara	59.8	3.4	53.2	66.4	480
Nyaruguru	82.8	2.3	78.3	87.2	480
Huye	78.7	2.6	73.6	83.8	480
Nyamagabe	80.6	1.8	77.0	84.1	480
Ruhango	53.4	2.5	48.5	58.2	480
Muhanga	93.9	1.1	91.8	96.0	480
Kamonyi	91.5	1.4	88.8	94.3	480
Karongi	84.6	1.8	81.0	88.2	480
Rutsiro	91.1	1.7	87.8	94.4	480
Rubavu	94.1	1.4	91.3	96.8	480
Nyabihu	80.1	2.3	75.5	84.6	480
Ngororero	77.6	2.0	73.8	81.5	480
Rusizi	90.4	1.8	86.8	94.0	480
Nyamasheke	96.0	1.2	93.6	98.5	480
Rulindo	84.6	1.8	81.2	88.1	480
Gakenke	94.7	1.3	92.3	97.2	480
Musanze	83.2	2.4	78.5	87.9	480
Burera	81.4	2.9	75.8	87.1	480
Gicumbi	88.2	1.6	85.1	91.2	480
Rwamagana	92.3	1.6	89.2	95.3	480
Nyagatare	94.7	1.3	92.2	97.2	480
Gatsibo	82.2	2.0	78.4	86.1	480
Kayonza	83.9	1.8	80.3	87.4	480
Kirehe	95.3	1.0	93.4	97.2	480
Ngoma	94.3	1.6	91.1	97.5	480
Bugesera	87.0	1.7	83.7	90.3	480

Table B.6: Percentage of HH using electricity distributor as primary source of lighting, EICV5

EICV5	Estimate	Standard error	Lower	Upper	Unweighted count
All Rwanda	27.1	0.8	25.6	28.6	14,580
Kigali City	78.4	2.2	74.1	82.6	1,620
Southern	14.4	1.2	12.0	16.8	3,840
Western	21.6	1.5	18.7	24.6	3,360
Northern	18.0	1.6	14.9	21.2	2,400
Eastern	18.1	1.4	15.3	20.8	3,360
Other urban	58.2	2.8	52.7	63.7	1,284
Southern rural	10.6	1.0	8.7	12.6	3,480
Western rural	15.2	1.2	12.9	17.5	2,940
Northern rural	13.8	1.3	11.2	16.4	2,160
Eastern rural	15.1	1.3	12.6	17.6	3,096
Urban	75.6	1.8	72.1	79.0	2,526
Rural	15.5	0.7	14.1	16.8	12,054
Q1	5.1	0.5	4.1	6.1	2,429
Q2	9.8	0.7	8.4	11.3	2,656
Q3	16.3	0.9	14.5	18.1	2,868
Q4	26.0	1.1	23.9	28.1	3,078
Q5	61.9	1.2	59.6	64.3	3,549
Nyarugenge	81.3	3.2	75.1	87.5	540
Gasabo	74.7	3.4	68.0	81.4	540
Kicukiro	84.4	3.1	78.3	90.5	540
Nyanza	14.3	3.6	7.2	21.3	480
Gisagara	10.3	2.5	5.4	15.2	480
Nyaruguru	9.4	2.0	5.4	13.3	480
Huye	14.0	3.2	7.7	20.3	480
Nyamagabe	8.8	2.8	3.3	14.2	480
Ruhango	19.8	3.4	13.1	26.5	480
Muhanga	19.6	4.4	11.0	28.3	480
Kamonyi	18.2	4.0	10.3	26.0	480
Karongi	13.9	4.0	6.1	21.6	480
Rutsiro	11.3	2.0	7.4	15.2	480
Rubavu	40.8	5.4	30.1	51.4	480
Nyabihu	17.0	3.5	10.1	23.9	480
Ngororero	7.0	2.1	2.9	11.1	480
Rusizi	32.2	4.4	23.6	40.9	480
Nyamasheke	22.1	3.1	15.9	28.2	480
Rulindo	15.1	2.8	9.6	20.7	480
Gakenke	11.9	2.4	7.1	16.6	480
Musanze	32.3	5.1	22.4	42.2	480
Burera	18.0	3.4	11.2	24.7	480
Gicumbi	11.9	2.8	6.4	17.4	480
Rwamagana	28.1	4.0	20.2	36.0	480
Nyagatare	15.3	3.8	7.9	22.8	480
Gatsibo	13.7	3.1	7.7	19.8	480
Kayonza	18.9	3.8	11.5	26.3	480
Kirehe	15.6	3.1	9.4	21.7	480
Ngoma	18.1	3.4	11.4	24.8	480
Bugesera	18.8	4.4	10.2	27.5	480

Table B.7: Percentage of HH using firewood as primary source of cooking fuel, EICV5

EICV5	Estimate	Standard error	Lower	Upper	Unweighted count
All Rwanda	79.9	0.8	78.3	81.4	14,580
Kigali City	22.4	2.7	17.2	27.6	1,620
Southern	92.6	1.0	90.7	94.4	3,840
Western	87.2	1.4	84.6	89.9	3,360
Northern	91.7	1.3	89.2	94.3	2,400
Eastern	89.3	1.1	87.2	91.3	3,360
Other urban	49.6	3.1	43.5	55.7	1,284
Southern rural	95.8	0.6	94.7	96.9	3,480
Western rural	94.8	0.7	93.4	96.2	2,940
Northern rural	95.9	0.7	94.6	97.3	2,160
Eastern rural	91.9	0.8	90.3	93.5	3,096
Urban	26.3	2.1	22.2	30.4	2,526
Rural	92.7	0.6	91.6	93.8	12,054
Q1	97.4	0.4	96.6	98.1	2,429
Q2	95.2	0.6	94.0	96.4	2,656
Q3	91.0	0.8	89.4	92.6	2,868
Q4	85.3	1.0	83.2	87.3	3,078
Q5	45.4	1.4	42.7	48.1	3,549
Nyarugenge	20.6	4.5	11.7	29.5	540
Gasabo	26.2	4.3	17.8	34.5	540
Kicukiro	15.2	3.4	8.5	22.0	540
Nyanza	93.5	2.1	89.4	97.7	480
Gisagara	95.9	1.8	92.4	99.4	480
Nyaruguru	95.6	1.1	93.5	97.6	480
Huye	88.2	3.2	81.9	94.5	480
Nyamagabe	96.1	1.6	93.0	99.2	480
Ruhango	94.8	1.8	91.4	98.3	480
Muhanga	89.1	3.6	81.9	96.2	480
Kamonyi	88.8	3.6	81.8	95.8	480
Karongi	92.0	2.5	87.2	96.8	480
Rutsiro	97.1	1.0	95.2	99.0	480
Rubavu	58.9	6.3	46.6	71.2	480
Nyabihu	88.1	3.3	81.6	94.6	480
Ngororero	96.7	1.5	93.7	99.8	480
Rusizi	86.2	3.4	79.5	92.8	480
Nyamasheke	98.0	0.7	96.8	99.3	480
Rulindo	93.5	2.1	89.5	97.6	480
Gakenke	97.2	0.8	95.6	98.7	480
Musanze	80.7	5.1	70.8	90.6	480
Burera	91.6	2.1	87.5	95.7	480
Gicumbi	96.2	1.8	92.7	99.8	480
Rwamagana	76.8	4.1	68.9	84.7	480
Nyagatare	90.1	3.1	84.0	96.3	480
Gatsibo	92.3	1.8	88.9	95.8	480
Kayonza	91.7	2.2	87.4	96.1	480
Kirehe	95.4	1.4	92.6	98.2	480
Ngoma	85.9	2.7	80.6	91.3	480
Bugesera	91.4	2.8	86.0	96.9	480
Source: FICV5	71.1	2.0	23.0	50.5	100

Table B.8: Percentage of HH using charcoal as primary source of cooking fuel, EICV5

EICV5	Estimate	Standard error	Lower	Upper	Unweighted count
All Rwanda	17.4	0.8	16.0	18.9	14,580
Kigali City	68.1	2.4	63.4	72.7	1,620
Southern	6.5	0.9	4.7	8.3	3,840
Western	12.2	1.3	9.6	14.8	3,360
Northern	7.3	1.2	4.9	9.7	2,400
Eastern	7.6	0.9	5.8	9.4	3,360
Other urban	47.2	3.0	41.4	53.0	1,284
Southern rural	3.3	0.5	2.3	4.3	3,480
Western rural	4.9	0.7	3.5	6.2	2,940
Northern rural	3.2	0.6	2.0	4.4	2,160
Eastern rural	5.3	0.8	3.8	6.7	3,096
Urban	65.1	1.9	61.4	68.9	2,526
Rural	6.0	0.5	4.9	7.0	12,054
Q1	1.3	0.3	0.8	1.9	2,429
Q2	3.7	0.6	2.6	4.8	2,656
Q3	8.0	0.8	6.5	9.6	2,868
Q4	13.9	1.0	11.9	15.9	3,078
Q5	47.0	1.4	44.3	49.7	3,549
Nyarugenge	67.8	4.2	59.6	75.9	540
Gasabo	66.8	3.8	59.3	74.2	540
Kicukiro	71.3	3.2	65.1	77.6	540
Nyanza	5.5	2.0	1.6	9.3	480
Gisagara	3.2	1.5	0.3	6.1	480
Nyaruguru	3.6	1.0	1.6	5.5	480
Huye	11.4	3.2	5.1	17.6	480
Nyamagabe	3.2	1.4	0.4	6.0	480
Ruhango	3.1	1.6	0.0	6.1	480
Muhanga	10.2	3.6	3.3	17.2	480
Kamonyi	10.4	3.7	3.2	17.5	480
Karongi	7.4	2.3	2.9	12.0	480
Rutsiro	2.8	1.0	0.9	4.7	480
Rubavu	40.1	6.1	28.2	52.1	480
Nyabihu	11.9	3.3	5.4	18.4	480
Ngororero	3.0	1.3	0.3	5.6	480
Rusizi	12.4	3.2	6.1	18.7	480
Nyamasheke	1.8	0.6	0.5	3.0	480
Rulindo	5.6	2.1	1.5	9.6	480
Gakenke	2.3	0.7	1.0	3.7	480
Musanze	18.7	4.8	9.2	28.2	480
Burera	5.9	1.7	2.7	9.2	480
Gicumbi	3.2	1.5	0.2	6.2	480
Rwamagana	17.7	4.0	9.9	25.5	480
Nyagatare	5.5	2.1	1.3	9.7	480
Gatsibo	4.5	1.7	1.1	7.9	480
Kayonza	7.9	2.2	3.6	12.1	480
Kirehe	3.9	1.3	1.4	6.3	480
Ngoma	7.6	2.4	3.0	12.2	480
Bugesera	7.5	2.4	2.8	12.3	480

Table B.9: Percentage of HH residing in Imidugudu, EICV5

EICV5	Estimate	Standard error	Lower	Upper	Unweighted count
All Rwanda	58.9	0.8	57.2	60.5	14,580
Kigali City	4.1	0.9	2.4	5.8	1,620
Southern	56.7	1.5	53.8	59.6	3,840
Western	59.5	1.8	56.0	62.9	3,360
Northern	68.8	2.0	65.0	72.7	2,400
Eastern	87.4	1.3	84.9	89.8	3,360
Other urban	53.0	3.7	45.7	60.3	1,284
Southern rural	59.7	1.5	56.9	62.6	3,480
Western rural	59.9	1.9	56.3	63.6	2,940
Northern rural	69.2	2.1	65.1	73.3	2,160
Eastern rural	88.9	1.2	86.6	91.2	3,096
Urban	24.8	2.3	20.3	29.3	2,526
Rural	67.0	0.9	65.2	68.9	12,054
Q1	66.8	1.3	64.3	69.3	2,429
Q2	64.1	1.3	61.6	66.5	2,656
Q3	64.1	1.2	61.7	66.5	2,868
Q4	61.8	1.3	59.4	64.3	3,078
Q5	43.9	1.4	41.2	46.6	3,549
Nyarugenge	6.6	2.1	2.6	10.7	540
Gasabo	2.8	1.1	0.8	4.9	540
Kicukiro	4.8	1.9	1.0	8.5	540
Nyanza	21.7	3.8	14.3	29.0	480
Gisagara	87.2	2.6	82.1	92.2	480
Nyaruguru	75.9	3.1	69.8	82.0	480
Huye	64.4	6.4	52.0	76.9	480
Nyamagabe	71.1	3.6	64.2	78.1	480
Ruhango	40.0	3.9	32.4	47.7	480
Muhanga	57.3	5.3	47.0	67.6	480
Kamonyi	40.0	2.9	34.3	45.6	480
Karongi	74.6	3.3	68.1	81.1	480
Rutsiro	78.8	3.7	71.6	86.0	480
Rubavu	80.5	4.4	71.8	89.2	480
Nyabihu	18.2	4.4	9.7	26.7	480
Ngororero	41.7	3.7	34.4	48.9	480
Rusizi	46.4	6.6	33.5	59.3	480
Nyamasheke	70.3	4.3	61.9	78.6	480
Rulindo	57.6	3.4	50.9	64.3	480
Gakenke	85.4	2.5	80.5	90.3	480
Musanze	72.4	4.1	64.3	80.5	480
Burera	71.3	6.7	58.3	84.3	480
Gicumbi	56.8	4.1	48.8	64.9	480
Rwamagana	83.9	3.2	77.7	90.1	480
Nyagatare	81.8	3.9	74.1	89.5	480
Gatsibo	86.3	3.3	79.8	92.8	480
Kayonza	93.7	2.8	88.2	99.2	480
Kirehe	97.7	1.0	95.7	99.6	480
Ngoma	88.1	3.6	81.0	95.3	480
Bugesera	83.9	3.1	77.8	90.1	480

Table B.10: Percentage of HH owning bicycle, EICV5

EICV5	Estimate	Standard error	Lower	Upper	Unweighted count	
All Rwanda	13.3	0.4	12.7	14.0	14,580	
Kigali City	8.1	1.0	6.1	10.0	1,620	
Southern	11.5	0.6	10.3	12.6	3,840	
Western	3.8	0.4	3.0	4.6	3,360	
Northern	8.9	0.7	7.5	10.4	2,400	
Eastern	29.2	1.0	27.3	31.0	3,360	
Other urban	11.2	1.1	9.1	13.4	1,284	
Southern rural	11.3	0.6	10.1	12.5	3,480	
Western rural	3.6	0.5	2.6	4.5	2,940	
Northern rural	8.8	0.8	7.3	10.3	2,160	
Eastern rural	30.0	1.0	28.0	31.9	3,096	
Urban	9.0	0.8	7.4	10.6	2,526	
Rural	14.4	0.4	13.6	15.2	12,054	
Q1	4.9	0.6	3.8	6.1	2,429	
Q2	9.7	0.7	8.3	11.1	2,656	
Q3	13.8	0.7	12.4	15.3	2,868	
Q4	19.1	0.8	17.5	20.7	3,078	
Q5	16.0	0.7	14.7	17.3	3,549	
Nyarugenge	3.0	0.8	1.6	4.5	540	
Gasabo	9.2	1.6	6.0	12.3	540	
Kicukiro	9.7	1.5	6.7	12.7	540	
Nyanza	14.2	1.7	10.8	17.6	480	
Gisagara	17.8	2.1	13.8	21.8	480	
Nyaruguru	7.6	1.2	5.3	10.0	480	
Huye	10.7	1.6	7.6	13.8	480	
Nyamagabe	7.4	1.4	4.6	10.2	480	
Ruhango	15.8	2.1	11.7	19.8	480	
Muhanga	11.6	1.7	8.4	14.9	480	
Kamonyi	6.8	1.1	4.7	8.9	480	
Karongi	2.5	0.8	1.0	4.0	480	
Rutsiro	1.4	0.5	0.4	2.5	480	
Rubavu	5.3	0.9	3.6	6.9	480	
Nyabihu	3.3	0.9	1.5	5.1	480	
Ngororero	2.3	0.8	0.8	3.8	480	
Rusizi	8.1	1.9	4.4	11.7	480	
Nyamasheke	2.3	0.7	0.9	3.6	480	
Rulindo	12.1	2.1	8.0	16.2	480	
Gakenke	5.4	1.5	2.5	8.3	480	
Musanze	7.1	1.2	4.8	9.5	480	
Burera	8.8	1.6	5.6	12.0	480	
Gicumbi	11.6	1.7	8.3	14.9	480	
Rwamagana	25.1	2.1	21.1	29.2	480	
Nyagatare	35.2	2.8	29.6	40.7	480	
Gatsibo	24.6	1.8	20.9	28.2	480	
Kayonza	26.1	2.4	21.3	30.9	480	
Kirehe	25.9	2.7	20.6	31.3	480	
Ngoma	27.7	2.4	23.0	32.3	480	
Bugesera	36.8	2.4	32.2	41.5	480	

Table B.11: Percentage of HH owning motorcycle (for private use only), EICV5

EICV5	Estimate	Standard error	Lower	Upper	Unweighted count	
All Rwanda	1.0	0.1	0.8	1.2	14,580	
Kigali City	1.3	0.4	0.6	2.0	1,620	
Southern	0.9	0.2	0.6	1.2	3,840	
Western	0.5	0.2	0.3	0.8	3,360	
Northern	0.7	0.2	0.4	1.1	2,400	
Eastern	1.3	0.2	0.9	1.7	3,360	
Other urban	1.3	0.4	0.6	2.1	1,284	
Southern rural	0.7	0.2	0.4	1.0	3,480	
Western rural	0.5	0.2	0.2	0.8	2,940	
Northern rural	0.7	0.2	0.3	1.1	2,160	
Eastern rural	1.3	0.2	0.9	1.8	3,096	
Urban	1.3	0.3	0.7	1.8	2,526	
Rural	0.9	0.1	0.7	1.1	12,054	
Q1	0.0	0.0	0.0	0.0	2,429	
Q2	0.0	0.0	0.0	0.0	2,656	
Q3	0.1	0.1	0.0	0.2	2,868	
Q4	1.1	0.2	0.6	1.5	3,078	
Q5	2.8	0.3	2.2	3.5	3,549	
Nyarugenge	0.5	0.3	-0.1	1.1	540	
Gasabo	1.4	0.6	0.2	2.6	540	
Kicukiro	1.7	0.6	0.6	2.8	540	
Nyanza	0.7	0.4	-0.1	1.5	480	
Gisagara	1.8	0.6	0.5	3.0	480	
Nyaruguru	0.3	0.3	-0.2	0.9	480	
Huye	0.6	0.3	0.0	1.3	480	
Nyamagabe	1.1	0.6	0.0	2.2	480	
Ruhango	0.8	0.4	0.0	1.6	480	
Muhanga	1.7	0.8	0.0	3.3	480	
Kamonyi	0.2	0.2	-0.2	0.6	480	
Karongi	1.8	0.8	0.2	3.3	480	
Rutsiro	0.5	0.3	-0.2	1.1	480	
Rubavu	0.0	0.0	0.0	0.0	480	
Nyabihu	0.0	0.0	0.0	0.0	480	
Ngororero	0.3	0.2	-0.1	0.8	480	
Rusizi	0.2	0.3	-0.2	0.7	480	
Nyamasheke	1.1	0.6	0.0	2.2	480	
Rulindo	0.9	0.4	0.0	1.7	480	
Gakenke	1.1	0.5	0.2	2.0	480	
Musanze	0.2	0.2	-0.2	0.6	480	
Burera	0.8	0.5	-0.2	1.7	480	
Gicumbi	0.9	0.4	0.1	1.7	480	
Rwamagana	1.1	0.5	0.2	2.1	480	
Nyagatare	1.8	0.7	0.5	3.1	480	
Gatsibo	1.6	0.6	0.5	2.8	480	
Kayonza	1.1	0.5	0.1	2.2	480	
Kirehe	1.2	0.5	0.3	2.2	480	
Ngoma	0.8	0.4	0.0	1.6	480	
Bugesera	1.0	0.6	-0.2	2.1	480	

Table B.12: Percentage of HH owning car (for private use only), EICV5

EICV5			Lower	Upper	Unweighted count	
All Rwanda	1.0	0.1	0.8	1.3	14,580	
Kigali City	5.5	0.8	3.9	7.0	1,620	
Southern	0.2	0.1	0.0	0.3	3,840	
Western	0.2	0.1	0.0	0.4	3,360	
Northern	0.4	0.2	0.0	0.8	2,400	
Eastern	0.3	0.1	0.1	0.4	3,360	
Other urban	1.8	0.5	0.9	2.7	1,284	
Southern rural	0.1	0.0	0.0	0.1	3,480	
Western rural	0.1	0.0	0.0	0.1	2,940	
Northern rural	0.1	0.1	0.0	0.2	2,160	
Eastern rural	0.2	0.1	0.0	0.3	3,096	
Urban	4.9	0.6	3.7	6.1	2,526	
Rural	0.1	0.1	0.0	0.2	12,054	
Q1	0.0	0.0	0.0	0.0	2,429	
Q2	0.0	0.0	0.0	0.0	2,656	
Q3	0.0	0.0	0.0	0.0	2,868	
Q4	0.0	0.0	0.0	0.0	3,078	
Q5	4.1	0.5	3.1	5.0	3,549	
Nyarugenge	2.9	0.8	1.3	4.4	540	
Gasabo	3.5	1.0	1.5	5.4	540	
Kicukiro	12.3	2.2	8.1	16.5	540	
Nyanza	0.0	0.0	0.0	0.0	480	
Gisagara	0.0	0.0	0.0	0.0	480	
Nyaruguru	0.3	0.2	-0.2	0.7	480	
Huye	0.4	0.3	-0.2	1.0	480	
Nyamagabe	0.2	0.2	-0.2	0.5	480	
Ruhango	0.0	0.0	0.0	0.0	480	
Muhanga	0.4	0.3	-0.2	1.0	480	
Kamonyi	0.0	0.0	0.0	0.0	480	
Karongi	0.0	0.0	0.0	0.0	480	
Rutsiro	0.0	0.0	0.0	0.0	480	
Rubavu	0.5	0.4	-0.3	1.3	480	
Nyabihu	0.0	0.0	0.0	0.0	480	
Ngororero	0.0	0.0	0.0	0.0	480	
Rusizi	0.7	0.4	-0.1	1.5	480	
Nyamasheke	0.1	0.1	-0.1	0.4	480	
Rulindo	0.0	0.0	0.0	0.0	480	
Gakenke	0.0	0.0	0.0	0.0	480	
Musanze	1.7	0.9	0.1	3.4	480	
Burera	0.0	0.0	0.0	0.0	480	
Gicumbi	0.2	0.2	-0.2	0.7	480	
Rwamagana	0.3	0.3	-0.3	0.9	480	
Nyagatare	0.2	0.2	-0.2	0.5	480	
Gatsibo	0.2	0.2	-0.2	0.7	480	
Kayonza	0.2	0.2	-0.2	0.6	480	
Kirehe	0.0	0.0	0.0	0.0	480	
Ngoma	0.4	0.3	-0.2	1.0	480	
Bugesera	0.5	0.4	-0.2	1.3	480	

Table B.13: Percentage of HH owning mobile phone, EICV5

EICV5	Estimate	Standard error	Lower	Upper	Unweighted count	
All Rwanda	66.9	0.5	65.9	67.9	14,580	
Kigali City	88.0	1.3	85.4	90.5	1,620	
Southern	58.3	1.0	56.3	60.3	3,840	
Western	64.1	1.1	61.8	66.3	3,360	
Northern	64.5	1.2	62.2	66.9	2,400	
Eastern	66.1	1.0	64.1	68.1	3,360	
Other urban	83.0	1.3	80.4	85.6	1,284	
Southern rural	56.1	1.0	54.1	58.1	3,480	
Western rural	61.2	1.1	58.9	63.4	2,940	
Northern rural	62.4	1.2	60.0	64.7	2,160	
Eastern rural	64.7	1.1	62.7	66.8	3,096	
Urban	88.6	0.9	86.8	90.4	2,526	
Rural	61.7	0.6	60.7	62.8	12,054	
Q1	44.1	1.1	42.0	46.2	2,429	
Q2	55.4	1.0	53.4	57.4	2,656	
Q3	64.0	1.0	62.0	66.0	2,868	
Q4	72.9	0.9	71.2	74.6	3,078	
Q5	86.5	0.6	85.3	87.8	3,549	
Nyarugenge	90.1	1.7	86.7	93.5	540	
Gasabo	85.7	2.1	81.6	89.9	540	
Kicukiro	91.4	1.5	88.4	94.4	540	
Nyanza	55.0	2.9	49.4	60.6	480	
Gisagara	44.4	3.0	38.5	50.2	480	
Nyaruguru	53.5	2.5	48.7	58.3	480	
Huye	55.4	3.0	49.6	61.2	480	
Nyamagabe	53.3	2.6	48.2	58.4	480	
Ruhango	66.7	2.5	61.7	71.7	480	
Muhanga	69.7	2.7	64.5	74.9	480	
Kamonyi	67.4	3.1	61.4	73.4	480	
Karongi	63.3	2.8	57.7	68.9	480	
Rutsiro	56.4	2.5	51.6	61.3	480	
Rubavu	68.7	3.5	62.0	75.5	480	
Nyabihu	62.1	3.2	55.8	68.3	480	
Ngororero	57.5	2.7	52.1	62.8	480	
Rusizi	67.8	3.2	61.5	74.0	480	
Nyamasheke	70.2	2.6	65.1	75.4	480	
Rulindo	65.2	2.0	61.4	69.1	480	
Gakenke	60.3	2.8	54.9	65.7	480	
Musanze	71.2	2.4	66.6	75.9	480	
Burera	66.4	2.8	61.0	71.9	480	
Gicumbi	59.3	3.2	53.0	65.6	480	
Rwamagana	71.9	2.9	66.3	77.5	480	
Nyagatare	69.7	2.6	64.5	74.8	480	
Gatsibo	63.2	2.4	58.5	68.0	480	
Kayonza	65.5	2.6	60.5	70.6	480	
Kirehe	66.2	2.6	61.1	71.4	480	
Ngoma	64.3	3.1	58.3	70.3	480	
Bugesera	60.9	2.9	55.3	66.5	480	

Table B.14: Percentage of HH owning radio, EICV5

EICV5	Estimate	Standard error	Lower	Upper	Unweighted count
All Rwanda	73.8	0.5	72.9	74.7	14,580
Kigali City	91.5	1.1	89.4	93.6	1,620
Southern	67.2	0.9	65.5	68.9	3,840
Western	69.5	1.1	67.3	71.6	3,360
Northern	73.2	1.0	71.2	75.3	2,400
Eastern	73.1	0.9	71.4	74.9	3,360
Other urban	85.6	1.2	83.1	88.0	1,284
Southern rural	65.6	0.9	63.9	67.3	3,480
Western rural	66.8	1.1	64.6	68.9	2,940
Northern rural	71.7	1.1	69.6	73.7	2,160
Eastern rural	72.3	0.9	70.6	74.1	3,096
Urban	91.3	0.7	90.0	92.7	2,526
Rural	69.6	0.5	68.6	70.5	12,054
Q1	52.0	1.1	49.9	54.2	2,429
Q2	64.0	1.0	62.1	66.0	2,656
Q3	72.0	0.9	70.2	73.8	2,868
Q4	79.6	0.8	78.0	81.1	3,078
Q5	90.7	0.6	89.6	91.8	3,549
Nyarugenge	93.5	1.4	90.8	96.2	540
Gasabo	89.9	1.7	86.5	93.3	540
Kicukiro	93.8	1.4	91.1	96.5	540
Nyanza	65.8	2.3	61.3	70.4	480
Gisagara	54.3	2.7	49.0	59.5	480
Nyaruguru	64.5	2.5	59.6	69.3	480
Huye	65.3	2.5	60.5	70.2	480
Nyamagabe	66.0	2.8	60.6	71.4	480
Ruhango	74.6	2.2	70.3	79.0	480
Muhanga	74.8	2.4	70.1	79.5	480
Kamonyi	72.3	2.1	68.2	76.4	480
Karongi	69.6	2.7	64.4	74.8	480
Rutsiro	63.5	2.8	58.1	69.0	480
Rubavu	73.0	3.5	66.2	79.7	480
Nyabihu	65.7	2.8	60.2	71.1	480
Ngororero	67.5	2.6	62.5	72.6	480
Rusizi	71.3	3.0	65.3	77.2	480
Nyamasheke	73.5	2.5	68.5	78.5	480
Rulindo	73.7	1.7	70.4	77.0	480
Gakenke	71.0	2.2	66.8	75.2	480
Musanze	76.9	2.1	72.8	81.0	480
Burera	73.8	2.8	68.3	79.3	480
Gicumbi	70.7	2.6	65.6	75.7	480
Rwamagana	77.8	2.8	72.4	83.3	480
Nyagatare	74.7	2.1	70.5	78.9	480
Gatsibo	70.8	1.9	66.9	74.6	480
Kayonza	70.9	2.4	66.1	75.6	480
Kirehe	74.5	2.1	70.3	78.7	480
Ngoma	73.9	2.3	69.3	78.5	480
Bugesera	69.3	2.6	64.2	74.4	480

Table B.15: Percentage of HH owning TV set, EICV5

EICV5	Estimate Standard error Lower		Upper	Unweighted count	
All Rwanda	10.4	0.4	9.6	11.2	14,580
Kigali City	36.0	1.9	32.2	39.8	1,620
Southern	5.2	0.6	4.0	6.5	3,840
Western	6.5	0.8	4.9	8.0	3,360
Northern	5.7	0.8	4.0	7.3	2,400
Eastern	5.8	0.6	4.7	6.9	3,360
Other urban	24.6	2.1	20.5	28.7	1,284
Southern rural	3.3	0.5	2.5	4.2	3,480
Western rural	3.3	0.4	2.5	4.1	2,940
Northern rural	3.2	0.5	2.3	4.1	2,160
Eastern rural	5.0	0.5	3.9	6.0	3,096
Urban	35.0	1.5	32.0	38.0	2,526
Rural	4.5	0.3	3.9	5.0	12,054
Q1	0.3	0.1	0.1	0.6	2,429
Q2	1.4	0.3	0.9	1.9	2,656
Q3	2.0	0.3	1.5	2.6	2,868
Q4	7.0	0.5	5.9	8.1	3,078
Q5	31.9	1.1	29.7	34.1	3,549
Nyarugenge	39.2	3.1	33.2	45.2	540
Gasabo	29.6	2.8	24.2	35.1	540
Kicukiro	48.3	3.3	41.7	54.8	540
Nyanza	4.7	1.7	1.3	8.1	480
Gisagara	2.4	1.2	0.2	4.7	480
Nyaruguru	2.7	0.9	0.9	4.6	480
Huye	6.7	1.7	3.4	10.0	480
Nyamagabe	3.0	1.3	0.5	5.6	480
Ruhango	2.9	1.0	1.0	4.9	480
Muhanga	9.1	2.6	4.1	14.2	480
Kamonyi	8.9	2.3	4.5	13.3	480
Karongi	5.0	1.4	2.2	7.8	480
Rutsiro	2.3	0.8	0.9	3.8	480
Rubavu	14.0	3.6	7.0	21.0	480
Nyabihu	5.3	1.5	2.4	8.1	480
Ngororero	2.4	1.1	0.2	4.6	480
Rusizi	7.8	1.8	4.2	11.4	480
Nyamasheke	6.1	1.7	2.9	9.3	480
Rulindo	5.4	1.4	2.7	8.1	480
Gakenke	1.9	0.8	0.4	3.4	480
Musanze	12.5	3.2	6.2	18.8	480
Burera	3.5	1.0	1.6	5.3	480
Gicumbi	4.6	1.4	1.8	7.4	480
Rwamagana	10.3	2.1	6.2	14.4	480
Nyagatare	5.6	1.0	3.6	7.6	480
Gatsibo	4.2	1.1	2.0	6.4	480
Kayonza	5.4	1.2	3.0	7.8	480
Kirehe	2.8	0.8	1.2	4.5	480
Ngoma	5.6	1.4	3.0	8.3	480
Bugesera	6.9	2.5	2.0	11.8	480

# **Annex C: WaSH Poverty Index**

The Water, Sanitation and Hygiene Poverty Index (WaSH PI) is a multidimensional tool that aims to produce an integrated assessment of the links between poverty and the delivery of WaSH services. The theoretical foundations of WaSH PI build on a combination of three composites that are aggregated to produce a single index value. The WaSH PI is composed of Water Poverty Index (WPI); Sanitation Poverty Index (SPI) and Hygiene Poverty Index (HPI). In addition, the values of WaSH PI fall within the range of 0 and 1, where the highest value 1 denotes best situation (lowest level of WaSH poverty), and 0 denotes the worst situation (highest level of WaSH poverty).

The human rights to water and sanitation have been interpreted as rights to the supply of these essential services. According to data available in EICV5 survey, the following four normative criteria have been proposed: availability, accessibility, facility and affordability. In this sense, proposal for monitoring drinking-water and sanitation consider these normative content as a starting point when defining the levels of service as indicated in the WaSH PI structure Table below. The WPI is mainly founded on indicators related to the water sources such as: Physical availability, accessibility, frequency of use of water source and affordability of water. The SPI considers the type of sanitation used by households.

# Structure of WaSH Poverty Index Components, indicators and cut-off (EICV5)

WaSH PI Components		Indicator	Composite scores/ cut-off					
		illuicatoi	Good	Fair	Acceptable	Risky		
Drinking water	WPI_Facility	Main source of drinking water	Piped water on premises (1)	Piped water not on promises (0.66)	Other improved water sources not on premises (0.33)	Unimproved and Surface water and Other (0)		
	WPI_Accessibility	Distance to the used water source (in Metres)	Water on premises (1)	<= 500 m (0.66)	<= 1000 m (0.33)	> 1000 m (0)		
	WPI_Availability	Usage rate of the main drinking water source	Regular use (regularly/often) (1)			Irregular use (0)		
	WPI_Affordability	Affordability of drinking water source	Affordable (1)			Too expensive (0)		
Sanitation	SPI_ Facility	Type of sanitation facility	Flush toilet (1)	Other Improved (0.66)	Unimproved (0.33)	No facility/ Open Defecation (0)		

Table C.1 provides information on WaSH poverty index situation. The WaSH PI values were sorted and ranked in descending order based on poverty levels. In ranking, 1 denotes the "highest" priority (highest level of poverty) and is assigned to the lowest value for WaSH PI, WPI and SPI values. At national level, aggregated WaSH PI values is (0.679). The water and sanitation sub-indices (WPI and SPI) present an average of (0.697) and (0.608) respectively.

With regard to water, Nyarugenge district displays the highest WPI value (0.843) i.e: (lowest degree of water poverty), whereas Bugesera has the lowest WPI value (0,592) i.e: (highest degree of water poverty). Correspondingly, Kicukiro presents the highest SPI value (0.703) i.e: (lowest degree of sanitation poverty), while Nyanza and Gisagara are identified as districts in need of interventions (highest degree of poverty), in terms of sanitation (0.483 and 0.492 respectively) compared to other districts.

Table C.1: Aggregated WaSH poverty index values and ranks (in Descending order of WaSH PI) by urban/rural, province, consumption quintile, type of habitat, disability status, sex of HH head and district, EICV5

	EICV5	WPI	Rank	SPI	Rank	WaSH PI	Rank
All Rwanda		0.697		0.608	***	0.679	
Urban/ rural	Rural	0.664	1	0.595	1	0.650	1
Orban, rurai	Urban	0.834	2	0.663	2	0.800	2
	Eastern	0.616	1	0.616	4	0.616	1
	Southern	0.690	2	0.561	1	0.664	2
Province	Northern	0.708	3	0.607	2	0.688	3
	Western	0.711	4	0.610	3	0.691	4
	Kigali City	0.808	5	0.667	5	0.780	5
	Q1	0.632	1	0.560	1	0.618	1
	Q2	0.654	2	0.583	2	0.640	2
Quintile	Q3	0.673	3	0.600	3	0.659	3
	Q4	0.690	4	0.610	4	0.674	4
	Q5	0.789	5	0.660	5	0.763	5
	Isolated rural housing	0.671	1	0.558	1	0.649	1
	Umudugudu	0.672	2	0.608	3	0.659	2
Type of habitat	Unplanned clustered rural housing	0.684	3	0.587	2	0.664	3
Type of Habitat	Unplanned urban housing	0.721	4	0.609	4	0.699	4
	Aglomeration	0.790	5	0.647	5	0.762	5
	Modern planned area	0.917	6	0.755	6	0.884	6
Disability status	with disability	0.695	1	0.607	1	0.677	1
of HH	without disability	0.828	2	0.677	2	0.798	2
Sex of head of HH	Female	0.683	1	0.579	1	0.662	1
Sex of flead of fin	Male	0.701	2	0.618	2	0.684	2
	Bugesera	0.592	1	0.601	14	0.593	1
	Nyaruguru	0.599	2	0.592	11	0.597	2
	Gatsibo	0.603	4	0.591	10	0.600	3
District	Nyagatare	0.600	3	0.637	23	0.607	4
	Rwamagana	0.610	5	0.622	18	0.613	5
	Rusizi	0.620	8	0.627	20	0.621	6
	Ngoma	0.619	6	0.633	21	0.622	7
	Kirehe	0.619	7	0.638	26	0.623	8

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EICV5	WPI	Rank	SPI	Rank	WaSH PI	Rank
Gisagara	0.665	10	0.492	2	0.631	9
Rutsiro	0.640	9	0.619	17	0.636	10
Nyanza	0.675	11	0.483	1	0.637	11
Huye	0.677	12	0.570	5	0.655	12
Ruhango	0.696	16	0.499	3	0.656	13
Rulindo	0.679	13	0.607	15	0.665	14
Kayonza	0.686	15	0.589	9	0.667	15
Gakenke	0.679	14	0.636	22	0.671	16
Gicumbi	0.702	17	0.615	16	0.684	17
Nyamagabe	0.715	19	0.573	7	0.687	18
Burera	0.714	18	0.576	8	0.687	19
Nyabihu	0.721	21	0.565	4	0.690	20
Ngororero	0.724	22	0.573	6	0.693	21
Nyamasheke	0.718	20	0.637	24	0.702	22
Kamonyi	0.732	23	0.624	19	0.711	23
Muhanga	0.737	24	0.641	27	0.718	24
Karongi	0.753	25	0.594	12	0.722	25
Musanze	0.759	26	0.597	13	0.727	26
Gasabo	0.783	27	0.647	28	0.756	27
Rubavu	0.797	28	0.637	25	0.765	28
Nyarugenge	0.843	30	0.680	29	0.810	29
Kicukiro	0.837	29	0.703	30	0.810	30

# Annex E: Persons who contributed to the implementation of the EICV5

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